AIR QUALITY
GENERAL PERMIT TO CONSTRUCT/OPERATE
HOT MIX ASPHALT FACILITIES
(For Minor Facilities)

OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
707 NORTH ROBINSON, P. O. BOX 1677
OKLAHOMA CITY, OKLAHOMA 73101-1677

In compliance with the provisions of the Oklahoma Clean Air Act, as amended (Oklahoma Statutes title 27A, §§ 2-5-101 to -118 (Supp. 1998)), and rules promulgated thereunder, operators of hot mix asphalt facilities, as described under Part 1, Section II, are hereby granted permission to construct/operate such facilities as specified in an Authorization to Construct/Operate (hereinafter referred to as an "Authorization") issued under this general permit by the Department of Environmental Quality (DEQ). Parts 1 through 4 and Appendix A and B of this permit specify emissions limitations and standards that constitute applicable air pollution rules, including state-only requirements, and include operational requirements and limitations necessary to assure compliance with all applicable air pollution rules.

The owner or operator of a hot mix asphalt facility may request that the facility be granted an Authorization to Construct/Operate in accordance with this general permit by submitting to the Air Quality Division (AQD) a complete set of General Permit Application Forms for a Hot Mix Asphalt Facility. Eligible facilities may apply for coverage under this permit at any time during the permit term. No source, or part thereof, is authorized to construct/operate pursuant to the terms of this general permit unless an application for an Authorization to Construct using a Notice of Intent form has been received by the AQD, or an Authorization to Construct or Operate has been issued for that source.

This permit shall become effective on December 12, 2002.

Signed and issued this 12th day of December, 2002.

Eddie Terrill, Director, Air Quality Division

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PART 1 - REQUIREMENTS FOR GENERAL PERMITS

This permit is issued for the hot mix asphalt facility source category to establish (A) terms and conditions to implement applicable air pollution rules, (B) terms and conditions to implement applicable air pollution rules for specified categories of changes to those permitted sources, (C) terms and conditions for new requirements that apply to sources with existing permits, and (D) federally-enforceable caps on emissions. The permit is issued after finding that there are several permittees, permit applicants, or potential permit applicants who have the same or substantially similar operations, emissions, activities, or facilities; the permittees, permit applicants, or potential permit applicants emit the same types of regulated air pollutants; the operations, emissions, activities, or facilities are subject to the same or similar standards, limitations, and operating requirements; and the operations, emissions, activities, or facilities are subject to the same or similar monitoring requirements.

SECTION I. AUTHORITY

This permit is developed in accordance with the provisions of OAC 252:100-7-15 and 100-7-18.

SECTION II. ELIGIBILITY

A. This permit is limited to air pollutant emitting sources located at facilities that are designed and operated for the primary purpose of producing hot mix asphalt (HMA). Hot mix asphalt includes mixtures of aggregate (including reclaimed asphalt pavement or other recycled materials), and liquid asphalt cement. In conjunction with production of HMA the facility may also operate nonmetallic mineral processing equipment, including crushers, screens, conveyors and other processing equipment.

B. The following types of facilities are generally eligible for coverage under this permit:
   1. New facilities.
   2. Existing facilities, including both those with previously issued individual state construction and/or operating permits or those previously exempted from the requirement to obtain a permit.
   3. Facilities existing prior to the effective date of any applicable standard that would have created specific quantifiable and enforceable emission rates.

C. The following facilities are not eligible for this permit:
   1. Facilities for which material facts were misrepresented or omitted from the application and the applicant knew or should have known of such misrepresentation or omission.
   2. Facilities with emissions units, unless qualified as a de minimis activity under OAC 252:100, Appendix H, that are affected sources subject to:
      a. OAC 252:100-8 (Permits for Part 70 Sources)
      b. OAC 252:100-15 (Motor Vehicle Pollution Control Devices).
      c. OAC 252:100-17 (Incinerators).
      d. OAC 252:100-21 (Wood Burning Equipment).
      e. OAC 252:100-23 (Cotton Gins).

f. OAC 252:100-24 (Grain, Feed, or Seed Operations).
g. OAC 252:100-35 (Control of Emissions of Carbon Monoxide).
h. 40 CFR Part 59 (National VOC Standards)
i. 40 CFR Part 82, Subpart A, B, & C (Stratospheric Ozone).

3. Facilities with emission units subject to 40 CFR Part 264 emission standards (Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities).
4. Any major source (as defined in OAC 252:100-8-2).

D. The following facilities, unless qualified as a de minimis activity under OAC 252:100, Appendix H, are not eligible to obtain an Authorization to Construct under this permit, but may be eligible for coverage under an Authorization to Operate if they obtain an individual construction permit and all relevant requirements and limitations in that permit are incorporated into the Authorization to Operate:

1. Facilities with a design process rate greater than 1,000 tons HMA/hour or utilizing a particulate control device on the mixer with an overall (control and capture) efficiency of less than 99.8%.
2. Facilities with fuel-burning equipment fired with fuels other than: natural gas, liquid petroleum gas (LPG), diesel with a sulfur content less than 0.8% by weight, or #2 through #6 fuel oil with a maximum of 0.8 wt% sulfur.
3. Facilities with heaters with a rated heat input of 50 MMBTUH or more.
4. Facilities that store VOCs with a vapor pressure greater than 1.5 psia in storage tanks built after December 28, 1974, with a capacity greater than 151 m^3 (40,000 gallons), or with a capacity greater than 400 gallons that are not equipped with a submerged fill.
5. Facilities located in Tulsa County which store gasoline or other VOCs (with vapor pressure greater than 1.5 psia) in storage tanks with a capacity greater than 2,000 gallons.
6. Facilities that store organic liquids other than liquid fuels (i.e., residual oil, distillate oil, or gasoline) unless qualified as a de minimis activity under OAC 252:100, Appendix H.
7. Facilities that use combustion devices (such as flares, incinerators or thermal oxidizers) to control emissions of VOCs.
8. Facilities with equipment subject to the existing equipment standards for sulfur dioxides at OAC 252:100-31-7(a).
9. Facilities with emission units that are not exempted from Part 5 ("Toxic Air Contaminants") of OAC 252:100-41, as specified in OAC 252:100-41-43.
10. Facilities with emissions units subject to:
    a. NSPS requirements under 40 CFR Part 60, other than those addressed by Subpart A, Subpart Kb, Subpart GG, Subpart OOO, and/or Subpart I, or
    b. NESHAP requirements under 40 CFR Part 61 or 63.

    unless such requirements are specifically incorporated into the Authorization to Construct/Operate issued under this permit as provided for under Part 4, Section V of this permit.
11. Facilities located in an area that is federally designated as non-attainment.

