# Air Pollution Control Title V Permit to Operate Statement of Basis for Permit No V-SUIT-0054-2020.00 INSERT DATE



# Red Cedar Gathering Company Midway Compressor Station Southern Ute Indian Reservation La Plata County, Colorado

# 1. Facility Information

#### a. Location

The Midway Compressor Station (Midway), owned and operated by Red Cedar Gathering Company (Red Cedar), is located within the exterior boundary of the Southern Ute Indian Reservation. The exact location is Section 23, T33N, R7W, in La Plata County, at latitude North 37.09240 and longitude West 107.57650. The mailing address is:

Red Cedar Gathering Company Midway Compressor Station 125 Mercado Street; Suite 201 Durango, CO 81301

#### b. Contacts

# **Facility Contact:**

Kyle Hunderman
Environmental Compliance Specialist II – Air Quality
Red Cedar Gathering Company
125 Mercado Street; Suite 201
Durango, CO 81301
(970) 764-6921

# **Responsible Official:**

Coy Bryant
President and Chief Operating Officer
Red Cedar Gathering Company
125 Mercado Street; Suite 201
Durango, CO 81301
(970) 764-6900

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

The Midway Compressor Station receives coal-bed methane gas gathered from nearby sources and compresses the natural gas to transmission pipeline specification. Gas entering the facility from the field is first fed to an inlet separator that gravimetrically removes water that may have condensed during the transportation from the supplying gas wells. Separator overhead gas is fed to one of up to ten compressor engines from a common suction header. The compressors discharge gas to a common

discharge that feeds to scrubbers. The scrubbers separate and collect liquids that may have formed during compression. The compressed gas is then fed to a dehydration unit. Tri-ethylene glycol (TEG) is circulated counter-currently and absorbs water in the wet 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 60 MMscf/day with ten compressor engines operating.

There are currently nine natural gas-fired 4-stroke lean-burn 1340 horsepower Caterpillar G2516LE compressor engines and one natural gas-fired 4-stroke lean burn 1380 horsepower Caterpillar G3516J compressor engine operating at the facility. The nine units have a site rating of 1251 horsepower and the one unit has a site rating of 1380 horsepower. The facility also contains one Tri-ethylene glycol dehydration unit with two 30 MMscfd contact towers and one 0.75 MMBtu/hr reboiler burner. Additional facility equipment includes: ten 500 gallon lubricating oil storage tanks, ten 500 gallon used oil storage tanks, four 500 gallon ethylene glycol storage tanks, three 500 gallon used oil storage tanks, one 400 barrel used oil tank, one 60 barrel dehy still vent tank, one 0.750 MMBtu/hr TEG reboiler heater, one 0.325 MMBtu/hr used oil storage tank heater, one 0.008 MMBtu/hr catalytic heater, and one 0.004 MMBtu/hr catalytic heater. Each of the Caterpillar compressor engines is equipped with either a NOx sensor or O<sub>2</sub> sensor as part of the air fuel controller system (AFRC) and an oxidation catalytic converter to reduce emissions in the exhaust stream. A continuous parameter monitoring system (CPMS) is used to record the catalyst inlet temperature of each engine to ensure that the inlet temperature remains between 450° F and 1350° F. The CPMS continuously monitors the catalyst inlet temperature and reduces the data to a 4-hour rolling average. The CPMS also logs the shutdown times and events and displays the unit process and fuel flows for each engine. The pressure drop across the catalyst is manually recorded at least once a month. Facility data is recorded in accordance with applicable parts of Section §63.6640.

#### d. List of All Units and Emission-Generating Activities

Red Cedar provided the information contained in Tables 1 and 2 in its part 70 permit renewal 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
Red Cedar Gathering Company, Midway Compressor Station

Emission Unit ID		Control Equipment						
	Caterpillar G35	Equipment						
E1	Serial No.	WPW-02226	Install Date:	3/13/2019				
E2	Serial No.	WPW00724	Install Date:	8/20/2019	1			
E4	Serial No.	WPW00178	Install Date:	6/4/2019	- Oxidation Catalyst			
E5	Serial No.	WPW00235	Install Date:	5/8/2015	and AFRC			
E6	Serial No.	WPW00939	Install Date:	10/11/2016	- (*Enforceable)			
E7	Serial No.	WPW01778	Install Date:	11/19/2019				
E8	Serial No.	WPW01905	Install Date:	4/23/2019				
E9	Serial No.	WPW00938	Install Date:	7/16/2019				
	Caterpillar G35	Oxidation Catalyst and AFRC						
E3	Serial No.	4EK-00507	Install Date:	12/3/2019	(*Not Enforceable)			
	Caterpillar G3:	Oxidation Catalyst and AFRC						
E10	Serial No.	N6W0059	Install Date:	9/20/2018	(*Enforceable)			

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.

