Air Pollution Control
Title V Permit to Operate
Statement of Basis for Permit No V-SUIT-0046-2014.00
{Date TBD}

Samson Resources Company
Worford Ridge Compressor Station
Southern Ute Indian Reservation
La Plata County, Colorado

1. Facility Information

a. Location

The Worford Ridge Compressor Station, owned and operated by Samson Resources Company (Samson Resources), is located within the exterior boundary of the Southern Ute Indian Reservation. The exact location is NW¼, SE¼ Section 16, T33N, R8W, in La Plata County, at latitude North 37.10041 and longitude West -107.72187. The Mailing address is:

Samson Resources Company
Worford Ridge Compressor Station
Two West Second Street
Tulsa, OK 74103-3103

b. Contacts

Facility Contact:
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Responsible Official:
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Samson Resources Company
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c. Description of Operations

According to Samson Resources' application, the Worford Ridge Compressor Station (Worford Ridge) is a natural gas compression facility located within the exterior boundaries of the Southern Ute Indian Reservation in southwestern Colorado. Worford Ridge receives coal-bed methane gas gathered from nearby sources and dehydrates and compresses the natural gas to transmission pipeline specifications. Gas entering the facility from the field is first fed to an inlet separator that gravimetrically removes water that may have formed/condensed during transportation from the supplying gas wells. The water is transferred to a storage tank where it is stored until removal from the facility. The pipelines are periodically cleaned using pigging operations in the southwest corner of the facility. Separator overhead gas is fed to one of the four compressor engines from a common suction header. The compressors

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discharge gas to a common discharge header that feeds to scrubbers. The scrubbers separate and collect liquids that may have formed during compression. The compressed gas is then fed to the dehydration unit. Triethylene glycol is circulated counter-currently and absorbs water from the saturated gas. Rich glycol is circulated to a reboiler, where moisture is driven to the atmosphere by heating the glycol. Dry gas exits the contactors and is directed to the sales line, where it is metered and exits the facility. The gas processing capacity of the facility is approximately 40 MMscf/d with four compressor engines operating.

The primary source for emissions is from the facility's four natural gas-fired four-stroke lean-burn (4SLB) spark ignition (SI) compressor engines, and one triethylene glycol (TEG) dehydrator.

d. List of All Units and Emission-Generating Activities

Samson Resources provided the information contained in Tables 1 and 2 in its initial Part 70 permit application. Table 1 lists emission units and emission generating activities, including any air pollution control devices. Emission units identified as "insignificant" emitting units (IEUs) are listed separately in Table 2.

Table 1 – Emission Units
Samson Resources Company, Worford Ridge Compressor Station

Emission Unit ID[1]	Description		Control Equipment
	4 - Waukesha L5794LT (4SLB SI) natural gas-fired Compressor Engines, 1,400 hp		
C-101	Serial No.: C-14536/1	Installed: 05/06/10	Johnson-Mathey Oxidation Catalyst[1]
C-102	Serial No.: C-15963/1	Installed: 08/16/06	
C-103	Serial No.: C-15967/1	Installed: 12/04/06	
C-104	Serial No.: C-15026/1	Installed: 03/11/09	
	1 - TEG Dehydration Still and Flash Tank Vent, 40 MMscf/d		None
D1	Serial No. N/A	Installed: 08/06	

[1] While the engines are controlled with oxidation catalysts to control CO (75% reduction) and formaldehyde (60% reduction), there are no conditions in this permit to make the use of the catalysts enforceable. Therefore, the PTE of the facility is based on uncontrolled emissions.

The Southern Ute Indian Tribe/State of Colorado Environmental Commission's Reservation Air Code 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 minimis level established under Section 112(g), whichever is lower [RAC 2-106(4)(f); RAC 1-103(36) and (37)]. However, the application may not omit information needed to determine the applicability of, or to impose, any applicable requirement, or to calculate the fee [RAC 2-106(4)(f)]. Units that qualify as "insignificant" for the purposes of the Part 70 application are in no way exempt from applicable requirements or any requirements of the Part 70 permit.