PART 1 - REQUIREMENTS FOR GENERAL PERMITS

This permit is issued for the hot mix asphalt facility source category to establish (A) terms and conditions to implement applicable air pollution rules, (B) terms and conditions to implement applicable air pollution rules for specified categories of changes to those permitted sources, (C) terms and conditions for new requirements that apply to sources with existing permits, and (D) federally-enforceable caps on emissions. The permit is issued after finding that there are several permittees, permit applicants, or potential permit applicants who have the same or substantially similar operations, emissions, activities, or facilities; the permittees, permit applicants, or potential permit applicants emit the same types of regulated air pollutants; the operations, emissions, activities, or facilities are subject to the same or similar standards, limitations, and operating requirements; and the operations, emissions, activities, or facilities are subject to the same or similar monitoring requirements.

SECTION I. AUTHORITY

This permit is developed in accordance with the provisions of OAC 252:100-7-15 and 100-7-18.

SECTION II. ELIGIBILITY

A. This permit is limited to air pollutant emitting sources located at facilities that are designed and operated for the primary purpose of producing hot mix asphalt (HMA). Hot mix asphalt includes mixtures of aggregate (including reclaimed asphalt pavement or other recycled materials), and liquid asphalt cement. In conjunction with production of HMA the facility may also operate nonmetallic mineral processing equipment, including crushers, screens, conveyors and other processing equipment.

B. The following types of facilities are generally eligible for coverage under this permit:
   1. New facilities.
   2. Existing facilities, including both those with previously issued individual state construction and/or operating permits or those previously exempted from the requirement to obtain a permit.
   3. Facilities existing prior to the effective date of any applicable standard that would have created specific quantifiable and enforceable emission rates.

C. The following facilities are not eligible for this permit:
   1. Facilities for which material facts were misrepresented or omitted from the application and the applicant knew or should have known of such misrepresentation or omission.
   2. Facilities with emissions units, unless qualified as a de minimis activity under OAC 252:100, Appendix H, that are affected sources subject to:
      a. OAC 252:100-8 (Permits for Part 70 Sources)
      b. OAC 252:100-15 (Motor Vehicle Pollution Control Devices).
      c. OAC 252:100-17 (Incinerators).
      d. OAC 252:100-21 (Wood Burning Equipment).

e. OAC 252:100-23 (Cotton Gins).
f. OAC 252:100-24 (Grain, Feed, or Seed Operations).
g. OAC 252:100-35 (Control of Emissions of Carbon Monoxide).
h. 40 CFR Part 59 (National VOC Standards)
i. 40 CFR Part 82, Subpart A, B, & C (Stratospheric Ozone).

3. Facilities with emission units subject to 40 CFR Part 264 emission standards (Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities).
4. Any major source (as defined in OAC 252:100-8-2).

D. The following facilities, unless qualified as a de minimis activity under OAC 252:100, Appendix H, are not eligible to obtain an Authorization to Construct under this permit, but may be eligible for coverage under an Authorization to Operate if they obtain an individual construction permit and all relevant requirements and limitations in that permit are incorporated into the Authorization to Operate:

1. Facilities with a design process rate greater than 1,000 tons HMA/hour or utilizing a particulate control device on the mixer with an overall (control and capture) efficiency of less than 99.8%.
2. Facilities with fuel-burning equipment fired with fuels other than: natural gas, liquid petroleum gas (LPG), diesel with a sulfur content less than 0.8% by weight, or #2 through #6 fuel oil with a maximum of 0.8 wt% sulfur.
3. Facilities with heaters with a rated heat input of 50 MMBTUH or more.
4. Facilities that store VOCs with a vapor pressure greater than 1.5 psia in storage tanks built after December 28, 1974, with a capacity greater than 151 m^3 (40,000 gallons), or with a capacity greater than 400 gallons that are not equipped with a submerged fill.
5. Facilities located in Tulsa County which store gasoline or other VOCs (with vapor pressure greater than 1.5 psia) in storage tanks with a capacity greater than 2,000 gallons.
6. Facilities that store organic liquids other than liquid fuels (i.e., residual oil, distillate oil, or gasoline) unless qualified as a de minimis activity under OAC 252:100, Appendix H.
7. Facilities that use combustion devices (such as flares, incinerators or thermal oxidizers) to control emissions of VOCs.
8. Facilities with equipment subject to the existing equipment standards for sulfur dioxides at OAC 252:100-31-7(a).
9. Facilities with emission units that are not exempted from Part 5 ("Toxic Air Contaminants") of OAC 252:100-41, as specified in OAC 252:100-41-43.
10. Facilities with emissions units subject to:
    a. NSPS requirements under 40 CFR Part 60, other than those addressed by Subpart A, Subpart Kb, Subpart GG, Subpart OOO, and/or Subpart I, or
    b. NESHAP requirements under 40 CFR Part 61 or 63.

    unless such requirements are specifically incorporated into the Authorization to Construct/Operate issued under this permit as provided for under Part 4, Section V of this permit.

11. Facilities located in an area that is federally designated as non-attainment.
12. Facilities that request an Alternative Emissions Reduction Authorization under OAC 252:100-11.

E. The DEQ may not issue a permit authorization sought by an applicant that has not paid all monies owed to the DEQ or is not in substantial compliance with the Environmental Quality Code, rules of the Board and the terms of any existing DEQ permits and orders. The DEQ may impose specific conditions on the applicant to assure compliance and/or a separate schedule that the DEQ considers necessary to achieve required compliance. [OAC 252:4-7-15(b)(1)]

Facilities that are not in compliance with all applicable State and Federal air requirements may become eligible for coverage under this permit through submission of a compliance plan meeting the requirements of Part 3 of this Permit.

F. The DEQ may refuse issuance of an authorization to an applicant even though the facility meets the above eligibility criteria. In such a case, DEQ will provide in writing to the facility an explanation providing the reason(s) for the decision.

SECTION III. AUTHORIZATION TO CONSTRUCT/OPERATE

An applicant for an Authorization to Construct/Operate under this General Permit may obtain coverage under this permit in one of the following ways:

A. An applicant proposing to construct a new facility that meets all of the eligibility requirements including those listed in Part 1, Section II.D may apply for an Authorization to Construct using the DEQ Notice of Intent (NOI) Form. Coverage under this permit is effective upon receipt of the NOI. The Authorization to Construct is issued by the DEQ after confirming that the application is administratively complete, the proper fee has been received, and that the facility is eligible for coverage under the permit.

B. An applicant proposing to construct a new facility that meets all of the eligibility requirements except those listed in Part 1, Section II.D must apply for an individual permit for the facility since a case-by-case determination is most likely required to establish enforceable limitations for some particular emissions unit.

C. An applicant proposing to obtain coverage under this permit for an existing, previously permitted facility, need only submit an application for an Authorization to Operate if the facility meets all of the eligibility requirements.

