Air Pollution Control Title V Permit to Operate Statement of Basis for Permit No. V-UM-0001-09.00 March 2010



Western Gas Resources Asset Holding Company, LLC **Barker Creek Compressor Station Ute Mountain Indian Reservation** San Juan County, New Mexico

1. Facility Information

a. Location

The Barker Creek Compressor Station (Barker Creek) is owned and operated by Western Gas Resources Asset Holding Company LLC (WGR), a subsidiary of Anadarko Petroleum Corporation, and is located within the exterior boundaries of the Ute Mountain Indian Reservation, in the northwestern part of the State of New Mexico. The exact location is NW ¼ Section 2, T32N, R14W, San Juan County, New Mexico. The mailing address is:

> Barker Creek Compressor Station 99 County Road 6500 Kirtland, New Mexico 87417

b. Contacts

Facility Contact:

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Company Contact:

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Alternate Contact:

Suzanne G. Boenker President EnviroSolutions Engineering, LLC Ute Mountain Ute Tribe 5306 Oakdale Creek Court Spring, Texas 77379 Phone: 281-370-3492 Fax: 281-320-9404

Tribal Contact:

Honorable Ernest House Chairman Ute Mountain Ute Tribe P.O. Box JJ Towaoc, Colorado 81334 Phone: 970-564-5602

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Alternate Tribal Contact:

Scott Clow **Environmental Director**

P.O. Box 448 Towaoc, Colorado 81334

Phone: 970-564-5432

c. <u>Description of Operations</u>

Barker Creek is a natural gas compressor station. The inlet gas and any associated pipeline liquids entering the compressor station pass through a horizontal separator (not a Joule-Thompson or dewpoint skid) where gas is separated and routed to the inlet of the compressor. Pipeline liquids are primarily water and are routed as a single stage to offsite storage not owned or operated by WGR. In the event any associated condensate is entrained with the water, flashing emissions are routed along with the gas to the inlet of the compressor. The separator is not an emissions source, and hence no flashing emissions occur. No other equipment is connected with the separator, except the gas inlet, gas outlet, and liquids outlet piping and associated connections. The compressor engine at Barker Creek is a Waukesha L5794GSI reciprocating internal combustion engine (RICE) fueled by natural gas and utilizing rich burn technology.

d. <u>List of All Units and Emission-Generating Activities</u>

WGR provided the information contained in Tables 1 and 2 in its initial part 71 permit application. Table 1 lists emission units and emission generating activities, including any air pollution control devices. Emission units identified as "insignificant" are listed separately in Table 2.

Table 1 - Emission Units Barker Creek Compressor Station

Emission Unit Id.	Description	Control Equipment		
	Waukesha L5794GSI rich burn compressor engine, 1,380 bhp, 3.51 MMBtu/hr, natural gas fired:			
C-1101	Serial No. C-1442/1 Installed: 8/26/2003	Catalytic Converter (not enforceable)		

Part 71 allows sources to separately list in the permit application units or activities that qualify as "insignificant" based on potential emissions below 2 tpy for all regulated pollutants that are not listed as hazardous air pollutants (HAPs) under section 112(b) of the Clean Air Act (CAA) and below 1,000 lbs per year or the de minimus level established under Section 112(g), whichever is lower, for HAP emissions. However, the application may not omit information needed to determine the applicability of, or to impose, any applicable requirement, or to calculate the fee. Units that qualify as "insignificant" for the purposes of the part 71 application are in no way exempt from applicable requirements or any requirements of the part 71 permit.

WGR stated in its initial part 71 permit application that the emission units in Table 2, below, are insignificant. The application provided emission calculations for fugitive emissions using current American Petroleum Institute emission factors. This data supports the source's claim that these units qualify as insignificant.

Table 2 - Insignificant Emission Units Barker Creek Compressor Station

Description

Process fugitives (fugitive emissions from gas valves, light liquid valves, relief valves, liquid flanges, open-ended lines, compressor seals, pump seals, and gas flanges)

e. Potential To Emit

Under 40 CFR 52.21, potential to emit (PTE) is defined as the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation, or the effect it would have on emission, is federally enforceable.

The Waukesha L5794GSI compressor engine at Barker Creek is equipped with a catalytic converter emissions control device. However, the compressor engine is not subject to any applicable regulations requiring the use of a control device to meet reduced emission levels. Therefore, the use of the catalytic converter at Barker Creek is not federally enforceable and is voluntarily maintained onsite by WGR. WGR has not requested recognition for the use of the control device.

The PTE for Barker Creek was reported by WGR in forms "PTE" and "EMISS" of the part 71 application. The PTE for this facility are as follows:

Nitrogen Oxides (NOx) -193.10 tpy Carbon Monoxide (CO) -146.49 tpy Volatile Organic Compounds (VOCs) -6.19 tpy Small Particulates (PM₁₀) -0 tpy Lead (Pb) -0 tpy Sulfur Dioxide (SO₂) -0.0 tpy Total Hazardous Air Pollutants (HAPs) -0.67 tpy Largest Single HAP (Formaldehyde, CH₂O) -0.67 tpy

f. Construction, Permitting, and Compliance History

WGR's initial construction of Barker Creek (also known as Barker Dome) consisted of one 1,380 hp natural gas fired Waukesha L5794GSI compressor engine (C-1101). The PTE of this engine was below the Prevention of Significant Deterioration (PSD) thresholds, and therefore did not require a pre-construction permit. WGR began operation of the facility in August of 2003. The PTE of the engine exceeded the title V thresholds for major sources, and therefore, WGR was required to submit a part 71 permit application within 12 months of the commencement of operations. However, an application was not submitted. WGR voluntarily disclosed the

violation in a notification letter on April 7, 2008, pursuant to EPA's Self Audit Policy, that an initial part 71 application was being prepared. A Consent Agreement was filed with the EPA Region 8 Hearing Clerk on October 20, 2009 to address the violation. A copy of Consent Agreement CAA-08-2010-0001 is maintained on file in the docket of the permit.