Samson Resources stated in its Part 70 initial permit application that the emission units in Table 2, below, are insignificant. The application provided calculations for heater/reboiler emissions based on EPA's AP-42 emission factors. Samson Resources provided sufficient information, including EPA Tanks

4.0.9d calculations, to verify any emissions from liquids in the tanks were insignificant. This data supports Samson Resources' claim that these units qualify as insignificant.

Table 2 – Insignificant Emission Units
Samson Resources Gathering Company, Worford Ridge Compressor Station

Emission Unit ID	Description	Size/Rating
IEU-1 thru IEU-4	4 - Lubricating Oil Storage Tanks	500 gal
IEU-5	1 - Ethylene Glycol (antifreeze) Storage Tank	500 gal
IEU-6	1 - Triethylene Glycol (TEG) Storage Tank	500 gal
IEU-7 & IEU-8	2 - Produced Water Storage Tanks	500 bbl
IEU-9	1 - Slop Tank	400 bbl
IEU-10	1 - Natural Gas-Fired Regenerator Burner	0.75 MMBtu/hr
IEU-11 thru IEU-13	3 - Natural Gas-Fired Tank Heaters	0.12 MMBtu/hr
IEU-14	1 - Pig Launcher	N/A
IEU-15	4 - Compressor Blowdown Emissions	N/A
IEU-16	4 - Compressor Starter Emissions	N/A
IEU-17	4 - Compressor Cylinder Rod Packing Vent Emissions	N/A
FUG	Facility Fugitive Emissions	N/A

e. Facility Construction and/or Permitting History

The Worford Ridge Compressor Station was initially constructed in August 2006. EPA issued the initial Part 71 permit, # V-SU-0046-07.00, in June 2007. That permit was modified and issued as permit #V-SU-0046-07.01 in January 2008. That permit will be replaced by this initial Part 70 permit, # V-SUIT-0046-2013.00. No pre-construction permits have been issued to this facility.

f. Potential to Emit

Under RAC 1-103(51), 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 emissions, is federally enforceable.

Greenhouse Gas Tailoring Rule

On June 3, 2010, EPA promulgated the final PSD and Title V Greenhouse Gas Tailoring Rule (Tailoring Rule). The Tailoring Rule established the applicability criteria that determine which stationary sources and modification projects are subject to PSD and Title V permitting requirements for greenhouse gas (GHG) emissions. As of January 2, 2011, GHGs are regulated NSR pollutants under the PSD major source permitting program when they are emitted by new sources or modifications in amounts that meet the Tailoring Rule's set of applicability thresholds.

For PSD and Title V purposes, GHGs are a single air pollutant defined as the aggregate group of the following six gases: carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). CO_2-equivalent (CO_2e) is defined as the sum of the mass emissions of each individual GHG adjusted for its global warming potential value in

Table A-1 of the Greenhouse Gas Reporting Program (40 CFR Part 98, Subpart A, Table A-1).

The Tailoring Rule established the following applicability criteria for GHGs:

PSD Applicability Criteria
PSD applies to GHGs if any of the following conditions are met: 1. The source is a new source otherwise subject to PSD (for another regulated NSR pollutant) <u>and</u> the source has a GHG PTE equal to or greater than • 75,000 tpy CO_2e; 2. The source is a new source and has a GHG PTE equal to or greater than: • 100,000 tpy CO_2e, <u>and</u> • 100 / 250 tpy mass basis 3. A modification to an existing source is otherwise subject to PSD (for another regulated NSR pollutant) <u>and</u> has a GHG emissions increase and net emissions increase: • Equal to or greater than 75,000 tpy CO_2e, and • Greater than 0 tpy mass basis 4. An existing source has a GHG PTE equal to or greater than: • 100,000 tpy CO_2e, <u>and</u> • 100 / 250 tpy mass basis <u>and</u> a modification to an existing source has a GHG emissions increase and net emissions increase: • Equal to or greater than 75,000 tpy CO_2e, and • Greater than 0 tpy mass basis 5. The source is an existing minor source for PSD, <u>and</u> a modification alone has actual or potential GHG emissions equal to or greater than: • 100,000 tpy CO_2e, <u>and</u> • 100 / 250 tpy mass basis

Title V Applicability Criteria
Title V applies to GHGs at the following sources: 1. Existing or newly constructed sources that emit or have a PTE equal to or greater than: • 100,000 tpy CO_2e, <u>and</u> • 100 tpy mass basis

A detailed summary and guidance of permitting requirements established by the Tailoring Rule can be found in the March 2011 EPA document titled "PSD and Title V Permitting Guidance for Greenhouse Gases", located at http://www.epa.gov/nsr/ghgdocs/ghgpermittingguidance.pdf.

