

December 8, 2022

Via Email Only to: Amanda.Swope@blackhillscorp.com

Amanda Swope
Environmental Professional
Black Hills Energy Arkansas Inc. - Lone Elm Compressor Station
655 East Millsap Road, Suite 104
Fayetteville, AR 72703

RE: AFIN #: 24-00104 Tracking #: 1868-AGP-471

General Air Permit for Minor Source Natural Gas Compression Stations

Notice of Intent - New

Dear Ms. Swope,

The Division of Environmental Quality has reviewed your facility's Notice of Intent (NOI) and we have made a determination that the information certified in the NOI fulfills the required criteria for general permitting as specified in the Arkansas Plan of Implementation for Air Pollution Control (Rule 19), the Arkansas Pollution Control Code (Rule 18), and other applicable rules. The tracking number for Black Hills Energy Arkansas Inc. - Lone Elm Compressor Station, located at 4511 Dogwood Lane, Ozark, AR 72949 is 1868-AGP-471. A copy of the general permit is available at <a href="https://www.adeq.state.ar.us/air/permits/">https://www.adeq.state.ar.us/air/permits/</a> under the "General Air Permits" link. If you would like to receive a hardcopy of the permit via mail, please contact Rhonda Bowler at 501-682-0765 or <a href="mailto:bowler@adeq.state.ar.us">bowler@adeq.state.ar.us</a>. This permit and tracking number is your authority to construct, operate, and maintain the equipment and/or control apparatus as set forth in your NOI received on 12/7/2022 and attached to this letter.

This authorization expires upon expiration of the General Air Permit for Minor Source Natural Gas Compression Stations on December 13, 2025. This confirmation letter shall be considered part of the permit. Please place this letter at the facility.

Sincerely,

Thomas Rheaume, P.E.

Thomas Rleaune

Senior Operations Manager, Office of Air Quality, Division of Environmental Quality 5301 Northshore Drive, North Little Rock, AR 72118-5317

Enclosure

# Air Permit Notice of Intent (NOI) for Minor Source General Air Permit for Natural Gas Compression Stations 1868-AGP-000

Digitally signed by:
nform
DPEPORTALIIS.ADPCEDM2 state and
Date: 2022.12.07 10:50:15 -06:90
Reason: Copy Of Record
Location: North Little Rock, Arkansas

version 4 10

(Submission #: HPP-RCES-MYBEJ, version 1)

# **Details**

**AFIN** 24-00104

**Reference #** 1868-AGP-471

Submission ID HPP-RCES-MYBEJ

# **Form Input**

# **Applicability**

#### Requirements for Natural Gas Compression Stations General Permit Applicants

In order to be eligible for this permit the facility must meet the conditions, limits and requirements contained in the general permit.

Requirements include, but are not limited to:

- Engines are not allowed to provide electricity to the grid except as allowed under the definition and limits of "emergency engines" in 40 C.F.R. 60 Subpart JJJJ or 40 C.F.R. 63 Subpart ZZZZ.
- Only spark ignition engines are allowed/covered by this permit.
- No fuel other than natural gas is allowed to be combusted in stationary sources.
- Fugitive VOC emissions must be less than 5 tons per year.
- If there is an amine sweetener at the facility, the design capacity must be below two tons per day of Hydrogen Sulfide expressed as sulfur and emissions of Hydrogen Sulfide are limited to 2.37 tons per year.
- If the facility has a Triethylene Glycol (TEG) Dehydration unit, the benzene emissions must be below 1 ton/year of benzene for each unit
- Gasoline throughput is limited to less than 10,000 gallon per month.

Click here for the Natural Gas Compression General Permit

Does the facility meet the conditions stated in the general permit including but not limited to those requirements listed above?

Yes

# **General Information**

# AFIN, NOI Type, Current Air Permits, and Changes

Indicate below the Arkansas DEQ Facility Identification Number (AFIN), type of NOI, clearly and concisely indicate the changes associated with this NOI and list any active air permit number.

Arkansas DEQ Facility Identification Number (AFIN) 24-00104

Select the Type of NOI

New

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#### List All Changes Associated with this NOI or Indicate "None"

Remove a Waukesha L7042G (896hp) and replace with a Waukesha F18GL (400hp). The current Title V permit (1450-AOP-R6) will be terminated upon installation of the replacement engine.

