

2/19/2024

### Via Division Portal Electronic Submittal

Michael Kennedy, Director Kentucky Division for Air Quality 300 Sower Blvd, Second Floor Frankfort, Kentucky 40601

Re: Application for Permit Renewal

East Kentucky Power Cooperative, Inc. - Pendleton LGTE Site

Permit No. V-18-010 R1 Agency Interest #: 77788

Dear Mr. Kennedy:

East Kentucky Power Cooperative, Inc. (EKPC) operates the Pendleton Landfill Gas To Energy Site located at 1374 Bryan Griffin Road, Butler, KY 41006. EKPC currently operates the Landfill-Gas-To-Energy site in accordance with Permit No. V-18-010 R1.

The current permit was originally issued on August 21, 2019 and subsequently revised on September 6, 2019. The current permit is scheduled to expire on August 21, 2024. EKPC is submitting the enclosed application for renewal of the permit pursuant to 401 KAR 52:020, Section 12, and Section G of the permit.

EKPC looks forward to working with the Division during the renewal process. Should you have any questions, please feel free to contact me.

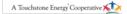
Sincerely,

Jerry Purvis

Jerry Purvis, Vice President Environmental Affairs

cc: Rick Shewekah, KDAQ Zach Bittner, KDAQ

4775 Lexington Road
P.O. Box 707
Winchester, Kentucky 40392
www.ekpc.coop



Kevin Moore, EKPC Robert Webb, EKPC



## APPLICATION FOR RENEWAL OF TITLE V, OPERATING PERMIT V-18-010 R1

# EAST KENTUCKY POWER COOPERATIVE, INC. PENDLETON LANDFILL GAS TO ENERGY SITE AGENCY INTEREST NO. 77788 SOURCE ID. NO. 21-191-00022

## Prepared by:

EAST KENTUCKY POWER COOPERATIVE, INC.
P. O. Box 707
4775 Lexington Road
Winchester, Kentucky 40392-0707

#### 1.0 INTRODUCTION

East Kentucky Power Cooperative, Inc. (EKPC) operates the Pendleton Landfill Gas To Energy Site (Pendleton) located at 1374 Bryan Griffin Road, Butler, KY 41006. EKPC currently operates the Landfill-Gas-To-Energy (LGTE) site in accordance with Permit No. V-18-010 R1, which will expire on August 21, 2024. The current permit was originally issued on August 21, 2019, and subsequently revised on September 6, 2019.

EKPC leases property from the Pendleton County landfill necessary for its LGTE operations and purchases gas from the landfill. However, the landfill is separately owned and operated, there is no shared control nor are there any shared employees. Each entity is subject to separate compliance requirements under the Clean Air Act. Neither the landfill nor EKPC can speak for the other, nor can either assure compliance for the other. Neither has access to the other's operational information and neither can direct compliance decisions or obligations of the other. EKPC and the landfill are not interdependent. EKPC utilizes all the gas it purchases. No landfill gas is ever purchased and returned. We understand that any landfill gas not purchased is automatically sent to the landfill flare. The LGTE engines can be operated on a number of different fuels and thus EKPC is not limited to the sole use of landfill gas.

The landfill gas is directly converted into electricity at EKPC's facility. EKPC accepts delivery of the landfill gas at the interconnection point outside the LGTE compressor room. Prior to the demarcation point, EKPC understands that the landfill uses a knockout pot, filter and blower to dewater, compress and filter the landfill gas. Additionally, EKPC owns and operates skids within its facility that filter, dewater and compress the gas to protect its engines by assuring no water is introduced in the process. EKPC performs a weekly fuel skid inspection to assure the compressor is running. Filter changes occur according to manufacturer specifications. Records of the weekly inspections are kept at the site. EKPC is therefore able to provide its own assurances that the fuel it combusts has been filtered, dewatered and compressed in compliance with the current permit condition; however, it does not have the information or authority to provide assurances as to the processes used by the landfill. The EKPC LGTE system is sealed for proper operation. There is no point where gas can be vented to the atmosphere during normal operation. The system cannot operate if air is introduced into the pipes during startup. If necessary, a manual vent to the atmosphere with a manual valve can be opened only during startup and to allow air to be purged from the lines.

EKPC submits this application for renewal of the permit pursuant to 401 KAR 52:020 Section 12 and Section G of the permit. Pursuant to 401 KAR 52:020 Section 4(2)(c), this renewal application is timely and provides "only the information that is new or different from the most recent source-wide permit application."

#### 2.0 CHANGES SINCE LAST SOURCE WIDE APPLICATION

There have been no changes to the emission units covered by this permit. The site remains the same as at the time of the last source wide permit application and EKPC is proposing no changes in this permit renewal.

### 3.0 EMISSION CALCULATIONS

EKPC has reviewed emission calculations for the unit at the site during the last permitting process and has determined that no changes to emission factors or other components of the emission calculations have occurred since the last source wide permit application. Thus no changes are proposed.