The PTE for Worford Ridge Compressor Station was listed by Samson Resources in Forms "GIS", "PTE", and the various forms "EMISS" of the Part 70 operating permit initial application. Table 3 shows PTE data broken down by each individual emission unit, as well as the total facility-wide PTE.

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Table 3 - Potential to Emit (uncontrolled)
Samson Resources Gathering Company, Worford Ridge Compressor Station

Emission Unit ID	Regulated Air Pollutants[1,2,3] in tpy (uncontrolled)								
	NO_X	VOC	SO_2	PM_{10}	CO	Lead	Total HAPs	Largest *Single* HAP (CH_2O)	GHGs (CO_2e mtpy)
C-101	33.8	6.8	0.0	0.0	24.3	0.0	2.2	2.2	5781.4
C-102	33.8	6.8	0.0	0.0	24.3	0.0	2.2	2.2	5781.4
C-103	33.8	6.8	0.0	0.0	24.3	0.0	2.2	2.2	5781.4
C-104	33.8	6.8	0.0	0.0	24.3	0.0	2.2	2.2	5781.4
D1	0.3	15.2	0.0	0.0	0.3	0.0	10.4	0.0	435.9
Total IEUs	0.5	3.4	0.0	0.0	0.4	0.0	0.0	0.0	881.1
	136.0	**45.8**	**0.0**	**0.0**	**97.9**	**0.0**	**19.2**	**8.8**	**24,442.6**

[1]Uncontrolled NOx, CO, and VOC emissions for Units C-101, C-102, C-103, C-104 are based on manufacturer specifications.
[2]Uncontrolled dehydrator emissions based on GRI GLY-Calc modeled emissions.
[3]GHG emissions calculations based on 40 CFR 98 Subpart C, 98.33(a)(1)(i), Tier 1 Methodology, Equations C-1 and C-2.

2. Applicable Requirements

The following discussion addresses a selection of the regulations from the Code of Federal Regulations (CFR) at Title 40. Note that this discussion does not include the full spectrum of potentially applicable regulations and is not intended to represent official applicability determinations. These discussions are based on the information provided by Samson Resources in its Part 70 initial permit application and are only intended to present the information certified to be true and accurate by the Responsible Official of this facility.

Prevention of Significant Deterioration (PSD) - 40 CFR 52.21

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. A new stationary source, or a modification to an existing minor stationary 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, 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.

The Worford Ridge Compressor Station does not belong to any of the 28 source categories. Therefore, the potential to emit threshold for determining PSD applicability for this source is 250 tons per year for criteria pollutants and 100,000 tpy for CO_2e. The potential to emit of regulated pollutants at this facility are currently below the major source threshold of 250 tpy. **Therefore, the Worford Ridge Compressor Station is not a major PSD source for any pollutants subject to regulation.**

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New Source Performance Standards (NSPS)

40 CFR Part 60, Subpart A: General Provisions. This subpart applies to the owner or operator of any stationary source that 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, the Worford Ridge Compressor Station is not subject to any specific subparts under 40 CFR Part 60. **Therefore, the General Provisions of Part 60 do 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.

According to Samson Resources, the Worford Ridge Compressor Station has no tanks that were constructed, reconstructed, or modified after June 11, 1973 and prior to May 19, 1978. **Therefore, Subpart K does not apply.**

40 CFR Part 60, Subpart Ka: 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.

According to Samson Resources, the Worford Ridge Compressor Station has no tanks that were constructed, reconstructed, or modified after May 18, 1978 and prior to June 23, 1984. **Therefore, Subpart Ka does not apply.**

40 CFR Part 60, Subpart Kb: 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 (~472 bbl). The subpart does not apply to storage vessels with a capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure less than 3.5 kPa or with a capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure less than 15.0 kPa.