EPA received an initial part 71 permit application for Barker Creek on January 9, 2009, which included the fees for prior operating years. The facility is a major source for the purpose of title V for nitrogen oxides (NO_x) and carbon monoxide (CO) emissions and is an area source for hazardous air pollutant (HAP) emissions. The Waukesha L5794GSI engine at Barker Creek has voluntary controls in place to reduce emissions (catalytic converter), but the controls are not federally enforceable. Because the engine was constructed prior to June 12, 2006, the engine is not subject to the requirements of 40 CFR part 63, subpart ZZZZ or 40 CFR part 60, subpart JJJJ. Therefore, the draft permit for Barker Creek contains part 71 administrative requirements but no other applicable CAA requirements (hollow permit).

Table 3 illustrates the permitting history, any changes in the unit-specific and facility-wide PTE and emission status, and the compliance history since operation of the facility commenced in 2003, in the context of the promulgation of some CAA requirements that may apply.

Table 3 – Construction and Permitting History Barker Creek Compressor Station

(In Context of Some CAA Regulations That May Apply)

August 7, 1980 Prevention of Significant Deterioration Pre-Construction Permitting Program Promulgated (the 8/7/80 rules form the basis of the current regulations)

Applicability:

PSD is a preconstruction review requirement that applies to proposed projects that are sufficiently large (in terms of emissions) to be a "major" stationary source or "major" modification. Source size is defined in terms of "potential to emit," which is its capability at maximum design capacity to emit a pollutant, except as constrained by federally and practically enforceable conditions. A new source or a modification to an existing minor source is major if the proposed project has the potential to emit any pollutant regulated under the CAA in amounts equal to or exceeding specified major source thresholds [100 tpy for the 28 listed industrial source categories and 250 tpy for all other sources].

PSD also applies to modifications at existing major sources that cause a significant "net emissions increase" at that source. A modification is a physical change or change in the method of operation. Significance levels for each pollutant are defined in the PSD regulations at 40 CFR 52.21.

Compliance: No new source or modification of a source subject to PSD review may be constructed without a permit.

February 19, 1999 – Part 71 (Title V) Operating Permit Program Promulgated (the 2/19/99 rules form the basis of the current regulations)

Applicability:

Any major source (criteria pollutants > 100 tpy, or any single HAP > 10 tpy, or aggregated HAP > 25 tpy);

Any source, including an area source, subject to a standard, limitations, or other requirements under 111 or 112 of the CAA promulgated on or before July 21, 1992. Non-major sources subject to 111 or 112 regulation promulgated after July 21, 1992 are subject unless the rule specifies otherwise;

Any Acid Rain source;

Any Solid Waste Incineration Unit;

Application Due Date: Within 12 months after commencing operation.

Table 3 – Construction and Permitting History, Continued...

(In Context of Some CAA Regulations That May Apply)

June 17, 1999 – MACT HH for Major HH HAP Oil and Gas Production Sources Promulgated (HAP > 10/25 tpy)

HAP PTE determined by emissions from dehydrators and storage vessels with a potential for flash emissions only, unless the facility is oil and gas plant.

Affected Sources:

Glycol dehydration units

Storage vessels with the potential for flash emissions

Group of ancillary equipment (pumps, valves, flanges, etc...)

Compressors intended to operate in volatile hazardous air pollutant service, located at natural gas processing plants

Final Compliance Dates

Construction or reconstruction commenced before February 6, 1998 – June 17, 2002

Construction or reconstruction commenced after February 6, 1998 – Upon start-up or June 17, 2002, whichever date is later Area → Major HAP Source

Construction or reconstruction of the affected unit commenced before February 6, 1998, causing source to become major – 3 years after becoming major

Construction or reconstruction of the affected unit commenced after February 6, 1998, causing source to become major – Upon start-up

August 26, 2003 – Barker Creek Operations Commenced								
	PTE (tpy)							
	NOx	CO	VOC	HAPs	CH ₂ O			
C-1101, 1,380 hp Waukesha L5794GSI (catalytic converter) – rich burn compression engine	193.1	146.49	5.99	0.67	0.67			
IEUs (process fugitives)	0	0	0.20	0	0			
Facility PTE for 2003 New Source	193.10	146.49	6.19	0.67	0.67			

PSD Status: Minor
HAP Status per Subpart HH: Minor
Title V Status: Major*

*Although site was major for criteria pollutants, the facility operated under EPA's 50% Transition Policy. The facility did not meet all the requirements for this policy and submitted an application for a part 71 operating permit in January 2009.

June 15, 2004 – RICE MACT For Major HAP Sources Promulgated (HAP >10/25 tpy)

Affected Sources:

Existing RICE \geq 500 hp, located at major sources of HAP emissions, constructed or reconstructed on or before 12/19/2002

New/Reconstructed RICE ≥ 500 hp, located at major sources of HAP emissions, constructed or reconstructed after 12/19/2002

Final Compliance Dates

Existing lean burn RICE – Exempt.

Existing rich burn RICE – June 15, 2007.

Start up a new or reconstructed rich or lean burn RICE on or before August 16, 2004 - August 16, 2004.

Start up a new or reconstructed rich or lean burn RICE after August 16, 2004 – upon start-up.

Area → Major HAP Source

Commence construction or reconstruction after becoming a major HAP source – upon start-up.

Commence construction or reconstruction before becoming a major HAP source – within 3 years of becoming major.

Applicability to Source

Not subject; HAP PTE < 10/25 tpy

Table 3 – Construction and Permitting History, Continued...