# List Current Active Air Permit Number for the Facility (If Applicable)

1450-AOP-R6

#### Air Permit NOI Contact Information

In many cases, the person who prepared and is most knowledgeable about the NOI is someone other than the person who signed the NOI. Information in this table should allow the Office of Air Quality to contact this person. If this section is blank and the Office of Air Quality requires additional information, we will contact the person listed in the mailing address.

#### Air Permit NOI Contact Information

#### Air Permit NOI Contact

First Name Last Name Amanda Swope

Title

Senior Environmental Professional

Phone Type Number Extension

Business 4796018390

Email

amanda.swope@blackhillscorp.com

#### Air Permit NOI Contact Address

655 E. Millsap Road Fayetteville, AR 72703

# Applicant Information

# **Facility Information**

Please provide the following information about the facility.

# Legal Name - Facility Name

Black Hills Energy Arkansas Inc. - Lone Elm Compressor Station

# North American Industry Classification System (NAICS)

Please provide the NAICS codes and description for your facility.

Click here to search for and review the NAICS Codes via the Census Bureau NAICS Lookup

# **Primary NAICS Code and Description**

486210

# Facility Physical Address

# **Physical Address**

4511 Dogwood Lane

Ozark, AR 72949

# **Facility Physical County**

Franklin

# Facility Physical Location Latitude and Longitude

35.536263, -93.945297

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# Facility Mailing Address

#### **Mailing Contact**

**Prefix** 

Ms.

First Name Last Name Amanda Swope

Title

Senior Environmental Professional

Phone Type Number Extension

Business 4796018390

Email

Amanda.Swope@blackhillscorp.com

**Mailing Address** 

655 East Millsap Road

Fayetteville, AR 72703

[NO COUNTRY SPECIFIED]

# **Additional Facility Email Contact**

If you want an additional facility contact to be included on emails of correspondence for this facility, please enter their email address below. This contact should be facility personnel only.

# **Enter the Additional Facility Email Contact**

NONE PROVIDED

### Billing Information

Please provide the following information for the Billing contact for this NOI.

# Billing Information

# **Billing Contact**

First Name Last Name Amanda Swope

Title

Senior Environmental Professional

**Organization Name** 

Black Hills Energy Arkansas, Inc.

Phone Type Number Extension

Business 4796018390

Email

amanda.swope@blackhillscorp.com

**Billing Address** 

655 E. Millsap Road

Fayetteville, AR 72703

#### Organizational Information

Please provide the following information for the applicant. If the applicant is a Corporation, Limited Liability Company, Limited Partnership, or Cooperative; your legal name must exactly match the name registered with the Arkansas Secretary of State. Please use the following link to reference the Secretary of State registered name listing. The Proof of Good Standing for entities chartered outside of Arkansas is not required for Administrative Changes.

All Corporations, Limited Liability Companies (LLC), Limited Partnerships (LP, LLP, and LLLP), and Cooperatives must be registered and in good standing with the Arkansas Secretary of State and the state of origin (if other than Arkansas). Click here to view the Secretary of State registered name listing

# **Legal Organization**

Corporation (Domestic or Foreign, includes for-profit, nonprofit, and corporation d/b/a company)

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# Enter the Arkansas Secretary of State's Filing Number

100003980

Indicate if the Applicant is chartered in Arkansas (i.e. domestic) or chartered in a state other than Arkansas (i.e. foreign). Refer to the State of Origin that is listed on the Arkansas Secretary of State s website for this applicant. Domestic (Arkansas)

Disclosure Statement or Securities and Exchange Commission (SEC) Reports (Required for Initial Permits, Renewals, and any time the Disclosure Statement has Changed)

Arkansas Code Annotated • 8-1-106 requires that all applicants for the issuance or transfer of any permit submit a disclosure statement with their applications. Some exceptions apply (refer to the form for details).

The disclosure form is a separate form and can be obtained using the link below. Click Here for the DEQ Disclosure Statement Form

#### Attach the Disclosure Statement or SEC Annual and Quarterly Reports

10-Q.pdf - 08/08/2022 04:38 PM Annual Report.pdf - 08/08/2022 04:38 PM Comment

NONE PROVIDED

# Responsible Official Information

Provide the information below for the person under whose electronic signature or hardcopy signature this form will be certified when completed. This person must be a responsible official. For the definition of responsible official click the link below.