D. An applicant proposing to obtain coverage under this permit for an existing facility, not previously permitted, need only submit an application for an Authorization to Operate if the facility meets all of the eligibility requirements including those listed in Part 1, Section II.D. If the facility meets all of the eligibility requirements except those listed in Part 1, Section II.D the applicant may apply for an Authorization to Operate for the facility, and include fees for both an individual construction permit, and the Authorization to Operate. The AQD will make any necessary Section II.D determinations for incorporation in the Authorization to Operate.

E. An applicant proposing to modify an existing facility (e.g., add/replace equipment or increase emissions) already covered by an Authorization to Operate under this general permit must meet the requirements specified in Part 4, Section II of this permit. Note that an applicant proposing to modify an existing facility need not obtain a new Authorization to Operate, unless an individual construction permit is required to make a modification as described under Part 1, Section II.D of this permit.

SECTION IV. PERMIT TERM

This general permit shall remain valid and in effect unless it is modified or revoked in accordance with DEQ rules.

The DEQ shall establish, at the time this permit is modified, the terms and conditions under which existing Authorizations under this permit will be eligible for reauthorization under a modified general permit.

PART 2 - SPECIFIC CONDITIONS

Facilities shall be designed, constructed, and operated to meet the following terms and conditions, and any other applicable air pollution rules specified in this permit, the facility's Authorization to Construct and/or Authorization to Operate, and any other requirements specified by rule or statute.

SECTION I. Points of Emissions and Limitations for Each Point [OAC 252:100-7-15 and 7-18]:

A. Facility-Wide Emissions Cap and Emissions Limitations

Emissions limitations shall be established in each Authorization issued under this permit as a facility-wide emissions cap. Such limitations shall be established, in tons per year (TPY), for any pollutant subject to regulation, as the sum of the actual emissions from all authorized emissions units.

In no case shall such emissions limitations exceed that level which would cause the facility to be classified as a major source. Nor shall the permittee cause or allow the emission of any regulated air pollutant in such a concentration as to cause or contribute to a violation of ambient air quality standards or other applicable air pollution rules.

Compliance with these emissions limitations shall be determined, on a monthly basis for any regulated air pollutant with actual emissions greater than or equal to 80% of a major source threshold; and annually for any other regulated air pollutant.

The facility throughput shall be maintained at such a level so as to not exceed the annual facility-wide emissions limitations. In no case shall the daily average production rate of HMA exceed 1,000 TPH.

B. Hot Mix Asphalt Facility Subject to NSPS Subpart I

In addition to the facility-wide emissions cap established in Section I.A, the permittee shall comply with all applicable emissions limitations set forth in 40 CFR Part 60 Subpart I - Standards of Performance for Hot Mix Asphalt Facilities, for all hot mix asphalt facilities constructed or operated under this permit that commenced construction or modification after June 11, 1973.

C. Nonmetallic Mineral Processing Equipment Subject to NSPS Subpart OOO

In addition to the facility-wide emissions cap established in Section I.A, the permittee shall comply with all applicable emissions limitations set forth in 40 CFR Part 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants, for all nonmetallic mineral processing equipment constructed or operated under this permit that commenced construction or modification after August 31, 1983.

D. Nonmetallic Mineral Processing Equipment Subject to Hourly PM Limits

In addition to the facility-wide emissions cap established in Section I.A, the permittee shall comply with any applicable emissions limitations set forth in the Authorization to assure compliance with OAC 252:100-19-12 for all emission points associated with each nonmetallic mineral processing equipment emissions unit constructed or operated under this permit. Such emissions limitations shall be established for any emission point if actual emissions exceed 80% of the allowable rate given in Appendix G of OAC 252:100. For each emission point subject to such emissions limitations the permittee shall calculate and keep records of the hourly rate of emissions, in lbs/hr. The hourly rate of emissions shall be calculated as the daily throughput divided by the hours of operation for that day.

SECTION II. HMA Dryers

The following specific conditions apply to hot mix asphalt dryers unless qualified as a de minimis activity under OAC 252:100, Appendix H,:

A. The permittee shall keep the following records of operation for any HMA dryer operated under this permit. [OAC 252:100-27-2 (c)].
   1. HMA production (daily and cumulative annual). The cumulative annual production shall be calculated each month as the sum of each daily production and added to the total production for the previous 11 months.
   2. Type of control device used to control emissions from the HMA dryer, and the overall particulate (capture and control) efficiency of the control device.

B. Emissions estimates used to demonstrate compliance with Part 2, Section I.A. of this permit shall be calculated, for each reporting period, utilizing production-based emissions factors shown in the latest version of AP-42, unless factors have been derived from emission tests conducted on the reporting facility, in which case the emission test factors will be used, times the actual recorded production during the reporting period.

C. The permittee shall maintain a record of the manufacturer's specifications on the burner showing the rated heat input and NO_x emissions rate (in lb/MMBTU). No burner with a rated heat input of 50 MMBTUH or more shall be installed, or modified, so that NO_x emissions exceed 0.20 lb/MMBTU, two-hour maximum, when fired with natural gas or 0.30 lb/MMBTU, two-hour maximum, when fired with liquid fuels.

D. The permittee shall perform a biennial burner combustion optimization (tune-up) on any HMA dryer burner with a rated heat input of 50 MMBTUH or more (unless the burner is equipped with a "continuous automated combustion control system"). The tune-up shall be performed as specified in Appendix B of this permit. The Permittee shall maintain records of all tune-ups, maintenance, and adjustments made to the burner. All documents and calculations used to determine reduced NO_x emission settings should be kept as part of the tune-up, maintenance and adjustments records. These records shall include burner

settings that affect NOx emissions and how the settings were determined. In lieu of a biennial tune-up, the permittee may establish the range of operating parameters, e.g., fuel usage per ton of HMA produced, necessary to assure optimum combustion, and perform a tune-up every five years. The operating range shall include a 20% safety factor. The first (biennial or five-year) tune-up shall be conducted within the calendar year of issuance for any Authorization issued prior to March 31, or during the following calendar for all other Authorizations.

E. The permittee shall comply with all applicable requirements set forth in 40 CFR Part 60 Subpart I - Standards of Performance for Hot Mix Asphalt Facilities for all hot mix asphalt facilities constructed or operated under this permit. Subpart I applies to certain affected facilities in hot mix asphalt plants that commenced construction or modification after June 11, 1973.

SECTION III. Heaters

The following specific conditions apply to heaters unless qualified as a de minimis activity under OAC 252:100, Appendix H,:

A. The permittee shall keep the following records of operation for any heater operated under this permit. [OAC 252:100-27-2 (c)].
   1. Hours of operation (daily and cumulative annual), or
   2. Fuel usage (monthly and cumulative annual).

B. Calculation of emissions from heaters and boilers shall be based on the maximum design heat input using the lower heating value of the fuel, the hours of operation, and appropriate emission factor, or amount of fuel burned in the reporting period.

