April 18, 2016

EAGLERIDGE

City of Mansfield 1200 E. Broad Street Mansfield, TX 76063 Attn: David Nicholson

RE: Request for Extension

Woodlands Estate East and West Padsites

Tarrant County, Texas

Gentlemen:

EagleRidge Energy, LLC, operated by EagleRidge Operating, LLC ("EagleRidge"), is requesting an extension of time for use of temporary gas operated lift compressors until EagleRidge completes its feasibility and cost analysis study for the use of lift compressors at the Woodlands Estate Padsites. The deadline, as defined by the City, is May 9, 2016, and July 7, 2016, respectively. In addition, there will be additional compressors that will face the same permanent classification status before the study is completed by EagleRidge. This request for an extension is due to the potential high cost of the conversions and the commercial nature of the conversions.

On November 9, 2015, EagleRidge began investigating the causes for the significant drop in production at the Woodlands Estates padsites. Production from the 15 wells had dropped significantly from 8 million to 2.5 million cubic feet per day. Based on our review, reduced production has become a significant issue with hundreds of wells in the southeast portion of Tarrant County. Low-volume wells will be unable to sustain commercial production if operating costs increase or become excessive.

Prior to installing the first lift compressor, EagleRidge determined, based on engineering analyses, that the gas lift pressure provided by the Summit Midstream Compressor Station (the "Station") was too low to effectively gas lift all of the wells. In addition, the compression provided by the Station was at a higher cost. The low pressures provided by the Station are ineffective at lifting water and are causing the wells to continue to load which reduces and impairs commercial production. The configuration and setup of these compressors will not allow them to provide pressures sufficient to lift water at a commercially reasonable cost.

EagleRidge's solution (which was untested at the time) was to install smaller, gas-operated lift compressors which: (1) are easy and inexpensive to move and set up; (2) are available under low-cost, short-term leases; (3) have a much smaller foot print; (4) operate at a significantly lower cost; and, (5) are small enough to place behind existing walls around the wellheads, thereby preventing noise from affecting the surrounding areas and limiting the need for further construction and the accompanying disturbances. All of the lift compressors have been tested either meet or exceed the Texas Commission on Environmental Quality (TCEQ) permit by rule emission guide and the Environmental Protection Agency (EPA) guide under 40CFR40, Subpart JJJJ, (Results of those tests are attached). Electric compressors, by contrast, would result in

EagleRidge Operating, LLC P.O. Box 191447 Dallas, TX 75219

O 214-295-6704 F 214-520-2773 significant additional costs for each pad site including, but not limited to, costs: (i) to provide new electric service; (ii) to provide buildings for sound proofing; (iii) for long-term leases (two to three years) of the compressors; and (iv) to change out gas lift valves to operate at the higher pressures. Such additional costs are simply not commercially feasible for low-volume wells.

EagleRidge has installed three lift compressors to serve six of the 15 wells which need the increased pressures provided by the lift compressors. Production from the six wells has increased from 2.5 million to 5 million cubic feet per day and continues to improve. EagleRidge is working on two additional wells to improve production. The increased pressures have started to unload water thereby further increasing production. However, EagleRidge still has nine wells to convert to lift compression. EagleRidge estimates that it will take another 4 months based on our schedule to workover and convert the remaining 9 wells and an additional 3 months of evaluation of all of the wells. EagleRidge estimates that it will take until December 1, 2016 to evaluate all of our options and evaluate the commercial options available to EagleRidge and make a decision as to the installation of permanent lift compressors. EagleRidge estimates that if all of the conversions are successful, that it will require 2 compressors with 700 horsepower each to maintain optimum pressures for effective lift compression.

The number of wells that will require lift compression is yet to be determined, however, one of the factors to consider as wells return to production is water production (initially 200-300 barrels per day). Water production will begin to drop off after 2-3 months, and as water production drops off, another lifting method known as "plunger lift" may become commercially and mechanically effective depending on the extent of the water production. This method involves installing a plunger in the tubing that lifts the water and is operated by the pressure of the well itself without compression. However, plungers do not operate effectively on higher water volume wells. If the water production is reduced and a plunger lift is installed, the need for lift compression could be reduced to one 700 horsepower compressor or less.

