



**Air Pollution Control
Title V Permit to Operate
Statement of Basis for Permit No. V-SUIT-0031-2015.00
June 8, 2015**

**Samson Resources Company
South Ignacio Central Delivery Point
Southern Ute Indian Reservation
La Plata County, Colorado**

1. Facility Information

a. Location

The South Ignacio Central Delivery Point, owned and operated by Samson Resources Company (Samson), is located within the exterior boundary of the Southern Ute Indian Reservation. The exact location is Section 32, T33N, R7W, in La Plata County, at latitude North 37.053917 and longitude West - 107.625222. The Mailing address is:

Samson Resources Company
South Ignacio Central Delivery Point
370 17th Street, Suite 3000
Denver, CO 80202

b. Contacts

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c. Description of Operations

The South Ignacio Central Delivery Point (CDP) is owned and operated by Samson Resources. The facility is located within the exterior boundaries of the Southern Ute Indian Reservation in the SE ¹/₄ of Section 32, township 33, Range 7 West in La Plata County, Colorado.

The facility is comprised of equipment that dehydrates and compresses coal-bed methane gas from several wells 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. Separator overhead gas is fed to one of the eight compressor engines from a common suction header. The compressors 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 two dehydration units. Tri-ethylene 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 70 MMscfd with eight compressor engines operating.

Process equipment installed at the facility consists of eight natural gas-fired reciprocating engines, two Triethylene glycol dehydration units equipped with reboiler burners, and a flare. There are several insignificant emission units at this facility including various storage tanks and heaters.

d. List of all Units and Emission-Generating Activities

Samson 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, South Ignacio Central Delivery Point**

Emission Unit ID	Description	Control Equipment
E1	1 – Waukesha L7044GSI Natural Gas-Fired SI 4SRB Compressor Engine, 1,680 nameplate rated hp Serial No.: C-61982/1A Installed: 07/30/2010	NSCR
E2 E3 E4	3 – Waukesha L7042GL Natural Gas-Fired SI 4SLB Compressor Engine, 1,478 nameplate rated hp Serial No.: C-10643/1 Installed: 05/01/2012 Serial No.: 403301 Installed: 10/08/2008 Serial No.: C-12097/2 Installed: 03/10/2008	Oxidation Catalyst
E5 E6 E7 E8	4 – Waukesha L5794LT Natural Gas-Fired SI 4SLB Compressor Engine, 1,515 nameplate rated hp Serial No.: C-15966/1 Installed: 04/19/2013 Serial No.: C-15810/1 Installed: 08/18/2011 Serial No.: C-15836/1 Installed: 05/28/2012 Serial No.: C-15964/1 Installed: 03/13/2012	Oxidation Catalyst
	1 – PESCO Triethylene Glycol Dehydrator, 30 MMscfd, with 1.25 MMBtu/hr reboiler burner	Condenser

D1	Serial No.: N/A Installed: 2003	and Flare Stack
D2	1 – PESCO Triethylene Glycol Dehydrator, 40 MMscfd, with 0.75 MMBtu/hr reboiler burner Serial No.: N/A Installed: 02/2009	Condenser and Flare Stack

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, for HAP emissions [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 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 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’s claim that these units qualify as insignificant.

**Table 2 – Insignificant Emission Units
Samson Resources Company, South Ignacio Central Delivery Point**

Emission Unit ID	Description	Size/Rating
IEU1	16 - Lubricating oil storage tanks	500 gal
IEU2	11 - Used oil storage tanks	500 gal
IEU3	2 - Ethylene glycol storage tanks	500 gal
IEU4	4 - Produced water storage tanks	1000 gal
IEU5	1 - Slop tank	400 bbl
IEU6	1 - Methanol storage tank	500 gal
IEU7	5 - Tank heaters	0.12 MMBtu/hr
IEU8	8 - Compressor Blowdown emissions	N/A
IEU9	8 - Compressor starter emissions	N/A
IEU10	8 - Compressor cylinder rod packing vent emissions	N/A
FUG	N/A - Facility Fugitive Emissions	N/A