C. The permittee shall maintain a record of the manufacturer's specifications on the heater showing the rated heat input and NO_x emissions rate (in lb/MMBTU).

SECTION IV. Storage Tanks

The following specific conditions apply to storage tanks unless qualified as a de minimis activity under OAC 252:100, Appendix H.

A. The permittee shall maintain an operational record for all storage tanks with a capacity of 400 gallons or more. The record shall include the tank identification number, type of tank, date of manufacture, tank capacity in gallons, NSPS or NESHAP applicability, name of the material stored, purchase records, and vapor pressure (in psia) at the maximum storage temperature.

[OAC 252:100-7-15 and 252:100-7-18]

B. The permittee shall estimate the emissions of VOCs from storage tanks to demonstrate compliance with Part 2, Section I.A. of this permit. The estimates of emissions shall be calculated using the latest approved version of AP-42 "Compilation of Air Pollution

Emission Factors," or as implemented in approved EPA emissions estimation software, e.g., TANKS. Annual emissions estimates determined monthly shall be calculated on a rolling average basis.

C. Volatile Organic Compound (VOC) storage tanks built after December 28, 1974 and with a capacity of 400 gallons or more storing a liquid with a vapor pressure of 1.5 psia or greater under actual conditions shall be equipped with a permanent submerged fill. The permittee shall perform a visual inspection of such system annually to confirm its integrity and keep maintenance records. Such records shall at a minimum include the work performed, the date on which it was performed, and the increase, if any, in emissions as a result.

[OAC 252:100-37-15(b) and 252:100-39-41(b)]

D. The permittee shall comply with all applicable requirements set forth in 40 CFR Part 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Tank(s) constructed or operated under this permit. Subpart Kb applies to certain VOC storage vessels for which construction, reconstruction, or modification commenced after July 23, 1984.

SECTION V. Internal Combustion (IC) Engines and Gas Turbines

The following specific conditions apply to IC engines/turbines unless qualified as a de minimis activity under OAC 252:100, Appendix H,

A. Engine/turbine make, model and serial numbers or other acceptable form of permanent (non-removable) identification shall be on each engine/turbine.

B. The permittee shall monitor and record start and stop times, measured to the nearest hourly period, of any engine/turbine operated under this permit. In addition, the permittee shall record the monthly hours of operation.

C. Calculation of emissions from engines and turbines (NOx and CO) shall be based on the engine's full load (100% of design horsepower) emission rates in g/hp-hr as given by the manufacturer or derived from source testing as described in condition F of this Section, except VOC and PM10 emissions can also be based on rates provided in the latest edition of AP-42 times the hours of operation in the reporting period. If emissions must be determined each month, the annual emissions shall be calculated on a rolling basis.

D. Calculation of emissions of SO_2 from engines and turbines shall be based on the sulfur content in the fuel using the appropriate emission factor from the latest edition of AP-42.

E. The permittee shall conduct a quarterly test of NO_x and CO from all engines/turbines constructed or operated under this permit if actual emissions of the entire facility equals or exceeds 80% of the major source thresholds for NO_x or CO. Quarterly NO_x and CO testing is also required for any engine with a catalytic converter (or other controls necessary to meet emissions limitations). A 24-hour average hourly emissions rate shall be calculated as the mean

of all such tests conducted in any consecutive 24-hour period. The hourly average emissions rate for the reporting period shall be calculated as the mean of all such 24-hour average tests conducted in any reporting period i.e., monthly, quarterly, or annually. Testing is required for any engine/turbine that runs for more than 220 hours during that calendar quarter. Quarterly tests shall be at least 45 days apart. Testing shall be conducted when operating under representative conditions for that period using portable engine analyzers or an equivalent method approved by Air Quality. When four consecutive quarterly tests show an engine to be in compliance with the emissions limitations shown in the Authorization, then the testing frequency may be reduced to semi-annual testing. Semi-annual tests shall be at least five months apart. Likewise, when the following two consecutive semi-annual tests show compliance, the testing frequency may be reduced to annual testing. Annual tests shall be at least eleven months apart. Upon any showing of non-compliance with emissions limitations, the testing frequency shall revert to quarterly. Reduced engine testing does not apply to engines with catalytic converters (or other controls necessary to meet emissions limitations). For each test, the following engine operating parameters shall be clearly described in the sampling report: air/fuel ratio, exhaust O_2 content, percent water in the exhaust, stack temperature, engine speed, and horsepower.

F. The permittee shall conduct an emissions test of NO_x and CO to establish g/hp-hr emissions rates for any engine/turbine added under this permit for which manufacturer's data is not available (e.g., AP-42 factors are proposed to be used), or confirm compliance with the manufacturer's g/hp-hr emissions rates for any engine/turbine added under this permit that causes or contributes to actual facility-wide emissions of greater than 80 tpy for either pollutant. Testing shall be conducted when operating under representative conditions using a portable engine analyzer or other equivalent method approved by Air Quality. Three test runs shall be conducted for a minimum of 15 minutes each at 90% or greater of the full load, if possible, and the g/hp-hr results of each test shall be averaged to calculate the final emissions rates. The exhaust flow calculated from the Gross Caloric Value (BTU content) of the fuel shall be based on the lower heating value. Fuel data, ambient conditions, and engine operational data shall be recorded once during each run. The final emissions rates shall be expressed at the International Organization for Standardization (ISO) power and ISO specific fuel consumption levels, consistent with ISO 3046-1, or an equivalent method. Testing shall establish the maximum and minimum operating parameters, e.g., timing, manifold vacuum pressure, exhaust stream oxygen concentration, air/fuel ratio controller (AFRC) ranges, etc., while maintaining stable engine operation. A copy of the test results shall be submitted to the AQD within 60 days of commencing operation of the engine.

G. Source testing described in condition F of this Section shall be conducted to confirm engine/turbine NO_x, CO and VOC emissions rates if adjustments to the engine/turbine are made so that it operates outside of the parameter ranges established in a previous source test.

H. The permittee shall at all times operate and maintain all IC engines and associated emissions control systems in a manner that will minimize emissions of VOCs and will achieve compliance with the conditions of this permit and any Authorization issued to the permittee hereunder. Among other things, such operation shall assure that the equipment is not

overloaded, that it is properly cleaned and maintained, and that temperature and available air are sufficient to provide essentially complete combustion.

The permittee shall keep operation and maintenance records for each engine subject to emissions limitations in Section I.D. of this permit. Such records shall at a minimum include the work performed, the date on which it was performed, and the increase, if any, in emissions as a result.

[OAC 252:100-37-36]

I. The permittee shall comply with all applicable requirements set forth in 40 CFR Part 60, Subpart GG - Standards of Performance for Stationary Gas Turbines for Which Construction, Reconstruction, or Modification Commenced After October 3, 1977.

