



ACID RAIN PERMIT

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

Permit No.: 2019-1325-ARR3 Term : 5 years from issuance below

Facility Name: Tenaska Kiamichi Generating Station ORIS Code: 55501

Facility Location: Section 34, Township 3N, Range 13E, Kiowa, Pittsburg County,
Oklahoma

Company Name: Kiowa Power Partners, LLC Contact: Trevor Tobias (402) 691-9598

Mailing Address: 14302 FNB Parkway, Omaha, NE 68154

This Permit is issued pursuant to **OAC 252:100-8-6.3** and **Title IV of the Clean Air Act** subject to the permit application attached by reference. The owner and operator of the source shall comply with the standard requirements and special provisions set forth in the permit application under 40 CFR §72.31. This permit is deemed to incorporate the definitions of terms under 40 CFR §72.2. Per 40 CFR §72.51, each affected unit operated in accordance with this permit shall be deemed to be operating in compliance with the Acid Rain Program, except as provided in 40 CFR §72.9(g)(6). As published in 40 CFR §73.10, SO₂ initial Allowance Allocations for each affected unit per year are as follows. Allowances actually held by the facility may change as authorized.

UNIT	Unit Will Hold Allowances in Accordance with 40 CFR §72.9(c)(1)	CEMS Certification Date
CTGDB1	Yes	11/23/2002
CTGDB2	Yes	11/23/2002
CTGDB3	Yes	11/23/2002
CTGDB3	Yes	11/23/2002

DRAFT/PROPOSED

Director, Air Quality Division

Date

DRAFT/PROPOSED

**OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

MEMORANDUM

June 4, 2021

TO: Phillip Fielder, P.E., Chief Engineer

THROUGH: Phil Martin, P.E., Engineering Manager, Existing Source Permits Section

THROUGH: Joseph K. Wills, P.E., Engineering Section

FROM: Jian Yue, P.E., New Source Permits Section

SUBJECT: Evaluation of Permit Application No. **2019-1325-ARR3**
Kiowa Power Partners, LLC
Tenaska Kiamichi Generating Station
Facility ID: 4258
Section 34, Township 3N, Range 13E, Kiowa, Pittsburg County, Oklahoma
Latitude: 34.68363°N, Longitude: 95.93490°W
Direction: From the junction of Highways 69/63 in Kiowa, 3.7 miles S/SW on HW 69 to the first road west of the railroad tracks, turn W/NW (right) at 34.67750°/-95.93419°, continue W/NW and N for a total of 0.25 miles to facility gate.

INTRODUCTION

Kiowa Power Partners, LLC has requested an acid rain permit renewal for the referenced facility pursuant to Title IV of the Clean Air Act and implementing regulations found in 40 CFR Parts 72 through 78. The facility is currently operating under Permits No. 2014-1411-ARR2 issued March 27, 2015 and No. 2019-0898-TVR3 (M-1) issued on February 28, 2020. 40 CFR §72.30 (c) requires that the designated representative shall submit a complete Acid Rain permit application for each source with an affected unit at least 6 months prior to the expiration of an existing Acid Rain permit. The applicant submitted the renewal application on August 12, 2019.

FACILITY DESCRIPTION

The facility includes four (4) 181.6 MW natural gas-fired combustion turbines (GE PF7241FA or equivalent) with four (4) 650-MMBTUH duct burners operating in combined-cycle mode with four heat recovery steam generators (HRSGs) and two steam turbines.

TIER CLASSIFICATION AND PUBLIC REVIEW

This application has been classified as Tier II as a new acid rain permit that is independent of a Part 70 permit application (OAC 252:4-7-33(b)(1)(E)). Information on all permit actions is available for review by the public in the Air Quality section of the DEQ Web Page: <https://www.deq.ok.gov/>.

The applicant will publish a “Notice of Filing a Tier II Application” and a “Notice of Tier II Draft Permit” in a local newspaper for a 30-day public review. A copy of the draft permit will be available on the Air Quality section of the DEQ web page at www.deq.ok.gov.

STATES REVIEW

The facility is not located within 50 miles of the border of the state of Oklahoma and any other state.

EPA REVIEW

The applicant requested and was granted concurrent public and EPA review periods. The proposed permit will be sent to EPA for a 45-day review period.

If the Administrator does not object in writing during the 45-day EPA review period, any person that meets the requirements of this subsection may petition the Administrator within 60 days after the expiration of the Administrator's 45-day review period to make such objection. Any such petition shall be based only on objections to the permit that the petitioner raised with reasonable specificity during the public comment period provided for in 27A O.S. § 2-14-302.A.2., unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period. If the Administrator objects to the permit as a result of a petition filed under this subsection, the DEQ shall not issue the permit until EPA's objection has been resolved, except that a petition for review does not stay the effectiveness of a permit or its requirements if the permit was issued after the end of the 45-day review period and prior to an EPA objection. If the DEQ has issued a permit prior to receipt of an EPA objection under this subsection, the DEQ will modify, terminate, or revoke such permit, and shall do so consistent with the procedures in 40 CFR §§ 70.7(g)(4) or (5)(i) and (ii) except in unusual circumstances. If the DEQ revokes the permit, it may thereafter issue only a revised permit that satisfies EPA's objection. In any case, the source will not be in violation of the requirement to have submitted a timely and complete application.