Red Cedar stated in its Part 70 permit renewal 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. Red Cedar provided sufficient information, including EPA Tanks 4.0.9d calculations, to

verify any emissions from liquids in the tanks were insignificant. This data supports Red Cedar's claim that these units qualify as insignificant.

Table 2 – Insignificant Emission Units Red Cedar Gathering Company, Midway Compressor Station

Emission Unit ID	Amount	Description	Size	Units
D1	1	Tri-Ethylene Glycol (TEG) Dehydrator	60	MMscfd
TK-501	1	Used Oil Tank	400	bbl
TK-502	1	Dehy Still Vent Tank	60	bbl
TK-503→512	10	Lubricating Oil Storage Tank	500	gal
TK-513→522	10	Used Oil Storage Tank	500	gal
TK-523→526	4	Ethylene Glycol (EG) Storage Tank	500	gal
TK-527	1	TEG Storage Tank	500	gal
TK-528→530	3	Used Oil Storage Tank	500	gal
RB1	1	TEG Reboiler Heater	0.75	MMBtu/hr
H-101	1	Used Oil Storage Tank Heater	0.325	MMbtu/hr
H-102	1	Catalytic Heater	0.008	MMbtu/hr
H-103	1	Catalytic Heater	0.004	MMbtu/hr
FUG	N/A	Fugitive Emissions	N/A	N/A
C10	1	Ariel JGT/4 Compressor Unit – Serial Number: F-56746	N/A	N/A

## e. Facility Construction and/or Permitting History

The Midway Compressor Station (previously Spring Creek Compressor Station) became a major CAA Title V Source, as defined in 40 CFR 70.2, on February 25, 2010 when the sixth compressor engine began operation. A Part 71 Federal Operating Permit Application was received by the U.S. Environmental Protection Agency (EPA) on December 23, 2010. An amendment to the application was received by the EPA on January 12, 2012. A Tribal Operating Permit Application was submitted for the facility in March of 2013.

On May 1, 2014 Samson Resources Company (previous owner) and EPA entered into Consent Agreement Final Order (CAFO) #CAA-08-2013-0015. The emission limits in the CAFO provided enforceable recognition of the air-to-fuel ratio (AFR) control systems installed on each of the nine (9) engines operating at the facility at that time. Although Midway remains a major source subject to Title V, the enforceable emission limits in the CAFO reduce the emissions NO<sub>x</sub> emissions at the facility to synthetic minor levels with respect to the Prevention of Significant Deterioration (PSD) permit program at 40 CFR Part 52.

On March 11, 2015, EPA issued Samson Resources Company synthetic minor new source review permit # SMNSR-SU-000053-2013.001 to maintain, beyond the expiration date of the CAFO, Spring Creek's status as a synthetic minor source of NOx emissions with respect to the Prevention of Significant Deterioration (PSD) permit program. On May 30, 2018, Red Cedar requested EPA terminate permit # SMNSR-SU-00053-2017.002. EPA granted that request on July 25, 2018 and the permit was terminated.

On July 15, 2015, an initial Part 70 operating permit, V-SUIT-0054-2015.00, was issued to Samson Resources Company. Two administrative permit revisions were completed to reflect change of ownership from Samson Resources Company to Red Willow Production Company to the current owner, Red Cedar Gathering Company. On May 13, 2019, a significant permit revision was completed to reflect the addition of emission unit E10. A minor permit revision was completed on July 1, 2019 after a like kind engine swing occurred on emission unit E1. Although the engine is a like kind engine, the engine's manufacture date made the engine subject to new requirements. An administrative permit revision was completed on November 1, 2019 to correct emission standards. On XXXXX, a Part 70 renewal permit, V-SUIT-0054-2020.00, was issued.