(In Context of Some CAA Regulations That May Apply)

January 3, 2007 - MACT HH for Area Sources of Oil & Gas Production Facilities Promulgated (HAP < 10/25 tpy)

Affected Sources:

Triethylene Glycol (TEG) dehydration units

Final Compliance Dates

Construction or reconstruction of the affected unit located in an Urban-1 county commenced before February 6, 1998:

Located w/i Urban Area (UA) Plus Offset and Urban Cluster (UC) boundary – January 4, 2010

Not Located w/i UA Plus Offset and UC boundary - January 5, 2009

Construction or reconstruction of the affected unit located in an Urban-1 county commenced on or after February 6, 1998 – Upon start-up or January 3, 2007, whichever date is later.

Construction or reconstruction of the affected unit not located in an Urban-1 county commenced before July 8, 2005:

Located w/i UA Plus Offset and UC boundary - January 4, 2010

Not Located w/i UA Plus Offset and UC boundary - January 5, 2009

Applicability to Source

Not subject; Facility does not operate a TEG dehydration unit

April 7, 2008 - Self-disclosure Letter to EPA Pursuant to EPA's Self Audit Policy

WGR failed to submit an initial part 71 application for Title V permit to operate within 12 months of commencing operations, therefore violating the Clean Air Act. WGR self-disclosed the violation to EPA in a letter dated April 17, 2008 pursuant to EPA's Self Audit Policy.

Compliant and Settlement Agreement entered into by Anadarko Petroleum Corporation and U.S. EPA to settle alleged violations of the Clean Air Act. The Final Order of this Consent Agreement was filed with the EPA Region 8 Hearing Clerk on October 20, 2009 (Docket No.: CAA-08-2010-0001).

January 18, 2008 Amended MACT ZZZZ Promulgated

Area Sources (HAP < 25 tpv & for any size engine)

Major Sources (HAP > 25 tpy & for engines ≤ 500 hp)

Affected Sources

New or reconstructed RICE of any hp at area sources of HAP emissions, constructed or reconstructed on or after 6/12/06

New or reconstructed RICE \leq 500 hp at major sources of HAP emissions, constructed or reconstructed on or after 6/12/06

Final Compliance Dates

Major HAP source

Start up a new or reconstructed RICE ≤ 500 hp before January 18, 2008 – January 18, 2008

Start up a new or reconstructed RICE ≤ 500 hp after January 18, 2008 – upon start-up

Area HAP source

Start up a new or reconstructed RICE of any hp before January 18, 2008 – January 18, 2008

Start up a new or reconstructed RICE of any hp after January 18, 2008 – upon start-up

Applicability to Source

Not Subject; Area source for HAP emissions, but engine was constructed prior to 6/12/06 and has not been reconstructed since

January 18, 2008 NSPS JJJJ for Spark Ignition Engines Promulgated

Affected Sources:

Stationary spark ignition (SI) internal combustion engines (ICE) that commenced construction, modification or reconstruction after June 12, 2006, where the SI ICE are manufactured on or after specified manufacture trigger dates. The manufacture trigger dates are based on the engine type, fuel used, and maximum engine horsepower.

For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator (See 40 CFR 60.4230(a)).

Compliance Date - Upon start-up

Applicability to Source

Not Subject; Engine commenced construction prior to June 12, 2006.

Table 3 – Construction and Permitting History, Continued...

(In Context of Some CAA Regulations That May Apply)

January 9, 2009 – Initial Application for Part 71 Permit							
	PTE (tpy	PTE (tpy)					
	NOx	CO	VOC	HAP	CH ₂ O		
C-1101, 1,380 hp Waukesha L5794GSI (catalytic converter) – rich burn compression	193.1	146.49	5.99	0.67	0.67		
engine							
IEUs (process fugitives)	0	0	0.20	0	0		
Total Source PTE	193.10	146.49	6.19	0.67	0.67		
PSD Status of Facility: Minor HAP Status of Facility: Area Source; RICE MACT & NSPS JJJJ Exempt Title V Status: Subject; Permit #V-UM-0001-09.00 issued.							

2. Tribe Information

a. Indian Country

Barker Creek is located within the exterior boundaries of the Ute Mountain Indian Reservation and is thus within Indian country as defined at 18 U.S.C. §1151. The Ute Mountain Ute Indian Tribe does not have a federally-approved CAA title V operating permits program nor does EPA's approval of the State of New Mexico's title V program extend to Indian country. Thus, EPA is the appropriate governmental entity to issue the title V permit.

b. The Reservation

The Ute Mountain Indian Reservation is located on about 625,000 acres in the four corners area of Southwest Colorado, Northwest New Mexico, and Southeastern Utah. Towaoc is the headquarters of the Ute Mountain Ute Indian Tribe. White Mesa Village, in southeastern Utah, is also part of the Ute Mountain Indian Reservation. Current information indicates that the population of the Tribe is about 1,900 people.

c. Tribal Government

The Ute Mountain Ute Indian Tribe is a constitutional government organized pursuant to the authority of Section 16 of the Indian Reorganization Act of June 16, 1934 (48 Stat.986). The Ute Mountain Ute Tribe adopted its constitution and By-laws on May 8, 1940 in order to exercise the rights of self-government, to administer Tribal affairs, and to preserve, develop, and increase Tribal resources. It was approved by the Secretary of Interior on June 6, 1940.

The Tribal Council consists of seven individuals who are elected to the Ute Mountain Ute Tribal Council. The White Mesa community in Utah elects one representative, the Towaoc community in Colorado elects five representatives, and the Chairman is elected by all the eligible voters of the Ute Mountain Ute Tribe. Council members are elected for staggered three-year terms.

d. Local Air Quality

At the present time, there are no monitoring stations located on the Ute Mountain Indian Reservation. However, the Southern Ute Indian Reservation directly to the east maintains an air monitoring network consisting of two stations equipped to measure ambient concentrations of oxides of nitrogen (reporting the parameters NO, NO₂, and NO_x), ozone (O₃), CO, and PM_{2.5}, and to collect meteorological data.