EagleRidge's goal is to lift water thereby increasing production for low-volume wells at an affordable cost that effectively reduces the need for lift compressors and ultimately further reduces emissions and other related costs. At this time, the installation of large electric compressors is not commercially feasible, and will cause excessive operation costs and transportation activity into the area, thus potentially resulting in greater emissions. Our goal is to assess the success of the well conversions to determine the size and number of electric lift compressors that will be required.

Should you need any other information or have any questions please call me at 817-946-2873 or contact me by email at mgrawe@eagleridgeenergy.com.

Very truly yours,

EAGLERIDGE OF ERATING, LLC

Mark L. Grawe

Executive Vice President and COO

Attach:

ENGINE EMISSIONS REPORT EAGLERIDGE ENERGY, LLC CATERPILLAR, 3306 NA, UNIT #351, SERIAL #G6X03418

Test Period:	Otr 2 - 2015			
Location:		Manufacturing or Rehuild Date	Air Permit Number:	40 CFR 60 JJJJ
Date:	April 22 2045		Unit Number:	351
Project Number:	7711 42, 2013	01/19/15	Suction Pressure (psi):	62
Fnoine Manifacturers	G-10-diw.tx-eng#1		Discharge Pressure (psi):	890
Esting Medial	Caterpillar	Federal	Stack Exhaust Temperature (°F):	
Eligilie Model:	3306 NA	Regulatory	Rated Horsebower (hp.):	117
Engine Serial Number:	G6X03418	Citation	Brake Horsepower (hhp):	143
Analyzer Manufacturers:	TECO(NOx), TECO(CO), SERV(O2), VIG(VOC)	Subpart 14.1.1	First of Electrical Comps.	134
Analyzer Model Numbers:	42i-HL, 48i, 1440, 210		Eligine Fuel Flow (Fuel Consump.) (Btu/hp*hr):	7,775
Date Analyzers Calibrated:		\$60,4233 and/or	Specific Gravity:	0.6571
Test Results and Calculations:	Annendix A	\$60.4243	ruel Heating Value [HHV] (Btu/SCF):	1,119
Emission Data Records:	a vibradry		BSFC (Btu/hp*hr);	8,596
Calibration Gas Certifications:	Spellary B		Annual Hours Allowed to Operate:	8.760
Quality Accurance and Of Date:	Appenaix C		Engine Speed (rpm):	1 685
Tier Assurance and Ac Data:	Appendix D		Air Manifold Temp (°F):	
ruel Analysis Records:	Appendix E		Air Manifold Pressure (nei)	1
Ambient Temperature (°F):	65.3		Control (Not)	-5
Barometric Pressure (in. Hg):	29.92		Operating Hours (hours):	-
Relative Humidity (%):	20:01		Available Horsepower (hpa):	136
	Emissis Test Barrier		Rated Engine Speed (rpm):	1.800
Della-4	Ellission l'est Kesults		Rated Manifold Pressure (in. Hg (abs)):	90
TOL	Stack Test Results	Federal Limits Passing	Fraine 1 002 (07).	70
0 ₂ (%)	0.07	_	Differential Brossess (2010)	66
NOx (pbmvd)	72.27		Direction Pressure (in H ₂ O):	1.0
CO (ppmvd)	37.10	1	-Brake norsepower based on available horsepower multiplied by load.	blied by load.
VOC (ppmvd)	4.14	1	Avadable not sepower based on the engine speed ratio (actual vs rated), see Engine Spec Sheet, Appendix B.	actual vs rated), see Engine
NOx (ppmvd@15%0 ₂)	20.46	22.00	-Load based on the air manifold ratio (actual vs rated), see Engine Spec Sheet	e Engine Spec Sheet
	10.50	270.00	Appendix B.	
VOC (ppmvd@15%0 ₂)	1.17			
NOx (g/hp*hr)	96.0			
	0.20	:		
	0.08	2.00 YES		,
voc (g/np*nr)	0.01	0.70 · YES		å.
All testing conducted according to Unit Methods: 1, 3a, 7e, 10, 19 and 18/25a	All testing conducted according to United States Environmental Protection Agency (EPA), Methods: 1, 3a, 7e, 10, 19 and 18/25a.	tion Agency (EPA),	Tested By: Air Hygiene International, Inc. Tester(s) / Test Unit(s): N. Arthur	