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According to Samson Resources, the Worford Ridge Compressor Station has no tanks with a capacity greater than 75 m^3 (~472 bbl or 19,813 gal) that are used to store volatile organic liquids. **Therefore, Subpart Kb does not apply.**

40 CFR Part 60, 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.

According to Samson Resources, there are no stationary gas turbines located at the Worford Ridge Compressor Station. **Therefore, Subpart GG does not apply.**

40 CFR Part 60, Subpart KKK: Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants for which construction, reconstruction, or modification commenced after January 20, 1984, and on or before August 23, 2011. 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.

According to Samson Resources, the Worford Ridge Compressor Station does not extract natural gas liquids from field gas, nor does it fractionate mixed NGLs to natural gas products, and thus does not meet 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 SO_2 emissions from Onshore Natural Gas Processing for which construction, reconstruction, or modification commenced after January 20, 1984, and on or before August 23, 2011. 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 (H_2S) and carbon dioxide (CO_2) from a sour natural gas stream. Sulfur recovery units are defined as process devices that recover sulfur from the acid gas (consisting of H_2S and CO_2) removed by a sweetening unit.

According to Samson Resources, the Worford Ridge Compressor Facility has no sulfur recovering units and does not perform sulfur recovery at the facility. **Therefore, Subpart LLL 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)).

Samson Resources provided the following information:

Table 3 - NSPS Subpart JJJJ Applicability Determination
Samson Resources Gathering Company, Worford Ridge Compressor Station

Unit	Serial No	Unit Description	Fuel	Maximum HP	Manufacture Date	Commenced Construction Date	Trigger Date for Applicability-Manufactured on or after
C-101	C-14536/1	Waukesha L5794LT 4SLB Compressor Engine	Natural Gas	1,445	04/2005[1]	Prior to 7/1/2007	7/1/2007
C-102	C-15963/1	Waukesha L5794LT 4SLB Compressor Engine	Natural Gas	1,445	09//2005[1]	Prior to 7/1/2007	7/1/2007
C-103	C-15967/1	Waukesha L5794LT 4SLB Compressor Engine	Natural Gas	1,445	04/2006[1]	Prior to 7/1/2007	7/1/2007
C-104	C-15026/1	Waukesha L5794LT 4SLB Compressor Engine	Natural Gas	1,445	03/2004[1]	Prior to 7/1/2007	7/1/2007

[1] Per Samson Resources, these engines have not been modified or reconstructed (as defined in Part 60) since June 12, 2006.

According to Samson Resources, C-101, C-102, C-103, and C-104 were manufactured prior to July 1, 2007 (trigger date for lean burn engine with maximum engine power greater than or equal to 500 hp). The engines have not been reconstructed or modified (as defined in §60.15) since June 12, 2006. **Therefore, the requirements of Subpart JJJJ do not apply**.

Should Samson Resources propose to install a replacement engine for C-101, C-102, C-103, or C-104 that is subject to Subpart JJJJ, Samson Resources will not be allowed to use the off permit changes provision, and will be required to submit a minor permit modification application to incorporate Subpart JJJJ requirements into the permit.

40 CFR Part 60, Subpart OOOO: Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution. This subpart establishes emission standards and compliance schedules for the control of VOC and SO_2 emissions from affected facilities that commence construction, modification or reconstruction after August 23, 2011. Affected facilities under this subpart include gas wells, compressors, pneumatic controllers, storage vessels, process unit equipment, and sweetening units.

According to Samson Resources, the Worford Ridge Compressor Facility does not have any affected facilities under the rule that were constructed, reconstructed, or modified after August 23, 2011. **Therefore, Subpart OOOO does not apply.**

National Emission Standards for Hazardous Air Pollutants (NESHAP)

40 CFR Part 63, Subpart A: 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, Worford Ridge is subject to 40 CFR Part 63, Subpart HH and Subpart ZZZZ; therefore the General Provisions of Part 63 apply. Additionally, the facility has equipment in relevant source categories (D1 (Subpart HH)), which is not subject to the relevant standards. A record of an applicability determination demonstrating that the unit is not subject to the relevant Part 63 standards must be kept (per §63.10(b)(3)) on site for 5 years after the determinations or until a source changes its operations to become an affected source.

