



**AIR QUALITY
GENERAL PERMIT TO CONSTRUCT/OPERATE
PRINTING AND/OR PACKAGING 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 printing and/or packaging 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 printing and/or packing 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 Printing and/or Packaging Facilities. 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 31, 2002.

Signed and issued this 31st day of December, 2002.

A handwritten signature in cursive script, appearing to read "Eddie Terrill".

Eddie Terrill, Director, Air Quality Division

~~TABLE~~ TABLE OF CONTENTS

PART 1	REQUIREMENTS FOR GENERAL PERMITS	
Section I.	Authority.....	3
Section II.	Eligibility.....	3
Section III.	Authorization to Construct/Operate.....	5
Section IV.	Permit Term.....	6
PART 2	SPECIFIC CONDITIONS	7
Section I.	Points of Emissions and Limitations for Each Point	7
Section II.	Printing Operation Requirements.....	8
Section III.	Heater/Boiler/Oxidizer Requirements.....	9
Section IV.	Packaging Operation Requirements.....	10
Section V.	Storage Tanks	11
Section VI.	Facility-wide Requirements	11
PART 3	SCHEDULE OF COMPLIANCE.....	16
PART 4	STANDARD CONDITIONS	17
APPENDIX		
A.	Control Devices	22
B.	Burner Combustion Optimization (Tune-up) Requirements	24

PART 1 - REQUIREMENTS FOR GENERAL PERMITS

This permit is issued for the printing and/or packaging facility source category to establish (A) terms and conditions to implement applicable air pollution rules, including state-only requirements, (B) terms and conditions to implement applicable air pollution rules, including state-only requirements 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 printing and/or packaging.
- 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, Subpart B (National VOC Standards for Automobile Refinish Coatings).
 - i. 40 CFR Part 59, Subpart D (National VOC Standards for Architectural Coatings)
 - j. 40 CFR Part 82, Subpart B, Subpart D, Subpart E, Subpart G, and Subpart H (Stratospheric Ozone Protection).
 - k. 40 CFR Part 264 (Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities).
- 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 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.
 - 2. 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 m³ (40,000 gallons); or with a capacity greater than 400 gallons that are not equipped with a submerged fill system.
 - 3. Facilities located in Tulsa County that store gasoline or other VOCs (with vapor pressure greater than 1.5 psia) in storage tanks with a capacity greater than 2,000 gallons.
 - 4. Facilities with equipment subject to the existing equipment standards for sulfur dioxides at OAC 252:100-31-7(a).
 - 5. Facilities with emissions units subject to:
 - a. NSPS requirements under 40 CFR Part 60 not addressed by Subpart A, Subpart Dc, Subpart Kb, Subpart QQ, and Subpart FFF, or
 - b. NESHAP requirements under 40 CFR Part 61, or
 - c. NESHAP requirements under 40 CFR Part 63 not addressed by §63.829(d) and §63.830(b) of Subpart KK 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.
 - 6. 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.
 - 7. Facilities located in an area that is federally designated as non-attainment.
 - 8. 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 as an annual amount in TPY, on a rolling monthly basis for any regulated air pollutant with actual emissions greater than or equal to 80% of a major source threshold and annually (calendar year) for any regulated air pollutant with actual emissions less than 80% of a major source threshold.

The facility throughput shall be maintained at such a level so as to not exceed the annual facility-wide emissions limitations.

B. Publication Rotogravure Printing Presses Subject to NSPS Subpart QQ

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 QQ - Graphic Arts Industry: Publication Rotogravure Printing, for all publication rotogravure printing presses (not proof presses) that commenced construction, modification, or reconstruction after October 28, 1980.

C. Rotogravure Printing Lines Subject to NSPS Subpart FFF

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 FFF - Flexible Vinyl and Urethane Coating and Printing, for all rotogravure printing lines used to print or coat flexible vinyl or urethane products that began construction, modification, or reconstruction after January 18, 1983.

