

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



**AIR POLLUTION CONTROL
TITLE V PERMIT TO OPERATE**

In accordance with the provisions of Title V of the Clean Air Act (42 U.S.C. 7661-7661f) and Part 1, Article II of the Southern Ute Indian Tribe/State of Colorado Environmental Commission's Reservation Air Code (RAC) and applicable rules and regulations,

**Williams Four Corners, LLC
Ignacio Gas Plant**

is authorized to operate air emission units and to conduct other air pollutant emitting activities in accordance with the conditions listed in this permit.

This source is authorized to operate at the following location:

**Southern Ute Indian Reservation
SE ¼ of Section 35 SW ¼ of Section 36, T34N R9W
La Plata County, Colorado**

Terms not otherwise defined in this permit have the meaning assigned to them in the referenced regulations. All terms and conditions of the permit are enforceable by the Tribe and citizens under the Clean Air Act.

Brenda Jarrell, Air Quality Program Manager
Environmental Programs Division
Southern Ute Indian Tribe

**AIR POLLUTION CONTROL
TITLE V PERMIT TO OPERATE
Williams Four Corners, LLC
Ignacio Gas Plant**

Permit Number: V-SUIT-0027-2015.00 Issue Date: {TBD}
[Replaces EPA-issued Permit No.: V-SU-000027-2008.00] Effective Date: {TBD}
Expiration Date: {TBD}

The permit number cited above should be referenced in future correspondence regarding this facility.

Permit Issuance History

Date	Type of Action	Section Number and Title	Description of Action
November 19, 2003	Initial Permit Issued		# V-SU-0027-00.00
January 28, 2013	1 st Renewal Permit Issued		# V-SU-000027-2008.00
TBD	Initial Part 70 Permit Issued		# V-SUIT-0027-2015.00 Replaces EPA issued permit # V-SU-000027-2008.00

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Abbreviations and Acronyms

4SLB	Four-Stroke Lean-Burn
4SRB	Four-Stroke Rich-Burn
AFS	Air Facility System database
AQP	Southern Ute Indian Tribe's Air Quality Program
bbbl	Barrels
BACT	Best Available Control Technology
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CMS	Continuous Monitoring System (includes COMS, CEMS and diluent monitoring)
COMS	Continuous Opacity Monitoring System
CO	Carbon monoxide
CO ₂	Carbon dioxide
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
EPA	United States Environmental Protection Agency
gal	Gallon
GPM	Gallons per minute
H ₂ S	Hydrogen sulfide
HAP	Hazardous Air Pollutant
hr	Hour
ID	Identification Number
kg	Kilogram
lbs	Pounds
MACT	Maximum Achievable Control Technology
Mg	Megagram
MMBtu	Million British Thermal Units
MMSCFD	Million standard cubic feet per day
mo	Month
NESHAP	National Emission Standards for Hazardous Air Pollutants
NMHC	Non-methane hydrocarbons
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review
pH	Negative logarithm of effective hydrogen ion concentration (acidity)
PM	Particulate Matter
PM ₁₀	Particulate matter less than 10 microns in diameter
ppbvd	Parts per billion by volume, dry
ppm	Parts per million
ppmvd	Parts per million by volume, dry
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
psi	Pounds per square inch
psia	Pounds per square inch absolute
RAC	Southern Ute Indian Tribe/State of Colorado Environmental Commission's Reservation Air Code
RICE	Reciprocating Internal Combustion Engine
RMP	Risk Management Plan
scf	Standard cubic feet
scfm	Standard cubic feet per minute
SI	Spark Ignition
SO ₂	Sulfur Dioxide
SUIT	Southern Ute Indian Tribe
tpy	Ton(s) Per Year
Tribe	Southern Ute Indian Tribe
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds

List of Tables

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DRAFT

I. Source Information and Emission Unit Identification

I.A. Source Information

Parent Company Name: Williams Companies

Plant Name: Ignacio Gas Plant

Plant Location: SE ¼ of Section 35 SW ¼ of Section 36, T34N R9W
Latitude: N 37.145278
Longitude: W 107.784444

State: Colorado

Reservation: Southern Ute Indian Reservation

County: La Plata County

Responsible Official: General Manager, Vice President

SIC Code: 1321

AFS Plant Identification Number: 08-067-U0038

Other Clean Air Act Permits: EPA issued the first PSD permit to the facility in 1984. PSD Permit #PSD-SU-0027-01.00 was issued on December 22, 2010 to incorporate the requirements of the 1984 PSD permit and two Consent Decrees. This Part 70 permit replaces the facility's EPA-issued Part 71 permit (V-SU-000027-2008.00). There are no other CAA permits issued to this facility.

Description of Process:

The Ignacio Gas Plant provides compression, dehydration, sweetening, and natural gas liquids recovery for the San Juan Gathering Systems, an approximately 5,300 mile pipeline system gathering gas from the San Juan Basin. The San Juan Basin spans the southwest corner of Colorado and the northwest corner of New Mexico.

The Ignacio Gas Plant has the ability to condition approximately 500 to 650 million standard cubic feet (MMscfd) of field gas per day into saleable natural gas liquids and residue gas. The primary plant operations include inlet compression, dehydration, carbon dioxide removal, natural gas liquids removal, fractionation, and storage.

This facility consists of one turbo-expander cryogenic plant nominally rated at 450MMscfd and one NGL fractionation plant. Present total gas throughput averages close to 500 MMscfd. Of this, approximately

380 MMscfd is Trunk S gas that is processed in the cryogenic plant. About 90 MMscfd is from Trunk C that is dehydrated and then normally bypasses all other plant processes, including amine treating and the cryogenic plant.

There are two primary incoming pipelines to the plant. The 30" Trunk S from the San Juan Basin area of primarily New Mexico brings hydrocarbon liquid-rich gas for processing. During July 2011, the WMB and WPZ Boards approved a Four Corners Area Consolidation Project where the S-87 lateral was constructed from Dogie Station to Trunk S and now transfers historic Lybrook Plant volumes to the Ignacio Gas Plant. A filter separator and slug catcher are used to recover free liquids from the inlet stream. This protects the compressor turbines from foreign material and free liquids. Trunk C is a 16" line that brings in gas with a lower content of recoverable hydrocarbon liquids that contains about 6% carbon dioxide and must be treated or blended with the cryogenic process residue stream for the entire outlet stream to meet interstate pipeline quality specifications. This can be processed in the amine treater and/or cryogenic plant if necessary to achieve interstate pipeline gas quality specifications.

Primary plant operations include inlet compression turbines, the east glycol dehydration unit, the amine plant, the west glycol dehydration unit, the molecular sieve dehydrator, the turbo-expander plant (cryogenic removal of natural gas liquids), the fractionation plant, and recompression. Each of these plant operations is described in detail below.

Inlet Compression

Inlet compression at the facility is accomplished through an arrangement of compressors driven by stationary natural gas turbines. The turbines are 1-Solar Titan 130 Natural Gas-Fired Turbine (Trunk S), 1 – Solar Mars 100 Natural Gas-Fired Turbine (Trunk S) and 1 – Solar Taurus 70 Natural Gas-Fired Turbine (Trunk C) equipped with a heat recovery steam generator.

Phase 2 consisted of changes to the re-compression system at the facility involving changes in and around the existing Recompression Building. Two existing GE-M3142J A/T gas turbine re-compression units were replaced with 2-Solar Titan 130 Natural Gas-Fired Turbines equipped with heat recovery steam generators (HRSG). The Phase 2 Recompression System was put on line in May 2014.

Dehydration

Dehydration of Trunk C field gas is accomplished at the East Dehydrator. The East Dehydrator is equipped with a natural gas-fired reboiler rated at 0.75 MMBTU/hr. The East dehydration unit regenerator vent goes to the Callidus Thermal Oxidizer (ThOx). Emission Limits and Operating Requirements dictated by PSD-SU-00027-01.00 issued December 22, 2010 are applicable.

Initial dehydration of Trunk S field gas is accomplished at the West Dehydrator which removes excess moisture to decrease the burden on the molecular sieve dehydrator. The West Dehydrator is equipped with a steam-heated glycol reboiler. The West Dehydration unit regenerator vent's hydrocarbon slip is

controlled by the Flare. Emission limits and operating requirements dictated by PSD-SU-00027-01.00 issued December 22, 2010 may be applicable.

The molecular sieve dehydrator consists of four beds. Three beds are typically active while the fourth undergoes regeneration. Regeneration is accomplished by a natural gas-fired regeneration gas heater which is designated at 18.5 MMBtu/hr. the standby regeneration gas heater, which is also natural gas fired, is design-rated at 13.02 MMBtu/hr.

Carbon Dioxide Removal

Carbon dioxide removal occurs within the Amine Treatment System. Because the amine reboiler utilizes heat from plant steam, it is not a source of combustion emissions. However, hydrocarbons are released from the process during amine regeneration. These hydrocarbons, entrained in the carbon dioxide vent stream, are controlled by the Thermal Oxidizer. Emission Limits and Operating Requirements dictated by Prevention of Significant Deterioration (PSD) Permit No. PSD-SU-00027-01.00 issued December 22, 2010 are applicable.

Natural Gas Liquids Removal, Fractionation and Storage

At the Turbo-Expander Unit, the demethanizer separates methane from the natural gas liquids. The natural gas liquids are then sequentially separated into Ethane, Propane, Butane and Natural Gasoline at the fractionation plant. Variation in fractionation operations can occur based on market conditions. The demethanizer, deethanizer, depropanizer, and debutanizer reboilers utilize plant steam. Storage facilities are located within the facility and include:

Product	No. of Vessels	Vessel Size (gallons)	Pressure Rating (psig)
Y-Grade Bullets	5	25,200	700
Propane Bullets	10	42,000	250
Butane Spheres	2	260,232	85
Natural Gasoline Spheres	2	214,900	30
Condensate Bullets	2	41,581	85
LNG Bullet	1	38,500	185
LNG Bullet	1	55,000	90
Propane Bullet	1	90,000	240
Condensate Bullet	1	90,000	240

Loading of Natural Gas Liquids

Natural gas liquids are transported off-site via pipelines and tanker trucks. Y-grade (demethanized mix of natural gas liquids composition of which depends on a number of plant operating variables), is transported off-site via a natural gas liquids pipeline. The loading of the remaining natural gas liquids occurs through

loading racks - two (2)-propane loading racks, one (1)-butane loading rack, and two (2)-natural gasoline loading racks. These liquids can also be sent to the pipeline when excess at the plant is available.

Re-Compression

The methane stream leaving the Turbo-Expander Plant (TXP) is recompressed by two (2) Solar Titan 130 natural gas-fired turbine driven compressors equipped with Heat Recovery Steam Generators (HRSG).

Utilities

The following combustion sources at the Ignacio Plant are equipped with waste heat recovery units:

- Trunk C - Solar Taurus 70 w/ HRSG
- Recompression - Two (2)-Solar Titan 130s w/ HRSG
- Thermal Oxidizer w/ HRSG

These waste heat recovery units provide the Ignacio Plant with high pressure steam (600 psig) to drive a steam turbine generator set to produce plant electricity, as well as low pressure steam (60 psig). Supplemental low pressure steam is produced by the Vogt CL.VV-22.5 boilers. These units generally operate only when the re-compressors are not in operation. The plant includes a two-cell cooling tower.

Emission Control Equipment

VOCs may be released from various process units, storage tanks and leaking components. Such releases occur throughout the plant, and may be controlled or uncontrolled (fugitive). Controlled releases are collected and routed through a header to the smokeless flare or the flash gas system. The Ignacio Gas Plant operates a Callidus Technologies Thermal Oxidizer (TO) installed in 1999 and equipped with a forced draft combustion air blower and vent stack. The TO controls emissions from the East Dehydration Unit and the Amine Treatment System. Thermal Oxidizer Emission Limits and Operating Requirements dictated by Prevention of Significant Deterioration (PSD) Permit No. PSD-SU-00027-01.00 issued December 22, 2010 are applicable.