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 area or major 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 per §63.760(a)(1)(i) through (a)(1)(iii), is less than 18,400 standard cubic meters per day are exempt from the 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 vessels 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 subpart HH (at 40 CFR 63.761) states, in part, that only emissions from the dehydration units and storage vessels 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 also applies 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 must document that PTE of benzene is less than 0.9 megagrams (1,984 lbs.).

Applicability of Subpart HH to the Worford Ridge Compressor Station

According to Samson Resources, the Worford Ridge Compressor Station total HAP emissions from glycol dehydrators and storage vessels are below major source thresholds. Furthermore, with respect to area source requirements, uncontrolled actual average benzene emissions from the TEG dehydration units at the facility are less than 0.9 megagrams (1,984 lbs.). Per 40 CFR 63.764(e)(1)(ii), dehydration unit D1 is exempt from the 40 CFR 63.764(d) general requirements for area sources. **Therefore, only recordkeeping requirements apply to the facility.**

40 CFR Part 63, Subpart HHH: National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities. This subpart 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 hazardous air pollutant (HAP) emissions. Natural gas transmission means the pipelines are used for long distance transport (excluding processing).

According to Samson Resources, the Worford Ridge Compressor Station is a natural gas production facility and not a natural gas transmission or storage facility. **Therefore, Subpart HHH does not apply.**

40 CFR Part 63, Subpart ZZZZ (RICE MACT): 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 spark ignition internal combustion engines (SI ICE) and stationary compression ignition internal combustion engines (CI ICE).

For the purposes of this standard, construction or reconstruction is as defined in §63.2.

Summary of Applicability to Engines at Major HAP Sources

Major HAP Sources				
Engine Type	**Horse Power Rating**	**New / Existing**	**Applicability Trigger Date**	
SI ICE – All[1]	≥ 500 hp	New	On or After:	12/19/2002
SI ICE – 4SRB	> 500 hp	Existing	Before:	12/19/2002
SI ICE – All[1]	≤ 500 hp	New	On or After:	6/12/2006
SI ICE – All[1]	≤ 500 hp	Existing	Before:	6/12/2006
CI ICE – All[2]	≥ 500 hp	New	On or After:	12/19/2002
CI ICE – Non Emergency	> 500 hp	Existing	Before:	12/19/2002
CI ICE – All[2]	≤ 500 hp	New	On or After:	6/12/2006
CI ICE – All[2]	≤ 500 hp	Existing	Before:	6/12/2006

1. All includes emergency ICE, limited use ICE, ICE that burn land fill or digester gas, 4SLB, 2SLB, and 4SRB.
2. All includes emergency ICE and limited use ICE

Summary of Applicability to Engines at Area Hap Sources

Area HAP Sources				
Engine Type	**Horse Power Rating**	**New / Existing**	**Applicability Trigger Date**	
SI ICE – All[1]	All hp	New	On or After:	6/12/2006
SI ICE – All[1]	All hp	Existing	Before:	6/12/2006
CI ICE – All[2]	All hp	New	On or After:	6/12/2006
CI ICE – All[2]	All hp	Existing	Before:	6/12/2006

1. All includes emergency ICE, limited use ICE, ICE that burn land fill or digester gas, 4SLB, 2SLB, and 4SRB.
2. All includes emergency ICE and limited use ICE

Applicability of 40 CFR 63, Subpart ZZZZ to the Worford Ridge Compressor Station:

Unit	Serial Number	Unit Description	Fuel	Site Rated BHP	Commenced Construction, Reconstruction, or Modification Date	Installation Date
C-101	C-14536/1	Waukesha L5794 LT 4SLB Compressor Engine	Natural Gas	1400	Prior to 06/12/2006	05/06/10
C-102	C-15838/1	Waukesha L5794 LT 4SLB Compressor Engine	Natural Gas	1400	Prior to 06/12/2006	08/15/12
C-103	C-15967/1	Waukesha L5794 LT 4SLB Compressor Engine	Natural Gas	1400	Prior to 06/12/2006	12/04/06
C-104	C-15026/1	Waukesha L5794 LT 4SLB Compressor Engine	Natural Gas	1400	Prior to 06/12/2006	03/11/09