D. 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 all processing equipment constructed or operated under this permit. Such emissions limitations shall be established for any emission point if actual emissions exceeds 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. Printing Operation Requirements

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

- A. Make, model and serial numbers or other acceptable form of permanent (non-removable) identification shall be on each printing press.
- B. The permittee shall keep the following records of operation for any printing press operated under this permit.
 - 1. The monthly consumption of ink in pounds or gallons; the percent by weight VOC, HAP, and TAC content, as applied; and an estimate of VOC, HAP, and TAC emissions.
 - 2. The monthly consumption of fountain solution, additives, and cleaning solutions, in pounds or gallons; the percent by weight or weight to volume ratio (lbs/gal) VOC, HAP, and TAC content; and an estimate of VOC, HAP, and TAC emissions.
 - 3. Type of control device used to control emissions from printing presses, and the overall control (capture and control device) efficiency.
- C. Estimates of emissions of VOCs from printing operations shall be calculated using a material balance method, as described in the latest approved version of AP-42 "Compilation of Air Pollution Emission Factors," and further described in the STAPPA/ALAPCO/EPA Emission Inventory Improvement Program, "Technical Report: Area Sources and Area Source Method Abstracts: Graphic Arts," Vol. III, Chapter 7, November 1996. 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. USEPA Method 24 (40CFR Part 60, Appendix A) for VOCs, Method 320 (40CFR Part 63, Appendix A) for HAPs and TACs, a Material Safety Data Sheet, or an equivalent document provided by the supplier of each coating shall be used to estimate VOC, HAP, and TAC content, as long as the documentation contains sufficient information to

determine the VOC, ~~HAP~~, and TAC content, in pounds per gallon. Where these documents differ, the results of USEPA Method 24 and Method 320 results shall govern.

- E. The permittee shall comply with all applicable requirements set forth in 40 CFR Part 60, Subpart QQ - Graphic Arts Industry: Publication Rotogravure Printing, for each publication rotogravure printing press (not a proof press) that commenced construction, modification, or reconstruction after October 28, 1980.
- F. The permittee shall comply with all applicable requirements set forth in 40 CFR Part 60, Subpart FFF - Flexible Vinyl and Urethane Coating and Printing, for each rotogravure printing line used to print or coat flexible vinyl or urethane products that began construction, modification, or reconstruction after January 18, 1983.

SECTION III. Heater/Boiler/Thermal Oxidizer Requirements

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

- A. Make, model and serial numbers or other acceptable form of permanent (non-removable) identification shall be on each heater, boiler, or thermal oxidizer.
- B. The permittee shall keep the following records of operation for any heater/boiler/thermal oxidizer operated under this permit. [OAC 252:100-19-4 & 252:100-37-36].
 - 1. Hours of operation (daily and cumulative annual), or
 - 2. Fuel usage (daily and cumulative annual), and
 - 3. Maintenance records, including the work performed, date it was performed, and the increase, if any, in emissions as a result.
- C. The permittee shall keep the following records of operation for any thermal oxidizer operated intermittently under this permit. [OAC 252:100-19-4].
 - 1. Start and stop times of the thermal oxidizer, and
 - 2. Start and stop times of any equipment exhausted through the thermal oxidizer, and
 - 3. The operating temperature of the thermal oxidizer at the time any equipment exhausted through the thermal oxidizer is started.
- D. Calculation of emissions from heaters/boilers/thermal oxidizers shall be based on the maximum design heat input using the lower heating value of the fuel. TYP emissions estimates used to demonstrate compliance with Part 2, Section I.A. of this permit shall be calculated, for each reporting period, as the hourly emissions rate based on the BTU content analysis, times the hours of operation or amount of fuel burned in the reporting period, i.e., monthly, or annually.
- E. The permittee shall maintain a record of the manufacturer's specifications on any heater/boiler/thermal oxidizer showing the rated heat input and NO_x emissions rate (in lb/MMBTU). No heater/boiler/thermal oxidizer 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, three-hour average, when fired with natural gas or 0.30 lb/MMBTU, three-hour average, when fired with liquid fuels. [OAC 252-100-33]

- F. The permittee shall perform an annual combustion optimization (tune-up) on any heater/boiler/thermal oxidizer with a rated heat input of 50 MMBTUH or more (unless 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 heater/boiler/thermal oxidizer. 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 heater/boiler/thermal oxidizer settings that affect NO_x emissions and how the settings were determined. The first 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.
- G. The permittee shall comply with all applicable requirements set forth in 40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units for Which Construction, Reconstruction, or Modification Commenced After June 9, 1989. Subpart Dc applies to steam generating units with a maximum design heat input capacity greater than or equal to 10 MMBTUH but less than or equal to 100 MMBTUH.