The uncontrolled releases are minimized through the implementation of a Leak Detection and Repair (LDAR) program. The amine treatment system requires an LDAR program at least as stringent as NSPS KKK for equipment leaks (this is a PSD BACT requirement as this unit is not subject to NSPS KKK). The Turbo-Expansion Unit is subject to NSPS KKK. Releases from the following sources are controlled through the flare system:

- Inlet separator (C Trunk)
- Inlet Gas Cooler
- West Dehydration Unit
- Fuel Gas Line and Filter

18	Pre-PSD (pre-1971)	None
19	1984 PSD (BACT)	LDAR Program
20	1998 NSPS KKK	LDAR Program
21	1 – Natural Gas Liquids Loadout System, one pipeline and five loading racks Installed: Pre-1972	Plant Flare (Emission Unit 23)
22	1 – Callidus Technologies 203313-00 thermal oxidizer Serial No.: 203313-000 Installed: 01/01/1999	None
23	1 – Zecco Plant Flare Serial No.: 17790 Installed: 2009	None
24	1 – Fluor Company Cooling Tower Serial No.: NA Installed: 01/01/1956	None
25	1 – Waukesha H866D Diesel Fired Water Pump Engine, 384 nameplate rated HP Serial No.: NA Installed: 01/01/1978	None
26	1 – Caterpillar 4W-3798 Diesel Fired Water Pump Engine, 305 nameplate rated HP Serial No.: 4260 Installed: 01/01/1985	None
27	1 – Solar Mars 100 Natural Gas-Fired Turbine (Trunk S) Serial No.: 1355M Installed: 02/01/2013	None
28	3 – Solar Titan 130 Natural Gas-Fired Turbine Serial No.: 0710L Installed: 02/01/2013 (Simple Cycle)	None
30	Serial No.: 0723L Installed: 02/01/2013 (Combined Cycle)	
31	Serial No.: 0724L Installed: 02/01/2013 (Combined Cycle)	
29	1 – Solar Taurus 70 Natural Gas-Fired Turbine (Trunk C) Serial No.: 0764B Installed: 02/01/2013	None
32	2 – Horton 42,000 gallon condensate storage tank Installed: 1956	None
33	Installed: 1956	
*10	2 – General Electric M3142J A/T Natural Gas-Fired Turbine Serial No.:282514 Installed: 1984	None
*11	Serial No.:282515 Installed: 1984	

*According to Williams, these units have been permanently removed from the facility. However, these units remain listed in the Part 70 permit as they are still listed in the PSD permit for this facility

**Table 2 – Insignificant Emission Units
Williams Four Corners LLC, Ignacio Gas Plant**

Emission Unit ID	Description	Size/Rating
N/A	2 – Lube oil storage tank	2,060 gal
N/A	1 – Diesel tank (river water pump building & fire water pump generators)	290 gal
N/A	1 – Diesel tank (river water pump building & fire water pump generators)	322 gal
N/A	1 – Spent lube oil storage tank	33,694 gal
N/A	1 – Lube oil storage tank	11,653 gal
N/A	1 – Diesel storage tank	517 gal
N/A	1 – Diesel storage tank	1,028 gal
N/A	1 – Gasoline storage tank	582 gal
N/A	1 – Petroleum solvent storage tank	509 gal
N/A	1 – Lube oil storage tank	6,300 gal
N/A	1 – Spent lube oil storage tank	2,000 gal
N/A	1 – Turbine 32 oil storage tank	8,820 gal
N/A	2 – Natural gasoline sphere – 30 psig	214,924 gal
N/A	2 – Natural gas liquid rundown pressurized tank – 85 psig	41,581 gal
N/A	1 – Recovery oil tank (T9103)	504 gal
N/A	1 – Recovery oil tank (T9104)	500 gal
N/A	1 – Ambitrol storage tank	748 gal
N/A	2 – Butane sphere – 85 psig	260,232
N/A	5 – Y-Grade bullet – 700 psig	22,321 gal
N/A	10 – Propane bullet – 250 psig	40,805 gal
N/A	1 – Sulfuric acid storage tank	4,200 gal
N/A	1 – Sulfuric acid storage tank	294 gal
N/A	1 – TEG storage tank	2,910 gal
N/A	1 – Raw water storage tank (West tank)	215,904 gal
N/A	1 – Raw water storage tank (East tank)	200,000 gal
N/A	1 – Optisphere HP55441 tank	400 gal
N/A	1 – Ambitrol storage tank	2,300 gal
N/A	1 – DI water storage tank	215,977 gal
N/A	2 – Raw water storage tank	21,000 gal
N/A	1 – Salt water storage tank	4,300 gal
N/A	1 – Depositrol PY5206 tank	400 gal
N/A	1 – Biomate MBC2881 tank	55 gal
N/A	1 – Cooling tower blend tank	2,970 gal
N/A	1 – Klaraid IC1172 tank	400 gal
N/A	1 – Cortol OS2001 tank	400 gal
N/A	1 – Steammate NA0120 tank	400 gal
N/A	3- Gas spec (amine) storage tank – 1 fresh, 1 mixed, and 1 regenerated	16,800 gal
N/A	1 – Gas Spec (amine) storage tank	4,200 gal
N/A	1 – Gas spec (amine) storage tank	20,000 gal
N/A	1 – Methanol storage tank	24,240 gal
N/A	1 – Turbine 32 oil storage tank	300 gal
N/A	1 – Gengard GN7110 tank	550 gal
N/A	1 – Bleach tank	330 gal
N/A	1 – Waste oil tank	630 gal
N/A	1 – TEG storage tank	719 gal
N/A	1 – Turbine 32 oil storage tank (steam turbine)	850 gal
N/A	1 – Klaraid IC1172 tank	500 gal
N/A	1 – Polyfloc AE1115 tank (inside clear water building)	120 gal

N/A	1 – Diesel storage tank	564 gal
N/A	1 – LNG pressurized bullet – 185 psig	38,513 gal
N/A	1 – LNG pressurized bullet – 90 psig	55,000 gal
N/A	1 – Waste water frac tank	16,800 gal
N/A	1 – Slop oil tank	4,200 gal
N/A	1 – Odorant storage tank	796 gal
N/A	1 – Propane bullet – 240 psig	90,000 gal
N/A	1 – Condensate bullet – 240 psig	90,000 gal
N/A	1 – Sodium Hydroxide tank	35 gal
N/A	1 – Lube oil storage tank	6,300 gal
N/A	2 – Lube oil storage tank	2,000 gal
N/A	1 – Lube oil/water storage tank	1,000 gal
N/A	1 – Sodium Hydroxide tank	300 gal

II. Site Specific Requirements

II.A. 40 CFR Part 60, Subpart A –Standards of Performance for New Stationary Sources, General Provisions [40 CFR 60.1 - 60.19, RAC 3-102]

This facility is subject to the requirements of 40 CFR Part 60, Subpart A. Notwithstanding conditions in this permit, the permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart A.

Requirements for Tanks

II.B. 40 CFR Part 60, Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction, or Modification Commenced After July 23, 1984 [40 CFR 60.110b – 60.117b, RAC 3-102]

This facility is subject to the requirements of 40 CFR Part 60, Subpart Kb. Notwithstanding conditions in this permit, the permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart Kb.

1. Affected Sources

- a. The following emission units are subject to 40 CFR Part 60, Subpart Kb:
 - i. 24,240 gallon methanol tank
 - ii. 33,694 gallon spent lube oil storage tank
 - iii. Two (2) – 21,000 gallon spent lube oil/water storage tanks
 - iv. Two (2) – 42,000 gallon produced water tanks

[40 CFR 60.110b]

2. Recordkeeping Requirements

- a. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel as specified in §60.110b(a).

[40 CFR 60.116b]

Requirements for Equipment Leaks

II.C. 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 [40 CFR 60.630 – 60.636, RAC 3-102]

This facility is subject to the requirements of 40 CFR Part 60, Subpart KKK. Notwithstanding conditions in this permit, the permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart KKK.

1. Affected Sources

- a. 40 CFR Part 60, Subpart KKK applies to the following emission units:
 - i. Each compressor in VOC or wet gas service; and
 - ii. The group of all equipment except compressors within a process unit

[40 CFR 60.630]

2. Standards

- a. The permittee shall comply with the requirements of §§60.482-1 (a), (b), and (d) and 60.482-2 through 60.482-10, except as provided in §60.633, as soon as practicable, but no later than 180 days after initial startup.
- b. The permittee may elect to comply with the requirements of §§60.483-1 and 60.483-2.
- c. The permittee may apply to the EPA Region 8 for permission to use an alternative means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to that achieved by the controls required in this subpart. In doing so, the owner of operator shall comply with requirements of §60.634 of this subpart.
- d. The permittee shall comply with the provisions of §60.485 of this subpart, except as provided in §60.633(f).

- e. The permittee shall comply with the provisions of §§60.486 and 60.487, except as provided in §§60.633, 60.635, and 60.636.
- f. The permittee shall use the following provision instead of §60.485(d)(1): Each piece of equipment is presumed to be in VOC service or in wet gas service unless the permittee demonstrates that the piece of equipment is not in VOC service or in wet gas service. For a piece of equipment to be considered not in wet gas service, it must be determined that the VOC content can be reasonably expected never to exceed 10.0 percent by weight. For a piece of equipment to be considered in wet gas service, it must be determined that it contains or contacts the field gas before the extraction step in the process. For determining the percent VOC content of the process fluid that is contained in or contacts a piece of equipment, procedures that conform to the methods described in ASTM E169-63, 77, or 93, E168-67, 77, or 92, or E260-73, 91, or 96 (incorporated by reference as specified in §60.17) shall be used.

[40 CFR 60.632]

3. Exceptions

- a. The permittee may comply with the following exceptions to the provisions of 40 CFR Part 60 Subpart VV:
 - i. For each pressure relief device in gas/vapor service, the requirements listed in §60.633(b).
 - ii. For sampling connection systems, the exemption listed in §60.633(c).
 - iii. For pumps in light liquid service, valves in gas/vapor and light liquid service, and pressure relief devices in gas/vapor service that are located at a nonfractionating plant that does not have the design capacity to process 283,200 standard cubic meters per day (10 million standard cubic feet per day) or more of field gas, the exemption listed in §60.633(d).
 - iv. For reciprocating compressors in wet gas service, the exemption listed in §60.633(f).
 - v. For flares used to comply with this subpart, the requirements specified in §60.633(g).
 - vi. For demonstrating whether a piece of equipment is in light or heavy liquid service, the requirements listed in §60.633(h).

[40 CFR 60.633]

4. Recordkeeping Requirements

- a. The permittee shall comply with the requirements of §60.486 of 40 CFR Part 60, Subpart VV.

[40 CFR 60.635(a)]

- b. The permittee shall comply with the requirements of §60.635(b) for pressure relief devices subject to the requirements of §60.633(b)(1).

[40 CFR 60.635(b)]

- c. The permittee must comply with the following requirement in addition to the requirement of §60.486(j) of 40 CFR Part 60, Subpart VV:

- i. Information and data used to demonstrate that a reciprocating compressor is in wet gas service to apply for the exemption in §60.633(f) shall be recorded in a log that is kept in a readily accessible location.

[40 CFR 60.635(c)]

5. Reporting Requirements

- a. The permittee shall comply with the requirements of §60.487 of 40 CFR Part 60, Subpart VV.

- b. The permittee shall include the following information in the initial semiannual report submitted to the Tribe in addition to the information required in §60.487(b)(1)-(4) of 40 CFR Part 60, Subpart VV:

- i. Number of pressure relief devices subject to the requirements of §60.633(b), except for those pressure relief devices designated for no detectable emissions under the provisions of §60.482-4(a) of 40 CFR Part 60, Subpart VV; and
- ii. Those pressure relief devices complying with §60.482(c) of 40 CFR Part 60, Subpart VV

- c. The permittee shall include the following information in all semiannual reports in addition to the information required in §60.487(c)(2) (i) through (vi) of 40 CFR Part 60, Subpart VV:

- i. Number of pressure relief devices for which leaks were detected as required in §60.332(b)(2); and
- ii. Number of pressure relief devices for which leaks were not repaired as required in §60.633(b)(3).

[40 CFR 60.636]

Requirements for SO₂ Emissions

II.D. 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 [40 CFR 60.640 – 60.648, RAC 3-102]

This facility is subject to the requirements of 40 CFR Part 60, Subpart LLL. Notwithstanding conditions in this permit, the permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart LLL.