According to Samson Resources, the Worford Ridge Compressor Station is an area source as defined in subpart ZZZZ under 40 CFR 63.6585(c). Units C-101, C-102, C-103, and C-104 are each considered existing non-emergency spark ignition (SI) four-stroke lean-burn (4SLB) remote stationary RICE > 500 site-rated hp constructed prior to June 12, 2006. These engines meet the requirements for remote stationary RICE as outlined in 40 CFR 63.6675. According to 40 CFR 63.6595(a)(1), Units C-101, C-102, C-103, and C-104 must meet the requirements of Subpart ZZZZ no later than October 19, 2013. **Therefore, Worford Ridge is subject to the requirements of Subpart ZZZZ.**

<u>40 CFR Part 63, Subpart DDDDD (Boiler MACT)</u>: National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. This rule establishes national emission limitations and work practice standards for HAPs emitted from new and existing industrial boilers, institutional boilers, commercial boilers, and process heaters that are located at major sources of HAPs, as defined by 40 CFR 65.7575. Boilers or process heaters that combust natural gas for fuel or have a maximum designed heat input capacity less than 10 MMBtu/hr are subject to work practice standards in lieu of emission limits. For the purposes of this subpart, an affected unit is an existing unit if it was constructed prior to June 4, 2010.

Also, according to Samson Resources, the Worford Ridge Compressor Station does not have any affected units constructed after June 4, 2010. **Therefore, Subpart DDDDD does not apply.**

<u>40 CFR Part 63, Subpart JJJJJJ</u>: National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers. This rule establishes national emission standards and operating limitations for HAPs emitted from new and existing industrial boilers, institutional boilers, as defined in §63.11237, and commercial boilers that are fueled by coal, biomass, or oil and are located at area sources of HAPs ,as defined in §63.2, except for as specified in §63.11195. For the purposes of this subpart, an affected unit is an existing unit if it was constructed prior to June 4, 2010.

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Also, according to Samson Resources, there are no non-natural gas-fired industrial, commercial, or institutional boilers located at the Worford Ridge Compressor Station. **Therefore, Subpart JJJJJJ does not apply.**

Compliance Assurance Monitoring (CAM) Rule

40 CFR Part 64: Compliance Assurance Monitoring Provisions. According to 40 CFR 64.2(a), the CAM rule applies to each 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 §70.4(b)(12) or §71.6(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: Continuous compliance method 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% of the amount, in tons per year, required for a source to be classified as a major source.

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According to Samson Resources, the CAM rule does not apply to any of the units at the Worford Ridge Compressor Station as none are subject to an applicable emissions limitation and the pre-controlled emissions for each unit are less than the major source threshold. **Therefore, CAM does not apply.**

Chemical Accident Prevention Program

40 CFR Part 68: Chemical Accident Prevention Provisions. This rule applies to stationary sources that manufacture, process, use, store, or otherwise handle more than the threshold quantity of a regulated substance in a process. Regulated substances include 77 toxic and 63 flammable substances which are potentially present in the natural gas stream entering the facility and in the storage vessels located at the facility. The quantity of a regulated substance in a process is determined according to the procedures presented under §68.115. §68.115(b)(l) and (2)(i) indicate that toxic and flammable substances in a mixture do not need to be considered when determining whether more than a threshold quantity is present at a stationary source if the concentration of the substance is below one percent by weight of the mixture. §68.115(b)(2)(iii) indicates that prior to entry into a natural gas processing plant, regulated substances in naturally occurring hydrocarbon mixtures need not be considered when determining whether more than a threshold quantity is present at a stationary source. Naturally occurring hydrocarbon mixtures include condensate, field gas, and produced water.

Based on Samson Resources' application, Worford Ridge Compressor Station does not have regulated substances above the threshold quantities in this rule. **Therefore the facility is not subject to the requirement to develop and submit a risk management plan.**

Stratospheric Ozone and Climate Protection

40 CFR Part 82, Subpart F: Air Conditioning Units. According to Samson Resources, no maintenance, service, repair or disposal of any equipment containing Class I or Class II refrigerants chlorofluorocarbons (CFCs)) occurs at Worford Ridge Compressor Station. If, however, Samson Resources were to engage in any of the afore mentioned activities it must comply with the standards of part 82, subpart F for recycling and emissions reduction if they service, maintain, or repair the air conditioning units in any way or if they dispose of the units.