SECTION VI. Nonmetallic Mineral/Aggregate Processing/Handling Equipment

The following specific conditions apply to nonmetallic mineral/aggregate processing/handling equipment unless qualified as a de minimis activity under OAC 252:100, Appendix H,

A. The permittee shall keep the following records of operations for any nonmetallic mineral processing equipment operated under this permit. [OAC 252:100-19-12].
   1. Hours of operation (daily and cumulative annual) of each piece of processing equipment, or the operation as a whole. If hours of operation are kept for the whole operation, the hours shall be based on whenever any piece of mineral processing equipment is operating at the site, i.e., startup and shutdown of the facility.
   2. Throughput (daily and cumulative annual). The daily throughput shall be calculated by measuring or estimating either the weight or volume of the average size truckload or loader bucket and counting the number of truckloads or bucket loads per day. The cumulative annual throughput shall be calculated as the sum of the daily throughputs over the last 12-months.
   3. Type of control technology used, if any.

B. The permittee shall comply with all applicable requirements set forth in 40 CFR Part 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants. Subpart OOO applies to affected facilities that commenced construction or modification after August 31, 1983.

SECTION VII Facility-wide Requirements

The following specific conditions apply facility-wide unless qualified as a de minimis activity, emitting other than particulate matter, under OAC 252:100, Appendix H,

A. The permittee shall maintain an equipment inventory. Such inventory shall be updated each time there is any change to facility equipment (i.e., addition, removal, or replacement) subject to this permit. The inventory shall include the equipment description, equipment serial or identification number, date of the change, description of the change, NSPS

applicability, annualized actual emissions for each emission source, and the annualized actual emissions for the facility. A copy of this record shall be provided with the notification required by Part 4, Section II.C. of this permit. If equipment is being added subject to NSPS which has not undergone the initial compliance demonstration as required by 40 CFR 60.8, the notification shall include a date and time for such required demonstration.

B. Fuel-burning equipment operated under this permit shall be fueled only with commercial grade natural gas, liquid petroleum gas (LPG), diesel, or #2 through #6 fuel oil. Liquid fuels must evidence a maximum of 0.8 wt% sulfur. Certification by an applicant in the application for an Authorization that commercial grade natural gas is used at the facility to fuel such equipment shall be sufficient to document compliance with this requirement. For equipment fueled by diesel, or #2 through #6 fuel oil, the permittee shall provide with the application a fuel composition analysis that shows total sulfur content. Thereafter, the permittee shall perform a fuel composition analysis that shows total sulfur content once per load received and shall maintain records of the required fuel composition analysis. A one-time certification of sulfur content of a grade of fuel, with subsequent receipts stating the fuel grade delivered from the supplier, is sufficient to document compliance with this requirement. A new certification shall be obtained from each new supplier.
[OAC 252:100-31]

C. Estimates of fugitive emissions of particulate matter shall be calculated using the latest approved version of AP-42 "Compilation of Air Pollution Emission Factors." TPY emissions estimates used to demonstrate compliance with Part 2, Section I.A. of this permit shall be calculated, for each reporting period, as the annual average divided by the number of reporting periods per year.

D. The permittee shall maintain records of emissions and any compliance demonstrations required by this permit. An emissions record shall describe calculated emissions of regulated air pollutants from all emissions units. This record shall include the emissions unit identification number, control method used, and other operating parameters as specified in specific conditions for each particular emissions unit. A copy of the records or a summary including sample calculations shall be submitted with the application for an Authorization to Operate under this permit.

E. Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in OAC 252:100-13, Prohibition of Open Burning. [OAC 252:100-13]

F. The permittee shall conduct quarterly visual observations of emissions by a Certified Visible Emission Evaluator using Test Method 9 (40 CFR Part 60, Appendix A) from all emissions units not subject to an opacity limit promulgated under NSPS Subpart OOO or Subpart I, or as follows: The permittee shall conduct quarterly visual observations to determine the presence or absence of visible emissions using Method 22 (40 CFR Part 60, Appendix A) for all emissions units not subject to an opacity limit promulgated under

NSPS Subpart OOO or Subpart I. The term "Fugitive emissions" as used in Method 22 shall be deemed to include all units subject to Subchapter 25 requirements. In no case shall the observation period for Method 22 be less than one minute in duration. If visible emissions exceed one minute in duration for any observation period and such emissions are not the result of a malfunction, then the permittee shall take immediate corrective action to reduce the opacity. Following implementation of corrective actions, a Method 22 test will be conducted to determine if the corrective actions were successful. If visible emissions are still observed following implementation of corrective action, then the permittee shall conduct, within 24 hours, a visual observation of emissions in accordance with 40 CFR Part 60, Appendix A, Method 9. When four consecutive quarterly Method 22 or Method 9 observations show no visible emissions or no emissions of a shade or density greater than twenty (20) percent equivalent opacity, respectively, the frequency may be reduced to semi-annual visual observations using Method 22 testing, as above. Likewise, when the following two consecutive semi-annual tests show compliance, the testing frequency may be reduced to annual testing. Upon any showing of non-compliance, the testing frequency shall revert to quarterly.

If a Method 9 observation exceeds 20% opacity, the permittee shall conduct a minimum of seven additional observations continuing through the next operational day, not to exceed 24-hours. The Method 9 observations shall be conducted at a frequency of at least two per any one-hour period, performed at least once every quarter of the operational day. If any additional Method 9 observation exceeds twenty (20) percent opacity and such emissions are not the result of a malfunction, then the permittee shall conduct monthly visual observations of emissions in accordance with 40 CFR Part 60, Appendix A, Method 9. When four consecutive quarterly Method 9 observations show no emissions of a shade or density greater than twenty (20) percent equivalent opacity, the permittee may revert to quarterly visual observations using Method 22 testing as above.

If more than one six-minute Method 9 observation exceeds 20% opacity in any consecutive 60 minutes, or more than three six-minute Method 9 observations in any consecutive 24 hours exceed 20% opacity, or any six-minute Method 9 observation exceeds 60% opacity, the permittee shall report such observation(s) as a deviation, in accordance with Part 4, Section III of this permit.

G. The permittee shall implement reasonable precautions or measures to minimize fugitive dust emissions from the handling, transporting or storage of any substance or material in a way that may enable fugitive dust to become wind-borne and result in air pollution. In addition, the permittee shall not cause or permit the discharge of any visible fugitive dust emissions beyond the property line in such a manner as to damage or to interfere with the use of adjacent properties, or to cause or contribute to the violation of ambient air quality standards. [OAC 252:100-29]

The permittee shall either respond, within 48 hours, to any written or oral concern expressed by a citizen (complaint) that alleges release of fugitive dust from the facility, or refer the complaint to DEQ for response and investigation within one working day. Such response

shall include conducting an investigation to determine the cause and action necessary to resolve the complaint, including any needed corrective action. Any referral to DEQ shall be made orally, and in writing to the DEQ central office with a written copy to the appropriate DEQ district office. The permittee shall keep the following records to document resolution of complaints.