e. Facility Construction and/or Permitting History

South Ignacio Central Delivery Point received its initial part 71 permit, #V-SU-0031-01.00, in April of 2004. This permit contained a federally enforceable 9.5 tpy facility-wide formaldehyde emissions cap to prevent the source from triggering the major source requirements of the RICE MACT at 40 CFR Part 63, Subpart ZZZZ, effective on August 16, 2004. In November 2005, the permit was modified to add three new lean-burn compressor engines with oxidation catalysts under the existing formaldehyde cap. The permit was modified again in July 2008 to authorize the installation of a new 40 MMBscf/day dehydration unit (emission unit D2) and create an enforceable benzene emission limit of 0.9 tpy benzene for each dehydration unit (emission units D1 and D2), and a facility-wide HAP emission limit of **23 tpy**, in order for the facility to avoid triggering the area source MACT HH requirement for glycol dehydrators emitting more than 1 tpy of benzene effective January 5, 2009, or triggering any major source MACT requirements for the dehydrators or engines. All Part 71 established synthetic minor emission limits were created prior to the trigger dates for MACT standards or the triggering of major NSR modification thresholds. On August 10, 2009, EPA issued the first renewal permit for the facility (V-SU-0031-08.00).

In 2011 Samson submitted a synthetic minor permit application for the facility under the Federal Minor New Source Review Program in Indian Country (76 FR 38748), to transfer the enforceable emissions limitations established under the part 71 permit #V-SU-0031-08.00 to a minor new source review permit. On January 9, 2015 EPA issued the facility synthetic minor new source review permit #SMNSR-SU-000031-2011.001. This permit did not authorize the construction of any new emission sources or authorize any physical modifications to the facility or its operations.

The site's existing part 71 permit will expire upon issuance of this Part 70 permit (V-SUIT-0031-2014.00).

[Explanatory Note: Prior to the promulgation of the Federal Minor New Source Review Program in Indian Country, EPA created synthetic minor limits in Part 71 permits as a temporary gap filling measure for sources operating in Indian country which did not have the ability to obtain synthetic minor limits through other programs, such as exists in state jurisdictions.]

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.

The PTE for South Ignacio Delivery Point was listed by Samson 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.

**Table 3 - Potential to Emit
Samson Resources Company, South Ignacio Central Delivery Point**

Emission Unit ID	Regulated Air Pollutants (tons per year)								GHGs (CO ₂ e tpy)
	NO _x	VOC	SO ₂	PM ₁₀	CO	Lead	Total HAPs	Largest Single HAP (CH ₂ O)	
E1	40.5	8.1	0.0	0.0	56.7	0.0	0.3	0.3	7919.6
E2	18.3	8.6	0.0	0.0	12.2	0.0	1.2	1.2	5710.2
E3	18.3	8.6	0.0	0.0	12.2	0.0	1.2	1.2	5710.2
E4	19.3	9.0	0.0	0.0	12.9	0.0	1.3	1.1	5954.3
E5	33.8	6.8	0.0	0.0	13.5	0.0	1.4	1.4	6356.3
E6	33.8	6.8	0.0	0.0	13.5	0.0	1.4	1.4	6356.3
E7	33.8	6.8	0.0	0.0	13.5	0.0	1.4	1.4	6356.3
E8	33.8	6.8	0.0	0.0	13.5	0.0	1.4	1.4	6356.3
D1	0.5	20.3	0.0	0.0	0.4	0.0	13.4	0.0	808.0
D2	0.3	24.5	0.0	0.0	0.3	0.0		0.0	574.5
FUG	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	389.2
IEUs	0.3	0.9	0.0	0.0	0.2	0.0	0.0	0.0	306.5
TOTAL	232.7	110.3	0.0	0.0	148.9	0.0	23.0	9.5	52,797.7

2. Tribal Authority

South Ignacio Central Delivery Point is located within the exterior boundaries of the Southern Ute Indian Reservation and is thus within Indian Country as defined at 18 U.S.C. §1151. On March 2, 2012, the 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, the 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. The EPA promulgated its approval of the Tribe’s applications on March 15, 2012 (77 FR 15267). The requirements of the Clean Air Act Title V, Part 70 Permitting Program (Program) have been incorporated at Article II, Part 1 of the Reservation Air Code. Therefore, the Southern Ute Indian Tribe is the appropriate governmental entity to issue the Title V permit to this facility.