SECTION IV. Packaging Operation Requirements

The following specific conditions apply to packaging operations 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 packaging operation operated under this permit. [OAC 252:100-7].
1. The monthly consumption of adhesives and cleaning solutions, in pounds or gallons; the percent by weight or weight to volume ratio (lbs/gal) VOC, HAP, and TAC content; and an estimate of VOC, HAP, and TAC emissions.
 2. The monthly amount of material (e.g., paper) processed, and an estimate of PM and PM₁₀ emissions. Facilities with actual emissions of PM and PM₁₀ less than 80% of the major source thresholds may monitor paper usage and estimate emissions annually.
 3. Type of control device used to control emissions from packaging operations, and the overall control (capture and control device) efficiency.
- B. Estimates of emissions of VOCs from packaging operations shall be calculated using a material balance method, as described in the latest approved version of AP-42 "Compilation of Air Pollution Emission Factors," and further described in the STAPPA/ALAPCO/EPA Emission Inventory Improvement Program, "Technical Report: Area Sources and Area Source Method Abstracts: Graphic Arts," Vol. III, Chapter 7,

November 1996. 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.

- C. The permittee shall comply with all applicable requirements set forth in 40 CFR Part 59, Subpart C – National VOC Emission Standards for Consumer and Commercial Products, for certain consumer products manufactured or imported on or after December 10, 1998 for sale or distribution in the United States. **(Federal-only requirement)**

SECTION V. 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 located at the facility. The record shall include the tank identification number, type of tank and tank seal, date of manufacture, tank capacity in gallons, NSPS or NESHAP applicability, whether equipped with a submerged fill pipe or vapor recovery system, name of the material stored, purchase records, vapor pressure (in psia) at the maximum storage temperature, monthly average throughput, and monthly average temperature (°F). Monthly average temperature need not be monitored for unheated tanks that receive liquids that are at or below ambient temperatures.
- B. Estimates of emissions of VOCs from storage tanks 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
- 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 or a vapor-recovery system as required in OAC 252:100-37-15(a)(2) or 100-39-41(b)(2). 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 VI. Facility-wide Requirements

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

- A. The permittee shall maintain records of all changes to facility equipment (i.e., addition, removal, or replacement) subject to this permit. The records shall include the equipment description, equipment serial or identification number, date of the change, description of the change, NSPS and NESHAP 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. Emissions units exhausted to control equipment operated under this permit shall not be started until the control or capture device has reached its normal operating condition, i.e., temperature and/or pressure sufficient to assure compliance with applicable requirements specified elsewhere in this permit. The permittee shall implement and maintain a program for leak detection and correction for the hoses and ductworks serving VOC emission capture systems and VOC control devices and keep maintenance records. Such records shall at a minimum include the work performed, the date on which it was performed, and the change, if any, in emissions as a result.
- D. The permittee shall keep all solvent containers closed at all times unless filling, draining, or performing cleanup operation. The permittee shall keep all solvent laden shop towels in a closed container when not being used.
- E. Estimates of fugitive emissions 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.

- F. 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. [OAC 252:100-7]
- G. 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]
- H. 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), or as follows: The permittee shall conduct quarterly visual observation 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. 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 six minutes in duration. If visible emissions exceed six minutes 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.

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 visual observations using Method 22 testing as above. When four consecutive quarterly Method 22 or Method 9 observations show no visible emissions or Method 9 shows no emissions of a shade or density greater than twenty (20) percent equivalent opacity, the frequency may be reduced to semi-annual visual observations using either Method 9 or 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 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. [OAC 252:100-25]

- I. 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]

- J. 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. [OAC 252:100-43]

- K. The permittee shall comply with the following standards for production and consumption of ozone-depleting substances. **(Federal-only requirement)** [40 CFR 82, Subpart A]
1. Persons producing, importing, or placing an order for production or importation of certain class I and class II substances, HCFC-22, or HCFC-141b shall be subject to the requirements of §82.4.
 2. Producers, importers, exporters, purchasers, and persons who transform or destroy certain class I and class II substances, HCFC-22, or HCFC-141b are subject to the recordkeeping requirements at §82.13.
 3. Class I substances (listed at Appendix A to Subpart A) include certain CFCs, Halons, HBFCs, carbon tetrachloride, trichloroethane (methyl chloroform), and bromomethane (Methyl Bromide). Class II substances (listed at Appendix B to Subpart A) include HCFCs.