1. Date, time, name, address, and phone number of person reporting complaint.
2. Date, time, and nature of incident/discovery.
3. Date, time, and DEQ contact person.
4. Person assigned to investigate complaint.
5. Results of investigations to determine the cause of the complaint.
6. Date and nature of action taken (including corrective action taken, if any) to resolve the complaint. [OAC 252:100-29]

H. Emissions units, and control devices associated with any emission units constructed under this permit, shall comply with all applicable requirements of OAC 252:100-45 - Monitoring of Emissions, and Appendix A of this permit.

The permittee shall install, use, and maintain such monitoring equipment as specified in Appendix A of this permit, except as otherwise specified elsewhere in this permit or the facility's Authorization to Construct/Operate, or applicable rules or statutes.

The permittee shall document that all testing is conducted using methods specified in 40 CFR Parts 51, 60, 61, 63, or 75, as applicable, or as otherwise specified in this permit or the Authorization to Construct/Operate. A copy of these records shall be retained with the records containing the facility's test results.

PART 3 – SCHEDULE OF COMPLIANCE

Any facility reporting non-compliance in an application for Authorization under this permit must submit with such application a schedule of compliance for emissions units or stationary sources that are not in compliance with all applicable air pollution rules.

A. This schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable air pollution rules for which the emissions unit or stationary source is not in compliance.

B. This compliance schedule shall correspond to and be at least as stringent as that contained in any judicial consent decree or administrative order to which the emissions unit or stationary source is subject.

D. Any such schedule of compliance shall be supplemental to, and shall not sanction non-compliance with, the applicable air pollution rules on which it is based.

E. The approvable schedule of compliance may be incorporated into an Authorization if such is issued to the facility.

F. The permittee of a facility that is operating subject to a schedule of compliance shall submit to AQD progress reports at least semi-annually. The progress reports shall contain dates for achieving the activities, milestones or compliance required in the schedule of compliance and the dates when such activities, milestones or compliance was achieved. The progress reports shall also contain an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

PART 4 – STANDARD CONDITIONS

SECTION I. DUTY TO COMPLY

The permittee shall comply with all conditions of this permit and any Authorizations issued hereunder. This permit does not relieve the holder of the obligation to comply with other applicable federal, state, or local statutes, regulations, rules, or ordinances. Any permit non-compliance shall constitute a violation of the Oklahoma Clean Air Act and shall be grounds for enforcement action, for revocation of the approval to operate under the terms of this general permit or for denial of an application to operate under the terms of this general permit.

[OAC 252:100-7-15(e) and 7-18]

SECTION II. FACILITY MODIFICATIONS AND MODIFICATION OF AUTHORIZATIONS TO CONSTRUCT/OPERATE UNDER THE TERMS OF THE GENERAL PERMIT

A. An Authorization shall be corrected if any applicable emission limitation or standard is found to be absent or is found to be in error. Correction of an Authorization shall not change the Effective Date of the Authorization.

B. The permittee shall obtain an individual construction permit for any modification that would cause an existing facility to no longer be classified as a minor facility.

C. The permittee shall obtain an individual construction permit for any modification described under Part 1, Section II.D. of this permit. All other facility modifications may be constructed without an Authorization to Construct, or individual construction permit, provided that the permittee notifies the DEQ in writing of the modification within 7 days following the start of operation.

D. The permittee shall apply for a new Authorization to Operate within 60 days of commencing operation of any modified facility authorized under an individual construction permit, or Authorization to Construct issued under this permit, except for a de minimis facility.

[OAC 252:100-7-18(a)]

E. The permittee shall apply for either a new Authorization to Operate or a relocation permit to relocate any portable source authorized under this permit. [OAC 252:100-7-17]

F. An Authorization to Construct issued under this permit will terminate and become null and void if the construction is not commenced within 18 months of the issuance date, or if work is suspended for more than 18 months after it has commenced. [OAC 252:100-7-15(f)]

SECTION III. REPORTING OF DEVIATIONS FROM PERMIT TERMS

A. In the event of any release which results in excess emissions, the owner or operator of such facility shall notify the Air Quality Division as soon as the owner or operator of the facility has knowledge of such emissions, but no later than 4:30 p.m. the next working day following the malfunction or release. Within ten (10) working days after the immediate notice is given, the owner or operator shall submit a written report describing the extent of the excess emissions and response actions taken by the facility.

B. Notification may be made by fax (1-405-702-4101), or by telephone (1-877-277-6236). Written notifications shall be made within 10 working days after the immediate notice is given to the DEQ central office, with a copy to the appropriate DEQ district office.

SECTION IV. MONITORING, RECORDKEEPING & REPORTING

A. The permittee shall keep records as specified in this permit and any authorization issued under this permit. These records, including monitoring data and support information, shall be retained on site or at a nearby field office for a period of at least five years unless a longer period is specified by an applicable rule or statute. Support information includes all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit or the Authorization. Where appropriate and if requested by the applicant, the Authorization will specify which records may be maintained in computerized form.
[OAC 252:100-5-2.1(c) and 7-15 and 7-18]

B. Any owner or operator subject to the provisions of NSPS shall maintain records of the occurrence and duration of any start-up or shutdown of the process containing such affected facilities, and shall record malfunctions in the operation of an affected facility or any malfunction of the air pollution control equipment.
[40 CFR §60.7 (b)]

C. Any owner or operator subject to the provisions of NSPS shall maintain a file of all measurements and other information required by this subpart recorded in a permanent file suitable for inspection. This file shall be retained for at least two years following the date of such measurements, maintenance, and records. [40 CFR §60.7 (d)]

D. All testing must be conducted by methods approved by the Executive Director under the direction of qualified personnel. All tests shall be made and the results calculated in accordance with test procedures described or referenced in the permit and approved by Air Quality. [OAC 252:100-43]

E. The permittee shall document that all testing is conducted using methods specified in 40 CFR Parts 51 (SIP), 60 (NSPS), 61 (NESHAP), 63 (MACT), or 75 (CEM), as applicable, or as

otherwise specified in this permit or the Authorization to Construct/Operate. A copy of these records shall be retained with facility's testing records. [OAC 252:100-45]

F. If the permittee monitors any pollutant more frequently than required by this permit, the results of this monitoring shall be included in the calculations used for determining compliance with the conditions of this permit.