The AQS database has data from the Southern Ute Tribe for NO_2 and O_3 data at the Ignacio, Colorado station (AQS identification number 08-067-7001) and the Bondad, Colorado station (AQS identification number 08-067-7003) since 1990 and 1997, respectively. The CO channel at the Ignacio station has been reporting to AQS in 2004, and both stations began reporting NO and NO_x data to AQS in 2001. In 2000, both stations initiated meteorological monitors measuring wind speed, wind direction, vertical wind speed, outdoor temperature, relative humidity, solar radiation, and rain/snowmelt precipitation. Reporting of vertical wind speed data from both stations terminated on July 1, 2007. Particulate data (PM_{10}) was collected from December 1, 1981 to September 30, 2006 at the Ignacio station and from April 1, 1997 to September 30, 2006 at the Bondad station. Both stations began reporting $PM_{2.5}$ in 2009.

Additionally, Montezuma County maintains an air monitoring station (AQS identification number 08-083-0006) in Cortez, Colorado, north of the Ute Mountain Indian Reservation. This station monitors for O₃, PM_{2.5}, ambient air temperature, and wind speed and direction. The Cortez station has been reporting to AQS since June of 2008.

3. Applicable Requirements

The following discussions address applicable requirements and requirements that may appear to be applicable but are not. All applicable and non-applicable requirements addressed here are included in the CFR at title 40.

Prevention of Significant Deterioration (PSD)

PSD is a preconstruction review requirement of the CAA that applies to proposed projects that are sufficiently large (in terms of emissions) to be a "major" stationary source or "major" modification of an existing stationary source. The PSD regulations are found at 40 CFR 52.21. Source size is defined in terms of "potential to emit," which is its capability at maximum design capacity to emit a pollutant, except as constrained by existing federally and practically enforceable conditions applicable to the source. A new stationary source or a modification to an existing minor stationary source is major for the purpose of PSD if the proposed project has the potential to emit any pollutant regulated under the CAA in amounts equal to or exceeding specified major source thresholds, which are 100 tpy for 28 listed industrial source categories and 250 tpy for all other sources. PSD also applies to modifications at existing major sources that cause a "significant net emissions increase" at that source. Significance levels for each pollutant are defined in the PSD regulations at 40 CFR 52.21. A modification is a physical change or change in the method of operation.

Barker Creek does not belong to any of the 28 listed source categories. Therefore, the potential to emit threshold for determining PSD applicability for this source is 250 tpy. A review of the information provided by WGR indicates that the potential emissions increases of any pollutant regulated under the CAA associated with construction of Barker Creek in 2003 were below the PSD major source threshold levels. This facility was not required to obtain a PSD permit and is considered a true minor source with respect to the PSD permitting requirements.

New Source Performance Standards (NSPS)

<u>40 CFR Part 60, Subpart A</u>: General Provisions. This subpart applies to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication of any standard in part 60. The general provisions under subpart A apply to sources that are subject to the specific subparts of part 60.

As explained below, Barker Creek is not subject to any specific subparts of part 60; therefore, the General Provisions of part 60 do not apply.

40CFR Part 60, Subpart Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. This rule applies to steam generating units with a maximum design heat capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr.

Barker Creek does not operate any heaters with a maximum design heat input capacity greater than or equal to 10 MMBtu/hr; therefore, subpart Dc does not apply.

40 CFR Part 60, Subpart K: Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978. This rule applies to storage vessels for petroleum liquids with a storage capacity greater than 40,000 gallons. 40 CFR part 60, subpart K does not apply to storage vessels for petroleum or condensate stored, processed, and/or treated at a drilling and production facility prior to custody transfer.

Barker Creek does not have any tanks that store petroleum liquids onsite; therefore, subpart K does not apply.

<u>40 CFR Part 60, Subpart Ka</u>: Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to June 23, 1984. This rule applies to storage vessels for petroleum liquids with a storage capacity greater than 40,000 gallons. Subpart Ka does not apply to petroleum storage vessels with a capacity of less than 420,000 gallons used for petroleum or condensate stored, processed, or treated prior to custody transfer.

Barker Creek does not have any tanks that store petroleum liquids onsite; therefore, subpart Ka does not apply.

<u>40 CFR Part 60, Subpart Kb</u>: Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984. This rule applies to storage vessels with a capacity greater than or equal to 75 cubic meters (471 bbl).

Barker Creek does not have any tanks that store volatile organic liquids onsite; therefore, subpart Kb does not apply.

<u>40 CFR Part 60</u>, Subpart GG: Standards of Performance for Stationary Gas Turbines. This rule applies to stationary gas turbines, with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 MMBtu/hr), that commenced construction, modification, or reconstruction after October 3, 1977.

There are no stationary gas turbines located at Barker Creek; therefore, subpart GG does not apply.

40 CFR part 60, Subpart JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. This subpart establishes emission standards and compliance requirements for the control of emissions from stationary spark ignition (SI) internal combustion engines (ICE) that commenced construction, modification or reconstruction after June 12, 2006, where the SI ICE are manufactured on or after specified manufacture trigger dates. The manufacture trigger dates are based on the engine type, fuel used, and maximum engine horsepower.

For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator (See 40 CFR 60.4230(a)).

