

**MINOR SOURCE PERMIT APPLICATION
for a
NATURAL GAS COMPRESSOR STATION**

FORMS & INSTRUCTIONS



AIR QUALITY DIVISION

**STATE OF OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**707 N ROBINSON AVE., SUITE 4100
P.O. Box 1677
OKLAHOMA CITY, OK 73101-1677**

**PHONE: (405) 702-4100
FAX: (405) 702-4101**

REVISED AUGUST 5, 1997

APPLICATION INSTRUCTIONS

MINOR SOURCE COMPRESSOR STATIONS

ASSISTANCE AVAILABLE
DEQ Customer Assistance: (800) 869-1400
Air Quality Division: (405) 702-4100

INTRODUCTION

This package contains the State of Oklahoma Air Quality Permit Application for a Minor Source. Please read all the directions carefully before you fill it out. Answer all questions by checking the appropriate box or filling in a response. Original signature from a responsible official is required on Form 884. Please note that delays in processing your application may occur if an incomplete application is submitted. It is the applicant's responsibility to submit a complete application well in advance of anticipated commencement of construction, start up dates, or the effective date of operating permit program requirements to allow sufficient time for proper application review and permit issuance.

BACKGROUND

Oklahoma operates a dual air quality permit system as delineated in Oklahoma Administrative Code (OAC) 252:100. The permit issuance process is delineated in OAC 252:002-15. A *construction permit* is to be obtained prior to the commencement of construction, installation or modification of an air contaminant source. A permit is necessary for any construction, installation or modification which will increase the amount of air contaminant emissions by more than the de minimis levels given in OAC 252:100-7-2. After construction is completed, application for an *operating permit* must be submitted within 60 days after start up. If you are uncertain whether a permit is required, a request for an applicability determination may be submitted to DEQ and a written determination will be made based on the data submitted. An applicability determination can also be performed to determine whether a facility is a major or minor source.

DEFINITIONS

Criteria Pollutant: Oxides of Nitrogen (NO_x), Sulfur Dioxide (SO₂), Lead (Pb), Ozone (O₃, i.e., regulated as non-methane hydrocarbon or NMHC as a precursor to O₃), Particulate Matter less than 10 microns (PM₁₀), Carbon Monoxide (CO).

Minor Source: A source that has the potential to emit less than 100 tons/year of a criteria pollutant, less than 10 tons/year of any single hazardous air pollutant, and less than 25 tons/year total hazardous air pollutants in the aggregate. These sources are classified as Tier I sources and follow the simplest type of application process.

Synthetic Minor Source: A source which has the potential under maximum operating conditions to emit at the Major Source level but which has a permit which restricts emissions to the minor source level. Such restrictions may include any of the following: hours of operation, emission control devices, and throughput. Applications for minor source permits are classified as either Tier I or Tier II, depending on several factors.

Major Source: A source that has the potential to emit more than 100 tons/year for criteria pollutants, 25 tons/year of hazardous air pollutants, or 10 tons/year of any single hazardous air pollutant. Additionally, a Major Source will not have permit requirements which restrict all actual criteria pollutant and hazardous air pollutant emissions to less than these levels. These sources are complex in their potential impact and are subject to the Tier II or Tier III application process.

TIER DETERMINATION

On July 1, 1996, DEQ implemented a new "Uniform Permitting" system under OAC 252:002 for all types of permit applications: air, water, and solid and hazardous waste. The system categorizes applications as Tier I, II, or III, depending on their complexity and the amount of public interest. The main effect of a Tier classification is the amount of public review given the application. For Air Quality permits, Tier I basically includes minor sources and most synthetic minor sources. Tier II covers major sources, and Tier III covers only very large sources such as those requiring PSD review. **This packet is designed (only) to meet the application requirements for most Natural Gas Compressor Stations which are minor sources and qualify as Tier I applications.** Other facilities, including those with emission units not covered in this application packet and those that need emissions modeling assistance, should contact Air Quality for information or additional forms and/or worksheets. Note that synthetic minor sources must apply using the Title V application form.