<u>Click Here for the Definition of Responsible Official</u>

#### Responsible Official

First Name Last Name Chad Kinsley

Title

Vice President, Operations

Company or Agency of the Responsible Official

Black Hills Energy Arkansas, Inc.

#### How Does the Person Certifying this Submission Qualify as a Responsible Official?

The person is the vice-president of the corporation, LLC, or cooperative in charge of a principle business function

# How Will the Responsible Official Certify this Submission?

The Responsible Official will submit this submission using their electronic signature

# **Facility Information**

Does this facility have any engines or turbines?

Yes

How many, if any, engines are used for compression at the facility?

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How many, if any, engines are used for emergency power at the facility?

0

Does the facility have an amine sweetener?

No

Does the facility have a Triethylene Glycol Dehydration (TEG) unit?

No

Does the facility have a boiler with an input capacity greater than 10 MMBTU/hr

No

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# Does the facility have a gasoline storage tank?

No

# **Facility Wide Emissions**

Provide the overall facility emissions of all sources, significant and insignificant.

# Total Particulate Matter/ Particulate Matter 10 (PM/PM10) emissions from this facility in tons/year:

0.13

#### Total Sulfur Dioxide (SO2) emissions from this facility in tons/year:

nn.

# Total Volatile Organic Carbon (VOC) emissions from this facility in tons/year:

1.66

# Total Carbon Monoxide (CO) emissions from this facility in tons/year:

5.02

# Total Nitrogen Oxide (NOx) emissions from this facility in tons/year:

7.72

# Highest single HAP emission from this facility in tons/year:

0.69

# Total HAP emissions from this facility in tons/year:

0.96

# Total Hydrogen Sulfide (H2S) emissions from this facility in tons/year:

0.01

# Individual Source Emissions and Calculations

Waukesha F18GL.pdf - 08/08/2022 04:45 PM

Comment

NONE PROVIDED

#### Compressor Station/Remote Status Map.

RICE\_LoneElm\_2022.pdf - 08/08/2022 04:46 PM

Comment

NONE PROVIDED

# **Engine/Turbine Information**

#### Engine/Turbine Information

Complete the following form. Attach a separate Engine/Turbine Form for each unit. Download the form, complete and attach below one form for each engine.

Click here to download the Engine and Turbine Form

# Attach the Engine/Turbine Form(s)

Engine Summary Form\_Lone Elm.pdf - 09/15/2022 10:58 AM

Comment

NONE PROVIDED

#### Are all engine/turbine serial numbers provided in the attached documents?

Yes

# Insignificant Activities and Other Information

# Insignificant Activities

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List below any emission sources other than those listed in the permit. These must qualify as insignificant activities listed in Appendix A, Group A of Regulation 18 or 19. For insignificant activities with a numerical standard in Appendix A, Group A of Regulation 18 or 19, calculations demonstrating compliance with the numerical standard must be provided also.

# Insignificant Activities

Lubricating Oil Tank Produced Water Tank Equipment Leaks Blowdowns Rod Packing Pneumatics

#### Attach Calculations and/or Detailed Lists for the Insignificant Activities Listed, if Necessary

Insignificant Activities.pdf - 09/15/2022 01:57 PM

Comment

NONE PROVIDED

# Other Information (Optional)

Attach any other information that you wish to be considered in this application.

# Attach Any Other Information

NONE PROVIDED Comment
NONE PROVIDED

# Fee Requirements

**Initial Fee** 

\$200

# How do you intend to pay your fee?

Online (a small additional processing fee is applied)

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# Agreements and Signature(s)

#### SUBMISSION AGREEMENTS

- I am the owner of the account used to perform the electronic submission and signature.
- I have the authority to submit the data on behalf of the facility I am representing.
- I agree that providing the account credentials to sign the submission document constitutes an electronic signature equivalent to my written signature.
- I have reviewed the electronic form being submitted in its entirety, and agree to the validity and accuracy of the information contained within it to the best of my knowledge.