### 4.0 CONCLUSION

EKPC is submitting this application for renewal of the existing Title V permit for the Pendleton Landfill-Gas-To-Energy Site in accordance with 401 KAR 52:020 Section 12 and Section G of the permit. The existing permit expires on August 21, 2024. This renewal application is being submitted at least six months in advance of the expiration date for the current permit. Pursuant to 401 KAR 52:020 Section 4(2)(c), this renewal permit application provides "only the information that is new or different from the most recent source-wide permit application." Therefore, this submittal is timely and complete such that the terms and conditions of the previous permit shall remain in effect until the renewal permit has been issued should the renewal permit not be issued before the expiration of the previous permit as specified in 401 KAR 52:020 Section 12(6)(a)-(b) and Section G of the permit.

### 5.0 ATTACHMENT

A DEP 7007AI Form is attached hereto and incorporated herein.

11/2018 DEP7007AI

# Division for Air Quality

300 Sower Boulevard Frankfort, KY 40601 (502) 564-3999

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Administrative Information
Section AI.1: Source Information
Section AI.2: Applicant Information
Section AI.3: Owner Information
Section AI.4: Type of Application
Section AI.5: Other Required Information

Section AI.6: Signature Block

Section AI.7: Notes, Comments, and Explanations

Additional	Documentation
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Additional Documentation attached

41006

Source Name:	East Kentucky Power Cooperative, Inc.
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KY EIS (AFS) #: 21- 191-00022

Permit #: V-18-010

Agency Interest (AI) ID: 77788

14-Feb-24 Date:

# Section AI.1: Source Information

**Physical Location** Address:

**Mailing Address:** 

**Street:** 

City:

1374 Bryan Griffin Road

City: Street or

Butler

1374 Bryan Griffin Road

P.O. Box:

Butler

KY Zip Code: 41006 State:

Zip Code:

## **Standard Coordinates for Source Physical Location**

County: Pendleton

(decimal degrees) Longitude: (decimal degrees) 84.406 Latitude: 38.734

Primary (NAICS) Category: Electric Power Generation **Primary NAICS #:** 221112 11/2018 DEP7007AI

Classification (SIC) C	Category:	Electric Power Generat	ion	Primary SIC #:	4911		
Briefly discuss the type conducted at this site.		Generation of electrical po	ower from landfill gas co.	mbustion			
Description of Area Surrounding Source:	Rural Area Urban Area	Industrial Park Industrial Area	Residential Area Commercial Area	Is any part of the source located on federal land?	☐ Yes ☑ No	Number of Employees:	1
Approximate distance to nearest residence o commercial property	or 1	00 feet	Property Area: approx	x, 1800 acres	Is this source portable?	☐ Yes ☑No	)
	What othe	r environmental permi	ts or registrations doe	es this source currently hold	or need to obtain in Ker	ntucky?	
NPDES/KPDES:	Currently Ho	old Need	✓ N/A				
Solid Waste:	Currently Ho	old Need	✓ N/A				
RCRA:	Currently Ho	old Need	✓ N/A				
UST:	Currently Ho	old Need	✓ N/A				
Type of Regulated	☐ Mixed Wast	e Generator	Generator	Recycler	Other:	_	
Waste Activity:	U.S. Importe	er of Hazardous Waste	Transporter	☐ Treatment/Storage/Disposa	l Facility	N/A	

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plicant Information							
East Kentucky Power Cooperative, Inc.							
Street or P.O. Box: 4775 Lexington Road, P.O. Box 707							
City:	Winchester	State:	KY	Zip Code:	40392-0707		
859-744-4812							
Kevin Moore							
Manager, Air Quality							
Street or P.O. Box: 4775 Lexington Road, P.O. Box 707							
City: Winchester		State:	KY	Zip Code:	40392-0707		
kevin.moore@ekpc.coop							
859-745-4157 ext. 6221							
Source							
Jerry Purvis							
Vice President, Environme	ental Affairs						
Street or P.O. Box:	4775 Lexington Roa	d, P.O. Box 707					
City:	Winchester	State:	KY	Zip Code:	40392-0707		
jerry.purvis@ekpc.coop							
859-744-4812							
	Street or P.O. Box: City:  859-744-4812  Kevin Moore  Manager, Air Quality Street or P.O. Box: City: Winchester kevin.moore@ekpc.coop 859-745-4157 ext. 6221  Source  Jerry Purvis Vice President, Environme Street or P.O. Box: City: jerry.purvis@ekpc.coop	East Kentucky Power Cooperative, Inc.  Street or P.O. Box: 4775 Lexington Roa City: Winchester  Kevin Moore  Manager, Air Quality Street or P.O. Box: City: Winchester  kevin.moore@ekpc.coop 859-745-4157 ext. 6221  Source  Jerry Purvis Vice President, Environmental Affairs Street or P.O. Box: 4775 Lexington Roa City: Winchester  jerry.purvis@ekpc.coop	East Kentucky Power Cooperative, Inc.  Street or P.O. Box: 4775 Lexington Road, P.O. Box 707 City: Winchester State:  859-744-4812  Kevin Moore  Manager, Air Quality Street or P.O. Box: 4775 I City: Winchester State: kevin.moore@ekpc.coop 859-745-4157 ext. 6221  Source  Jerry Purvis Vice President, Environmental Affairs  Street or P.O. Box: 4775 Lexington Road, P.O. Box 707 City: Winchester State: jerry.purvis@ekpc.coop	East Kentucky Power Cooperative, Inc.  Street or P.O. Box: 4775 Lexington Road, P.O. Box 707  City: Winchester State: KY   859-744-4812  Kevin Moore  Manager, Air Quality  Street or P.O. Box: 4775 Lexington Road, P.O. City: Winchester State: KY  kevin.moore@ekpc.coop  859-745-4157 ext. 6221  Source  Jerry Purvis  Vice President, Environmental Affairs  Street or P.O. Box: 4775 Lexington Road, P.O. Box 707  City: Winchester KY  Winchester KY  State: KY  Street or P.O. Box: 4775 Lexington Road, P.O. Box 707  City: Winchester KY	East Kentucky Power Cooperative, Inc.    Street or P.O. Box:		