PERMIT FEES

For applicable fees, please complete Form 100-815, which is included in this packet.

A COMPLETE APPLICATION MUST INCLUDE:

1. DEQ Form # 100-884 (General Facility Info Form)
2. DEQ Form # 100-100 (Emission Units info for each unit)
3. DEQ Form # 100-810 (Landowner Affidavit)
4. Appropriate fees (check payable to DEQ AQD)
5. Facility Plot Plan & Process Flow Diagram
6. DEQ Form # 100-815 (AQ Application Classification Fees)

SUBMIT 3 COPIES OF COMPLETED APPLICATION TO:

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
707 N. ROBINSON AVE., SUITE 4100
P.O. BOX 1677
OKLAHOMA CITY, OKLAHOMA 73101-1677

DEQ LANDOWNER NOTIFICATION AFFIDAVIT

Tier I, II, or III permit applicants must provide notice to the landowner(s). The basis for this requirement is Title 27A of the Oklahoma Statutes, Supplement 1996, § 2-14-103(9), as described in OAC 252:4-7-13 (b).

Please note that you MUST fill out and return this affidavit even if you don't have to give any landowner notice.

A	NOTICE TO THE LANDOWNER(S) IS NOT REQUIRED because: (check one)
	My application does not involve any land.
	My application involves only land owned by me (or applicant business).
	I have a current lease given to accomplish the permitted purpose.
	I have a current easement given to accomplish the permitted purpose.

OR

B	NOTICE TO THE LANDOWNER(S) IS REQUIRED because the land is owned by someone other than myself or the applicant business AND I HAVE NOTIFIED the following (check one):		
	Landowner(s)		Lessor or Administrator or Executor of the land
	METHOD OF DELIVERY (check one):		
	Actual notice, for which I have a signed and dated receipt		
	Service by Sheriff or private process server, for which I have an affidavit		
	Service by certified mail, restricted delivery, for which I have a signed return receipt		
	Legal publication, for which I have an affidavit of publication from the newspaper, because the landowners could not be located through due diligence		

LANDOWNER AFFIDAVIT CERTIFICATION			
I, as the applicant or an authorized representative of the applicant, hereby certify that I own the real property, have a current lease or easement which is given to accomplish the permitted purpose (per Option A above), or have provided legal notice to the landowner(s) (per Option B above) about the permit application for the facility described below.			
Company Name		Facility Name	
Facility Address or Legal Description.			
Responsible Official (signature)		Date Signed	
Responsible Official (typed)		Title	

If the landowner notice applies to your application (Option B above) you can send the following form to them as your notice:

NOTICE TO LANDOWNER OF FILING

Dear Landowner: (Name) _____

(Applicant name) _____ has filed a permit application with the Oklahoma Department of Environmental Quality for (Facility Name) _____ facility.

This application involves the land owned by you located at:

Address or Legal Description: _____

Signed: _____ Date: _____

**AIR QUALITY PERMIT APPLICATION
GENERAL FACILITY INFORMATION**

APPLICATION NUMBER
(AQD Use Only)

1	COMPANY INFORMATION	Name									
Mailing Address					City			State		Zip	

2	APPLICATION TYPE	Applicability Determination		Construction Permit		Operating Permit					
GP Authorization To Operate		GP Authorization To Construct		GP Name:							
Renewal	Modification	Relocation	PBR	PBR Type:							
Permit Number(s) (If Applicable)											
Est. Date of Construction/Modification Start:			Operational Start-up:			Completion:					

3	IS CONFIDENTIAL INFORMATION INCLUDED?	YES	NO
By including confidential information, Applicant acknowledges that such information may be shared with the U.S. Environmental Protection Agency for purposes consistent with the Federal Clean Air Act, 42 U.S.C. §§ 4201 et. seq.			