40 CFR Part 82, Subpart H: Halon Fire Extinguishers. According to Samson Resources, there are no halon fire extinguishers at Worford Ridge Compressor Station. However, should Samson Resources 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, Samson Resources would be required to comply with 40 CFR Part 82 and submit an application for a modification to this Title V permit.

Mandatory Greenhouse Gas Reporting

40 CFR Part 98: This rule requires sources above certain emission thresholds to calculate, monitor, and report greenhouse gas emissions. The requirements of 40 CFR Part 98 and CAA §307(d)(1)(V), the CAA authority under which 40 CFR Part 98 was promulgated, however, need not be included in a tribal-issued part 70 permit because those requirements are not included in the definition of "applicable requirement" in either 40 CFR part 70 or RAC 1-103(11). Although the rule is not an applicable requirement under 40 CFR Part 70 or the RAC, the source is not relieved from the requirement to comply with the rule separately from compliance with its Part 70 operating permit. It is the responsibility of each source to determine whether Part 98 is applicable and to comply, if necessary.

3. Tribal Authority

Reservation Air Code: The Reservation air Code was adopted pursuant to the authority vested in the Southern Ute Indian Tribe/State of Colorado Environmental Commission by (1) the Intergovernmental Agreement Between the Southern Ute Indian Tribe and the State of Colorado Concerning Air Quality Control on the Southern Ute Indian Reservation dated December 13, 1999, (2) tribal law (Resolution of the Council of the Southern Ute Indian Tribe # 00-09), (3) State law (C.R.S. § 24- 62-101), and (4) as recognized in federal law (Act of October 18, 2004, Pub. L. No. 108-336, 118 Stat.1354).

Title V Operating Permit Program: On March 2, 2012, EPA determined that the Southern Ute Indian Tribe of the Southern Ute Indian Reservation had met the requirements of 40 CFR § 70.4(b) for full approval to administer its Clean Air Act Title V, Part 70 Permitting Program (Program). In concert with that Program approval, EPA also found that the Tribe met the requirements of Section 301(d)(2) of the CAA and 40 CFR § 49.6 for treatment "in the same manner as a state" for the purposes of issuing CAA Title V, Part 70 operating permits. EPA promulgated its approval of the Tribe's applications on March 15, 2012 (77 FR 15267).

NSPS and NESHAP Delegation: On September 6, 2013, the Southern Ute Indian Tribe received delegation from the EPA to incorporate by reference into the Reservation Air Code and enforce certain subparts of the New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) under Sections 111 and 112 of the Clean Air Act, respectively (78 FR 40635). These NSPS and NESHAP subparts generally apply to oil and gas operations within the exterior boundaries of the Southern Ute Indian Reservation and were adopted unchanged into the Reservation Air Code as Parts 2 and 3.

Southern Ute Indian Tribe Minor Source Program: The Southern Ute Indian Tribe/State of Colorado Environmental Commission is currently developing a Minor Source Program in order to fill a regulatory gap wherein sources of air pollution located on the Reservation have been subject to fewer requirements than similar sources located on land under the jurisdiction of a state air pollution control agency. Until such time that EPA approves the Minor Source Program as part of a TIP under the Tribal Authority Rule, affected sources must comply with the federal rule "Review of New Sources and Modifications in Indian Country" that was published on July 1, 2011 (76 FR 38748). This rule requires

new and existing synthetic minor sources currently operating under federal operating permits for sources in Indian country (regulated at 40 CFR Part 71), as well as sources proposing minor modifications at existing major sources, to submit applications to EPA starting August 30, 2011. Existing true minor sources are required to register with the permitting authority no later than March 1, 2013. After September 2, 2014, all true minor sources that intend to construct or modify will have to apply for a preconstruction permit.

Implementation Plans: Worford Ridge Compressor Station is located in Indian country, the State of Colorado's implementation plan does not apply to this source. In addition, no tribal implementation plan (TIP) has been submitted and approved for the Southern Ute Indian Tribe, and EPA has not promulgated a federal implementation plan (FIP) for the Southern Ute Indian Reservation. Therefore, Worford Ridge Compressor Station is not subject to any implementation plan.

4. Public Participation

a. Public Notice

Per RAC § 2-109, all Part 70 draft operating permits shall be publicly noticed and made available for public comment.