\*\*\*The person digitally signing this form must be the same person referenced as the Responsible Official in this form or you must return to the previous screen and select the hard copy signature option and submit the hard copy certification with the Responsible Official's signature. If you are using the hard copy certification method, your application will not be considered complete until the original hard copy certification is received.\*\*\*

#### Certification

I certify under penalty of law that this Notice of Intent and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed By

Chad Kinsley on 12/07/2022 at 10:35 AM

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# SUPPLEMENTAL INTERNAL COMBUSTION ENGINE SUMMARY FORM

Unit No. 1				ř	
Engine Manufacturer:	Walikesha		Model:	F18GL	
Serial Number:	C-16814/1			•	
Construction Date			Date of last modification or reconstruction	no	
Engine Type:	Spark Ignition		Model Year:	2007	
(check one)	☐ 2 Stroke ■ 4 Stroke	INVAS.	Date Engine Ordered:	2007	
Maximum Rated Output: (bhp)			Engine Displacement (cc):	Displacement Per Cylinder (L/cylinder):	0.00
400		_	1096 cu in	182.67	
Primary Use:	ion				
■ Compressor Driver □ Other (specify):	<b>.</b>				
Is the engine subject to 40 C.F.R. § 60 Subpart JJJJ?		☐ Yes ■ No			
Is the engine certified?  \Boxed Yes \Boxed No	If yes, list certification standard.	on standard.	Ť		
Engine type for 40 C.F.R. § 63 Subpart ZZZZ	ZZZ				
Complies with ZZZZ by compliance with 40 C.F.R. § 60	C.F.R. § 60	Subpart JJJJ   1	Emergency Engine		
Four Stroke Lean Burn Non-Emergency Engines <500 hp	Engines ≤500 hp ■		Four Stroke Rich Burn Non-Emergency Engines <500 hp	Engines <500 hp	
Four Stroke Lean Burn Remote Non-Emergency Engines >500 hp	ergency Engines >500		Four Stroke Lean Burn Non-Remote Non-Emergency Engines >500 hp	on-Emergency Engines >500 hp	
Four Stroke Rich Burn Remote Non-Emergency Engines >500 hp	rgency Engines >500		Four Stroke Rich Burn Non-Remote Non-Emergency Engines >500 hp	on-Emergency Engines >500 hp	
All Two Stroke Lean Burn Non-Emergency Engines	cy Engines				
Add on Control:	ıt		☑ None		
☐ Non-selective catalytic reduction	alytic reduction (NSCR)	R)			
		TURBINE ENC	TURBINE ENGINE SUMMARY FORM		
Turbine Manufacturer:			Model:		
Construction Date			Date of last modifica	Date of last modification or reconstruction	
Serial Number:					
Heat input at peak load MMBtu/hr					
Subject to 40 C.F.R.60 Subpart GG?		☐ Yes ☐ No			
Subject to 40 C.F.R.60 Supbart KKKK?		☐ Yes ☐ No			

# Lone Elm Compressor Station Natural Gas 4-Stroke Lean Burn Engine

Source ID	SN-01				
Description	4 Stroke Lean Burn				
Manufacturer	Waukesha				
Model	F18GL				
Emission Control	None				
Fuel Heat Value	1000 Btu/scf				
Design Output	400 hp				
Site Output	400 hp				
Potential Operation	8760 hr/yr				
Potential Heat Rate	7500 Btu/hp-hr				
Potential Heat Rate	3.00 MMBtu/hr				
Potential Fuel Use	3000 scf/hr				
Potential Fuel Use	26.28 MMscf/yr				