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 No. 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).

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.

3. 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 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.

Tribal Minor New Source Review (TMNSR) – 40 CFR Part 49

EPA promulgated the federal rule “Review of New Sources and Modifications in Indian Country,” otherwise known as the Tribal Minor New Source Review Rule (TMNSR), on July 1, 2011 (76 FR 38748). The TMNSR rule applies to all new or modified industrial facilities in Indian country with a potential to emit equal to or greater than the minor NSR thresholds, but less than the major source thresholds, which are generally 100 to 250 tons per year (tpy). The minor NSR thresholds for attainment/unclassifiable areas are displayed in the table below:

40 CFR 49.153 Minor NSR Thresholds

Regulated NSR Pollutant	Minor NSR Thresholds for Attainment/Unclassifiable Areas in Tons Per Year (TPY)
Carbon Monoxide (CO)	10
Nitrogen Oxides (NO _x)	10
Sulfur Dioxide (SO ₂)	10
Volatile Organic Compounds (VOC)	5
PM ₁₀	5
PM _{2.5}	3
Lead	0.1
Fluorides	1
Sulfuric Acid Mist	2
Hydrogen Sulfide (H ₂ S)	2
Total Reduced Sulfur (including H ₂ S)	2
Reduced Sulfur Compounds (including H ₂ S)	2
Municipal Waste Combustor Emissions	10
Municipal Solid Waste Landfill Emissions (measured as nonmethane organic compounds)	10

Starting August 30, 2011 all minor modifications at existing major NSR sources, requests for synthetic minor limitations, and the transferring of synthetic minor limits from Part 71 permits into minor NSR

permits became subject to the TMNSR rule. All existing true minor sources were required to register with EPA by no later than March 1, 2013. All new minor sources constructed between August 30, 2011 and September 2, 2014 must submit a registration form within 90 days of beginning operation and obtain a permit only if a general permit is available for that source category. All new true minor sources not in the oil and natural gas sector, which intend to construct after September 2, 2014, are required to apply for a preconstruction permit. After March 2, 2016, all minor modifications at major sources and true minor sources in the oil and natural gas sector that intend to construct will have to apply for a preconstruction permit.

EPA issued South Ignacio Central Delivery Point synthetic minor new source review permit #SMNSR-SU-000031-2011.001 to transfer legally and practically enforceable emission limits previously established in the EPA-issued Part 71 permit. The requirements of the new source review permit have been incorporated into the Part 70 operating permit.

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 of any criteria 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. A source is also major if it has the potential to emit greenhouse gases in amounts of 100,000 tpy CO₂e or greater. 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.

South Ignacio Central Delivery Point does not belong to any of the 28 listed industrial source categories. Therefore, the PTE threshold for determining PSD applicability for this source is 250 tpy for criteria pollutants and 100,000 tpy for CO₂e. On January 9, 2015 EPA issued the facility synthetic minor new source review permit #SMNSR-SU-000031-2011.001 to transfer legally and practically enforceable emission limits previously included in the source’s Part 71 permit to establish the source as a synthetic minor source for NO_x, CO, Formaldehyde, Benzene, and total HAPs. Thus, South Ignacio Central Delivery Point is a synthetic minor source with respect to PSD for the previously mentioned pollutants and below the PSD thresholds for all other criteria pollutants. **Therefore, this site is not subject to the requirements of PSD at this time.**

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 South Ignacio Central Delivery Point is subject to Subpart JJJJ under 40 CFR Part 60. **Therefore, the General Provisions of Part 60 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 information provided by Samson, there are no storage tanks at South Ignacio Central Delivery Point with a storage capacity greater than 40,000 gallons. **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 July 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, there are no storage tanks at South Ignacio Central Delivery Point which were constructed between May 18, 1978 and July 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 (472bbl, or 19,813 gal). 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.