4	TIER CLASSIFICATION	Tier I	Tier II	Tier III	N/A – AD only
FACILITY TYPE		Major	Minor	Synthetic Minor	

5	FEES SUBMITTED	\$	CHECK #	DATE
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6	TECHNICAL CONTACT	Name									
Phone	Fax		Email Address								
Company Name											
Street Address		City			State		Zip				

7	FACILITY INFORMATION	Name									
SIC Code(s)		NAICS Code(s)									
Contact Person			Title	Phone							
LEGAL DESCRIPTION	Sub Section	Section		Township		Range					
Physical Address or Driving Directions											
City or Nearest Town			Zip	County							

8	GEOGRAPHIC COORDINATES	Latitude (to 5 Decimals)			Longitude (to 5 Decimals)		
DATA SOURCE	GPS	DEQ Data Viewer	Web Viewer (Specify):				
Center of Township & Range Section or relevant subsection				Street Address (Conversion Program):			
Unknown	Other (Specify):						
REFERENCE POINT	Facility Entrance Point or First Gate of Lease Property (preferred above all other options)						
Center of Facility	Unknown	Other (Specify):					

9	APPLICATION CERTIFICATION	This application, including all attachments, has been submitted as required by OAC 252:100.									
I certify that (a) I am the Responsible Official for this company as defined in OAC 252:100-3; and (b) based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate, and complete.											
Responsible Official (name)						Title					
Responsible Official (signature)						Date					
Phone	Fax		Email Address								
Street Address			City		State		Zip				

EMISSION UNITS – SUMMARY & ENGINES

MINOR SOURCE NATURAL GAS COMPRESSOR STATION EQUIPMENT DESCRIPTION

Please list all emission units located at the facility in the table below. For each unit, give a unique identifier (e.g. facility numbering system or emissions inventory ID#), the installation date (actual or projected), and indicate whether the unit is a subject of the requested permit action (Construction or Operating Permit, or Modification of an existing permit.) For each engine, storage tank, and dehydration unit subject of this application, complete an equipment description table.

EMISSION UNITS		Installation Date	Unit Subject of this Permit Action?	
ID #	Description		Yes	No
FUEL	Is Equipment on Site Fueled by Pipeline Grade Natural Gas?	Yes	No (Attach Fuel Analysis)	

ENGINES

Data submitted for construction permits should be a best estimate. The values may be modified following the actual construction and/or subsequent testing process. Applicant must fill out a complete table for each engine.

ENGINE DETAILS		Internal Combustion			Turbine		
Engine Number		Engine Serial Number (if available)					
Engine Make	Caterpillar	Waukesha	Cooper	White/Superior	Ingersol-Rand		
	Clark	Ajax	Solar	Other (Specify):			
Model							
Current Rated Horsepower				Construction Date			
Type (check all that apply)	Lean-burn	2-stroke	4-stroke	Normally Aspirated		Turbo Charged	
Control Equipment	Catalytic Converter		Other (Specify):				
OPERATING CONDITIONS (usually available from the manufacturer or stack tests on similar equipment)							
Annual hours of operation	Default 8760 hours (365 days at 24 hours/day)			Other (Specify):			
Fuel usage (scfh)			RPM				
Stack Diameter (ft)			Stack Height (ft)				
Stack Flow (acfm)			Stack Temperature °F				
EMISSIONS	NOx		CO		NMHC		
g/hp-hr							
lb/hr							
TPY							
EMISSIONS DATA SOURCE		Manufacturer's Data			AP-42 (January 1995), Table No.:		
Stack Test			Other (Specify):				

EMISSION UNITS - STORAGE TANKS & GLYCOL DEHYDRATION

MINOR SOURCE NATURAL GAS COMPRESSOR STATION EQUIPMENT DESCRIPTION

Please provide the following information if storage tanks or glycol dehydration units are operated at the facility. Data submitted for construction permits should be a best estimate. The values may be modified following the actual construction and/or subsequent testing process. Applicant must fill out a complete table for each tank with capacity of 400 gallons or more, and a complete table for each dehydration unit. This information is necessary to determine the emissions.

