



Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.



Mark Gordon, Governor

Todd Parfitt, Director

Date: November 24, 2020

Mr. Paul Strickland
COO
Kentex Worland, LLC
8333 Douglas Ave., Suite 1450
Dallas, TX 75225

Permit No. **P0028990**

Dear Mr. Strickland:

The Division of Air Quality of the Wyoming Department of Environmental Quality has completed final review of Kentex Worland, LLC's (CMP100581) application to modify the Worland Compressor Station (Kentex) (F000273) with the installation of two (2) 1,380 hp Caterpillar 3516 compressor engines (ENG003-ENG004). The Worland Compressor Station (Kentex) is located in the SE¼ of Section 17, T48N, R92W, approximately eight (8) miles north-northeast of Worland, in Washakie County, Wyoming.

Following this agency's proposed approval of the request as published October 15, 2020, and in accordance with Chapter 6, Section 2(m) of the Wyoming Air Quality Standards and Regulations, the public was afforded a 30-day period in which to submit comments concerning the proposed modification, and an opportunity for a public hearing. No comments have been received. Therefore, on the basis of the information provided to us, approval to modify the Worland Compressor Station (Kentex) as described in the application is hereby granted pursuant to Chapter 6, Section 2 of the regulations with the following conditions:

1. That authorized representatives of the Division of Air Quality be given permission to enter and inspect any property, premise or place on or at which an air pollution source is located or is being constructed or installed for the purpose of investigating actual or potential sources of air pollution and for determining compliance or non-compliance with any rules, standards, permits or orders.
2. That all substantive commitments and descriptions set forth in the application for this permit, unless superseded by a specific condition of this permit, are incorporated herein by this reference and are enforceable as conditions of this permit.
3. That a permit to operate, in accordance with Chapter 6, Section 2(a)(iii) of the WAQSR, is required after a 120 day start-up period in order to operate this facility.
4. That all notifications, reports and correspondences associated with this permit shall be submitted to the Stationary Source Compliance Program Manager. Submissions may be done electronically through <https://airimpact.wyo.gov> to satisfy requirements of this permit.
5. Engine startup and shutdown notifications shall be submitted to the Division, within fifteen (15) days of startup and shutdown for the Caterpillar 3516 engines (ENG003-ENG004). Notifications shall be submitted on a complete Engine Installation/Removal form. The form can be downloaded from the Air Quality website <http://deq.wyoming.gov/aqd> or obtained from the Air Quality Division. Once removed from the facility, an engine cannot be installed and operated in its place unless authorized by an appropriate permit modification.

6. That the date of commencement of construction shall be reported to the Administrator within thirty (30) days of commencement. In accordance with Chapter 6, Section 2(h) of the WAQSR, approval to construct or modify shall become invalid if construction is not commenced within twenty-four (24) months after receipt of such approval or if construction is discontinued for a period of twenty-four (24) months or more. The Administrator may extend the period based on satisfactory justification of the requested extension.
7. That performance tests be conducted, in accordance with Chapter 6, Section 2(j) of the WAQSR, within thirty (30) days of achieving a maximum design rate but not later than ninety (90) days following initial start-up, and a written report of the results be submitted. The operator shall provide fifteen (15) days prior notice of the test date. If a maximum design rate is not achieved within ninety (90) days of start-up, the Administrator may require testing be done at the rate achieved and again when a maximum rate is achieved.
8. Initial performance tests, as required by Condition 7 of this permit, shall be conducted on the following sources:
 - i. Caterpillar 3516 engines (ENG003-ENG004):

NO_x, CO, and VOC Emissions: Testing shall follow 40 CFR part 60, subpart JJJJ §60.4244, except that §60.8 only applies to engines subject to 40 CFR part 60, subpart JJJJ. For the initial performance test, testing shall not consist of Method 19 or ASTM Methods.

Formaldehyde Emissions: Each engine shall be tested for formaldehyde. Testing shall consist of three (3) 1-hour tests following EPA Reference Methods and a Division-approved formaldehyde test method.

A test protocol shall be submitted for review and approval prior to testing. Engine horsepower, inlet temperature to the catalyst, pressure drop across the catalyst and other operating conditions shall be recorded during each test run and submitted with the test report. Results shall be submitted to this Division within forty-five (45) days of completion.