[40 CFR 60.640(a)]

1. Recordkeeping and Reporting Requirements

- a. To certify that the facility is exempt from the control requirements of these standards, the permittee shall keep, for the life of the facility, an analysis demonstrating that the facility's design capacity is less than 2 LT/D of hydrogen sulfide expressed as sulfur.

[40 CFR 60.640(b) and 60.647(c)]

Requirements for Turbines

II.E. 40 CFR Part 60, Subpart KKKK – Standards of Performance for Stationary Combustion Turbines [40 CFR 60.4300 – 4420, RAC 3-102]

This facility is subject to the requirements of 40 CFR Part 60, Subpart KKKK. Notwithstanding conditions in this permit, the permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart KKKK.

1. Affected Sources

- a. 40 CFR Part 60, Subpart KKKK applies to the following emission units:
 - i. Unit 27, Solar Mars 100 natural gas-fired turbine
 - ii. Unit 28, Solar Titan 130 natural gas-fired turbine
 - iii. Unit 29, Solar Taurus 70 natural gas-fired turbine
 - iv. Unit 30, Solar Titan 130 natural gas-fired turbine
 - v. Unit 31, Solar Titan 130 natural gas-fired turbine

2. Emission Standards

- a. Units 27, 28, 29, 30, and 31 must meet the applicable emission limits for NO_x specified in Table 1 of 40 CFR Part 60, Subpart KKKK.
- b. If the permittee has two or more turbines that are connected to a single generator, each turbine must meet the emission limits for NO_x.

[40 CFR 60.4320]

- c. The permittee must meet the emission limits for Sulfur Dioxide (SO₂) by complying with the following standards specified in §60.4330:
 - i. The permittee must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO₂ in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output; or
 - ii. The permittee must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input. If the turbine simultaneously fires multiple fuels, each fuel must meet this requirement.

[40 CFR 60.4330(a)]

3. General Requirements

- a. The permittee must operate and maintain the stationary turbine(s), air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.
- b. When an affected unit with heat recovery utilizes a common steam header with one or more combustion turbines, the permittee shall:
 - i. Determine compliance with applicable NO_x emission limits by measuring the emissions combined with the emissions from the other unit(s) utilizing the common heat recovery unit; or
 - ii. Develop, demonstrate, and provide information satisfactory to EPA Region 8 on methods for apportioning the combined gross energy output from the heat recovery unit for each of the affected combustion turbines. The EPA Region 8 may approve such demonstrated substitute methods for apportioning the combined gross energy output measured at the steam turbine whenever the demonstration ensures accurate estimation of emissions related under this part.

[40 CFR 60.4333]

4. Continuous Compliance Requirements

- a. If using water or steam injection to control NO_x emissions, the permittee must comply with the requirements of §60.4335(a) to install, calibrate, maintain and operate a continuous monitoring

system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine when burning a fuel that requires water or steam injection for compliance; or

[40 CFR 60.4335(a)]

- b. As an alternative to the requirements listed in §60.4335(a), the permittee may use continuous monitoring as specified in §60.4335(b).

[40 CFR 60.4335(b)]

- c. If the permittee is not using water or steam injection to control NO_x emissions, the permittee must perform annual performance tests in accordance with §60.4400 to demonstrate continuous compliance. If the NO_x emission result from the performance test is less than or equal to 75 percent of the NO_x emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO_x emission limit for the turbine, you must resume annual performance tests; or,

[40 CFR 60.4340(a)]

- d. As an alternative to the requirement to perform annual performance testing as described in §60.4340(a), the permittee may install, calibrate, maintain, and operate one of the continuous monitoring systems specified in §60.4340(b); and

[40 CFR 60.4340(b)]

- e. If the permittee chooses to install, calibrate, maintain, and operate a continuous emission monitoring systems as described in §60.4340(b), the permittee must follow the requirements specified in §60.4345 for the continuous emission monitoring system equipment.

[40 CFR 60.4345]

5. Monitoring Requirements

- a. The permittee must follow the requirements specified in §60.4360 to monitor the total sulfur content of the fuel being fired in the turbine(s), except as provided in §60.4365 and specified in Condition 5.b. of this section below.

[40 CFR 60.4360]

- b. The permittee may elect not to monitor the total sulfur content of the fuel combusted in the turbine(s), if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO₂/J

(0.060 lb SO₂/MMBtu) heat input. The permittee must follow the requirements of either §60.4365(a) or §60.4365(b) to make the required demonstration.

[40 CFR 60.4365]

- c. If the permittee elects not demonstrate sulfur content using the options in §60.4365, and the fuel is supplied without intermediate bulk storage, the permittee must determine and record the sulfur content value of the gaseous fuel once per unit per operating day.

[40 CFR 60.4370(b)]

6. Reporting Requirements

- a. For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under this subpart, the permittee must submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.
- b. For each affected unit that performs annual performance tests in accordance with §60.4340(a), the permittee must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test.

[40 CFR 60.4375]

- c. For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that must be reported for NO_x are defined in §60.4380.

[40 CFR 60.4380]

- d. If the permittee chooses to monitor the sulfur content of the fuel, excess emissions and monitoring downtime are defined in §60.4385.

[40 CFR 60.4385]

- e. All reports required under §60.7(c) must be postmarked by the 30th day following the end of each 6 month period.

[40 CFR 60.4395]

7. Testing Requirements

- a. The permittee must conduct an initial performance test as required by 40 CFR 60.8 for measuring NO_x from Units 27, 28, 29, 30, and 31 within 60 days after achieving the maximum production rate at which the turbines will be operated, but not later than 180 days after initial

startup of the turbines, except as specified by §60.8(a)(1), (a)(2), (a)(3), and (a)(4) .
Subsequent performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test).

[40 CFR 60.4400(a), and 60.8]

- b. The permittee shall comply with the test methods and procedures of 40 CFR 60.4400 when conducting the initial performance test and subsequent performance tests for NO_x for Units 27, 28, 29, 30, and 31.

[40 CFR 60.4400]

- c. If the option to install and certify a NO_x – diluent CEMS under §60.4345 has been chosen, the permittee must follow the performance test requirements outlined in §60.4405.

[40 CFR 60.4405]

- d. If the option to monitor combustion parameters or parameters indicative of proper operation of NO_x emission controls in accordance with §60.4340 has been chosen, the appropriate parameters must be continuously monitored and recorded during each run of the initial performance test, to establish acceptable operating ranges, for purposes of the parameter monitoring plan for the affected unit, as specified in §60.4355.

[40 CFR 60.4410]

Requirements for Reciprocating Compressors

II.F. 40 CFR Part 60, Subpart OOOO – New Source Performance Standards for Crude Oil and Natural Gas Production, Transmission, and Distribution [40 CFR 60.5360 – 60.5430]

This facility is subject to the requirements of 40 CFR Part 60, Subpart OOOO. Notwithstanding conditions in this permit, the permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart OOOO.

1. Affected Sources

- a. The following emission units are affected sources for purposes of 40 CFR Part 60, Subpart OOOO:
 - i. Two (2) reciprocating compressors in VOC/wet gas service constructed after August 23, 2011.

[40 CFR 60.5365(c)]

2. Standards for Reciprocating Compressors [40 CFR 60.5385]

- b. The permittee must replace the reciprocating compressor rod packing according to Condition 2(a)(i) or 2(a)(ii):
 - i. Before the compressor has operated 26,000 hours. The number of hours of operation must be continuously monitored beginning upon initial startup of each compressor affected facility, or October 15, 2012, or the date of the most recent reciprocating compressor rod packing replacement, whichever is later; OR
 - ii. Prior to 36 months from the date of the most recent rod packing replacement, or 36 months from the date of startup
- c. The permittee must demonstrate initial compliance with standards that apply to reciprocating compressor affected facilities as required by §60.5410.
- d. The permittee must demonstrate continuance compliance with standards that apply to reciprocating compressor affected facilities as required by §60.5415.
- e. The permittee must perform the required notification, recordkeeping, and reporting as required by §60.5420.

II.G. 40 CFR Part 63, Subpart A - National Emission Standards for Hazardous Air Pollutants, General Provisions [40 CFR 63.1 - 63.16, RAC 4-103]

This facility is subject to the requirements of 40 CFR Part 63, Subpart A. Notwithstanding conditions in this permit, the permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart A.

[40 CFR 63.764(a)]

Requirements for Dehydrators

II.H. 40 CFR Part 63, Subpart HH - National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities [40 CFR 63.760 - 63.774, RAC 4-103]

This facility is subject to the requirements of 40 CFR Part 63, Subpart HH. Notwithstanding conditions in this permit, the permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart HH.

1. Affected Sources [40 CFR 63.760(a) through (e)]

- a. The following units are affected sources for purposes of 40 CFR Part 63, Subpart HH:
 - i. Each glycol dehydration unit as specified in §63.760(b)(1)(i)
 - ii. Each storage vessel with the potential for flash emissions
 - iii. The group of all ancillary equipment located at natural gas processing plants intended to operate in volatile hazardous air pollutant (VHAP) service as determined per the requirements of §63.772(a)

- iv. Compressors located at natural gas processing plants intended to operate in VHAP service as determined per the requirements of §63.772(a)

[40 CFR 63.760(b)(1)(i)(A)]

2. General Standards

- a. Table 2 of 40 CFR Part 63, Subpart HH specifies the General Provisions of 40 CFR Part 63, Subpart A that apply.

[40 CFR 63.764(a)]

- b. All reports required under 40 CFR Part 63, Subpart A shall be sent to the Tribe and Administrator at the following addresses:

Part 70 Program
Environmental Programs Division
Air Quality Program
P.O. Box 737 MS #84
Ignacio, CO 81137

and

Director, Air and Toxics Technical Enforcement Program
Office of Enforcement, Compliance and Environmental Justice
1595 Wynkoop Street, Denver, CO 80202-1129
Mail Code 8ENF-AT

Reports may be submitted on electronic media.

[40 CFR 63.764(b)]

- c. The permittee shall comply with 40 CFR Part 63, Subpart HH as follows:

- i. For each glycol dehydration unit process vent subject to this subpart, the permittee shall comply with the following:

1. The control requirements for glycol dehydration unit process vents specified in §63.765;
2. The monitoring requirements specified in §63.773; and
3. The recordkeeping and reporting requirements specified in §§63.774 and 63.775.

- ii. For each storage vessel with the potential for flash emissions subject to this subpart, the permittee shall comply with the following:

1. The control requirements for storage vessels specified in §63.766;
 2. The monitoring requirements specified in §63.773; and
 3. The recordkeeping requirements specified in §§63.774 and 63.775.
- iii. For ancillary equipment (as defined in 63.761) and compressors at a natural gas processing plant subject to this subpart, the permittee shall comply with the requirements for equipment leaks specified in 63.769.
- [40 CFR 63.764(c)]
- d. The permittee is exempt from the requirements of §63.764(c)(3) if the criteria listed in §63.764(e)(2)(i) or (ii) are met, except that the records of the determination of these criteria must be maintained as required in §63.774(d)(2).
- [40 CFR 63.764(e)]
- e. In all cases where the provisions of this subpart require an owner or operator to repair leaks by a specified time after the leak is detected:
- i. it is a violation of Subpart HH to fail to take action to repair the leak(s) within the specified time;
 - ii. If action is taken to repair the leak(s) within the specified time, failure of that action to successfully repair the leak(s) is not a violation of Subpart HH;
 - iii. However, if the repairs are unsuccessful and a leak is detected, the permittee shall take further action as required by the applicable provision of this subpart.
- [40 CFR 63.764(i)]
- f. At all times the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.
- [40 CFR 63.764(j)]
- g. The permittee shall comply with all provisions for affirmative defense for violations of emission standards during malfunctions as specified in §63.762.
- [40 CFR 63.762]

3. Control Equipment Requirements

- a. The permittee shall comply with the control equipment requirements as follows:
 - i. For each cover, the permittee shall comply with the cover requirements specified in §63.771(b);
 - ii. For each closed vent system, the permittee shall comply with the closed vent system requirements specified in §63.771(c);
 - iii. For each control device connected to a large dehydration unit process vent, the permittee shall comply with the applicable control device requirements specified in §63.771(d); and
 - iv. For each control device connected to a small dehydration unit process vent, the permittee shall comply with the applicable control device requirements specified in §63.771(f); and
 - v. For each process modification made to comply with glycol dehydration unit process vent standards at §63.765(c)(2), the permittee shall comply with the process modification standards specified in §63.771(e).