#### 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 Midway Compressor Station was listed by Red Cedar in Forms "GIS", "PTE", and the various forms "EMISS" of the Part 70 operating permit renewal 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
Red Cedar Gathering Company, Midway Compressor Station

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	Regulated Air Pollutants								
Emission	in tpy								
Unit ID	NO <sub>X</sub>	voc	SO <sub>2</sub>	PM <sub>10</sub>	со	Lead	Total HAPs	Largest Single HAP (CH <sub>2</sub> O)	GHGS (CO <sub>2</sub> e mtpy)
E1	24.2	6.9	0.0	0.4	22.7	0.0	4.0	3.3	6,363.1
E2	24.2	6.9	0.0	0.4	22.7	0.0	4.0	3.3	6,363.1
E3	24.2	6.9	0.0	0.4	22.7	0.0	4.0	3.3	6,363.1
E4	24.2	6.9	0.0	0.4	22.7	0.0	4.0	3.3	6,363.1
E5	24.2	6.9	0.0	0.4	22.7	0.0	4.0	3.3	6,363.1
E6	24.2	6.9	0.0	0.4	22.7	0.0	4.0	3.3	6,363.1
E7	24.2	6.9	0.0	0.4	22.7	0.0	4.0	3.3	6,363.1
E8	24.2	6.9	0.0	0.4	22.7	0.0	4.0	3.3	6,363.1
E9	24.2	6.9	0.0	0.4	22.7	0.0	4.0	3.3	6,363.1
E10	6.7	16.9	0.0	0.5	37.8	0.0	6.4	5.6	7,202.5
Total IEUs	0.5	0.5	0.0	0.0	0.4	0.0	0.3	0.0	6,980.5
Total	225.0	79.5	0.0	4.6	242.5	0.0	42.7	35.3	71,450.9

# 2. Tribal Authority

Midway Compressor Station 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.

The 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.

Tribal Minor New Source Review Program: Minor sources of air pollution located within the Southern Ute Indian Reservation exterior boundaries must comply with either the "Federal Implementation Plan for Managing Air Emissions From True Minor Sources In Indian Country In The Oil And Natural Gas Production And Natural Gas Processing Segments Of The Oil And Natural Gas Sector" listed at 40 CFR §49.101 – 105 or the "Federal Minor New Source Review Program In Indian Country" listed at 40 CFR §49.151 – 164.

# 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 Red Cedar in its Part 70 permit renewal 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.

Midway is not a PSD named source. Therefore, the PTE threshold for determining PSD applicability for this source is 250 tpy for criteria pollutants. On March 11, 2015, EPA issued Samson Resources Company a synthetic minor new source review permit # SMNSR-SU-000053-2013.001 to create legally and practically enforceable reductions of NOx emissions to establish Midway as a synthetic minor source of NOx emissions with respect to PSD. The synthetic minor permit was terminated on July 25, 2019 as the emission limits exceed the equipment's potential. The potential to emit of regulated pollutants at this facility are currently below the major source threshold of 250 tpy. **Therefore, the requirements of PSD do not apply at this time.** 

#### **New Source Performance Standards (NSPS)**

<u>40 CFR Part 60</u>, 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.

The Midway Compressor Station is subject to 40 CFR Part 60, Subpart JJJJ and Subpart OOOOa. Therefore, the General Provisions of Part 60 apply as specified in the relevant subparts.

<u>40 CFR Part 60</u>, <u>Subpart Dc</u>: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. This rule applies to steam generating units with a maximum design heat capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr and commenced construction, modification, or reconstruction after June 9, 1989.

According to Red Cedar, there are no steam generating units with a maximum design heat input capacity between 10 and 100 MMBtu/hr at the Midway Compressor Station. **Therefore, Subpart Dc does not apply.** 

<u>40 CFR Part 60, Subpart GG</u>: 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 Red Cedar, there are no stationary gas turbines located at the Midway Compressor Station. **Therefore, Subpart GG does not apply.** 

<u>40 CFR Part 60</u>, 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 Red Cedar, the Midway Compressor Station has no storage vessels that were constructed prior to May 19, 1978. **Therefore, Subpart K does not apply.** 

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

According to Red Cedar, the Midway Compressor Station has no storage vessels that were constructed between May 18, 1978 and June 23, 1984. **Therefore, Subpart Ka does not apply.** 

<u>40 CFR Part 60, Subpart Kb</u>: Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984. This rule applies to storage vessels with a capacity greater than or equal to 75 cubic meters (~629 bbl).