According to Samson, all tanks which contain volatile organic liquids and which were constructed after July 23, 1984 either have capacities less than the applicability threshold or have vapor pressures below the 15 kPa applicability threshold. **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, there are no stationary gas turbines located at the South Ignacio Central Delivery Point. **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, the South Ignacio Central Delivery Point does not process natural gas to extract natural gas liquids. **Therefore, Subpart KKK does not apply.**

40 CFR Part 60, Subpart LLL: Standards of Performance for SO₂ 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 (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.

According to Samson, the South Ignacio Central Delivery Point does not process natural gas to remove sulfur compounds. **Therefore, Subpart LLL does not apply.**

40 CFR Part 60, Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. This subpart establishes emission standards and compliance requirements for the control of emissions from stationary combustion ignition (CI) internal combustion engines (ICE) that commence construction (which for the purposes of this subpart is the date the engine is ordered by the owner or operator) after July 11, 2005 and are manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006, or are manufactured after April 1, 2006 and are not fire pump engines.

According to information provided by Samson, there are no stationary compression ignition (diesel) internal combustion engines (ICE) located at South Ignacio Central Delivery Point. **Therefore, Subpart IIII 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)).

**NSPS Subpart JJJJ Applicability Determination
Samson Resources Company, South Ignacio Central Delivery Point**

Unit	Serial No.	Unit Description	Fuel	Maximum HP	Commence Construction	Manufacture Date	Trigger Date for Applicability- Manufactured on or after	Subject to NSPS Subpart JJJJ
E1	C-61982/1A	Waukesha L7044GSI SI 4SRB Compressor Engine	Natural Gas	1,680	Prior to 06/12/2006	02/26/2004	07/01/2007	No
E2	C-10643/1	Waukesha L7042GL SI 4SLB Compressor Engine	Natural Gas	1,478	Prior to 06/12/2006	09/28/1992	07/01/2007	No
E3	403301	Waukesha L7042GL SI 4SLB Compressor Engine	Natural Gas	1,478	Prior to 06/12/2006	05/1991	07/01/2007	No
E4	C-12097/2	Waukesha L7042GL SI 4SLB Compressor Engine	Natural Gas	1,478	Prior to 06/12/2006	06/1996	07/01/2007	No
E5	C-15966/1	Waukesha L5794LT SI 4SLB Compressor Engine	Natural Gas	1,515	Prior to 06/12/2006	02/2006	07/01/2007	No
E6	C-15810/1	Waukesha L5794LT SI 4SLB Compressor Engine	Natural Gas	1,515	Prior to 06/12/2006	08/2005	07/01/2007	No
E7	C-15836/1	Waukesha L5794LT SI 4SLB Compressor Engine	Natural Gas	1,515	Prior to 06/12/2006	08/2005	07/01/2007	No
E8	C-15964/1	Waukesha L5794LT SI 4SLB Compressor Engine	Natural Gas	1,515	Prior to 06/12/2006	03/2006	07/01/2007	No

According to Samson, South Ignacio Central Delivery Point is potentially subject to this subpart as all engines at the site are stationary spark ignition internal combustion engines. However, Units E1, E2, E3, E4, E5, E6, E7, and E8 were manufactured prior to July 1, 2007 (the trigger date for engines with a maximum design horsepower ≥ 500). **Therefore, Subpart JJJJ does not apply.**

Should Samson propose to install a replacement engine which is subject to Subpart JJJJ, Samson 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 KKKK: Standards of Performance for Stationary Combustion Turbines. This subpart establishes emission standards and compliance schedules for the control of emissions from stationary combustion turbines that commenced construction, modification, or reconstruction after February 18, 2005. The rule applies to stationary combustion turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour.