[40 CFR 63.771]

[Explanatory note: Pursuant to the definition of “control device” at §63.761, if the gas or vapor recovered from regulated equipment is used, reused, returned back to the process, or sold then the recovery system used, including piping, connections, and flow inducing devices is not considered a control device or a closed-vent system.]

4. Test Methods, Compliance Procedures and Compliance Determinations

- a. Determination of material VHAP or HAP concentration to determine the applicability of the equipment leak standards under this subpart (§63.769) shall be made in accordance with the requirements specified in §63.772(a). Each piece of ancillary equipment and compressors are presumed to be in VHAP service or in wet gas service unless an owner or operator demonstrates that the piece of equipment is not in VHAP service or in wet gas service.
- b. The permittee shall determine the glycol dehydration unit natural gas flow rate and benzene emissions in accordance with the requirements specified in §63.772(b).
- c. The permittee shall conduct the no detectable emissions test procedure in accordance with the requirements specified in §63.772(c).
- d. For each small dehydration unit, the permittee shall conduct test procedures and compliance demonstrations as specified in §63.772(d).

- e. The permittee shall conduct the control device performance test procedure in accordance with the requirements specified in §63.772(e).
- f. The permittee shall demonstrate compliance for the control device performance requirements in accordance with the requirements specified in §63.772(f).
- g. The permittee shall demonstrate compliance with the percent reduction performance requirements for condensers in accordance with the requirements specified in §63.772(g).
- h. The permittee may utilize the manufacturer performance test procedures in accordance with the requirements specified in §63.772(h) and demonstrate compliance in accordance with the requirements specified in §63.772(i) as an alternative to conducting a performance test as specified in §63.772(e).

[40 CFR 63.772]

5. Inspection and Monitoring Requirements

- a. For each control device whose model was tested under §63.772(h), the permittee shall develop an inspection and maintenance plan for each control device in accordance with the requirements specified in §63.773(b).
- b. For each closed-vent system or cover required by the permittee to comply with 40 CFR Part 63, Subpart HH, the permittee shall comply with the requirements specified in §63.773(c).
- c. For each control device required by the permittee to comply with 40 CFR Part 63, Subpart HH, the permittee shall comply with the requirements as specified in §63.773(b) or §63.773(d).

[40 CFR 63.773]

6. Record Keeping Requirements

- a. The permittee must keep the records required by the recordkeeping provisions of 40 CFR Part 63, Subpart A, as specified in Table 2 of 40 CFR Part 63, Subpart HH.
- b. The permittee shall maintain records as specified in §63.774(b).
- c. The permittee shall maintain records as specified in §63.774(c).
- d. For glycol dehydration units operating at the facility that meets the exemption criteria in §63.764(e)(1)(i) or §63.764(e)(1)(ii), the permittee shall maintain records as specified in §63.774(d)(1).

- e. For equipment operating at the facility that meets the exemption criteria in §63.764(e)(2)(i) or (ii), the permittee shall maintain the records specified in §63.774(d)(2).
- f. If using a flare to comply with 63.771(d), the permittee shall maintain records as specified in 63.774(e).
- g. The permittee shall maintain records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control equipment and monitoring equipment as specified in §63.774(g).
- h. For each control device whose model was tested under §63.772(h), the permittee shall maintain records as specified in §63.774(h).
- i. [40 CFR 63.774]

7. Reporting Requirements

- a. The permittee must submit the reports required by the reporting provisions of Subpart A as specified in Table 2 of 40 CFR Part 63, Subpart HH.
- b. The permittee shall submit the information specified in §63.775(b).
- c. *Notification of Compliance Status Report.* The permittee shall submit a Notification of Compliance Status Report as required under §63.9(h) within 180 days after the compliance date specified in §63.760(f). In addition to the information required under §63.9(h), the Notification of Compliance Status Report shall include the information specified in paragraphs (d)(1) through (12) of §63.775. This information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination of the three (3). If all of the information required under this paragraph has been submitted at any time prior to 180 days after the applicable compliance dates specified in §63.760(f), a separate Notification of Compliance Status Report is not required.
- d. *Periodic Reports.* The permittee shall prepare Periodic Reports in accordance with §63.775(e)(2) and submit them to the Tribe and the Administrator semi-annually by April 1st and October 1st of each year. The report due on April 1st shall cover the July 1st – December 31st reporting period of the previous calendar year. The report due on October 1st shall cover the January 1st – June 30th reporting period of the previous calendar year. The initial report shall cover the period from the effective date of this permit through the end of the relevant semi-annual reporting period.
- e. *Notification of process change.* Whenever a process change is made, or a change in any of the information submitted in the Notification of Compliance Status Report, the permittee shall

submit a report within 180 days after the process change is made or as a part of the next Periodic Report. The report shall include the requirements of §63.775(f).

- f. *Electronic Reporting.* Within 60 days after the date of completing each performance test as required to comply with 40 CFR Part 63, Subpart HH, the permittee must submit the results of the performance tests to EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx) in accordance with the provisions specified at §63.775(g).

[40 CFR 63.775]

Requirements for Engines

II.I. 40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants From Reciprocating Internal Combustion Engines [40 CFR 63.6580 - 63.6675, RAC 4-103]

This facility is subject to the requirements of 40 CFR Part 63, Subpart ZZZZ for existing emergency compression-ignition stationary reciprocating internal combustion engines (RICE) with a site rating of less than 500 brake horsepower located at a major source of hazardous air pollutants (HAPs).

Notwithstanding conditions in this permit, the permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart ZZZZ.

1. Affected Sources

- a. 40 CFR Part 63, Subpart ZZZZ applies to the following engines:
 - i. Unit 25, Waukesha H866D Diesel-fired emergency water pump engine, 384 HP
 - ii. Unit 26, Caterpillar 4W-3798 Diesel-fired emergency water pump engine, 305 HP

2. Maintenance and Operation Requirements

- a. The permittee must comply with the following maintenance and operating requirements of Table 2c of 40 CFR Part 63, Subpart ZZZZ:
 - i. Except during periods of startup:
 - 1. Change oil and filter every 500 hours of operation or annually, whichever comes first; or utilize an oil analysis program as described in §63.6625(i) in order to extend the oil change requirement.
 - 2. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first

and replace as necessary

3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

ii. During periods of startup:

1. Minimize the engine's time at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which the non-startup emission limitations apply.

[40 CFR 63.6602, 40 CFR 63.6625(i), and Table 2c. of 40 CFR Part 63, Subpart ZZZZ]

- b. The permittee shall comply with the emission limitations, operating limitations, and other requirements in 40 CFR Part 63, Subpart ZZZZ at all times.

[40 CFR 63.6605(a)]

- c. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions to the levels required by 40 CFR Part 63, Subpart ZZZZ. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if the required levels have been achieved. Determination of whether such operations and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.6605(b)]

3. Continuous Compliance and Reporting Requirements

- a. The permittee must continuously comply with the following maintenance and operating requirements of Table 6 of 40 CFR Part 63, Subpart ZZZZ:

- i. Operate and maintain the stationary RICE according to the manufacturer's emission related operation and maintenance instructions; or
- ii. Develop and follow your own maintenance plan, which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions

[40 CFR 63.6625(e) and Table 6 of 40 CFR Part 63, Subpart ZZZZ]

- a. For emission units 25 and 26, the permittee must install a non-resettable hour meter if one is not already installed.

[40 CFR 63.6625(f)]
- b. The permittee must report each instance in which an emission or operating limitation was not met. These instance are deviations from the emission and operating limitations and must be reported according to reporting requirements of §63.6650.

[40 CFR 63.6640(b)]
- c. The permittee must also report each instance in which the requirements in Table 8 of 40 CFR Part 63, Subpart ZZZZ, were not met.

[40 CFR 63.6640(e)]
- d. For emission units 25 and 26, the permittee must follow the operation requirements specified in §63.6640(f) in order to be considered an emergency engine.

[40 CFR 63.6640(f)]

4. Record Keeping

- a. The permittee must keep the following records to comply with the emission and operating limitations:
 - i. A copy of each notification and report that was submitted to comply with 40 CFR Part 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirements of §63.10(b)(2)(xiv);
 - ii. Records of the occurrence and duration of each malfunction of operation (i.e. process equipment) or the air pollution control and monitoring equipment;
 - iii. Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii);
 - iv. Records of all required maintenance performed on the air pollution control equipment; and
 - v. Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 CFR 63.6655(a)]
- b. For each CEMS or CPMS, the permittee must keep the records specified in 40 CFR 63.6655(b)(1) through (3)

[40 CFR 63.6655(b)]

- c. The permittee must keep the records required in Table 6 of this subpart to show continuous compliance with each emission limitation, operating limitation, and work or management practice that applies.

[40 CFR 63.6655(d)]

- d. The permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the unit and after-treatment control device (if any) was operated and maintained according to the permittee's maintenance plan.

[40 CFR 63.6655(e)]

- e. The permittee must follow the requirements specified in §63.6655(f)

[40 CFR 63.6655(f)]

- f. Records must be in a form suitable and readily available for expeditious review.

[40 CFR 63.6660(a) and 40 CFR 63.10(b)(1)]

- g. The permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660(b) and 40 CFR 63.10(b)(1)]

- h. The permittee must keep each record readily accessible in hard copy or electronic form at the Ignacio Gas Plant site for five (5) years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

[40 CFR 63.10(b)(1), 40 CFR 63.10(f), and 40 CFR 63.6660(c)]

Requirements for Boilers and Process Heaters

[Explanatory Note: The 40 CFR Part 63, Subpart DDDDD compliance date for Units 12, 12a, 13, and 14 is January 31, 2016. Because this draft permit is expected to be issued prior to this compliance date, the requirements of 40 CFR Part 63, Subpart DDDDD have been included in this permit]

II.J. 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR 63.7480 - 63.7575]

This facility is subject to the requirements of 40 CFR Part 63, Subpart DDDDD. Notwithstanding conditions in this permit, the permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart DDDDD.

1. Affected Sources [40 CFR 63.7490(a) through (e)]

- a. The following existing process heaters and industrial boilers as defined in 63.7575 are affected sources for purposes of 40 CFR Part 63, Subpart DDDDD:
 - i. Unit 12, C.E. Natco molecular sieve regeneration process heater, 18.5 MMBtu/hr maximum design heat input.
 - ii. Unit 12a, Struthers molecular sieve regeneration process heater, 13.02 MMBtu/hr maximum design heat input.
 - iii. Unit 13, Vogt low pressure steam production industrial boiler, 18.0 MMBtu/hr maximum design heat input.
 - iv. Unit 14, Vogt low pressure steam production industrial boiler, 18.0 MMBtu/hr maximum design heat input.

[40 CFR 63.7490(a)(1)]

2. General Standards [40 CFR 63.7500]

- a. Each existing process heater must comply with the applicable requirements of this subpart no later than January 31, 2016.
- b. The Permittee shall comply with the emission limitations, work practice standards, and operating limitations specified in §63.7500.
- c. The standards shall apply at all times the affected unit is operating, except during periods of startup and shutdown during which time you must comply only with Table 3 to this subpart.

[40 CFR 63.7500(a) and (f)]

3. Initial Compliance Requirements [40 CFR 63.7510]

- a. The Permittee must demonstrate compliance with all applicable requirements as specified in §63.7505.
- b. The Permittee must conduct the initial performance tests or other compliance demonstrations requirements as specified in §63.7510.
- c. The Permittee must conduct subsequent performance tests, fuel analysis or tune-ups as specified in §63.7515.

- d. For each performance test, the Permittee must use the stack tests and procedures requirements specified in §63.7520.
- e. For each fuel analyses and fuel specifications, the Permittee must use the procedures specified in §63.7521.
- f. If the averaged emission rates are not more than 90% of the applicable emission limit for existing units, the Permittee may demonstrate compliance according to the procedures outlined in §63.7522.
- g. The Permittee must meet the monitoring, installation, operation, and maintenance requirements specified in §63.7525.
- h. The Permittee must demonstrate initial compliance with the emission limitations, fuel specifications, and work practice standards that apply as specified in §63.7530.
- i. The Permittee may use efficiency credits to demonstrate compliance in accordance with the procedures specified in §63.7533.