# Potential to Emit

		Emission	Emission			1	Source of
	CAS	Factor	Factor				Emission
Pollutant	Number	(lb/MMBtu)	(g/hp-hr)	(lb/hr)	(lb/yr)	(ton/yr)	Factor
NOx	***************************************	()	2.00	1.764	15449.995	7.725	Manf Spec
co			1.30	1.146	10042.497	5.021	Manf Spec
VOC		1990	0.27	0.238	2085.749	1.043	Manf Spec
SO2		0.000588		0.002	15.453	0.008	AP-42
PM PM10		9.91E-03 7.71E-05		0.030	260.435 2.026	0.130 0.001	AP-42 AP-42
	7						
1,1,2,2-Tetrachloroethane <sup>k</sup>	0.	4.00E-05 3.18E-05		1.20E-04	1.051	5.26E-04	AP-42
	0	2.67E-04		9.54E-05	0.836	4.18E-04	AP-42
1,3-Butadiene <sup>k</sup>				8.01E-04	7.017	3.51E-03	AP-42
1,3-Dichloropropene <sup>k</sup>	2	2.64E-05		7.92E-05	0.694	3.47E-04	AP-42
2-Methylnaphthalene <sup>k</sup>		3.32E-05		9.96E-05	0.872	4.36E-04	AP-42
2,2,4-Trimethylpentane <sup>k</sup>		2.50E-04		7.50E-04	6.570	3.29E-03	AP-42
Acenaphthene <sup>k</sup>		1.25E-06		3.75E-06	0.033	1.64E-05	AP-42
Acenaphthylene <sup>k</sup>		5.53E-06		1.66E-05	0.145	7.27E-05	AP-42
Acetaldehyde <sup>k,l</sup>		8.36E-03		2.51E-02	219.701	1.10E-01	AP-42
Acrolein <sup>k,I</sup>		5.14E-03		1.54E-02	135.079	6.75E-02	AP-42
Benzene <sup>k</sup>		4.40E-04		1.32E-03	11.563	5.78E-03	AP-42
Benzo(b)fluoranthenek		1.66E-07		4.98E-07	0.004	2.18E-06	AP-42
Benzo(e)pyrene <sup>k</sup>		4.15E-07		1.25E-06	0.011	5.45E-06	AP-42
Benzo(g,h,i)perylene <sup>k</sup>		4.14E-07		1.24E-06	0.011	5.44E-06	AP-42
Biphenyl <sup>k</sup>		2.12E-04		6.36E-04	5.571	2.79E-03	AP-42
Carbon Tetrachloride <sup>k</sup>		3.67E-05		1.10E-04	0.964	4.82E-04	AP-42
Chlorobenzene <sup>k</sup>		3.04E-05		9.12E-05	0.799	3.99E-04	AP-42
Chloroform <sup>k</sup>		2.85E-05		8.55E-05	0.749	3.74E-04	AP-42
Chrysene <sup>k</sup>		6.93E-07		2.08E-06	0.018	9.11E-06	AP-42
Ethylbenzene <sup>k</sup>		3.97E-05		1.19E-04	1.043	5.22E-04	AP-42
Ethylene Dibromide <sup>k</sup>		4.43E-05		1.33E-04	1.164	5.82E-04	AP-42
Fluoranthenek	<u> </u>	1.11E-06		3.33E-06	0.029	1.46E-05	AP-42
Fluorenek	2	5.67E-06		1.70E-05	0.149	7.45E-05	AP-42
Formaldehyde <sup>k,l</sup>		5.28E-02		1.58E-01	1387.584	6.94E-01	AP-42
Methanol <sup>k</sup>		2.50E-03		7.50E-03	65.700	3.29E-02	AP-42
Methylene Chloride <sup>k</sup>		2.00E-05		6.00E-05	0.526	2.63E-04	AP-42
n-Hexane <sup>k</sup>		1.11E-03		3.33E-03	29.171	1.46E-02	AP-42
Naphthalene <sup>k</sup>		7.44E-05		2.23E-04	1.955	9.78E-04	AP-42
PAH <sup>k</sup>	<u>.</u>	2.69E-05			0.707	-	AP-42 AP-42
Phenanthrene <sup>k</sup>	<u>-</u>	1.04E-05		8.07E-05		3.53E-04	AP-42 AP-42
Phenol <sup>k</sup>		2.40E-05		3.12E-05	0.273	1.37E-04	70-500 B UL 100000
	·			7.20E-05	0.631	3.15E-04	AP-42
Pyrene <sup>k</sup>		1.36E-06		4.08E-06	0.036	1.79E-05	AP-42
Styrene <sup>k</sup>	5	2.36E-05		7.08E-05	0.620	3.10E-04	AP-42
Tetrachloroethane <sup>k</sup>		2.48E-06		7.44E-06	0.065	3.26E-05	AP-42
Toluene <sup>k</sup>	9	4.08E-04		1.22E-03	10.722	5.36E-03	AP-42
Vinyl Chloride <sup>k</sup>		1.49E-05		4.47E-05	0.392	1.96E-04	AP-42
Xylene <sup>k</sup>		1.84E-04		5.52E-04	4.836	2.42E-03	AP-42
TOTAL HAPS				2.17E-01	1.90E+03	9.49E-01	