STORAGE TANKS									
Tank ID #		Construction Date		Submerged Fill Pipe Provided?		Yes		No	
Tank Height (ft)						Tank Diameter (ft)			
Tank Capacity (gallons)						Tank Color			
Maximum Throughput (gallons/year)						Vapor Pressure (psia)			
Type of Liquid Stored		Condensate*		Methanol		Crude Oils		Other (Specify):	

*Note: "Slop Oil" tanks are assumed to be condensate

STORAGE TANKS									
Tank ID #		Construction Date		Submerged Fill Pipe Provided?		Yes		No	
Tank Height (ft)						Tank Diameter (ft)			
Tank Capacity (gallons)						Tank Color			
Maximum Throughput (gallons/year)						Vapor Pressure (psia)			
Type of Liquid Stored		Condensate*		Methanol		Crude Oils		Other (Specify):	

*Note: "Slop Oil" tanks are assumed to be condensate

STORAGE TANKS									
Tank ID #		Construction Date		Submerged Fill Pipe Provided?		Yes		No	
Tank Height (ft)						Tank Diameter (ft)			
Tank Capacity (gallons)						Tank Color			
Maximum Throughput (gallons/year)						Vapor Pressure (psia)			
Type of Liquid Stored		Condensate*		Methanol		Crude Oils		Other (Specify):	

*Note: "Slop Oil" tanks are assumed to be condensate

GLYCOL DEHYDRATION UNIT INFORMATION - Attach a copy of glycol dehydration emission estimate printouts.									
Dehydrator Type:			Triethylene Glycol			Ethylene/Dithylene Glycol			Other
Emissions Estimation Method:			Gas Analysis			Rich/Lean+Gas Analysis			Rich/Lean
									Other
BTEX Levels Exceed De Minimis*? (See OAC 252:100-41-43)			No		Yes IMPORTANT: Attach Dispersion Modeling Results (e.g., from SCREEN 3 Program)				

*Benzene: 1200 pounds per year or 0.57 pounds per hour; Toluene, Ethylbenzene, & Xylene: 6 Tons per year or 5.6 pounds per hour.

COMMENTS

AIR QUALITY DIVISION CLASSIFICATION OF AQ PERMIT APPLICATIONS & APPLICATION FEES	<i>Received Stamp (DEQ Use Only)</i>	Application Number (AQD Use Only)	

Company Name						
Facility Name						
Mailing Address		City		State		Zip

This form is used to document both a preliminary determination of the Tier classification and any associated Application Fee.

Step 1: APPLICATION CLASSIFICATION AND TIER DETERMINATION
 DEQ's "Uniform Permitting" system, under OAC 252:004, categorizes different types of applications as Tier I, II, or III, depending on their complexity and the amount of public interest. The main effect of a Tier classification is the amount of public review given the application. For Air Quality permits, Tier I basically includes minor facilities and most synthetic minor facilities. Tier II covers major sources, and Tier III covers only very large sources such as those requiring PSD review. Additional information to make a preliminary determination of the Tier classification is provided on the next page. This determination will be verified before permit issuance.

Note that all Tier II and III applications require public notice of the application in one newspaper local to the site or facility as soon after the filing date as possible. Other public participation requirements, such as notice of draft and proposed permit, and notice of public meeting may also be required. Contact our office for more information on these requirements.

TIER CLASSIFICATION		Tier I		Tier II		Tier III		N/A – AD only
FACILITY TYPE		Major		Minor		Synthetic Minor		Confirmed/Corrected by: (AQD Use Only)

Step 2: APPLICATION TYPE & FEE
 Application fee may be determined according to the following schedule. The emissions level is based on the single criteria pollutant with the highest emissions rate. Fees are subject to change – please refer to OAC 252:100-7-3 or 252:100-8-1.7 for the latest fee schedule.