WGR provided the following information:

Table 4 – NSPS Subpart JJJJ Applicability Determination WGR Barker Creek Compressor Station

Unit	Serial Number	Unit Description	Fuel	ВНР	Manufacture/ Commence Construction, Modification, or Reconstruction Date	Install/ Start-up Date	Trigger Date for Applicability - Manufactured on or after
C-1101	C-1442/1	Waukesha L5794GSI Compressor Engine	Natural gas	1,380	Manufactured: Prior to June 12, 2006 ^a	August 26, 2003	7/1/2007

a. Per WGR, this engine was installed on August 26, 2003. This engine has not been modified or reconstructed (as defined in part 60) since installation.

The Waukesha L5794GSI engine was manufactured prior to July 1, 2007 (trigger date for rich burn engine with a maximum engine power greater than or equal to 500 hp). The engine has not been modified or reconstructed since June 12, 2006. Therefore, subpart JJJJ does not apply.

40 CFR Part 60, Subpart KKK: Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants. This rule applies to compressors and other equipment at onshore natural gas processing facilities. As defined in this subpart, a natural gas processing plant is any processing site engaged in the extraction of natural gas liquids (NGLs) from field gas, fractionation of mixed NGLs to natural gas products, or both. NGLs are defined as the hydrocarbons, such as ethane, propane, butane, and pentane that are extracted from field gas.

Barker Creek does not extract natural gas liquids from field gas, nor does it fractionate mixed NGLs to natural gas products, and thus it does not met the definition of a natural gas processing plant under this subpart. Therefore, subpart KKK does not apply.

40 CFR Part 60, Subpart LLL: Standards of Performance for Onshore Natural Gas Processing; SO₂ Emissions. This rule applies to sweetening units and sulfur recovery units at onshore natural gas processing facilities. As defined in this subpart, sweetening units are process devices that separate hydrogen sulfide (H₂S) and carbon dioxide (CO₂) from a sour natural gas stream. Sulfur recovery units are defined as process devices that recover sulfur from the acid gas (consisting of H₂S and CO₂) removed by a sweetening unit.

Barker Creek has no sweetening or sulfur recovery units. Therefore, subpart LLL does not apply.

National Emissions Standards for Hazardous Air Pollutants (NESHAP)

<u>40 CFR Part 63, Subpart A</u>: General Provisions. This subpart contains national emissions standards for HAPs that regulate specific categories of sources that emit one or more HAP regulated pollutants under the CAA. The general provisions under subpart A apply to sources that are subject to the specific subparts of part 63.

As explained below, Barker Creek is not subject to any specific subparts of part 63; therefore, the General Provisions of part 63 do not apply, with the exception that records of non-applicability must be kept.

40 CFR part 63, subpart HH: National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities. This subpart applies to the owners and operators of affected units located at natural gas production facilities that are major or area sources of HAPs, and that process, upgrade, or store natural gas prior to the point of custody transfer, or that process, upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. The affected units are glycol dehydration units, storage vessels with the potential for flash emissions, and the group of ancillary equipment, and compressors intended to operate in volatile hazardous air pollutant service, which are located at natural gas processing plants.

Throughput Exemption

Those sources whose maximum natural gas throughput, as appropriately calculated in §63.760(a)(1)(i) through (a)(1)(iii), is less than 18,400 standard cubic meters per day are exempt from the major source requirements of this subpart.

Source Aggregation

Major source, as used in this subpart, has the same meaning as in §63.2, except that:

- 1) Emissions from any oil and gas production well with its associated equipment and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units.
- 2) Emissions from processes, operations, or equipment that are not part of the same facility shall not be aggregated.
- 3) For facilities that are production field facilities, only HAP emissions from glycol dehydration units and storage tanks with flash emission potential shall be aggregated for a major source determination.

Facility

For the purpose of a major source determination, facility means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in subpart HH. Examples of facilities in the oil and natural gas production category include, but are not limited to: well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Production Field Facility

Production field facilities are those located prior to the point of custody transfer. The definition of custody transfer (40 CFR 63.761) means the point of transfer after the processing/treating in the producing operation, except for the case of a natural gas processing plant, in which case the point of custody transfer is the inlet to the plant.

Natural Gas Processing Plant

A natural gas processing plant is defined in 40 CFR 63.761 as any processing site engaged in the extraction of NGLs from field gas, or the fractionation of mixed NGLs to natural gas products, or a combination of both. A treating plant or gas plant that does not engage in these activities is considered to be a production field facility.

Major Source Determination for Production Field Facilities

The definition of major source in this subpart (at 40 CFR 63.761) states, in part, that only emissions from the dehydration units and storage vessels with a potential for flash emissions at production field facilities shall be aggregated when comparing to the major source thresholds. For facilities that are not production field facilities, HAP emissions from all HAP emission units shall be aggregated.

Area Source Applicability

40 CFR part 63, subpart HH applies also to area sources of HAPs. An area source is a HAP source whose total HAP emissions are less than 10 tpy of any single HAP or 25 tpy for all HAPs in aggregate. This subpart requires different emission reduction requirements for glycol dehydration units found at oil and gas production facilities based on their geographical location.

Units located in densely populated areas (determined by the Bureau of Census) and known as urbanized areas with an added 2-mile offset and urban clusters of 10,000 people or more, are required to have emission controls. Units located outside these areas will be required to have the glycol recirculation pump rate optimized or operators can document that PTE of benzene is less than 1 tpy.

Applicability of Subpart HH to the Barker Creek Compressor Facility

Barker Creek does not engage in the extraction of NGLs and therefore is not considered a natural gas processing plant. Hence, the point of custody transfer, as defined in this subpart HH, occurs downstream of the station and the facility would therefore be considered a production field facility. For production field facilities, only emissions from dehydration units and storage vessels with a potential for flash emissions are to be aggregated to determine major source status. Barker Creek is not a major source under this rule.