G. The permittee shall submit to AQD a copy of all reports submitted to EPA as required by 40 CFR Part 60, 61, and 63, for all equipment constructed or operated under this permit subject to such standards. [OAC 252:100-41-15]

SECTION V. REQUIREMENTS THAT BECOME APPLICABLE DURING THE PERMIT TERM

Any Authorization issued after the effective date of a new or modified requirement or standard applicable to a unit located at the facility, may incorporate such requirement or standard, which shall supersede any corresponding permit requirement that is less stringent than the newer requirement or standard. [OAC 252:100-7-15(a) and 7-18]

SECTION VI. ANNUAL EMISSIONS INVENTORY AND FEE PAYMENT

A. The permittee shall file with the AQD an annual emission inventory and shall pay annual fees based on emissions inventories or allowable emissions. [OAC 252:100-5]

B. The permittee shall use best available data to calculate emissions for inventory purposes. If available, emission test results conducted on an emission source at the permitted facility shall be used. If test results are unavailable for an emission source, emission shall be determined using the latest edition of AP-42, unless other methods are approved by DEQ. However, if emission testing is performed following permit issuance, the emission factors derived from the emission test results shall be used to calculate the actual emissions for the inventory. [OAC 252:100-5-2.1(d)]

SECTION VII. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

SECTION VIII. PROPERTY RIGHTS

A. This permit does not convey any property rights of any sort or any exclusive privilege.

B. This permit shall not be considered in any manner affecting the title of the premises upon which the equipment is located and does not release the permittee from any liability for damage to persons or property caused by or resulting from the maintenance or operation of the equipment for which the permit is issued.

SECTION IX. DUTY TO PROVIDE INFORMATION

A. The permittee shall furnish to the DEQ upon receipt of a written request and within sixty (60) days of the request, unless the DEQ specifies another time period, any information that the DEQ may request to determine whether cause exists for modifying, reopening, or revoking and reissuing or terminating the permit or to determine compliance with the permit or the Authorization. [27A O.S. Supp. 1999, § 2-5-105(18)]

B. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 27A O.S. Supp. 1999, § 2-5-105(18). Confidential information shall be clearly labeled as such and shall be separable from the main body of the document such as in an attachment.

C. Notification to the AQD of the sale or transfer of ownership of this facility is required and shall be made in writing within 10 days after such date.

[OAC 252:100-7-2(e)]

SECTION X. DUTY TO SUPPLEMENT

The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in any information submittal, shall promptly submit such supplementary facts or corrected information. [OAC 252:4-7-8]

SECTION XI. REOPENING, MODIFICATION AND REVOCATION

A. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit or an Authorization modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [27A O.S. Supp. 1999, § 2-5-112(B)(1)]

B. The permitting authority will reopen and revise or revoke this permit as necessary to remedy deficiencies if the DEQ or the EPA determines that this permit contains a material mistake or that the permit must be revised or revoked to assure compliance with the applicable air pollution rules. [27A O.S. Supp. 1999, § 2-5-112(B)(3)]

SECTION XII. INSPECTION AND ENTRY

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the DEQ to perform the following (subject to the permittee's right to seek confidential treatment pursuant to 27A O.S. Supp. 1999, § 2-5-105 (18) for confidential information submitted to or obtained by the DEQ under this section):

A. enter upon the permittee's premises during reasonable/normal working hours where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit or the Authorization;

B. have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit or the Authorization;

C. inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit or the Authorization; and

D. sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or the Authorization.

[27A O.S. Supp. 1999, § 2-5-105]

SECTION XIII. DE MINIMIS FACILITIES

The permittee is hereby authorized to operate emissions sources and/or conduct activities that are listed on the "De Minimis Facilities" list in OAC 252:100, Appendix H.

SECTION XIV. GENERAL PROVISIONS UNDER NSPS AND NESHAPS

The permittee shall comply with all applicable requirements of the corresponding General Provisions, as set forth in 40 CFR Part 60 Subpart A, 40 CFR Part 61 Subpart A, and 40 CFR Part 63 Subpart A, for all equipment constructed or operated under this permit subject to NSPS or NESHAPs.

[OAC 252:100-4 & 41-15]

APPENDIX A

CONSTRUCTION, OPERATION, MAINTENANCE AND MONITORING REQUIREMENTS FOR CONTROL DEVICES

A. All control devices shall be constructed, operated, and maintained according to manufacturers' specifications, except as otherwise required by this permit, the facility's Authorization to Construct/Operate, or applicable rules or statutes.

B. If parametric monitoring is conducted in lieu of direct emissions monitoring, the permittee shall demonstrate in the application for an Authorization to Operate that the operating range for such parameters, as recommended by manufacturers' specifications, assures compliance with applicable emissions limitations and other applicable air pollution rules.

C. Fugitive road dust shall be controlled as needed to maintain compliance with Part II – Section V.G. standards by applying water and/or chemical spray to the road.

D. Authorizations issued under this permit may specify that water/chemical spray dust suppression systems on non-metallic minerals processing equipment and transfer points be operated on either a continuous or intermittent basis, depending on whether processed materials contain sufficient moisture such that operation of the plant does not cause a violation of applicable limitations.

If water/chemical spray dust suppression systems are necessary to comply with emissions limitations, the permittee shall maintain the water spray system in good operating condition. At a minimum, the water pump, pipe system, spray nozzles, and any gauges (e.g., water pressure) shall be inspected daily. The permittee must maintain records of the description and the date of repairs on the water spray system.

E. Authorizations issued under this permit may specify that baghouses shall be operated continuously, or periodically as necessary to meet emissions limitations, when processing equipment is in operation and maintained according to manufacturer's specifications. At least once per month, the permittee shall inspect the baghouse cleaning system, dust removal system, and fan, and perform maintenance as needed. At least annually, or during each outage period that is longer in duration than 1 week, the permittee shall conduct a thorough baghouse inspection, including the filter bags, baghouse structure, expansion joints, turning vanes, and dampers, and conduct a review of all inspection and maintenance logs. Maintenance shall be performed as needed. The permittee shall monitor the pressure drop weekly, and any other operational parameters specified by the manufacturer as necessary to assure adequate operation of the baghouse. The permittee shall maintain logs of all visible emissions observations, baghouse inspections, operational parameters measured, and maintenance performed.

F. Authorizations issued under this permit may specify that wet scrubbers shall be operated continuously, or periodically as necessary to meet emissions limitations, when processing equipment is in operation. At least once per day, the permittee shall monitor and record the pressure drop across the scrubber on a differential pressure gauge. At least once per day the permittee shall monitor the flow rate of the scrubbing solution using a continuous flow meter, and record the flow rate of the scrubbing solution and make-up water. Maintenance shall be performed as needed, e.g., a significant increase or decrease in pressure drop or scrubbing solution flowrate indicates a problem. The permittee shall maintain a log of all pressure drop and flow rate measurements and maintenance performed.