MAJOR SOURCE		Fee	MINOR OR SYNTHETIC MINOR SOURCE		Fee
	Applicability Determination (100734)	\$500		Applicability Determination (100922)	\$500
	GP- Authorization to Construct (100778)	\$900		PBR – Construct (100985)	\$250
	GP- Authorization to Operate (100788)	\$900		PBR – Operate (100989)	\$100
	Part 70 Construction (100150)	\$7,500		GP – Authorization to Construct (100826)	\$500
	Part 70 Construction Modification (100779)	\$5,000		GP – Authorization to Operate (100827)	\$500
	Part 70 Operation (100733)	\$7,500		Construction (100829)	\$2,000
	Part 70 Minor Modification (100781)	\$3,000		Permit Amendment – no emission increase (100830)	\$500
	Part 70 Significant Modification (100786)	\$6,000		Operating Permit (100831)	\$750
	Part 70 Renewal (100787)	\$7,500		Operating Permit Modification (100833)	\$750
	Part 70 Relocation (100782)	\$500		Relocation (100834)	\$250

Application Type Confirmed – (AQD Use Only)

GP or PBR Name (If Applicable):		Existing Permit Number (If Applicable)	
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PAYMENT INFORMATION
 Please choose one payment type, and attach payment – payable to the Department of Environmental Quality (no cash can be accepted). Please reference the facility name (or existing permit or Authorization number) on the check or money order.

Payment Type		Check		Money order	Amount/ Receipt Confirmed by: (DEQ Use Only)	
Amount:	\$	Check or Money Order Number:			Date:	

TIER DETERMINATION INFORMATION

OAC 252:004-7 categorizes different types of Air Quality applications as Tier I, II, or III, depending on their complexity and the amount of public interest under DEQ's "Uniform Permitting" system. The Tier classification affects the amount of public review given the application. Applicants may use the following format as a checklist for determining Tier classification.

OAC 252:4-7-32. Air quality applications - Tier I

- _____ (1) New construction, operating and relocation permit for a minor facility.
- _____ (2) Modification of a construction permit for a minor facility that will remain minor after the modification.
- _____ (3) Modification of an operating permit that will not change the facility's classification from minor to major.
- _____ (4) Extension of expiration date of a minor facility construction permit.
- _____ (5) New construction permit for an existing Part 70 source for any facility change considered minor under OAC 252:100-8-7.2(b)(1).
- _____ (6) New operating permit for a Part 70 source that is based on a construction permit that was processed under Tier II or III, 252:100-8-8 and has conditions which do not differ from the construction permit's operating conditions in any way considered significant under OAC 252:100-8-7.2(b)(2).
- _____ (7) Modification of any Part 70 source operating permit condition that is based on the operating conditions of a construction permit that was processed under Tier II or Tier III and OAC 252:100-8-8, and does not differ from those construction permit conditions in any way considered significant under OAC 252:100-8-7.2(b)(2).
- _____ (8) A construction or operating permit modification that is minor under OAC 252:100-8-7.2(b)(1).
- _____ (9) Extension of expiration date of a Part 70 source's construction permit with no or minor modifications.
- _____ (10) New, modified and renewed individual authorizations under general operating permits for which a schedule of compliance is not required by OAC 252:100-8-5(e)(8)(B)(i).
- _____ (11) Burn approvals.
- _____ (12) Administrative amendments of all air quality permits and other authorizations.