According to Red Cedar, the Midway Compressor Station has no storage vessels for Volatile Organic Liquid that were constructed after July 23, 1984, with a capacity greater than or equal to 75m<sup>3</sup> or with a vapor pressure at or above 15kPa. **Therefore, Subpart Kb does not apply to this facility.** 

<u>40 CFR Part 60, Subpart KKK</u>: 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 Red Cedar, the Midway Compressor Station does not extract natural gas liquids from field gas or fractionate mixed natural gas liquids 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<sub>2</sub> 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<sub>2</sub>S) and carbon dioxide (CO<sub>2</sub>) from a sour natural gas stream. Sulfur recovery units are defined as process devices that recover sulfur from the acid gas (consisting of H<sub>2</sub>S and CO<sub>2</sub>) removed by a sweetening unit.

According to Red Cedar, the Midway Compressor Station has no sweetening or sulfur recovery units. **Therefore, Subpart LLL does not apply.** 

<u>40 CFR Part 60, Subpart JJJJ</u>: 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)).

Red Cedar provided the following information:

Table 4 - NSPS Subpart JJJJ Applicability Determination Red Cedar Gathering Company, Midway Compressor Station

Unit	Serial No	Unit Description	Fuel	Nameplate- Rated Horsepower	Commence Construction, Modification, or Reconstruction Date	Subpart JJJJ Trigger Date for Applicability- Manufactured on or after	Subject to Subpart JJJJ?
E1	WPW-02226	Caterpillar G3516LE 4SLB Compressor Engine	Natural Gas	1,340	5/18/2008	1/1/2008	Yes
E2	WPW00724	Caterpillar G3516LE 4SLB Compressor Engine	Natural Gas	1,340	2/5/2007	1/1/2008	No
Е3	4EK-00507	Caterpillar G3516LE 4SLB Compressor Engine	Natural Gas	1,340	6/1/1995	1/1/2008	No
E4	WPW00178	Caterpillar G3516LE 4SLB Compressor Engine	Natural Gas	1,340	5/22/2006	1/1/2008	No
E5	WPW00235	Caterpillar G3516LE 4SLB Compressor Engine	Natural Gas	1,340	6/30/2006	1/1/2008	No
E6	WPW00939	Caterpillar G3516LE 4SLB Compressor Engine	Natural Gas	1,340	5/31/2007	1/1/2008	No
E7	WPW01778	Caterpillar G3516LE 4SLB Compressor Engine	Natural Gas	1,340	10/30/2007	1/1/2008	No
E8	WPW01905	Caterpillar G3516LE 4SLB Compressor Engine	Natural Gas	1,340	1,340 12/19/2007		No
E9	WPW00938	Caterpillar G3516LE 4SLB Compressor Engine	Natural Gas	1,340	5/16/2007	1/1/2008	No
E10	N6W0059	Caterpillar G3516J 4SLB Compressor Engine	Natural Gas	1,380	3/28/2018	7/1/2007	Yes

According to Red Cedar, Emission units E2, E3, E4, E5, E6, E7, E8, and E9 are four-stroke lean-burn SI-ICE with a nameplate rated hp greater than 500 but less than 1,350, manufactured prior to the specified January 1, 2008 trigger date for this engine category, and therefore have no applicable requirements under the subpart. **Therefore, the requirements of Subpart JJJJ do not apply to emission units E2, E3, E4, E5, E6, E7, E8, or E9.** 

Emission unit E1 is a four-stroke lean burn SI-ICE with a nameplate hp greater than 500 but less than 1, 350 and was manufactured after the specified January 1, 2008 trigger date. Emission unit E10 is a four-stroke lean burn SI-ICE with a nameplate HP greater than 500 and was manufactured after July 1, 2007 trigger date. **Therefore, the requirements of Subpart JJJJ apply to unit E1 and E10.** 

Should Red Cedar propose to install any replacement engine that is subject to Subpart JJJJ for unit(s) E2, E3, E4, E5, E6, E7, E8, or E9, Red Cedar will not be allowed to use the off permit changes provision, and will be required to submit a minor permit revision application to incorporate Subpart JJJJ requirements into the permit.

<u>40 CFR Part 60, Subpart KKKK</u>: 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 Red Cedar, there are no stationary gas turbines located at Midway Compressor Station. Therefore, Subpart KKKK does not apply.