4. Continuous Compliance Requirements [40 CFR 63.7535]

- a. For each CMS, the Permittee must monitor and collect data in accordance with the procedures specified in §63.7535 and the site-specific monitoring plan required by §63.7505(d).
- b. The Permittee must demonstrate continuous compliance with the emission limitations, fuel specifications, and work practice standards in accordance with §63.7540.
- c. For each unit complying with the emission averaging provisions specified in §63.7522, the Permittee must demonstrate continuous compliance in accordance with §63.7541.

5. Notifications, Reports, and Records [40 CFR 63.7545]

- a. The Permittee must submit notifications as specified in §63.7545.
- b. The Permittee must submit reports as specified in §63.7550.
- c. The Permittee must keep records as specified in §63.7555.
- d. The Permittee must keep the records in the format and for the duration as specified in §63.7560.

Prevention of Significant Deterioration (PSD) Requirements

II.K. PSD Permit Requirements [PSD permit #PSD-SU-00027-01.00 and RAC 2-110(6) and 2-110(7)]

This source is subject to the requirements of federal PSD permit #PSD-SU-00027-01.00, issued by the EPA on December 22, 2010. Notwithstanding the conditions in this permit, the permittee shall comply with all applicable provisions in the PSD permit.

1. Requirements for the 10,700 bhp Turbines (Unit 10 and Unit 11)

- a. Turbine Compressor Unit 10 and Turbine Compressor Unit 11 shall each be limited to a maximum NO_x concentration in the exhaust of 138 parts per million (percent by volume at 15% oxygen and on a dry basis).
- b. Turbine Compressor Unit 10 and Turbine Compressor Unit 11 shall comply with the applicable requirements of 40 CFR 60, Subpart GG.
- c. Stack testing, when required, shall be performed on Turbine Compressor Unit 10 and Turbine Compressor Unit 11 according to Method 20 of 40 CFR 60, Appendix A to demonstrate compliance with the emission limits.
- d. A test protocol outlining a plan for compliance demonstration shall be submitted to EPA for approval 45 days in advance of any scheduled testing.
- e. All performance testing required pursuant to the PSD permit shall be conducted in accordance with the time schedules and procedures contained in 40 CFR 60.8 performance test results shall be submitted to EPA not more than 45 days after the testing date.
- f. At all times, including periods of startup, shutdown, and equipment malfunction, the permittee shall maintain and operate Turbine Compressor Unit 10 and Turbine Compressor Unit 11 in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being use will be based on information available to the Administrator, which may include, but not be limited to, monitoring results, review of operating and maintenance procedures, and inspection of the permitted facility.
- g. The permittee shall notify EPA not more than 48 hours after discovery (or as soon as possible) of excess emissions during periods of startup, shutdown, equipment malfunctions, or process upset. Not more than 10 days after discovery, all of the following shall be provided to EPA in writing:

- i. The identity of the stack or other emission points where excess emissions occurred;
- ii. The magnitude of excess emissions expressed in terms of the emission limits;
- iii. Pertinent operating data during the time of the upset;
- iv. The time and duration of the excess emissions;
- v. The identity of the equipment or process causing the upset and the suspected reasons for the upset;
- vi. Steps and procedures taken during the upset period to minimize excess emissions; and
- vii. Steps and procedures take or anticipated to be taken to prevent recurrence of the upset conditions.
- h. If the Administrator determines that the information submitted for excess emissions does not evidence malfunction or upset conditions, failure to meet limitations described in the PSD permit will be considered a violation of the PSD permit.

2. Requirements for the Amine Treatment System (Unit 17)

- a. The amine treatment system is subject to the major modification of a major stationary source provision of the PSD regulation. BACT for the amine treatment system is as follows:
 - i. A Thermal Oxidizer with natural gas as supplemental fuel shall be operated such that it is capable of destroying VOCs emitted from the amine regenerator still vent by at least 99%; and
 - ii. A Leak Detection and Repair (LDAR) program to control emissions from equipment leaks from various components (valves, seals, etc.) the LDAR program shall, at a minimum, conform to 40 CFR 60, Subpart KKK – Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants (NSPS KKK). The amine treatment system is not specifically subject to these standards, but they are specified as part of the BACT requirements. These components shall be clearly marked, and identified as subject to BACT requirements.
- b. The emission control devices shall be inspected, monitored, maintained, and operated as per the recommendations of the manufacturer to ensure on-going satisfactory performance. The operating and maintenance plan for all control equipment, control practices, and records of

such inspection, monitoring, maintenance, and operation shall be maintained at the site, and made available for review upon request.

- c. Visible emissions shall not exceed 20% opacity during normal operation of the amine treatment system. During periods of startup, process modification, or adjustment of control equipment, visible emissions shall not exceed 30% opacity for more than six (6) minutes in any consecutive 60 minutes. Opacity shall be measured by EPA Method 9.
- d. Volatile organic compound (VOC) emissions of air pollutants attributable to equipment leaks at the amine treatment system shall not exceed 0.72 tons per year (tpy). Compliance with the annual limits shall be determined on a rolling 12-month total. By the end of each month, a new twelve month total shall be calculated based on the previous 12 months' data. The permittee shall calculate monthly emissions and keep a compliance record on site for review.
- e. The amine treatment system shall be limited to the throughputs as listed below. During the first 12 months of operation, compliance with both the monthly and yearly production limitations shall be required. After the first 12 months of operation, compliance with only the yearly limitation shall be required. Compliance with the yearly production limits shall be determined on a rolling 12 month total. Monthly records shall be maintained by the permittee and made available for inspection upon request:
 - i. Processing (inlet flow) of natural gas shall not exceed 15,208 MMscf per month;
 - ii. Processing (inlet flow) of natural gas shall not exceed 182,500 MMscf per year; and
 - iii. MDEA (a mixture of alkanolamines, as absorbent to remove carbon dioxide from the natural gas) circulation rate shall not exceed 2,500 gallons per minute.
- f. At all times, including periods of startup, shutdown, and equipment malfunction, the permittee shall maintain and operate the amine treatment system in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator, which may include, but not be limited to, monitoring results, review of operating and maintenance procedures, and inspection of the permitted facility.
- g. The permittee shall notify EPA and the Tribe not more than 48 hours after discovery (or as soon as possible) of excess emissions during periods of startup, shutdown, equipment malfunctions, or process upset. Not more than 10 days after discovery, all of the following shall be provided to EPA and the Tribe in writing:

- i. The identity of the stack or other emission points where excess emissions occurred;
- ii. The magnitude of excess emissions expressed in terms of the emission limits;
- iii. Pertinent operating data during the time of the upset;
- iv. The time and duration of the excess emissions;
- v. The identity of the equipment or process causing the upset and the suspected reasons for the upset;
- vi. Steps and procedures taken during the upset period to minimize excess emissions; and
- vii. Steps and procedures taken or anticipated to be taken to prevent recurrence of the upset conditions.
- h. If the Administrator determines that the information submitted for excess emissions does not evidence malfunction or upset conditions, failure to meet limitations described in the PSD permit will be considered a violation of the PSD permit.
- i. The permittee shall submit to EPA Region 8 and the Tribe the record keeping format that outlines how it is maintaining compliance on an ongoing basis with the requirements for the amine treatment system.

3. Requirements for the Turbo-Expansion Unit

- a. The turbo-expansion unit is subject to the provisions of major modification of a major stationary source. A review under PSD regulations has determined that BACT for VOC equipment leaks from the turbo-expansion unit is an LDAR program. The LDAR program shall, at a minimum, conform to NSPS KKK. An overall control efficiency of 50.2% is assessed for this LDAR program.
- b. The turbo-expansion unit is subject to NSPS KKK
- c. The emission control devices shall be inspected, monitored, maintained, and operated as per the recommendations of the manufacturer to ensure on-going satisfactory performance. The operating and maintenance plan for all control equipment, control practices, and records of such inspection, monitoring, maintenance, and operation shall be maintained at the site, and made available for review upon request.
- d. At all times, including periods of startup, shutdown, and equipment malfunction, the permittee shall maintain and operate the turbo-expansion unit in a manner consistent with good air

pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator, which may include, but not be limited to, monitoring results, review of operating and maintenance procedures, and inspection of the permitted facility.

- e. Records of startups, shutdowns, and malfunctions shall be maintained, as required under §60.7.
- f. Excess Emissions and Monitoring System Performance Reports shall be submitted as required under §60.7.
- g. Performance tests shall be conducted as required under §60.8.
- h. The permittee shall submit to EPA Region 8 and the Tribe the record keeping format that outlines how it is maintaining compliance on an ongoing basis with the requirements for the turbo-expansion unit.

4. Requirements for the West Dehydrator (Unit 15)

- a. The west dehydrator is subject to the major modification of a major stationary source provision of the PSD regulation. A review under PSD regulations has determined that BACT for VOC emissions is a flare (Unit 23) with emissions not to exceed 6.7 tpy.
- b. The west dehydrator shall be operated in accordance with the manufacturer's recommendations and specifications, except as otherwise provided in the PSD permit.
- c. The hours of operation of the west dehydrator shall be recorded and used with other available information to quantify and report annual emissions.
- d. A model run using the most recent version of GRI-Glycalc and a current extended gas analysis shall be performed annually to determine and report compliance with the allowable emission rate.
- e. During any period when the flare is not operational or when emissions from the west dehydrator are not routed to the flare, the permittee shall record and report such operations to EPA and the Tribe. The requisite report shall be made on a semi-annual basis and shall describe the periods of the time that the west dehydrator operated and emissions were not controlled by the flare, the reason why the flare was not operating, and the actions taken by the permittee to allow it to resume operation of the flare.

- f. At all times, including periods of startup, shutdown, and equipment malfunction, the permittee shall maintain and operate the west dehydrator in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator, which may include, but not be limited to, monitoring results, review of operating and maintenance procedures, and inspection of the permitted facility.
- g. The permittee shall notify EPA and the Tribe not more than 48 hours after discovery (or as soon as possible) of excess emissions during periods of startup, shutdown, equipment malfunctions, or process upset. Not more than 10 days after discovery, all of the following shall be provided to EPA and the Tribe in writing:
 - i. The identity of the stack or other emission points where excess emissions occurred;
 - ii. The magnitude of excess emissions expressed in terms of emission limits;
 - iii. Pertinent operating data during the time of the upset;
 - iv. The time and duration of the excess emissions;
 - v. The identity of the equipment or process causing the upset and the suspected reasons for the upset;
 - vi. Steps and procedures taken during the upset period to minimize excess emissions; and
 - vii. Steps and procedures taken or anticipated to be taken to prevent recurrence of the upset conditions.
- h. If the Administrator determines that the information submitted for excess emissions does not evidence malfunction or upset conditions, failure to meet limitations described in the PSD permit will be considered a violation of the PSD permit.
- i. The permittee shall submit to EPA Region 8 and the Tribe the record keeping format that outlines how it is maintaining compliance on an ongoing basis with the requirements for the west dehydrator.