- L. The permittee shall comply with the following standards for recycling and emissions reduction, except as provided for Motor Vehicle Air Conditioners (MVAC) in Subpart B. [40 CFR 82, Subpart F]
1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 3. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 4. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record-keeping requirements pursuant to §82.166.
 5. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.158.
 6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

(Federal-only requirement)

- M. The permittee shall comply with all applicable requirements set forth in 40 CFR Part 63, Subpart KK – National Emission Standards for the Printing and Publishing Industry for such facilities constructed or operated under this permit. Subpart KK applies to each new and existing facility at which publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses are operated. Area sources that commit to and use less than the major source levels of HAPs are subject to the requirements of §63.829(d) (records of HAP use) and §63.830(b)(1) (submission of an initial notification).

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.
- C. 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.
- D. The approvable schedule of compliance may be incorporated into an Authorization if such is issued to the facility.
- E. 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 intent to construct and operate within 7 days of 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 any report submitted to EPA, for all equipment constructed or operated under this permit and subject to 40 CFR Part 60, 61, or 63.
[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, emissions 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(f)]

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 requirements.
- C. Thermal vapor incinerators shall be constructed with a temperature sensor in the outlet. The VOC removal efficiency shall be correlated to the outlet temperature and maintained so as to meet applicable requirements as specified elsewhere in this permit. The permittee shall monitor and record the outlet temperature continuously.
- D. Catalytic vapor incinerators shall be constructed with a temperature sensor in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor in the vent stream at the nearest feasible point to the catalyst bed outlet. The VOC removal efficiency shall be correlated to the inlet and outlet temperatures and maintained so as to meet applicable requirements as specified elsewhere in this permit. The permittee shall monitor and record the inlet and outlet temperatures continuously.
- E. Condensers shall be constructed with a temperature sensor in the outlet. The VOC removal efficiency shall be correlated to the condenser outlet temperature and maintained so as to meet applicable requirements as specified elsewhere in this permit. The permittee shall monitor and record the condenser temperature continuously if the condenser vents directly to the atmosphere (e.g., not combusted in a heater, boiler, or thermal oxidizer).
- F. Nonregenerative-type carbon adsorbers (e.g., carbon canisters) shall be constructed with dual canisters. The outlet VOC concentration from the canister in use shall be monitored and recorded daily using an Organic Vapor Analyzer. The design capacity and carbon replacement interval shall be maintained so as to meet applicable requirements as specified elsewhere in this permit. The permittee shall monitor and record the replacement interval.
- G. Regenerative-type carbon adsorbers shall be constructed with VOC sampling ports in both the inlet and outlet vent. The inlet and outlet VOC concentration shall be monitored and recorded daily using an Organic Vapor Analyzer. The removal efficiency and outlet VOC concentration shall be maintained so as to meet applicable requirements as

specified elsewhere in this permit. The permittee shall monitor and record the regeneration time and interval.

- H. Baghouses shall be constructed with a pressure gauge to measure the pressure drop across the baghouse. The particulate removal efficiency shall be correlated to the pressure drop and maintained so as to meet applicable requirements as specified elsewhere in this permit. 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 one 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.
- I. Cyclones shall be constructed with a pressure gauge to measure the pressure drop across the cyclone. At least once per week, the permittee shall monitor and record the pressure drop across the cyclone. Wet scrubbers shall also be equipped with a flowmeter to measure the scrubbing solution flowrate. At least once per week, the permittee shall monitor and record the pressure drop across the scrubber on a differential pressure gauge, and the scrubbing solution flowrate. 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., a significant increase or decrease in pressure drop or scrubbing solution flowrate indicates a problem. The permittee shall maintain a log of all pressure drops and flow rate measurements and maintenance performed.
- J. 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 engineering study of the process to be optimized. The engineering report 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 the 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 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 analysis 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 O₂ 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 boiler 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 O₂ or monitor NO_x directly. The fuel flow rate shall also be monitored.
- I. The permittee shall submit a copy of the report of the combustion optimization to the DEQ within 60 days after its completion. If requested, the DEQ may grant an extension of up to 30 days for combustion optimization report submittal. 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, O₂ 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.