<u>40 CFR Part 60, Subpart OOOO</u>: 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<sub>2</sub> 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. The effective date for this subpart is October 15, 2012.

According to Red Cedar, the Midway Compressor Station is not a natural gas processing plant and does not have gas wells, storage vessels, continuous-bleed pneumatic devices, or compressors that have been constructed, modified, or reconstructed after August 23, 2011, and on or before September 18, 2015. **Therefore, Subpart OOOO does not apply.** 

<u>40 CFR Part 60, Subpart OOOOa</u>: Standards of Performance for Crude Oil and Natural Gas Facilities. This subpart establishes emission standards and compliance schedules for the control of methane, VOC, and SO2 emissions from affected facilities that commence construction, modification or reconstruction after September 18, 2015. Affected facilities and equipment under this subpart include wells, compressors, storage vessels, process unit equipment, sweetening units, pneumatic pumps and pneumatic controllers.

According to Red Cedar, the Midway Compressor Station is not a natural gas processing plant and does not have gas wells, storage vessels, or continuous-bleed pneumatic devices that have been constructed, modified, or reconstructed after September 18, 2015. However, the addition of emission unit E10 triggered requirements for that compressor (assembly of the Arial compressor (emission unit C10) was finished on June 5, 2018)) and for the collection of fugitive emissions components at a compressor station. **Therefore, the requirements of Subpart OOOOa apply.** 

#### **National Emission Standards for Hazardous Air Pollutants (NESHAP)**

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

As explained below, the Midway Compressor Station is subject to 40 CFR Part 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 of HAP, 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, located at a major source of HAP, 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 Midway Compressor Station

According to Red Cedar, the Midway 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 annual average benzene emissions from the TEG dehydration units at the facility are less than 0.9 megagrams. Per 40 CFR 63.764(e)(1)(ii), dehydration unit D10 is exempt from the 40 CFR 63.764(d) general requirements for area sources. **Therefore, Red Cedar must maintain records as specified in 63.774(d)(1).** 

<u>40 CFR Part 63</u>, <u>Subpart HHH</u>: 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 Red Cedar, the Midway Compressor Station is not part of the natural gas transmission and storage source category. **Therefore, Subpart HHH does not apply.** 

<u>40 CFR Part 63, Subpart ZZZZ (RICE MACT)</u>: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. This rule establishes national emission limitations and operating limitations for HAPs emitted from stationary spark ignition internal combustion engines (SI ICE) and stationary compression ignition internal combustion engines (CI ICE) at major and area sources of HAPs.

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	<b>Horse Power Rating</b>	New / Existing	Applicability	Trigger Date				
SI ICE – All <sup>1</sup>	≥ 500 HP	New	On or After:	12/19/2002				
SI ICE – 4SRB	> 500 HP	Existing	Before:	12/19/2002				
SI ICE – All <sup>1</sup>	≤ 500 HP	New	On or After:	6/12/2006				
SI ICE – All <sup>1</sup>	≤ 500 HP	Existing	Before:	6/12/2006				
CI ICE – All <sup>2</sup>	≥ 500 HP	New	On or After:	12/19/2002				
CI ICE – Non Emergency	> 500 HP	Existing	Before:	12/19/2002				
CI ICE – All <sup>2</sup>	≤ 500 HP	New	On or After:	6/12/2006				
CI ICE – All <sup>2</sup>	≤ 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

# Applicability of 40 CFR 63, Subpart ZZZZ to the Midway Compressor Station:

Unit	Serial Number	Unit Description	Fuel	Site Rated HP	Commenced Construction or Reconstruction Date	Subject to Subpart ZZZZ?
E1	WPW-02226	Caterpillar G3516LE 4SLB Compressor Engine	Natural Gas	1,251	5/18/2008	Yes
E2	WPW00724	Caterpillar G3516LE 4SLB Compressor Engine	Natural Gas	1,251	2/5/2007	Yes
E3	4EK-00507	Caterpillar G3516LE 4SLB Compressor Engine	Natural Gas	1,251	6/1/1995	No
E4	WPW00178	Caterpillar G3516LE 4SLB Compressor Engine	Natural Gas	1,251	5/22/2006	Yes
E5	WPW00235	Caterpillar G3516LE 4SLB Compressor Engine	Natural Gas	1,251	6/30/2006	Yes
E6	WPW00939	Caterpillar G3516LE 4SLB Compressor Engine	Natural Gas	1,251	5/31/2007	Yes
E7	WPW01778	Caterpillar G3516LE 4SLB Compressor Engine	Natural Gas	1,251	10/30/2007	Yes
E8	WPW01905	Caterpillar G3516LE 4SLB Compressor Engine	Natural Gas	1,251	12/19/2007	Yes
E9	WPW00938	Caterpillar G3516LE 4SLB Compressor Engine	Natural Gas	1,251	5/16/2007	Yes
E10	N6W0059	Caterpillar G3516J 4SLB Compressor Engine	Natural Gas	1,380	3/28/2018	Yes