9. That emissions from each engine shall be limited as follows:

Engine	IMPACT AQD ID	NO _x			CO			VOC			Formaldehyde	
		g/hp-hr	lb/hr	tpy	g/hp-hr	lb/hr	tpy	g/hp-hr	lb/hr	tpy	lb/hr	tpy
Caterpillar 3516	ENG003- ENG004	0.5	1.5	6.7	0.5	1.5	6.7	0.7	2.1	9.3	0.21	0.93

10. That Kentex Worland, LLC shall follow the testing requirements as follows for engines (ENG003-ENG004):
 - i. That every twelve (12) calendar months, each engine (ENG003-ENG004) shall be tested to verify compliance with the NO_x, CO, VOC, and formaldehyde limits set forth in this permit. Formaldehyde testing is only required for the lean burn engines. Periodic tests for each engine are required within twelve (12) calendar months after completion of the initial performance test or the last periodic test. Testing for NO_x, CO and VOCs shall follow 40 CFR part 60, subpart JJJJ §60.4244, except that §60.8 only applies to engines subject to 40 CFR part 60, subpart JJJJ. Testing for formaldehyde shall follow EPA reference methods and a Division-approved formaldehyde test method. Formaldehyde emissions in terms of lb/hr shall be calculated using the methodology in Sections 10.1.1.1 and 10.1.1.2 of the State of Wyoming's Portable Analyzer Protocol. Notification of the test date shall be provided to the Division fifteen (15) days prior to testing. Results of the tests shall be submitted to the Division within forty-five (45) days of completing the tests.
 - ii. The Air Quality Division shall be notified within twenty-four (24) hours of any engine where the testing/monitoring required by (i) of this condition shows operation outside the permitted emission limits. By no later than seven (7) calendar days of such testing/monitoring event, the owner or operator shall repair and retest/monitor the affected engine to demonstrate that the engine has been returned to operation within the permitted emission limits. Compliance with this permit condition regarding repair and retesting/monitoring shall not be deemed to limit the authority of the Air Quality Division to cite the owner or operator for an exceedance of the permitted emission limits for any testing/monitoring required by (i) of this condition which shows noncompliance.
11. That Kentex Worland, LLC shall follow the monitoring and maintenance requirements as follows for engines ENG003-ENG004 equipped with an oxidation catalyst:
 - i. Operate and maintain the stationary RICE and after-treatment control device according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions at all times, including startup, shutdown, and malfunction.
 - ii. Install a thermocouple to measure the inlet catalyst temperature.
 - a. The inlet temperature shall be recorded at least monthly. If the temperature is outside of the range listed below, corrective action shall be taken.


Oxidation Catalyst: 450 °F to 1350 °F

- iii. Install a device to measure the pressure drop across the catalyst.
 - a. The pressure drop across the catalyst shall be recorded at least monthly. If the pressure changes by more than two (2) inches of water at one-hundred percent (100%) load, plus or minus ten percent (10%), from the pressure drop as determined below, corrective action shall be taken.
 - 1. During the initial performance test required by this permit, the reference pressure drop shall be established. When the catalyst is replaced, the reference pressure drop shall be reestablished during the subsequent periodic testing required by this permit.
 - iv. Records of catalyst inlet temperature, pressure drop, and any maintenance or corrective actions shall be kept and maintained for a period of five (5) years and shall be made available to the Division upon request.
12. Kentex Worland, LLC shall comply with all applicable requirements of 40 CFR part 60, subpart JJJJ.
13. Kentex Worland, LLC shall comply with all applicable requirements of 40 CFR part 60, subpart OOOOa.
14. Kentex Worland, LLC shall comply with all applicable requirements of 40 CFR part 63, subpart ZZZZ.

It must be noted that this approval does not relieve you of your obligation to comply with all applicable county, state, and federal standards, regulations or ordinances. Special attention must be given to Chapter 6, Section 2 of the Wyoming Air Quality Standards and Regulations, which details the requirements for compliance with Conditions 3, 6 and 7. Any appeal of this permit as a final action of the Department must be made to the Environmental Quality Council within thirty (30) days of permit issuance per Section 8, Chapter 1, General Rules of Practice and Procedure, Department of Environmental Quality.

If we may be of further assistance to you, please feel free to contact this office.

Sincerely,


Nancy E. Vehr
Administrator
Air Quality Division


Todd Parfitt
Director
Dept. of Environmental Quality