11/2018 EP7007AI Section AI.3: Owner Information **☑** Owner same as applicant Name: Title: **Street or P.O. Box: Mailing Address:** City: State: Zip Code: Email: Phone: List names of owners and officers of the company who have an interest in the company of 5% or more. Name **Position** 

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Section AI.4: Type	of Application						
Current Status:	✓ Title V ☐ Conditi	onal Major	State-Or	rigin	General Permit	Registra	tion None
	Name Change	☐ Initial Reg			Significant Revision	<u> </u>	trative Permit Amendment
Requested Action:	✓ Renewal Permit		Registration	Ш	Minor Revision		ource-wide OperatingPermit
(check all that apply)	502(b)(10)Change	Extension	•	Ш	Addition of New Facility	Portable	Plant Relocation Notice
	Revision	Off Permi	t Change		Landfill Alternate Compliance Submittal	Modifica	ation of Existing Facilities
	Ownership Change	Closure					
Requested Status:	✓ Title V ☐ Conditi	onal Major	State-Or	rigin	☐ PSD ☐ NSR	Other	:
Is the source requesting	a limitation of potentia	al emissions?		[	Yes Vo		
Pollutant:	Requested Limit:			Pollutant:		Requested Limit:	
Particulate Matter					Single HAP		
☐ Volatile Organic Co	empounds (VOC)				Combined HAPs		
Carbon Monoxide				Air Toxics (40 CFR 68, S	Subpart F)		
☐ Nitrogen Oxides					Carbon Dioxide		
Sulfur Dioxide					Greenhouse Gases (GHG	<del>(</del> )	
Lead					Other		
For New Constructio	n:						
_	ate of Construction: //YYYY)				Proposed Operation Start-Up Date: (	(MM/YYYY)	
For Modifications:							
-	ate of Modification: (/YYYY)				Proposed Operation Start-Up Date: (	(MM/YYYY)	
Applicant is seeking c	overage under a permit s	shield.	✓ Yes	[		-	nts for which permit shield is nt to the application. *

<sup>\*</sup> No changes to non-applicable requirements since last permit action

Indicate the documents attached as part of this application:						
□ DEP7007A Indirect Heat Exchangers and Turbines □ DEP7007CC Compliance Certification						
DEP7007B Manufacturing or Processing Operations	DEP7007DD Insignificant Activities					
DEP7007C Incinerators and Waste Burners	☐ DEP7007EE Internal Combustion Engines					
DEP7007F Episode Standby Plan	☐ DEP7007FF Secondary Aluminum Processing					
DEP7007J Volatile Liquid Storage	☐ DEP7007GG Control Equipment					
DEP7007K Surface Coating or Printing Operations	☐ DEP7007HH Haul Roads					
DEP7007L Mineral Processes	Confidentiality Claim					
DEP7007M Metal Cleaning Degreasers	Ownership Change Form					
DEP7007N Source Emissions Profile	Secretary of State Certificate					
DEP7007P Perchloroethylene Dry Cleaning Systems	Flowcharts or diagrams depicting process					
DEP7007R Emission Offset Credit	☐ Digital Line Graphs (DLG) files of buldings, roads, etc.					
DEP7007S Service Stations	☐ Site Map					
DEP7007T Metal Plating and Surface Treatment Operations	☐ Map or drawing depicting location of facility					
DEP7007V Applicable Requirements and Compliance Activities	Safety Data Sheet (SDS)					
DEP7007Y Good Engineering Practice and Stack Height Determination	Emergency Response Plan					
DEP7007AA Compliance Schedule for Non-complying Emission Units	Other:					
DEP7007BB Certified Progress Report						
the information submitted in this document and all its attachmen obtaining the information, I certify that the information is on known	n a responsible official*, and that I have personally examined, and am familiar with, nts. Based on my inquiry of those individuals with primary responsibility for owledge and belief, true, accurate, and complete. I am aware that there are on, including the possibility of fine or imprisonment.					
significant penalties for submitting faise of incomplete information						
Jerry Purvis	2/19/2024					
	2/19/2024 					
Jerry Purvis						