According to Red Cedar, Midway is a major source as defined in §63.6675 of Subpart ZZZZ. Unit E3 is a four-stroke lean-burn (4SLB) stationary RICE >500 site-rated hp that commenced construction before December 19, 2002 and is therefore considered an existing 4SLB stationary RICE. In accordance with §63.6590(b)(3)(ii), existing 4SLB stationary RICE with a site rating of more than 500 brake hp located at a major source of HAP do not have to meet the requirements of this subpart and of subpart A of part 63. Units E1, E2, and E4 through E10 are four-stroke lean-burn (4SLB) stationary RICE > 500 site-rated hp that commenced constructed after December 19, 2002. As a result of this construction date, the units are considered new 4SLB stationary RICE.

Therefore, Units E1, E2, E4, E5, E6, E7, E8, E9, and E10 are subject to the requirements for new non-emergency 4SLB SI RICE >500 hp located at a major source of HAPs.

40 CFR Part 63, Subpart DDDDD (Boiler MACT (for major sources)): 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 operating limitations for HAPs emitted from new and existing industrial boilers, institutional boilers, commercial boilers, and process heaters that are located at major sources of HAPs. 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 Red Cedar, the Midway Compressor Station has no industrial, commercial, or institutional boilers as defined in this subpart. **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 Red Cedar, there are no industrial, institutional, or commercial boilers at Midway Compressor Station. **Therefore, Subpart JJJJJJ does not apply.** 

# **Compliance Assurance Monitoring (CAM) Rule**

<u>40 CFR Part 64</u>: Compliance Assurance Monitoring Provisions. According to 40 CFR 64.2(a), the CAM rule applies to 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);
  - " $\S64.2(b)(1)$ : 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: <u>Continuous compliance method</u> means a method, specified by the applicable standard or an applicable permit condition, which:
- (1) Is used to determine compliance with an emission limitation or standard on a continuous basis, consistent with the averaging period established for the emission limitation or standard; and
- (2) Provides data either in units of the standard or correlated directly with the compliance limit."
- 2) The unit uses a control device to achieve compliance with any such limit or standard; and
- 3) The unit has pre-control device emissions of the applicable regulated pollutant that are equal to or greater than 100% of the amount, in tons per year, required for a source to be classified as a major source.

According to Red Cedar, the Midway Compressor Station has no units with potential emissions equal to or greater than the major source thresholds for an applicable regulated pollutant. **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.

According to Red Cedar, the Midway 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**

<u>40 CFR Part 82, Subpart F</u>: Air Conditioning Units. According to Red Cedar, no maintenance, service, repair or disposal of any equipment containing Class I or Class II refrigerants chlorofluorocarbons (CFCs)) occurs at Midway Compressor Station. However, if Red Cedar 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.

<u>40 CFR Part 82</u>, Subpart H: Halon Fire Extinguishers. According Red Cedar, there are no halon fire extinguishers at Midway Compressor Station. However, should Red Cedar 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, Red Cedar 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: Mandatory Greenhouse Gas Reporting. 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:

by any other delivery service to:

Part 70 Permitting Contact Southern Ute Indian Tribe Environmental Programs Division Part 70 Program PO Box 737 MS #84 Ignacio, Colorado 81137 Part 70 Permitting Contact 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 <u>Durango Herald</u> on November 4, 2020 and in the <u>Southern Ute Drum</u> on November 6, 2020 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 <a href="https://www.southernute-nsn.gov/environmental-programs/air-quality/air-permitting/">www.southernute-nsn.gov/environmental-programs/air-quality/air-permitting/</a>, 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 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