With respect to the area source requirements of this subpart, the facility is located outside both an urban area and an urban cluster. Furthermore, there are no TEG glycol dehydrators or tanks with the potential for flash emissions. Therefore, subpart HH does not apply.

<u>40 CFR Part 63, Subpart HHH</u>: National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities. This rule applies to natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user, and that are a major source of HAP emissions. Natural gas transmission means the pipelines used for long distance transport and storage.

Barker Creek is a natural gas production facility, and not a natural gas transmission or storage facility. Therefore, subpart HHH does not apply.

<u>40 CFR Part 63, Subpart ZZZZ</u>: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. This rule establishes national emission limitations and operating limitations for HAPs emitted from stationary RICE.

This rule applies to owners or operators of new and reconstructed stationary RICE of any horsepower rating which are located at a <u>major or area</u> source of HAP emissions. While all stationary RICE located at major or area sources are subject to the final rule (promulgated January 18, 2008, amending the final rule promulgated June 15, 2004), there are distinct requirements for regulated stationary RICE depending on their design, use, horsepower rating, fuel, and major or area HAP emission status.

Major Source Applicability

The standard now applies to engines with a horsepower rating of less than or equal to 500 brake horsepower (bhp) in addition to those engines with a horsepower rating greater than 500 bhp. The standard continues to have specific requirements for new or reconstructed RICE and existing spark ignition 4 stroke rich burn (4SRB) stationary RICE with horsepower ratings greater than 500 bhp located at a major HAP facility.

With the exception of the existing spark ignition 4SRB stationary RICE, other types of existing stationary RICE (i.e., spark ignition 2 stroke lean burn (2SLB), spark ignition 4 stroke lean burn (4SLB), compression ignition (CI), stationary RICE that combust landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, emergency, and limited use units) located at a major source of HAP emissions are not subject to any specific requirement under the final amended rule.

Existing RICE: A stationary RICE with a site rating of greater than 500 bhp is existing at a major source of HAP emissions if construction or reconstruction (as defined in §63.2) of the unit commenced before December 19, 2002. A stationary RICE with a site rating of less than or equal to 500 bhp is existing at a major source of HAP emissions if construction or reconstruction (as defined in §63.2) of the unit commenced before June 12, 2006.

New RICE: A stationary RICE with a site rating of greater than 500 bhp is new at a major source of HAP emissions if construction or reconstruction (as defined in §63.2) of the unit commenced on or after December 19, 2002. A stationary RICE with a site rating of less than or equal to 500 bhp is new at a major source of HAP emissions if construction or reconstruction (as defined in §63.2) of the unit commenced on or after June 12, 2006.

Area Source Applicability

The standard now has specific requirements for new and reconstructed stationary RICE located at minor sources of HAPs, for engines with horsepower ratings less than, equal to, or greater than 500 bhp. The area source standards for new stationary RICE defer to the requirements of NSPS JJJJ for Spark Ignition Internal Combustion Engines or NSPS IIII for Compression Ignition Internal Combustion Engines for demonstrating compliance with subpart ZZZZ. Existing RICE located at an area HAP source are not subject to any specific requirements under the final rule.

Existing RICE: A stationary RICE is existing at an area source of HAP emissions if construction or reconstruction of the unit commenced before June 12, 2006. The area source standards do not apply to existing stationary RICE.

New RICE: A stationary RICE is new at an area source of HAP emissions if construction or reconstruction (as defined in §63.2) of the unit commenced on or after June 12, 2006.

Table 5 – RICE MACT Applicability Determination WGR Barker Creek Compressor Station

Unit	Serial Number	Unit Description	Fuel	ВНР	Manufacture/ Commence Construction, Modification, or Reconstruction Date	Install/ Start-up Date
C-1101	C-1442/1	Waukesha L5794GSI Compressor Engine	Natural gas	1,380	Manufactured: Prior to June 12, 2006 ^a	August 26, 2003

a. Per WGR, this engine was manufactured prior to June 12, 2006 based on the installation date. This engine has not been modified or reconstructed (as defined in part 60) since installation.

Barker Creek is an area HAP source with total HAP emissions less than 25 tpy and formaldehyde emissions less than 10 tpy. However, the Waukesha engine onsite commenced construction prior to June 12, 2006. Therefore, subpart ZZZZ does not currently apply.

Compliance Assurance Monitoring (CAM) Rule

<u>40 CFR Part 64</u>: Compliance Assurance Monitoring Provisions. According to 40 CFR 64.2(a), the CAM rule applies to <u>each</u> Pollutant Specific Emission Unit (PSEU) at a major source that is required to obtain a part 70 or part 71 permit if the unit satisfies all of the following criteria:

- 1) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant other than an emissions limitation or standard that is exempt under §64.2(b)(1);
 - "§64.2(b)(1): Exempt emission limitations or standards. The requirements of this part shall not apply to any of the following emission limitations or standards:
 - (i) Emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to Section 111 or 112 of the Act;
 - (ii) Stratospheric ozone protection requirements under title VI of the Act;
 - (iii) Acid Rain Program requirements pursuant to Sections 404, 405, 406, 407(a), 407(b) or 410 of the Act;
 - (iv) Emissions limitations or standards or other applicable requirements that apply solely under an emissions trading program approved or promulgated by the Administrator under the Act that allows for trading emissions with a source or between sources;
 - (v) An emissions cap that meets the requirements specified in $\S70.4(b)(12)$ or $\S71.6(a)(13)(iii)$ of this chapter;
 - (vi) Emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in §64.1."
 - "§64.1: <u>Continuous compliance method</u> means a method, specified by the applicable standard or an applicable permit condition, which:

- (1) Is used to determine compliance with an emission limitation or standard on a continuous basis, consistent with the averaging period established for the emission limitation or standard; and
- (2) Provides data either in units of the standard or correlated directly with the compliance limit."
- 2) The unit uses a control device to achieve compliance with any such limit or standard; and
- 3) The unit has pre-control device emissions of the applicable regulated pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

Since no PSEU at Barker Creek is subject to an emission standard or limitation, the CAM requirements do not apply.