5. Requirements for the East Dehydrator (Unit 16)

- a. The east dehydrator is subject to the major modification of a major stationary source provision of the PSD regulation. A review under PSD regulations has determined that BACT for VOC

emissions is with a thermal oxidizer (Unit 22) that currently receives and controls the emissions from the amine treatment system. The emission limits for the thermal oxidizer when both the amine treatment system and the east dehydrator is operating shall not exceed the following:

VOCs	1.16 lbs per hour and 5.1 tons per year
Oxides of Nitrogen (NO _x)	8.8 lbs per hour and 38.52 tons per year
Carbon Monoxide (CO)	5.35 lbs per hour and 23.45 tons per year
Sulfur Oxides (SO ₂)	16.0 lbs per hour and 37.1 tons per year

- b. The fuel flow to the thermal oxidizer shall not exceed 55 MMBtu/hr and the flow shall be monitored by a continuous recording device.
- c. The east dehydrator shall be operated in accordance with the manufacturer's recommendations and specifications, except as otherwise provided in the PSD permit.
- d. Except as provided below, within 60 days of the date that the east dehydrator commences operation, the permittee shall perform a stack test to determine if the emissions from the thermal oxidizer meet the emission limits set forth.
 - i. The stack test shall be performed using EPA approved methods. The permittee shall submit a testing protocol to the EPA for comment 30 days before the stack test. This protocol also shall serve as notification to the EPA of the pending test in order to allow a representative to be present at the test.
 - ii. If EPA objects to the test protocol or any part of it, the permittee's obligation to conduct the stack test is suspended until the EPA and the permittee agree on the terms of a test protocol. Once agreement is reached, the permittee shall conduct the stack test within 45 days.
 - iii. The amine treatment system and the east dehydrator shall operate at 90% or more of the permitted facility's current operation capacity for the test.
 - iv. The results of the stack test shall be reported to the EPA and the Tribe within 45 days of the date of the test.
- e. A stack test shall be performed annually to determine the effectiveness of the thermal oxidizer in controlling VOC emissions. As part of the stack test, the permittee shall measure the inlet flow and outlet flow of the thermal oxidizer in order to confirm the stated destruction of the

control unit. The stack test also will be used to determine if the thermal oxidizer is controlling emissions at or below the permitted emission rate.

The results of this test shall be provided to the EPA and the Tribe in an annual report. Thermal oxidizer hours of operation shall be recorded and used with the results of the annual stack tests to quantify and report annual emissions to the EPA.

- f. During any period when the thermal oxidizer is not operational and the east dehydrator and the amine treatment system continue to operate, the permittee shall report such operations to the EPA and the Tribe. The requisite report shall be made on a semi-annual basis and shall describe the periods of time that the east dehydrator and the amine treatment system operated and emissions were not controlled by the thermal oxidizer, the reason why the thermal oxidizer was not operating and the actions taken by the permittee to allow it to resume operation of the thermal oxidizer.
- g. At all times, including periods of startup, shutdown, and equipment malfunction, the permittee shall maintain and operate the east dehydrator in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator, which may include, but not be limited to, monitoring results, review of operating and maintenance procedures, and inspection of the permitted facility.
- h. The permittee shall notify EPA and the Tribe not more than 48 hours after discovery (or as soon as possible) of excess emissions during periods of startup, shutdown, equipment malfunctions, or process upset. Not more than 10 days after discovery, all of the following shall be provided to EPA and the Tribe in writing:
 - i. The identity of the stack or other emission points where excess emissions occurred;
 - ii. The magnitude of excess emissions expressed in terms of emission limits;
 - iii. Pertinent operating data during the time of the upset;
 - iv. The time and duration of the excess emissions;
 - v. The identity of the equipment or process causing the upset and the suspected reasons for the upset;
 - vi. Steps and procedures taken during the upset period to minimize excess emissions; and

- vii. Steps and procedures taken or anticipated to be taken to prevent recurrence of the upset conditions.
- i. If the Administrator determines that the information submitted for excess emissions does not evidence malfunction or upset conditions, failure to meet limitations described in the PSD permit will be considered a violation of the PSD permit.
- j. The permittee shall submit to EPA Region 8 and the Tribe the record keeping format that outlines how it is maintaining compliance on an ongoing basis with the requirements for the east dehydrator.
- k.

Compliance Assurance Monitoring Requirements

II.L. 40 CFR Part 64 Compliance Assurance Monitoring

- a. The CAM requirements specified at 40 CFR Part 64 apply to the following emission units with respect to the VOC emission limits identified in the PSD Permit Requirements section of this permit.
 - i. Unit 15 - West Dehydration System (controlled by Flare Unit 23)
 - ii. Unit 16 - East Dehydration System (controlled by Thermal Oxidizer Unit 22)
 - iii. Unit 17 – Amine Sweetening System (controlled by Thermal Oxidizer Unit 22)
- b. The permittee shall follow the CAM plan provided as an appendix to this permit for Unit 15 (West Dehydration System), Unit 16 (East Dehydration System), and Unit 17 (Amine Sweetening System).
- c. Excursions, as defined in the CAM plan, shall be reported in accordance with the Facility-Wide Reporting Requirements section of this permit.
- d. Operation of Approved Monitoring
 - i. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[40 CFR 64.2(a)]

[40 CFR 64.7(b)]

ii. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of these CAM requirements, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[40 CFR 64.7(c)]

iii. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

[40 CFR 64.7(d)(1)]

iv. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR 64.7(d)(2)]

v. After approval of the monitoring required under the CAM requirements, if

the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the Tribe and, if necessary submit a proposed modification for this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 CFR 64.7(e)]

- e. Based on the results of a determination made under §64.7(d)(2) and Condition 4.d. above, the Tribe or EPA may require the permittee to develop and implement a Quality Improvement Plan (QIP) in accordance with §64.8.

[40 CFR 64.8(a)]

- f. The permittee shall submit monitoring reports in accordance with §64.9(a) for CAM requirements on a semi-annual basis to the Tribe as specified in the Facility-Wide Reporting Requirements section in this permit.

[40 CFR 64.9(a)]

- g. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written QIP required pursuant to Condition e. above and any activities undertaken to implement at QIP, and other supporting information required to be maintained under Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions as specified in §64.9(b).

[40 CFR 64.9(b)]

Consent Decree Requirements

II. M. Requirements of Consent Decree Case No. 1:11-cv-02846-PAB-CBS

This source is subject to the requirements of Consent Decree Case No. 1:11-cv-02846-PAB-CBS (Consent Decree), effective on December 15, 2011. Notwithstanding the conditions in this permit, the permittee shall comply with all applicable provisions of the Consent Decree.

1. Enhanced LDAR Program

- a. The permittee shall conduct annual enhanced LDAR surveys a minimum of ten calendar months apart.

- b. EPA shall be notified in writing of the specific dates at least 30 days prior to all scheduled enhanced LDAR surveys. If an enhanced LDAR survey cannot be performed on the scheduled date, the permittee shall notify EPA at least one week prior and reschedule the survey for a later date that still meets the frequency requirements described in Paragraph 5 of the Consent Decree.
- c. The permittee shall keep records of enhanced LDAR surveys and repairs pursuant to the requirements of Appendix A. of the Consent Decree.
- d. Within 60 days after any enhanced LDAR survey, the permittee shall submit written reports of the monitoring results to EPA. At a minimum, the reports shall include the information specified in the approved protocol for the Program.
- e. The permittee shall continue to implement the enhanced LDAR program for a period of five years after the effective date of the Consent Decree.

III. Facility-Wide Requirements

Conditions in this section of the permit apply to all emissions units located at the facility, including any units not specifically listed in Table 1 or Table 2 of the Source Emission Points section of this permit.

[RAC 2-110(1)(d)]

III.A. General Recordkeeping Requirements [RAC 2-110(6)]

The permittee shall comply with the following generally applicable recordkeeping requirements:

1. If the permittee determines that his or her stationary source that emits (or has the potential to emit, without federally recognized controls) one or more hazardous air pollutants is not subject to a relevant standard or other requirement established under 40 CFR part 63, the permittee shall keep a record of the applicability determination at the Ignacio Gas Plant, for a period of five years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination shall include an analysis (or other information) that demonstrates why the permittee believes the source is unaffected (e.g., because the source is an area source).

[40 CFR 63.10(b)(3)]

2. Records shall be kept of off permit changes made, as required by the Off Permit Changes section of this permit.

III.B. General Reporting Requirements

1. The permittee shall submit to the Tribe all reports of any required monitoring under this permit semiannually, by April 1 and October 1 of each year. The report due on April 1 shall cover the July 1 - December 31 reporting period of the previous calendar year. The report due on October 1 shall cover the January 1 - June 30 reporting period of the current calendar year. All instances of deviations from permit requirements shall be clearly identified in such reports. All required reports shall be certified by a responsible official consistent with the **Submissions** section of this permit.

[RAC 2-110(7)(a)]

3. “Deviation” means any situation in which an emissions unit fails to meet a permit term or condition. A deviation is not always a violation. A deviation can be determined by observation or through review of data obtained from any testing, monitoring, or recordkeeping established in accordance with RAC 2-110(5) and (6). For a situation lasting more than 24 hours which constitutes a deviation, each 24 hour period is considered a separate deviation. Included in the meaning of deviation are any of the following:

- iv. A situation where emissions exceed an emission limitation or standard;
- v. A situation where process or emissions control device parameter values indicate that an emission limitation or standard has not been met; or
- vi. A situation in which observations or data collected demonstrate noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit.
- vii. A situation in which an exceedance or an excursion, as defined in 40 CFR Part 64 occurs.

[RAC 1-103(21)]

4. The permittee shall promptly report to the Tribe deviations from permit requirements, (including emergencies), including the date, time, duration, and the probable cause of such deviations, the quantity and pollutant type of excess emissions resulting from the deviation, and any preventative, mitigation, or corrective actions or measures taken. “Prompt” is defined as follows:
 - a. Where the underlying applicable requirement contains a definition of “prompt” or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern.
 - b. Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations will be submitted based on the following schedule:
 - i. For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in the applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made by email, telephone, verbal, or facsimile

communication by the close of business the next working day, upon discovery of the occurrence, and in writing within 10 working days from the occurrence;

- ii. For emissions of any regulated air pollutant, excluding those listed in RAC § 2-110(7)(b)(i), that continue for more than 2 hours in excess of permit requirements, the report must be made by email, telephone, verbal, or facsimile communication by the close of business the next working day, upon discovery of the occurrence, and in writing within 10 working days from the occurrence;
- iii. For all other deviations from permit requirements, the report shall be contained in the report submitted with the semi-annual monitoring report.

[RAC 2-110(7)(b)]

III.C. Alternative Operating Scenario for Engine or Turbine Replacement [RAC 2-110(8)]

1. Replacement of an existing engine or turbine identified in this permit shall be allowed as an off-permit change pursuant to the Off Permit Changes provisions of this permit provided all of the following conditions are met:
 - a. The engine or turbine replacement is not subject to any requirements under Title IV of the Clean Air Act and is not a modification under Title I of the Clean Air Act;
 - b. The replacement engine or turbine is of the same make, model, horsepower rating, and configured to operate in the same manner as the engine being replaced.
 - c. The replacement engine or turbine meets all applicable requirements identified in this permit that apply to the existing engine being replaced.
 - d. All applicable requirements that apply to the replacement engine or turbine are already identified in the permit. Replacement of an existing engine or turbine identified in this permit with a new, modified, or reconstructed engine must utilize a Minor Permit Revision as specified in RAC 2-111(3) or a Significant Permit Revision as specified in RAC 2-111(4) to incorporate any new applicable requirements. The applicable requirements include, but may not be limited to:
 - i. Standards of Performance for Stationary Spark Ignition Internal Combustion Engines at 40 CFR Part 60, Subpart IIII;
 - ii. Standards of Performance for Stationary Compression Ignition Internal Combustion at 40 CFR Part 60, Subpart JJJJ;

- iii. National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines at 40 CFR Part 63, Subpart ZZZZ;
 - iv. Standards of Performance for Stationary Gas Turbines at 40 CFR Part 60, Subpart GG;
 - v. Standards of Performance for Stationary Combustion Turbines at 40 CFR Part 60, Subpart KKKK;
 - vi. National Emission Standard for Hazardous Air Pollutants for Stationary Combustion Turbines at 40 CFR Part 63, Subpart YYYY;
 - vii. Requirements established in a permit or permits issued pursuant to the Federal Minor New Source Review Program in Indian Country at 40 CFR Part 49;
 - viii. Requirements established in a permit or permits issued pursuant to the Prevention of Significant Deterioration of Air Quality Program at 40 CFR Part 52; or
 - ix. Requirements established in any promulgated Federal Implementation Plan that may apply to engines or turbines located on the Southern Ute Indian Reservation.
2. The Permittee shall provide contemporaneous written notice to the Tribe and the Administrator of any replacement of an existing engine or turbine identified in this permit. Such notice shall state when the replacement occurred and shall describe the replacement and any applicable requirement that would apply as a result of the replacement.
 3. The Permittee shall keep a record of the engine or turbine replacement.