ENGINE EMISSIONS REPORT EAGLERIDGE ENERGY, LLC CATERPILLAR, 3306TA, UNIT #355, SERIAL #G6X05243

Test Period:	Otr 2 - 2015					
Location:			Manufacturing		Air Permit Number:	40 CFR 60 Subpart JJJJ
Date:	3100 N earl		or Rebuild Date		Unit Number:	355
Project Number:	CIO2 4-1, 2010		02/25/15		Suction Pressure (psi):	70
Engine Manufacturer:	Z#Gu-rio-diw.tx-eng#Z				Discharge Pressure (psi):	800
	Caterpillar		Fodoral		Start 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	380
Engine Model:	3306TA		Poquipton		stack Exhaust Temperature (°F):	-
Engine Serial Number:	G6X05243		Citation		Rated Horsepower (hpr):	203
Analyzer Manufacturers:	TECO(NOx), TECO(CO), SERV(O2), MKS/THC CH C H 3				Brake Horsepower (bhp):	185
Analyzer Model Numbers:	42C 48C 1440 2030		Subpart JJJJ		Engine Fuel Flow (Fuel Consump.) (Btu/hp*hr):	8,098
Date Analyzers Calibrated:	2002 1011 100 100 100 100 100 100 100 10	ć			Specific Gravity:	0.6571
Test Results and Calculations:	Appendix A		\$50.4243		Fuel Heating Value [HHV] (Btu/SCF):	1,119
Emission Data Records:	Appendix B				BSFC (Btu/hp*hr):	8,9531
Calibration Gas Certifications:	Appendix				Annual Hours Allowed to Operate:	8.760
Quality Assurance and QC Data:	Appendix				Engine Speed (rpm):	1,645
Fuel Analysis Records:	Appendix				Air Manifold Temp (°F):	1
Ambient Temperature (°F):	1 Springle.				Air Manifold Pressure (psi):	
Barometric Pressure (in. Hg):	2814				Operating Hours (hours):	45.105
Relative Humidity (%):	47:07				Available Horsepower (hpa):	185
	5+ C+ T 3 H				Rated Engine Speed (rpm):	7 800
Pollutant (units)		-			Rated Manifold Pressure (in Hg (abc)):	000,1
0, (%)	Stack lest Results	State Limits	Federal Limits	Passing	Engine Load (%):	1 0
	0.00	-1	1		Differential D	100
×	183.36			1	Unrerential Pressure (in H ₂ O):	1
CO (ppmvd)	104.24				-brake norsepower based on available horsepower multiplied by	nultiplied by
VOC (ppmvd)	6.79		:	:	-Available horsepower based on the ongine oncine	
NOx (ppmvd@15%O ₂)	51.76		- 00	:	rated), see Engine Spec Sheet. Appendix B.	ino (actual vs
	29.43		070.00	YES	-Load assumed as 100% due to lack of air manifold pressure	pressure
VOC (ppmvd@15%0,)	1 92		470.00	YES	and/or control panel information.	
NOx (g/hp*hr)	20.0	1	60.00	YES		
CO (a/hp*hr)	0.00	-	1.00	YES		
C	0.24	I	2.00	YES		
	0.02	1	0.70	YES		
All testing conducted according t	All testing conducted according to United States Environmental Protection Agency (EPA), Methods: 1, 3a, 7e, 10, Tested By: Air Hygiene International, Inc.	on Agency (EPA	(), Methods: 1, 3a	a, 7e, 10,	Tested By: Air Hygiene International, Inc.	
	19, and 320.				rester(s) / rest Unit(s): M.Barry/J.McCormick	