TESTING

This facility includes four 181.6 MW natural gas-fired combustion turbines with four 650 MMBTUH duct burners operating in combined-cycle mode with four heat recovery steam generators (HRSGs) and two to four steam turbines. The table on the following page lists the most recent tests conducted.

Unit	Test Type	Test Dates	Test Results
CTGDB1	Appendix D Annual RATA	5/13/2020	Passed
CTGDB2	Appendix D Annual RATA	5/13/2020	Passed
CTGDB3	Appendix D Annual RATA	5/13/2020	Passed
CTGDB4	Appendix D Annual RATA	5/13/2020	Passed

FEES PAID

No fee is required.

SUMMARY

RATA tests have been performed according to 40 CFR Part 75 Appendix D. There are no active Compliance or Enforcement Air Quality issues that would preclude the issuance of this permit. Issuance of the permit is recommended, contingent on public and EPA review.



SCOTT A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT
Governor

Kiowa Power Partners, LLC
Attn: Mr. Trevor Tobias
14302 FNB Parkway
Omaha, NE 68154

SUBJECT: Acid Rain Permit No. 2019-1325-ARR3
Kiowa Power Partners, LLC
Tenaska Kiamichi Generating Station
Facility ID: 4258
Section 34, Township 3N, Range 13E, Kiowa, Pittsburg County, Oklahoma

Dear Mr. Tobias:

Air Quality Division has completed the initial review of your permit application referenced above. This application has been determined to be a **Tier II**. In accordance with 27A O.S. § 2-14-301 & 302 and OAC 252:4-7-13(c) the application and enclosed draft permit are now ready for public review. The requirements for public review include the following steps which you must accomplish:

1. Publish at least one legal notice (one day) of "Notice of Tier II Permit Application Filing" and "Notice of Tier II Draft Permit" in at least one newspaper of general circulation within the county where the facility is located. (Instructions enclosed)
2. Provide for public review (for a period of 30 days following the date of the newspaper announcement) a copy of this draft permit and a copy of the application at a convenient location (preferably a public location) within the county of the facility.
3. Send to AQD a copy of the proof of publication notice from Item #1 above together with any additional comments or requested changes which you may have on the draft permit.

Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact me at (405) 702-4100 or the permit writer, Jian Yue, at (405) 702-4205.

Sincerely,

A handwritten signature in black ink that reads "Phillip Fielder".

Phillip Fielder, P.E., Chief Engineer
AIR QUALITY DIVISION
Enclosures





SCOTT A. THOMPSON
Executive Director

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Attn: Mr. Trevor Tobias
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Kiowa Power Partners, LLC
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Facility ID: 4258
Section 34, Township 3N, Range 13E, Kiowa, Pittsburg County, Oklahoma

Dear Mr. Tobias:

Enclosed is the permit authorizing operation of the referenced facility per 40 CFR §72.73.

Thank you for your cooperation in this matter. If we may be of further service, please contact our office at (405) 702-4100.

Very truly yours,

DRAFT/PROPOSED

Phillip Fielder, P.E., Chief Engineer
AIR QUALITY DIVISION

Enclosures

cc: EPA Region 6
Compliance Assurance & Enforcement Division (6EN-AA)
Attn: Mr. David Garcia
1445 Ross Avenue
Dallas, Texas 75202



NOTICE OF DRAFT PERMIT TIER II or TIER III AIR QUALITY PERMIT APPLICATION

APPLICANT RESPONSIBILITIES

Permit applicants are required to give public notice that a Tier II or Tier III draft permit has been prepared by DEQ. The notice must be published in one newspaper local to the site or facility. Upon publication, a signed affidavit of publication must be obtained from the newspaper and sent to AQD. Note that if either the applicant or the public requests a public meeting, this must be arranged through the Customer Services Division of the DEQ.

REQUIRED CONTENT (27A O.S. § 2-14-302 and OAC 252:4-7-13(c))

1. A statement that a Tier II or Tier III draft permit has been prepared by DEQ;
2. Name and address of the applicant;
3. Name, address, driving directions, legal description and county of the site or facility;
4. The type of permit or permit action being sought;
5. A description of activities to be regulated, including an estimate of emissions from the facility;
6. Location(s) where the application and draft permit may be reviewed (a location in the county where the site/facility is located must be included);
7. Name, address, and telephone number of the applicant and DEQ contacts;
8. Any additional information required by DEQ rules or deemed relevant by applicant;
9. A 30-day opportunity to request a formal public meeting on the draft permit.