OAC 252:4-7-33. Air quality applications - Tier II

- _____ (1) A minor facility seeking a permit for a facility modification that when completed would turn it into a Part 70 source.
- _____ (2) New construction permit for a new Part 70 source not classified under Tier III.
- _____ (3) New construction permit for an existing Part 70 source for any facility change considered significant under OAC 252:100-8-7.2(b)(2) and which is not classified under Tier III.
- _____ (4) New operating permit for a Part 70 source that did not have an underlying construction permit processed under Tier II or Tier III, and OAC 252:100-8-8.
- _____ (5) New operating permit for a Part 70 source with one or more conditions that differ from the underlying Tier II or Tier III construction permit's operating conditions in a way considered significant under OAC 252:100-8-7.2(b)(2).
- _____ (6) New acid rain permit that is independent of a Part 70 permit application.
- _____ (7) New temporary source permit under OAC 252:100-8-6.2.
- _____ (8) Significant modification, as described in OAC 252:100-8-7.2(b)(2), of a Part 70 operating permit that is not based on an underlying construction permit processed under Tier II or Tier III, and OAC 52:100-8-8.
- _____ (9) Modification of a Part 70 operating permit when the conditions proposed for modification differ from the underlying construction permit's operating conditions in a way considered significant under OAC 252:100-8-7.2(b)(2).
- _____ (10) A Part 70 construction permit modification considered significant under OAC 252:100-8-7.2(b)(2) and which is not classified under Tier III.
- _____ (11) Renewals of operating permits for Part 70 sources.
- _____ (12) New, modified and renewed general operating permits.
- _____ (13) Individual authorizations under any general operating permit for which a schedule of compliance is required by OAC 252:100-8-5(c)(8)(B)(i).
- _____ (14) Plant-wide emission plan approval under OAC 252:100-37-25(b) or OAC 252:100-39-46(j).
- _____ (15) Alternative emissions reduction authorizations.

OAC 252:4-7-34. Air quality applications - Tier III

(a) A construction permit for any new major stationary source listed in this subsection requires a Tier III application. For purposes of this section, "Major stationary source" means:

- _____ (1) Any of the following sources of air pollutants which emits, or has the PTE, 100 TPY or more of any pollutant subject to regulation:
 - _____ (A) carbon black plants (furnace process),
 - _____ (B) charcoal production plants,
 - _____ (C) chemical process plants,
 - _____ (D) coal cleaning plants (with thermal dryers),
 - _____ (E) coke oven batteries,
 - _____ (F) fossil-fuel boilers (or combustion thereof), totaling more than 250 million BTU per hour heat input,
 - _____ (G) fossil fuel-fired steam electric plants of more than 250 million BTU per hour heat input,
 - _____ (H) fuel conversion plants,
 - _____ (I) glass fiber processing plants,
 - _____ (J) hydrofluoric, sulfuric or nitric acid plants,
 - _____ (K) iron and steel mill plants,
 - _____ (L) kraft pulp mills,
 - _____ (M) lime plants,
 - _____ (N) incinerators, except where used exclusively as air pollution control devices,
 - _____ (O) petroleum refineries,
 - _____ (P) petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels,
 - _____ (Q) phosphate rock processing plant,
 - _____ (R) portland cement plants,
 - _____ (S) primary aluminum ore reduction plants,
 - _____ (T) primary copper smelters,
 - _____ (U) primary lead smelters,
 - _____ (V) primary zinc smelters,
 - _____ (W) secondary metal production plants,
 - _____ (X) sintering plants,
 - _____ (Y) sulfur recovery plants, or
 - _____ (Z) taconite ore processing plants, and

_____ (2) Any other source not specified in paragraph (1) of this definition which emits, or has the PTE, 250 TPY or more of any pollutant subject to regulation.

_____ (b) Existing incinerators. An application for any change in emissions or potential to emit, or any change in any permit condition, that would have caused an incinerator to be defined as a major stationary source when originally permitted shall require a Tier III application.

(c) Potential to emit. For purposes of this section, "potential to emit" means emissions resulting from the application of all enforceable permit limitations as defined in OAC 252:100-1-3.