III.D. Alternative Operating Scenario for Thermal Oxidizer Maintenance/Repair

1. The use of a backup thermal oxidizer (Unit 22a) with equivalent capacity and emission destruction efficiency and configured to operate in the same manner as the primary thermal oxidizer (Unit 22) shall be an allowed alternative operating scenario under this permit provided that the following conditions are met:
 - a. Any emission limits, requirements, testing or other provisions that apply to the primary thermal oxidizer shall also apply to the backup thermal oxidizer except that an annual performance test shall only be conducted on the backup thermal oxidizer Unit 22a if the unit operates for more than 500 hours in any calendar year.
 - b. At no time shall the backup thermal oxidizer operate at the same time the primary thermal oxidizer is operating except periods of transition between the primary and backup thermal

oxidizers. Transition events shall be documented, last no more than 30 minutes in duration, and will be reported as excess emission events in accordance with the PSD Permit #PSD-SU-00027-01.00 deviation reporting requirements of Condition II.J and the General Reporting Requirements of Condition III.B.

III.D. Permit Shield [RAC 2-110(10)(c)]

Nothing in this permit shall alter or affect the following:

1. The provisions of Section 303 of the Clean Air Act, 42 U.S.C. § 7603 concerning emergency powers, including the respective authorities of the Administrator under those sections;
2. The liability of a permittee for any violation of applicable requirements prior to or at the time of permit issuance;
3. The applicable requirements of the acid rain program consistent with section 408(a) of the Act; or
4. The ability of the Administrator respectively to obtain information from a source pursuant to Section 114 of the Clean Air Act, 42 U.S.C. § 7414.

III.E. Chemical Accident Prevention

1. The permittee has more than a threshold quantity of a regulated substance in a process, as determined under §68.115, and shall comply with the requirements of the Chemical Accident Prevention Provisions at 40 CFR Part 68 no later than the latest of the following dates:
 - a. June 21, 1999; or
 - b. Three (3) years after the date on which a regulated substance is first listed under 40 CFR §68.130; or
 - c. The date on which a regulated substance is first present above a threshold quantity in process

IV. Part 70 Administrative Requirements

IV.A. Annual Fee Payment [RAC 2-110(1)(h) and RAC 2-118]

1. An annual operating permit emission fee shall be paid to the Tribe by the permittee.

[RAC 2-118(2)]

2. The permittee shall pay the annual permit fee each year no later than April 1st for the preceding calendar year, except that the first annual permit fee will cover the period from the issuance date of this permit through December 31st of the same year.

[RAC 2-118(2)]

3. Fee payments shall be remitted in the form of a money order, bank draft, certified check, corporate check, or electronic funds transfer payable to the Southern Ute Indian Tribe and sent or delivered by the United States Postal Service c/o Environmental Programs Division Part 70 Program, P.O. Box 737 MS #84, Ignacio, Colorado 81137; or by common carrier (such as UPS or FedEx) c/o Environmental Programs Division Part 70 Program, 398 Ouray Drive, Ignacio, Colorado 81137.

[RAC 2-118(4)(a)]

4. The permittee shall send an updated fee calculation worksheet submitted annually by the same deadline as required for fee payment to the address listed in the **Submissions** section of this permit.

[RAC 2-118]

5. Basis for calculating annual fee:

- a. Subtotal annual fees shall be calculated by multiplying the applicable emission fee set pursuant to RAC § 2-119(1) times the total tons of actual emissions for each fee pollutant. In absence of actual emissions data, calculate the annual fee based on the potential to emit (as defined at RAC 1-103(51)) for each fee pollutant. Emissions of any regulated air pollutant that already are included in the fee calculation under a category of regulated pollutant, such as a federally listed hazardous air pollutant that is already accounted for as a VOC or as PM10, shall be counted only once in determining the source's actual emissions.

[RAC 2-119(2)(a)]

- i. "Actual emissions" means the actual rate of emissions in tpy of any fee pollutant (for fee calculation) emitted from a title V source over the preceding calendar year or any other period determined by the Tribe to be more representative of normal operation and consistent with the fee schedule adopted by the Tribe and approved by the Administrator. Actual emissions shall be calculated using each emissions units actual operating hours, production rates, in-place control equipment, and types of materials processed, stored, or combusted during the preceding calendar year or other period used for this calculation.

[RAC 1-103(2)]

- ii. Actual emissions shall be computed using compliance methods required by the permit.

[RAC 2-118(1)(b)]

- iii. If actual emissions cannot be determined using the compliance methods in the permit, the permittee shall use other federally recognized procedures.

[RAC 2-118(1)(b)]

- b. The total annual fee submitted shall be the greater of the applicable minimum fee or the sum of subtotal annual fees for all fee pollutants emitted from the source.

[RAC 2-119(2)(b)]

[Explanatory note: The applicable emission fee amount and applicable minimum fee (if necessary) are revised each calendar year to account for inflation, and they are available from AQP prior to the start of each calendar year.]

- c. The permittee shall exclude the following emissions from the calculation of fees:
 - i. The amount of actual emissions of any one fee pollutant that the source emits in excess of 4,000 tons per year
 - ii. Any emissions that come from insignificant activities not required in a permit application pursuant to RAC § 2-106(4).

[RAC 1-103(2)(c)]

6. Annual fee calculation worksheets shall be certified as to truth, accuracy, and completeness by a responsible official.

[RAC 2-105 and RAC 2-118(2)(c)]

7. Failure of the permittee to pay fees by the due date shall subject the permittee to assessment of penalties and interest in accordance with RAC § 2-118(6).

[RAC 2-118(6)]

8. When notified by the Tribe of underpayment of fees, the permittee shall remit full payment within 30 days of receipt of an invoice from the Tribe.

[RAC 2-119(3)(b)]

9. A permittee who thinks a Tribe assessed fee is in error and who wishes to challenge such fee shall provide a written explanation of the alleged error to the Tribe along with full payment of the assessed fee.

[RAC 2-119(3)(c)]

IV.B. Compliance Requirements

1. Compliance with the Permit

- a. The permittee must comply with all conditions of this part 70 permit. Any permit noncompliance with federally enforceable or Commission-only permit conditions constitutes a

violation of the RAC and Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application.

[RAC 2-110(3)(a)]

- b. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

[RAC 2-110(3)(b)]

- c. All terms and conditions of this permit which are required under the Clean Air Act or under any of its applicable requirements, including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Clean Air Act, except terms and conditions the permit specifically designates as not being federally enforceable under the Clean Air Act that are not required under the Clean Air Act or under any of its applicable requirements. Terms and conditions so designated are not subject to the requirements of RAC §§ 2-108, 2-111, 2-112, other than those contained in this paragraph.

[RAC 2-110(3)(f)]

- d. This permit, or the filing or approval of a compliance plan, does not relieve any person from civil or criminal liability for failure to comply with the provisions of the RAC and the Clean Air Act, applicable regulations thereunder, and any other applicable law or regulation.

[RAC 2-110(3)(g)]

- e. For the purpose of submitting compliance certifications in accordance with the Compliance Certifications condition below of this permit, or establishing whether or not a person has violated or is in violation of any requirement of this permit, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[Section 113(a) and 113(e)(1) of the Act, 40 CFR §§ 51.212, 52.12, 52.33, 60.11(g), and 61.12]

2. Compliance Certifications

- a. The permittee shall submit to the Tribe and the Administrator an annual certification of compliance which shall certify the source's compliance status with all permit terms and conditions and all applicable requirements relevant to the source, including those related to emission limitations, standards, or work practices. The compliance certification shall be certified as to truth, accuracy, and completeness by a responsible official consistent with RAC § 2-110(9)(a). The certification of compliance shall be submitted annually by April 1st and

shall cover the preceding calendar year in which the certification of compliance is due, except that the first annual certification of compliance will cover the period from the issuance date of this permit through December 31st of the same year.

[RAC 2-110(9)(c)]

3. Compliance Schedule

- a. For applicable requirements with which the source is in compliance, the source will continue to comply with such requirements.

[RAC 2-106(4)(1)(ii)]

- b. For applicable requirements that will become effective during the permit term, the source shall meet such requirements on a timely basis.

[RAC 2-106(4)(1)(iii)]

IV.C. Duty to Provide and Supplement Information [RAC 2-110(7)(e), 2-106(5), and 2-124]

1. The permittee shall furnish to the Tribe, within the period specified by the Tribe, any information that the Tribe request in writing to determine whether cause exists for reopening and revising, revoking, and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Tribe copies of records that are required to be kept by the permit, including information claimed to be confidential. Information claimed to be confidential must be accompanied by a claim of confidentiality according to the provisions of RAC 2-124.

[RAC 2-110(7)(e) and RAC 2-124]

2. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application or in a supplemental submittal, shall promptly submit such supplementary facts or corrected information. In addition, a permittee shall provide additional information as necessary to address any requirements that become applicable after the date a complete application is filed, but prior to release of a draft permit.

[RAC 2-106(5)]

IV.D. Submissions [RAC 2-105]

1. Any application, form, report, compliance certification, or other document submitted by the permittee under this permit shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[Explanatory Note: The Tribe has developed a reporting form “CTAC” for certifying truth, accuracy and completeness of part 70 submissions. The form may be found on the AQP’s website (<http://www.southernute-nsn.gov/environmental-programs/air-quality>).]

2. Except where otherwise noted, any documents required to be submitted under this permit, including reports, test data, monitoring data, notifications, compliance certifications, fee calculation worksheets, and applications for renewals and permit modifications shall be submitted:

by United States Postal Service:
Part 70 Program
Environmental Programs Division
Air Quality Program
P.O. Box 737 MS #84
Ignacio, Colorado 81137

or by Common Carrier:
Part 70 Program
Environmental Programs Division
Air Quality Program
398 Ouray Drive
Ignacio, CO 81137

IV.E. Severability Clause [RAC 1-106 and RAC 2-110(1)(f)]

The provisions of this permit are severable, and in the event of any challenge to any portion of this permit, or if any provision is held invalid, the remaining permit conditions shall remain valid and in force.

IV.F. Permit Actions [RAC 2-110(3)]

1. This permit may be modified, reopened and revised, revoked and reissued, or terminated for cause.

[RAC 2-110(3)(c)]

2. The filing by the permittee of a request for a permit revision, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay any permit condition.

[RAC 2-110(3)(d)]

IV.G. Administrative Permit Revision [RAC 2-111(2)]

1. The permittee may submit an application for an administrative permit revision as defined in RAC § 1-103.

[RAC 2-111(2)(a)]

2. The permittee may implement an administrative permit revision immediately upon submittal of the request for the administrative revision.

[RAC 2-111(2)(c)]

[Note to permittee: If the provisions allowing for an administrative permit revision do not apply, please contact the Air Quality Program for a determination of similarity prior to submitting your request for an administrative permit revision.]

IV.H. Minor Permit Revisions [RAC 2-111(3)]

1. The permittee may submit an application for a minor permit revision as defined in RAC § 1-103.
2. An application requesting the use of minor permit revision procedures shall meet the requirements of RAC § 2-106(4) and shall include the following:
 - a. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
 - b. If changes are requested to the permit language, the permittee's suggested draft permit changes;
 - c. Certification by a responsible official, consistent with RAC § 2-105, that the proposed revision meets the criteria for use of minor permit revision procedures and a request that such procedures be used; and
 - d. Completed forms for the Tribe to use to notify the Administrator and affected programs as required under RAC § 2-108
 - e. If the requested permit revision would affect existing compliance plans or schedules, related progress reports, or certification of compliance requirements, and an outline of such effects.

[RAC 2-111(3)(a)]

3. The permittee shall not submit multiple minor permit revision applications that may conceal a larger revision that would not constitute a minor permit revision.

[RAC 2-111(3)(b)]

4. The permittee may make the change proposed in its minor permit revision application immediately after it files such application, provided, however, for sources that have previously utilized this provision during the term of the permit and, on two or more occasions have failed to file a complete application, may thereafter make the change only after the application is deemed complete. After the permittee makes the change and until the Tribe takes any of the actions specified in the following subsection, the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this period, the permittee need not comply with the existing permit terms and conditions it seeks to modify. If the permittee fails to comply with its proposed permit terms and conditions during this period, however, the existing permit terms and conditions it seeks to modify may be enforced against it.