Chemical Accident Prevention Program

<u>40 CFR Part 68</u>: Chemical Accident Prevention Provisions. Based on WGR's application, Barker Creek currently does not manufacture, process, use, store, or otherwise handle regulated substances in excess of the threshold quantities in this rule and, therefore, is not subject to the requirement to develop and submit a risk management plan. However, WGR has an ongoing responsibility to submit this plan <u>IF</u> a substance is listed that the total source has in quantities over the threshold amount or <u>IF</u> the total source ever increases the amount of any regulated substance above the threshold quantity.

Stratospheric Ozone and Climate Protection

40 CFR Part 82, Subpart F: Air Conditioning Units. There are no air conditioning units at Barker Creek that contain Class 1 or Class 2 refrigerants (chlorofluorocarbons (CFCs)). Should an air conditioning unit be installed at Barker Creek and WGR performs any maintenance, service, repair, or disposal of any equipment containing CFCs, or contracts with someone to do this work, WGR would be required to comply with title VI of the CAA and submit an application for a modification to this title V permit.

40 CFR Part 82, Subpart H: Halon Fire Extinguishers. There are no halon fire extinguishers at Barker Creek. However, should WGR obtain any halon fire extinguishers, then it must comply with the standards of 40 CFR part 82, subpart H for halon emissions reduction, if it services, maintains, tests, repairs, or disposes of equipment that contains halon or uses such equipment during technician training. Specifically, WGR would be required to comply with 40 CFR part 82 and submit an application for a modification to this title V permit.

Off Permit Changes and Alternative Operating Scenarios

Language has been included in the permit to allow for off permit replacement of the compressor engine with a new or overhauled engine, provided that each replacement engine is the same make, model, horsepower rating, configuration, and with equivalent air emission controls and

meeting the same applicable requirements, as the engine it replaces, and provided that the provisions in the Off Permit Changes section of the permit, specific to engine replacement, are satisfied. The primary purpose of the special provisions is to ensure existing emission limits, PSD, NSPS, and MACT requirements are not circumvented by off permit changes. Related language is also included in the section on Alternative Operating Scenarios.

Conclusion

Since Barker Creek is located in Indian country, the State of New Mexico's implementation plan does not apply to this source. In addition, no tribal implementation plan (TIP) has been submitted and approved for the Ute Mountain Ute Indian Tribe, and EPA has not promulgated a federal implementation plan (FIP) for the area of jurisdiction governing the Ute Mountain Indian Reservation. Therefore, Barker Creek is not subject to any implementation plan.

Based on the information provided in WGR's application, EPA has determined that the facility is subject only to those applicable federal CAA programs discussed above.

EPA recognizes that, in some cases, sources of air pollution located in Indian country are subject to fewer requirements than similar sources located on land under the jurisdiction of a state or local air pollution control agency. To address this regulatory gap, EPA is in the process of developing national regulatory programs for preconstruction review of major sources in nonattainment areas and of minor sources in both attainment and nonattainment areas. These programs will establish, where appropriate, control requirements for sources that would be incorporated into part 71 permits. To establish additional applicable, federally-enforceable emission limits, EPA Regional Offices will, as necessary and appropriate, promulgate FIPs that will establish federal requirements for sources in specific areas. EPA will establish priorities for its direct federal implementation activities by addressing as its highest priority the most serious threats to public health and the environment in Indian country that are not otherwise being adequately addressed. Further, EPA encourages and will work closely with all tribes wishing to develop TIPs for approval under the Tribal Authority Rule. EPA intends that its federal regulations created through a FIP will apply only in those situations in which a tribe does not have an approved TIP.

4. EPA Authority

a. General Authority to Issue Part 71 Permits

Title V of the CAA requires that EPA promulgate, administer, and enforce a federal operating permits program when a state does not submit an approvable program within the time frame set by title V or does not adequately administer and enforce its EPA-approved program. On July 1, 1996 (61 FR 34202), EPA adopted regulations codified at 40 CFR 71 setting forth the procedures and terms under which the Agency would administer a federal operating permits program. These regulations were updated on February 19, 1999 (64 FR 8247) to incorporate EPA's approach for issuing federal operating permits to stationary sources in Indian country.

As described in 40 CFR 71.4(a), EPA will implement a part 71 program in areas where a state, local, or tribal agency has not developed an approved part 70 program. Unlike states, Indian tribes are not required to develop operating permits programs, though EPA encourages tribes to do so. See, e.g., Indian Tribes: Air Quality Planning and Management (63 FR 7253, February 12, 1998) (also known as the "Tribal Authority Rule"). Therefore, within Indian country, EPA will administer and enforce a part 71 federal operating permits program for stationary sources until a tribe receives approval to administer their own operating permits programs.

Barker Creek is located in on the Ute Mountain Indian Reservation in San Juan County, New Mexico. EPA Region 8 implements the part 71 program on the Ute Mountain Indian Reservation, including areas of the reservation that are within the State of New Mexico, as indicated in the Office of Management and Budget Circular No. A-105.

5. Use of All Credible Evidence

Determinations of deviations, continuous or intermittent compliance status, or violations of the permit are not limited to the testing or monitoring methods required by the underlying regulations or this permit; other credible evidence (including any evidence admissible under the Federal Rules of Evidence) must be considered by the source and EPA in such determinations.

6. Public Participation

a. Public Notice

As described in 40 CFR 71.11(a)(5), all part 71 draft operating permits shall be publicly noticed and made available for public comment. The public notice of permit actions and public comment period is described in 40 CFR 71(d).