SAMPLE NOTICE on page 2.

SAMPLE NOTICE (*Italicized print is to be filled in by the applicant.*):

DEQ NOTICE OF TIER ...II or III... DRAFT PERMIT

A Tier ...II or III... application for an air quality ...type of permit or permit action being sought (e.g., Construction Permit for a Major Facility)... has been filed with the Oklahoma Department of Environmental Quality (DEQ) by applicant, ...name and address.

The applicant requests approval to ...brief description of purpose of application... at the ...site/facility name ... [proposed to be] located at ...physical address (if any), driving directions, and legal description including county....

In response to the application, DEQ has prepared a draft permit [modification] (Permit Number: ...xx-xxx-x...), which may be reviewed at ...locations (one must be in the county where the site/facility is located) ... or at the Air Quality Division's main office (see address below). The draft permit is also available for review in the Air Quality Section of DEQ's Web Page:: <http://www.deq.ok.gov/>. Additionally, the draft permit may be obtained in an electronic form by direct request of the Chief Engineer by the methods listed below.

This draft permit would authorize the facility to emit the following regulated pollutants: (list each pollutant and amounts in tons per year (TPY))

The public comment period ends 30 days after the date of publication of this notice. Any person may submit written comments concerning the draft permit to the Air Quality Division contact listed below. [Modifications only, add: Only those issues relevant to the proposed modification(s) are open for comment.] A public meeting on the draft permit [modification] may also be requested in writing at the same address. Note that all public meetings are to be arranged and conducted by DEQ/CSD staff.

In addition to the public comment opportunity offered under this notice, this draft permit is subject to U.S. Environmental Protection Agency (EPA) review, EPA objection, and petition to EPA, as provided by 40 CFR § 70.8. [For Construction Permits, add: The requirements of the construction permit will be incorporated into the Title V permit through the administrative amendment process. Therefore, no additional opportunity to provide comments or EPA review, EPA objection, and petitions to EPA will be available to the public when requirements from the construction permit are incorporated into the Title V permit.]

If the Administrator (EPA) does not object to the proposed permit, the public has 60 days following the Administrator's 45 day review period to petition the Administrator to make such an objection as provided in 40 CFR 70.8(d) and in OAC 252:100-8-8(j). Information on all permit actions and applicable review time lines is available in the Air Quality section of the DEQ Web page: <https://www.deq.ok.gov/>.

For additional information, contact ...names, addresses and telephone numbers of contact persons for the applicant, or contact DEQ at: Chief Engineer, Permits & Engineering Group, Air Quality Division, 707 N. Robinson, Suite 4100, P.O. Box 1677, Oklahoma City, OK, 73101-1677. Phone No. (405) 702-4100. E-mail – phillip.fielder@deq.ok.gov

Department of Environmental Quality (DEQ)
Air Quality Division (AQD)
Acronym List
4-15-21