G. Authorizations issued under this permit may specify that cyclones shall be operated continuously, or periodically as necessary to meet emissions limitations, when processing equipment is in operation. At least once per day, the permittee shall monitor and record the pressure drop across the cyclone on a differential pressure gauge. In lieu of measuring the pressure drop across the cyclone, the permittee may measure the pressure drop across a wet scrubber located immediately upstream of the cyclone to determine that both the scrubber and cyclone are properly operated. Maintenance shall be performed as needed, e.g., visible emissions or a significant increase or decrease in pressure drop. The permittee shall maintain a log of the pressure drop and maintenance performed.

H. Nonselective catalytic reduction (NSCR) systems shall be constructed with an Air-to-Fuel Ratio Controller using sensors to measure the exhaust oxygen concentration and temperature across the catalyst necessary to assure compliance with the hourly emissions rates established in Part 2, Section V.F of this permit. The temperature across the catalyst shall be monitored and recorded once per week.

I. All records shall be maintained in accordance with Part 4 of this permit, except as otherwise required by this permit, the facility's Authorization to Construct/Operate, or applicable rules or statutes.

APPENDIX B
Burner Combustion Optimization (Tune-up) Requirements

A. All combustion optimizations conducted shall be performed according to methods approved in writing by the DEQ. The purpose of the Tune-up is to optimize combustion (minimize VOC emissions) while maintaining NO_x emissions.

B. The DEQ may require written notification to be submitted at least 15 days in advance of a combustion optimization to provide the DEQ an opportunity to evaluate the plan and to have a representative present to witness the combustion optimization procedures. The notice shall provide a combustion optimization plan that includes, but need not be limited to, the following information:

1. The results of an analysis of the process to be optimized. The analysis shall identify and evaluate the options available for modifications to the process that would optimize combustion while minimizing NO_x emissions.
2. A description of the process or operation variables that affect the air contaminant source's emissions.
3. A description of the process to be optimized.
4. A description of the sampling equipment and the combustion optimization methods and procedures to be used.
5. The date and starting time of the combustion optimization.
6. A description of the number and location of any sampling ports and sampling points and an identification of the combustion gases to be sampled.
7. A statement indicating the production rate and the operating conditions at which the combustion optimization will be conducted.

C. In evaluating any requested combustion optimization plan, the DEQ shall respond to the permittee within 15 business days of receipt of the plan and may require one or more of the following activities:

1. A pre-combustion optimization conference which includes the permittee, the person conducting the combustion optimization and the DEQ to discuss any deficiencies in the plan or settle any combustion optimization procedure questions the DEQ, the person conducting the combustion optimization or the permittee might have.
2. Any change to the sampling method that is deemed necessary by the DEQ to conduct a proper combustion optimization.
3. A rescheduling of the combustion optimization to accommodate witnessing or source production schedules.

D. The permittee shall notify the DEQ of any modifications to a combustion optimization plan for which DEQ has previously requested notification at least 5 business days prior to the combustion optimization, unless waived by the DEQ. In the event the permittee is unable to conduct the combustion optimization on the date specified in the plan, due to unforeseeable circumstances beyond the permittees' control, the permittee shall notify the DEQ at least 5 business days prior to the scheduled combustion optimization date and specify the date when the combustion optimization is to be rescheduled.

E. The DEQ may require the permittee to provide proper facilities for conducting combustion optimization tests that may include:
1. The installation of sampling ports and safe sampling platforms.
2. A safe work area for the test crew or any witnessing personnel.
3. Safe access to the work area or sampling platform.
4. Utilities for the sampling equipment.
5. Instrumentation to monitor and record emissions data, i.e., a strip chart recorder, computer or digital recorder.

F. The DEQ may require that a DEQ representative be present at any combustion optimization. The DEQ may require the following activities:
1. The DEQ may require the person conducting the combustion optimization to provide the DEQ a copy of all test data and equipment calibration data prepared or collected for the combustion optimization.
2. The DEQ may require the permittee and person conducting the combustion optimization to correct any deficiency in the performance of the combustion optimization provided that the DEQ notifies the permittee and person conducting the combustion optimization of the deficiency as soon as it is discovered. The failure of the permittee and person conducting the combustion optimization to correct any deficiency may result in the DEQ refusing to accept the results of the combustion optimization.

G. The components of any emission sampling train or associated sampling equipment shall be calibrated not more than 60 days before the test. This includes the following:
1. Any equipment used to measure gas velocity.
2. Any equipment used to meter sample gas volume.
3. Any equipment used to regulate sample gas flow.
4. Any equipment used to measure temperature.
5. Any gas-sampling nozzle used during the emission test.
6. Any equipment used to determine gas molecular weight.
7. Any other sampling equipment that requires periodic calibration.

H. Any emissions testing conducted in conjunction with combustion optimization shall be conducted in accordance with OAC 252:100-43. The combustion optimization shall include the following procedures:
1. An analysis to identify the optimized combustion profile or equipment modifications needed to optimize combustion. The study shall address, but is not limited to, the modification of the following systems: fuel delivery, burner, primary and secondary combustion monitoring, combustion-air delivery and burner management.
2. The combustion optimization shall be based on burner tune-up procedures that result in maximum combustion efficiency and a low NO_x operating curve. This curve shall determine the operating range of combustion variables such as CO and O_2 at set points within the following ranges: 20-30% load, 45-55% load, 70-80% load and 95-

100% load, for those set points that represent at least 10% of operating hours in a typical year.

3. A continuous combustion analyzer shall be used to monitor the operation of the combustion unit in accordance with the combustion efficiency and low NO_x operating curve required under this section. The analyzer shall monitor the combustion parameters CO and O_2 or monitor NO_x directly. The fuel flow rate shall also be monitored.

I. The permittee shall retain a copy of the report of the combustion optimization at the facility within 60 days after its completion. The failure to include the following information in a combustion optimization report may result in rejection of the combustion optimization. The combustion optimization report shall include, but need not be limited to, the following information:

1. A detailed description of the process optimized and the procedures employed.
2. A log of the operating conditions of the process optimized and of any associated air pollution control device.
3. A summary of results, expressed in terms of the concentrations of NO_x, O_2 and CO, prior to and following the combustion optimization.
4. Sample calculations employing all the formulas used to calculate the results.
5. The field and laboratory data for the optimization.
6. The optimization analysis and combustion efficiency and low NO_x operating curve.
7. A report of any visible emission evaluations performed during the combustion optimization.
8. A copy of any steam, opacity or airflow charts made during the optimization.
9. A report of any fuel analysis performed on the fuel burned during the optimization.
10. Documentation of any process upset occurring during the optimization.
11. If the combustion optimization being conducted is one required under J, the changes made to the process or control device since the last test.

J. The DEQ may require a permittee to conduct an additional combustion optimization under the following conditions.

1. If the DEQ determines that a permittee has not satisfied the requirements of H or I.
2. If combustion units are modified sources with respect to NO_x due to a change in the method of operation.