There was a 30-day public comment period for actions pertaining to a draft permit. Public notice was given for this draft permit by mailing a copy of the notice to the permit applicant, the affected state, tribal and local air pollution control agencies, the county executives, the state and federal land managers, and the local emergency planning authorities which have jurisdiction over the area where the source is located. A copy of the notice was also provided to all persons who have submitted a written request to be included on the mailing list. If you would like to be added to our mailing list to be informed of future actions on these or other CAA permits issued in Indian country, please send your name and address to the contact listed below:

Claudia Smith, Part 71 Operating Permits Contact U.S. Environmental Protection Agency, Region 8 1595 Wynkoop Street (8P-AR) Denver, Colorado 80202-1129

Public notice was published in the <u>Weeminuche Smoke Signals</u>, and the <u>Farmington Daily Times</u> on February 12, 2010, giving opportunity for public comment on the draft permit and the opportunity to request a public hearing.

b. Opportunity for Comment

Members of the public were given the opportunity to review a copy of the draft permit prepared by EPA, the application, this Statement of Basis for the draft permit, and all supporting materials for the draft permit. Copies of these documents were available at the following locations:

San Juan County Clerk's Office 100 S. Oliver Drive Aztec, New Mexico 87410

Ute Mountain Ute Indian Tribe 520 Sunset Boulevard P.O. Box 448 Towaoc, Colorado 81334

US EPA Region 8 Air Program Office 1595 Wynkoop Street (8P-AR) Denver, Colorado 80202-1129

All documents were available for review at the U.S. EPA Region 8 office Monday through Friday from 8:00 a.m. to 4:00 p.m. (excluding federal holidays).

Any interested person could submit written comments on the draft part 71 operating permit during the public comment period to the Part 71 Permit Contact at the address listed above. All comments are considered and answered by EPA in making the final decision on the permit. EPA keeps a record of the commenters and of the issues raised during the public participation process.

Anyone, including the applicant, who believed any condition of the draft permit is inappropriate could raise all reasonable ascertainable issues and submit all arguments supporting their position by the close of the public comment period. Any supporting materials submitted must have been included in full and may not be incorporated by reference, unless the material was already submitted as part of the administrative record in the same proceeding or consists of state or federal statutes and regulations, EPA documents of general applicability, or other generally available reference material.

No comments on the draft permit and Statement of Basis were received during the public comment period.

c. Opportunity to Request a Hearing

A person could submit a written request for a public hearing to the Part 71 Permit Contact, at the address listed in section 6.a above, by stating the nature of the issues to be raised at the public hearing. EPA did not receive any requests for a public hearing during the public comment period.

d. Appeal of Permits

Within 30 days after the issuance of a final permit decision, any person who filed comments on the draft permit or participated in the public hearing may petition to the Environmental Appeals Board to review any condition of the permit decision. Any person who failed to file comments or participate in the public hearing may petition for administrative review, only if the changes from the draft to the final permit decision or other new grounds were not reasonably foreseeable during the public comment period. The 30-day period to appeal a permit begins with EPA's service of the notice of the final permit decision.

The petition to appeal a permit must include a statement of the reasons supporting the review, a demonstration that any issues were raised during the public comment period, a demonstration that it was impracticable to raise the objections within the public comment period, or that the grounds for such objections arose after such a period. When appropriate, the petition may include a showing that the condition in question is based on a finding of fact or conclusion of law which is clearly erroneous; or, an exercise of discretion, or an important policy consideration which the Environmental Appeals Board should review.

The Environmental Appeals Board will issue an order either granting or denying the petition for review, within a reasonable time following the filing of the petition. Public notice of the grant of review will establish a briefing schedule for the appeal and state that any interested person may file an amicus brief. Notice of denial of review will be sent only to the permit applicant and to the person requesting the review. To the extent review is denied, the conditions of the final permit decision become final agency action.

A motion to reconsider a final order shall be filed within 10 days after the service of the final order. Every motion must set forth the matters claimed to have been erroneously decided and the nature of the alleged errors. Motions for reconsideration shall be directed to the Administrator rather than the Environmental Appeals Board. A motion for reconsideration shall not stay the effective date of the final order unless it is specifically ordered by the Board.

e. Petition to Reopen a Permit for Cause

Any interested person may petition EPA to reopen a permit for cause, and EPA may commence a permit reopening on its own initiative. EPA will only revise, revoke and reissue, or terminate a permit for the reasons specified in 40 CFR 71.7(f) or 71.6(a)(6)(i). All requests must be in writing and must contain facts or reasons supporting the request. If EPA decides the request is not justified, it will send the requester a brief written response giving a reason for the decision. Denial of these requests is not subject to public notice, comment, or hearings. Denials can be informally appealed to the Environmental Appeals Board by a letter briefly setting forth the relevant facts.

f. Notice to Affected States/Tribes

As described in 40 CFR 71.11(d)(3)(i), public notice was given by mailing a copy of the notice to the air pollution control agencies of affected states, tribal and local air pollution control agencies

which have jurisdiction over the area in which the source is located, the chief executives of the city and county where the source is located, any comprehensive regional land use planning agency, and any state or federal land manager whose lands may be affected by emissions from the source. The following entities were notified:

- State of Colorado, Department of Public Health and Environment
- State of New Mexico, Environment Department
- State of Utah, Department of Environmental Quality
- State of Arizona, Department of Environmental Quality
- Southern Ute Indian Tribe, Environmental Programs Office
- Navajo Tribe, Navajo Nation EPA
- Jicarilla Tribe, Environmental Protection Office
- San Juan County, County Clerk
- National Park Service, Air, Denver, CO
- U.S. Department of Agriculture, Forest Service, Rocky Mountain Region
- Wild Earth Guardians