Public notice is given by publication in a newspaper of general circulation in the area where the source is located or in a state publication designed to give general public notice, to persons on a mailing list developed by the Tribe, including those who request in writing to be on the list, and by other means if necessary to assure adequate notice to the affected public. If an interested person would like to be added to the Tribe's mailing list to be informed of future actions on permits issued by the Tribe, please send your name and address:

by United State Postal Service to:	by any other delivery service to:
Part 70 Permitting Contact Southern Ute Indian Tribe Environmental Programs Division PO Box 737 MS #84 Ignacio, Colorado 81137	Part 70 Permitting Contact Southern Ute Indian Tribe Environmental Programs Division 398 Ouray Drive Ignacio, Colorado 81137

Public notice will be published in the Durango Herald as detailed in the cover letter of this draft permit package, 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 will be given an opportunity to review a copy of the draft permit prepared by the Tribe, the application, this statement of basis for the draft permit, and all supporting materials for the draft permit. Copies of these documents are available at:

Southern Ute Indian Tribe
Environmental Programs Division
Air Quality Program
115 County Road 517
Ignacio, Colorado 81137

All documents are available for review at the Southern Ute Indian Tribe's Environmental Programs Division office Monday through Friday from 9:00 a.m. to 4:00 p.m. (excluding holidays).

Any interested person may submit written comments on the draft Part 70 operating permit during the public comment period to the Part 70 Permit Contact at the address listed above. The Tribe will consider and address comments in making a final decision on the permit. The Tribe keeps a record of the commenters and of the issues raised during the public participation process.

Anyone, including the applicant, who believes any condition of the draft permit is inappropriate should raise all reasonably ascertainable issues and submit all arguments supporting his or her position by the close of the public comment period. Any supporting materials submitted must be included in full and may not be incorporated by reference, unless the material has already been submitted as part of the administrative record in the same proceeding or consists of Environmental Commission, tribal, state or Federal statutes and regulations, EPA documents of general applicability, or other generally available reference material.

c. Opportunity to Request a Hearing

A person may submit a written request for a public hearing to the Part 70 Permit Contact, at the address listed above, by stating the nature of the issues to be raised at the public hearing. Based on the number of hearing requests received, the Tribe will hold a public hearing whenever it finds there is a significant degree of public interest in a draft operating permit. The Tribe will provide public notice of the public hearing. If a public hearing is held, any person may submit oral or written statements and data concerning the draft permit.

d. Public Petitions to the Administrator

In the event the Administrator of the United States Environmental Protection Agency does not object to issuance of the permit, on the basis that it would not be in compliance with applicable requirements, within its 45-day review period, any person may then petition the Administrator within 60 days after the expiration of the Administrator's 45-day review period to make such objection. Any such petition must be based only on objections to the permit that were raised with reasonable specificity during the public comment period unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objections arose after such period. If the administrator objects to a permit as a result of this petition, the Tribe shall not issue the permit until the Administrator's objection has been resolved, except that a petition for review does not stay the

effectiveness of a permit or its requirements if the permit was issued after the end of the 45-day review period and before the Administrator's objection.

e. Appeal of Permits

Within 60 days after the Tribe's final permit action, an applicant, any person who filed comments on the draft permit or participated in the public hearing, and any other person who could obtain judicial review of that action under applicable law, may appeal to the Environmental Commission in accordance with the RAC and the Commission's Procedural Rules.

Petitions for administrative review of final permit actions can be filed after the deadline designated by the Commission only if they are based solely on grounds arising after the deadline for administrative review has passed. Such petitions shall be filed no later than 60 days after the new grounds for review arise. If the final permit action being challenged is the Tribe's failure to take final action, a petition for administrative review may be filed any time before the Tribe denies or issues the final permit.

f. Notice to Affected States/Tribes

As described in RAC § 2-109(3), public notice will be given by notifying all affected programs. The following entities will be notified:

- State of Colorado, Department of Public Health and Environment
- State of New Mexico, Environment Department
- Ute Mountain Ute Tribe, Environmental Programs Department
- Navajo Tribe, Navajo Nation EPA
- Jicarilla Tribe, Environmental Protection Office
- National Park Service, Air Resources Division, Denver, CO
- U.S. Department of Agriculture, United States Forest Service, Rocky Mountain Region

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