According to Samson, there are no stationary gas turbines located at the South Ignacio Central Delivery Point. **Therefore, Subpart KKKK does not apply.**

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 SO₂ 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, all equipment at the South Ignacio Central Delivery Point potentially subject to this subpart commenced construction prior to August 23, 2011 and has not undergone 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, the South Ignacio Central Delivery Point is subject to 40 CFR 63 Subparts HH and ZZZZ. Therefore **the General Provisions of Part 63 apply** as specified in the relevant subparts.

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, 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.

Major Source Glycol Dehydrator Applicabilities

For facilities that are determined to be major HAP sources, each glycol dehydration unit is subject to the glycol dehydration unit process vent standards of 40 CFR 63.765 for small or large dehydration units, defined, as follows, in 40 CFR 63.760:

Small Glycol Dehydration Unit: a glycol dehydration unit, located at a major source, with an actual annual average natural gas flowrate less than 85 thousand standard cubic meters per day or actual annual average benzene emissions less than 0.90 Mg/yr, determined according to §63.772(b).

Large Glycol Dehydration Unit: a glycol dehydration unit with an actual annual average natural gas flowrate equal to or greater than 85 thousand standard cubic meters per day and actual annual average benzene emissions equal to or greater than 0.90 Mg/yr, determined according to §63.772(b). A glycol dehydration unit complying with the 0.9 Mg/yr control option under §63.765(b)(1)(ii) is considered to be a large dehydrator.

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 uncontrolled annual actual benzene emissions are less than 0.9 megagrams (1,984 lbs.).

Any source that determines that it is not a major source but has actual emissions of 5 tons per year of a single HAP or 12.5 tons per year of a combination of HAP (i.e. 50 percent of the major source thresholds), shall update its major source determination within 1 year of the prior determination and each year thereafter, using gas composition data measured during the preceding 12 months.

Applicability of Subpart HH to the South Ignacio Central Delivery Point

According to Samson, the South Ignacio Central Delivery Point has affected sources under this subpart, upgrades natural gas, is not located in an urbanized area or urban cluster, and is located prior to the point of custody transfer (and therefore prior to the point at which natural gas leaves the natural gas processing category and enters the natural gas transmission and storage category). Because the facility is in the natural gas production category only emissions from dehydration units and storage vessel need to be aggregated when determining major source status.

South Ignacio Central Delivery Point has obtained Minor NSR permit number SMNSR-SU-000031-2011.01 to establish legally and practically enforceable emission limits and emission reductions for benzene, formaldehyde and facility wide HAP emissions. Samson used these emission limits to determine that total HAP emissions from the glycol dehydration units and storage vessels are below major source thresholds. In addition, Samson used the 0.9 tpy benzene emission limit established for each glycol dehydration unit to determine that per §63.764(e)(1)(ii), the units are exempt from the general requirements found at §63.764(d). **Therefore, only the recordkeeping requirements of §63.774(d)(1) 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, the South Ignacio Central Delivery Point is 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 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 Part 63, Subpart ZZZZ to the South Ignacio Central Delivery Point

Unit	Serial Number	Unit Description	Fuel	Site Rated HP	Commenced Construction or Reconstruction Date	Subject to Area Source Standards for Existing RICE
E1	C-61982/1A	Waukesha L7044GSI SI 4SRB Compressor Engine	Natural Gas	1680	02/26/2004	Yes
E2	C-10643/1	Waukesha L7042GL SI 4SLB Compressor Engine	Natural Gas	1267	09/28/1992	Yes
E3	403301	Waukesha L7042GL SI 4SLB Compressor Engine	Natural Gas	1267	05/1991	Yes
E4	C-12097/2	Waukesha L7042GL SI 4SLB Compressor Engine	Natural Gas	1336	06/1996	Yes
E5	C-15966/1	Waukesha L5794LT SI 4SLB Compressor Engine	Natural Gas	1400	02/2006	Yes
E6	C-15810/1	Waukesha L5794LT SI 4SLB Compressor Engine	Natural Gas	1400	08/2005	Yes
E7	C-15836/1	Waukesha L5794LT SI 4SLB Compressor Engine	Natural Gas	1400	08/2005	Yes
E8	C-15964/1	Waukesha L5794LT SI 4SLB Compressor Engine	Natural Gas	1400	03/2006	Yes

South Ignacio Central Delivery Point is subject to Minor NSR permit SMNSR-SU-000031-2011.01 which establishes legally and practically enforceable emission limits and emission reductions for formaldehyde and facility-wide HAPs. Samson used these emission limits and emission reductions to establish South Ignacio as an area source for the purposes of Subpart *ZZZZ*.