ACFM	Actual Cubic Feet per Minute	H₂CO	Formaldehyde
AD	Applicability Determination	H₂S	Hydrogen Sulfide
AFRC	Air-to-Fuel Ratio Controller	HAP	Hazardous Air Pollutants
API	American Petroleum Institute	HC	Hydrocarbon
ASTM	American Society for Testing and Materials	HCFC	Hydrochlorofluorocarbon
		HFR	Horizontal Fixed Roof
BACT	Best Available Control Technology	HON	Hazardous Organic NESHAP
BAE	Baseline Actual Emissions	HP	Horsepower (hp)
BHP	Brake Horsepower (bhp)	HR	Hour (hr)
BTU	British thermal unit (Btu)	I&M	Inspection and Maintenance
		IBR	Incorporation by Reference
C&E	Compliance and Enforcement	ICE	Internal Combustion Engine
CAA	Clean Air Act		
CAM	Compliance Assurance Monitoring	LAER	Lowest Achievable Emission Rate
CAS	Chemical Abstract Service	LB	Pound(s) [Mass] (lb, lbs, lbm)
CAAA	Clean Air Act Amendments	LB/HR	Pound(s) per Hour (lb/hr)
CC	Catalytic Converter	LDAR	Leak Detection and Repair
CCR	Continuous Catalyst Regeneration	LNG	Liquefied Natural Gas
CD	Consent Decree	LT	Long Ton(s) (metric)
CEM	Continuous Emission Monitor		
CFC	Chlorofluorocarbon	M	Thousand (Roman Numeral)
CFR	Code of Federal Regulations	MAAC	Maximum Acceptable Ambient Concentration
CI	Compression Ignition		
CNG	Compressed Natural Gas	MACT	Maximum Achievable Control Technology
CO	Carbon Monoxide or Consent Order	MM	Prefix used for Million (Thousand-Thousand)
COA	Capable of Accommodating		
COM	Continuous Opacity Monitor	MMBTU	Million British Thermal Units (MMBtu)
		MMBTUH	Million British Thermal Units per Hour (MMBtu/hr)
D	Day	MMSCF	Million Standard Cubic Feet (MMscf)
DEF	Diesel Exhaust Fluid	MMSCFD	Million Standard Cubic Feet per Day
DG	Demand Growth	MSDS	Material Safety Data Sheet
DSCF	Dry Standard (At Standard Conditions) Cubic Foot (Feet)	MWC	Municipal Waste Combustor
		MWe	Megawatt Electrical
EGU	Electric Generating Unit		
EI	Emissions Inventory	NA	Nonattainment
EPA	Environmental Protection Agency	NAAQS	National Ambient Air Quality Standards
ESP	Electrostatic Precipitator	NAICS	North American Industry Classification System
EUG	Emissions Unit Group		
EUSGU	Electric Utility Steam Generating Unit	NESHAP	National Emission Standards for Hazardous Air Pollutants
FCE	Full Compliance Evaluation	NH₃	Ammonia
FCCU	Fluid Catalytic Cracking Unit	NMHC	Non-methane Hydrocarbon
FIP	Federal Implementation Plan	NGL	Natural Gas Liquids
FR	Federal Register	NO₂	Nitrogen Dioxide
		NO_x	Nitrogen Oxides
GACT	Generally Achievable Control Technology	NOI	Notice of Intent
GAL	Gallon (gal)	NSCR	Non-Selective Catalytic Reduction
GDF	Gasoline Dispensing Facility	NSPS	New Source Performance Standards
GEP	Good Engineering Practice	NSR	New Source Review
GHG	Greenhouse Gases		
GR	Grain(s) (gr)		

O₃	Ozone	SRU	Sulfur Recovery Unit
O&G	Oil and Gas	T	Tons
O&M	Operation and Maintenance	TAC	Toxic Air Contaminant
O&NG	Oil and Natural Gas	THC	Total Hydrocarbons
OAC	Oklahoma Administrative Code	TPY	Tons per Year
OC	Oxidation Catalyst	TRS	Total Reduced Sulfur
		TSP	Total Suspended Particulates
PAH	Polycyclic Aromatic Hydrocarbons	TV	Title V of the Federal Clean Air Act
PAE	Projected Actual Emissions		
PAL	Plant-wide Applicability Limit	µg/m³	Micrograms per Cubic Meter
Pb	Lead	US EPA	U. S. Environmental Protection Agency
PBR	Permit by Rule		
PCB	Polychlorinated Biphenyls	VFR	Vertical Fixed Roof
PCE	Partial Compliance Evaluation	VMT	Vehicle Miles Traveled
PEA	Portable Emissions Analyzer	VOC	Volatile Organic Compound
PFAS	Per- and Polyfluoroalkyl Substance	VOL	Volatile Organic Liquid
PM	Particulate Matter	VRT	Vapor Recovery Tower
PM_{2.5}	Particulate Matter with an Aerodynamic Diameter <= 2.5 Micrometers	VRU	Vapor Recovery Unit
PM₁₀	Particulate Matter with an Aerodynamic Diameter <= 10 Micrometers	YR	Year
POM	Particulate Organic Matter or Polycyclic Organic Matter	2SLB	2-Stroke Lean Burn
ppb	Parts per Billion	4SLB	4-Stroke Lean Burn
ppm	Parts per Million	4SRB	4-Stroke Rich Burn
ppmv	Parts per Million Volume		
ppmvd	Parts per Million Dry Volume		
PSD	Prevention of Significant Deterioration		
psi	Pounds per Square Inch		
psia	Pounds per Square Inch Absolute		
psig	Pounds per Square Inch Gage		
RACT	Reasonably Available Control Technology		
RATA	Relative Accuracy Test Audit		
RAP	Regulated Air Pollutant		
RFG	Refinery Fuel Gas		
RICE	Reciprocating Internal Combustion Engine		
RO	Responsible Official		
ROAT	Regional Office at Tulsa		
RVP	Reid Vapor Pressure		
SCC	Source Classification Code		
SCF	Standard Cubic Foot		
SCFD	Standard Cubic Feet per Day		
SCFM	Standard Cubic Feet per Minute		
SCR	Selective Catalytic Reduction		
SER	Significant Emission Rate		
SI	Spark Ignition		
SIC	Standard Industrial Classification		
SIP	State Implementation Plan		
SNCR	Selective Non-Catalytic Reduction		
SO₂	Sulfur Dioxide		
SO_x	Sulfur Oxides		
SOP	Standard Operating Procedure		