Unit E1 is a four-stroke rich-burn (4SRB) stationary RICE constructed prior to June 12, 2006, and subject to the *ZZZZ* area source requirements for existing 4SRB remote stationary RICE > 500 hp, as outlined in the maintenance requirements listed in item number 11 of Table 2d and the management practices listed in item number 9 of Table 6. Units E2, E3, E4, E5, E6, E7, and E8 are four-stroke lean-burn (4SLB) stationary RICE constructed prior to June 12, 2006, subject to the area source requirement for existing 4SRB remote stationary RICE > 500 hp, as outlined in the maintenance requirements listed in item number 8 of Table 2d and the management practice listed in item number 9 of Table 6. **Therefore, Units E1, E2, E3, E4, E5, E6, E7, and E8 are subject to the applicable area source requirements of Subpart *ZZZZ*.**

40 CFR Part 63, Subpart DDDDD (Boiler MACT): 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 63.7575. 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.

According to information provided by Samson, the South Ignacio CDP is not a major source as defined in 40 CFR 63.7575. **Therefore, Subpart DDDDD does not apply.**

40 CFR Part 63, Subpart JJJJJJ: 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, and commercial boilers, as defined by 40 CFR 63.11237, and are located at area sources of HAPs, as defined by 40 CFR 63.2, except as specified in 40 CFR 63.11195. For the purposes of this subpart, an affected unit is an existing unit if it was constructed prior to June 4, 2010.

According to information provided by Samson, there are no industrial, institutional, or commercial boilers at Jaques 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*
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.

According to information provided by Samson, there are no emission units at the facility with pre-control device emissions of a regulated pollutant greater than 100% of the amount, in tons per year, required for a source to be classified as a major source.

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)(1) 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.

According to Samson, South Ignacio Central Delivery Point has no substance listed by this regulation that is stored on-site in quantities above the applicable threshold values set forth by the regulation. **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, the facility does not engage in the distribution or sale of controlled substances, and it does not produce, transform, destroy, import, or export products containing controlled substances. If Samson were to engage in any of the aforementioned activities, it must comply with the standards of part 82, Subpart F for recycling and emissions reduction if they service, maintain, or repair 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’s application, there are no halon fire extinguishers at South Ignacio Central Delivery Point. However, should Samson 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 would be required to comply with 40 CFR Part 82 and submit an application for a revision 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.

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:

Southern Ute Indian Tribe
Environmental Programs Division
Part 70 Program
PO Box 737 MS #84
Ignacio, Colorado 81137

by any other delivery service to:

Southern Ute Indian Tribe
Environmental Programs Division
Part 70 Program
398 Ouray Drive
Ignacio, Colorado 81137

Public notice for the draft permit was published in the Durango Herald, on March 2, 2015 and in the Southern Ute Drum on March 6, 2015 in order to provide 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 an opportunity to review a copy of the draft permit prepared by the Tribe, the application, the statement of basis for the draft permit, and all supporting materials for the draft permit. Copies of these documents were on the Southern Ute Air Quality Program webpage at www.southernute-nsn.gov/environmental-programs/air-quality/air-permitting/, and at:

Southern Ute Indian Tribe
Environmental Programs Division
Air Quality Program
71 Mike Frost Way
Ignacio, Colorado 81137

All documents were 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 was given the opportunity to submit written comments on the draft Part 70 operating permit during the public comment period. The Tribe has considered and addressed 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 believed any condition of the draft permit was inappropriate, could 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 have been included in full and may not have been incorporated by reference, unless the material had already been submitted as part of the administrative record in the same proceeding or consisted 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 RAC 2-109(8) 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. 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