[RAC 2-111(3)(e)]

5. The permit shield under RAC § 2-110(10) does not extend to minor permit revisions.

[RAC 2-110(10)(d)]

IV.I. Significant Permit Revisions [RAC 2-111(4)]

1. The permittee must request the use of significant permit revision procedures as defined in RAC § 1-103.
2. Significant permit revisions shall meet all requirements of the RAC for permit issuance and renewal, including those for applications, review by the Administrator and affected programs, and public participation.

[RAC 2-111(4), 2-109, and 2-106(3)]

IV.J. Permit Reopenings, Revocations and Reissuances, and Terminations [RAC 2-112]

1. The permit may be reopened and revised for any of the reasons listed in paragraphs a. through d. below. Alternatively, the permit may be revoked and reissued for the reasons listed in paragraphs c. and d. below:
 - a. Additional requirements under the Clean Air Act become applicable to a major source with a remaining permit term of 3 or more years, provided that the Tribe shall revise such permits to incorporate such additional requirements no later than 18 months after promulgation of such requirements, and no such reopening is required if the effective date of the requirement is later than the permit expiration date unless the original permit or any of its terms or conditions have been extended past the permit expiration date pursuant to RAC § 2-104(2)(b)(iii);
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit;
 - c. The Tribe or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the terms or conditions of the permit; or
 - d. The Tribe or the Administrator determines that the permit must be revised or revoked and reissued to assure compliance with applicable requirements.
2. The permit may be terminated for any of the reasons in (a) through (g) below:
 - a. The permittee fails to meet the requirements of an approved compliance plan;
 - b. The permittee has been in significant or repetitious noncompliance with the operating permit terms or conditions;

- c. The permittee has exhibited a history of willful disregard for environmental laws of any tribal or state authority, or of the United States;
- d. The permittee has knowingly misrepresented a material fact in any application, record, report, plan, or other document filed or required to be maintained under the permit;
- e. The permittee falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under the permit;
- f. The permittee fails to pay fees required under RAC §§ 2-118 and 2-119; or
- g. The Administrator has found that cause exists to terminate the permit.

IV.K. Property Rights [RAC 2-110(3)(e)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

IV.L. Inspection and Entry [RAC 2-110(9)(b)]

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the Tribe or other authorized representative to perform the following:

1. Enter upon the permittee's premises where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. As authorized by the Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

IV.M. Emergency Situations [RAC 2-117]

1. The permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency as defined in RAC § 1-103. To do so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and

d. The permittee reported the emergency to the Tribe in compliance with RAC § 2-110(7).

[RAC 2-117(1)]

2. In any enforcement preceding the permittee attempting to establish the occurrence of an emergency has the burden of proof.

[RAC 2-117(2)]

3. This emergency situation provision is in addition to any emergency or upset provision contained in any applicable requirement.

[RAC 2-117(3)]

IV.N. Permit Transfers [RAC 2-113]

1. This permit shall not be transferable, by operation of law or otherwise, from one location to another or from one source to another, except that a permit may be transferred from one location to another in the case of a portable source that has notified the Tribe in advance of the transfer, pursuant to the RAC. A permit for a source may be transferred from one person to another if the Tribe finds that the transferee is capable of operating the source in compliance with the permit. This transfer must be accomplished through an administrative permit revision in accordance with the Administrative Permit Revisions section of this permit.

IV.O. Off-Permit Changes [RAC 2-116(2)]

1. The permittee is allowed to make, without a permit revision, certain changes that are not addressed or prohibited by this permit provided that the following requirements are met:
 - a. Each such change meets all applicable requirements and shall not violate any existing permit term or condition;
 - b. Such changes are not subject to any requirements under title IV of the Clean Air Act and are not modifications under title I of the Clean Air Act;
 - c. Such changes are not subject to permit revision procedures under RAC § 2-111; and
 - d. The permittee provides contemporaneous written notice to the Tribe and the Administrator of each such change, except for changes that qualify as insignificant activities. Such notice shall state when the change occurred and shall describe the change, any resulting emissions change, pollutants emitted, and any applicable requirement that would apply as a result of the change.

[RAC 2-116(2)(a)]

2. The permit shield does not apply to changes made under this provision.

[RAC 2-110(10)(d)]

3. The permittee shall keep a record describing changes made at the source that result in emissions of any regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

[RAC 2-116(2)(b)]

4. The notice shall be kept at the Ignacio Gas Plant, and made available to the Tribe on request, in accordance with the general recordkeeping provision of this permit.

[RAC 2-110(6)]

IV.P. Permit Expiration and Renewal [RAC §§ 2-104(3), 2-106(2)(b), 2-107(7)(a), 2-107(7)(b), 2-110(1)(a), and 2-106(3)]

1. This permit shall expire five years from the effective date of this permit.

[RAC 2-110(1)(a)]

2. Expiration of this permit terminates the permittee's right to operate unless a timely and complete permit renewal application has been submitted at least 6 months but not more than 18 months prior to the date of expiration of this permit.

[RAC 2-107(7)(b)]

3. If the permittee submits a timely and complete permit application for renewal, consistent with RAC § 2-106 but the Tribe has failed to issue or disapprove a renewal permit before the end of the permit term, then the permit shall not expire and all its terms and conditions shall remain in effect until the renewal permit has been issued or disapproved.

[RAC 2-104(2)(b)]

4. The ability to operate under this permit shall cease if (1) the Tribe takes final action to issue the permittee a renewal permit or deny the permittee a permit or (2) the permittee fails to submit by the deadline specified in writing by the Tribe any additional information identified as being needed to process the application.

[RAC 2-104(3)]

5. Renewal of this permit is subject to the same procedures, including those for public participation and affected program and EPA review, as those that apply to initial permit issuance.

[RAC 2-107(7)(a)]

6. The application for renewal shall include the current permit number, description of permit revisions and off permit changes that occurred during the permit term, any applicable requirements that were promulgated and not incorporated into the permit during the permit term, and other information required by the application form.

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V. Appendix

V.A. Inspection Information

1. Driving Directions to the facility:

From Durango, Colorado, go southeast approximately 7 miles on US Hwy 160 towards Bayfield. Turn right at stop light onto State Hwy 172. Travel south 2.3 miles towards Ignacio. 0.3 miles after highway curves to the east take a right on County Road 307. Go south 4 miles. Ignacio Gas Plant is on the left (east) side of the road.

2. Global Positioning System (GPS):

Latitude: N 37.145278

Longitude: W 107.784444

3. Safety Considerations:

In order to enter the facility, fire retardant clothing, hard hats, safety glasses, and steel toed boots are required. Additionally, upon initial visit and annually thereafter, visitors are required to perform site specific safety training and pass a written exam.

V.B. – Compliance Assurance Monitoring (CAM) Plan

CAM Plan for West Glycol Dehydrator Regenerator Vent (Unit 15)

I. Background

a. Emission Unit

Description: West Glycol Dehydrator (regenerator vent controlled by plant flare)

Identification: Unit ID 15

Facility: Ignacio Gas Plant, Durango, Colorado

b. Applicable Regulations & Emission Limits

Regulation: PSD Permit #PSD-SU-0027-01.00

Emission Limits: 6.7 tpy of VOC (Permit Condition II.J.4.a)

c. Control Technology & PTE

Controls: Open-tip Flare (Unit ID 23)

Potential pre-control device emissions: 584.7 tpy of VOC

Potential post-control device emissions: 6.7 tpy of VOC

II. Monitoring Approach

The key elements of the monitoring approach are presented in the attached table.

III. Response to Excursion

- a. An excursion outside the indicator range signaling the improper operation of the flare will trigger an inspection, corrective action, recordkeeping, and reporting. Maintenance personnel will inspect the control device and indicator within 24 hours and make necessary repairs as soon as practicable.
- b. Any number of excursions that exceed the Quality Improvement Plan (QIP) threshold shall trigger the requirement for a QIP for the associated indicator.

If the EPA determines that the permittee has not used acceptable procedures in response to excursions of the indicator, the EPA may require the permittee to prepare a QIP. The QIP will include procedures for evaluating the control performance problems and actions to correct the problems identified, implementation of QIP shall not excuse the permittee from compliance

with any emission limitation or standard, or any existing monitoring, reporting, or recordkeeping requirement that may apply under any federal, state, or local law, or any other applicable regulation under the Clean Air Act.

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Monitoring Approach: Williams Ignacio Plant Flare for West Glycol Dehydrator Regenerator Vent (Unit ID 15)

		Indicator No. 1	Indicator No. 2
I. Indicator		Operate flare with presence of a pilot flame at all times	Operate flare with no visible emissions
	Measurement Approach	Continuously measure the temperature of the pilot flame using a thermocouple or equivalent temperature sensing device equipped with a continuous recording device.	Continuously observe flare for visible emissions using a remote viewing system (camera with live video feed in plant control room). If any visible emissions are observed, operator shall immediately use Method 22 of 40 CFR Part 60, Appendix A to confirm visible emission. The observation period shall be two(2) hours.
II. Indicator Range		An excursion is defined as any loss of flare flame. The pilot system is equipped with auto-ignition and automatically re-lights the pilot. Associated recordkeeping and reporting shall be conducted for each excursion event as required.	An excursion is defined as any visible emissions observed using Method 22 that continues for longer than five (5) minutes during the 2 hour observation period.
QIP Threshold		No more than six (6) excursions in any semiannual reporting period.	No more than 12 excursions in any semiannual reporting period.
III. Performance Criteria	A. Data Representativeness	The thermocouple will determine the presences or absence of a pilot flame. Requiring the presence of a pilot flame will assure ignition of the flare when waste gas is vented to it.	Observation of the flare in the plant control room via the remote viewing system will continuously monitor the control device for visible emissions. Requiring the flare operation with no visible emissions will assure proper operation of the flare.

	B. Verification of Operational Status	With loss of pilot flame, observation of flare flame will be confirmed with the plant camera and remote viewing system.	The observation of visible emissions will indicate that the control device is malfunctioning.
	C.QA/QC Practices/Criteria	The thermocouple, data recorder, malfunction alarm with notification system shall be inspected for proper operation on a quarterly basis.	The camera and video feed for the remote viewing system shall be inspected for proper operation on a quarterly basis. Records of the inspection shall be maintained at the facility.
	D. Monitoring Frequency	The presence of a pilot flame shall be monitored continuously.	The flare shall be continuously monitored with the remote viewing system.
	E. Data Collection Procedures	Pilot flame status is continuously monitored by the plant control room using alarm notification from the flare pilot system. The thermocouple shall be equipped with a continuous recording device such as a data logger or chart recorder to monitor proper thermocouple operation. Records of all inspection, maintenance, and repair activities shall be maintained on-site.	All visible emission events and Method 22 measurements shall be recorded in a log and maintained at the facility. The log shall include at a minimum, the date/time the event occurred, the duration of the event, the personnel that observed the event, and the corrective action taken.
	F. Averaging Time	Averaging is not necessary since the thermocouple will operate continuously.	None.

Justification

I. Background

This facility processes natural gas from the San Juan Basin gas gathering system. The West Glycol dehydrator uses a glycol solution to remove water from the plant inlet gas stream. The glycol functions in a continuous, closed loop system, and is regenerated in a thermal reaction. This thermal reaction also removes any hydrocarbons that have been stripped away from the inlet gas stream. Hydrocarbon emissions from the West Dehydration Unit (Unit ID 15) are routed to the plant flare for the destruction of volatile organic compounds. The monitoring approach outlined here applies to the flare, which has a 98% destruction efficiency.

II. Rationale for Selection of Performance Indicators

The use of a thermocouple to detect the presence of pilot flame has been selected as a performance indicator because a continuous pilot flame is necessary to ensure waste gas combustion. The thermocouple monitors the temperature at the pilot flame of the flare. If the pilot flame goes out, the thermocouple detects the absence of the pilot flame, and any necessary repairs that need to be made. The data logger associated with the thermocouple will provide continuous measurements for compliance assessment and recording the number of excursions.

Operating the flare with no visible emissions has been selected as a performance indicator because visible emissions indicate the flare is not functioning properly. The plant control room will monitor the flare continuously via a remote viewing system. If visible emissions are noted on the viewing monitor, Method 22 measurements will confirm the visible emissions to determine the remote viewing system is functioning properly. If visible emissions are observed, the permittee will inspect the control device and make any necessary repairs.

Regular inspections of the performance indicators will ensure the monitoring of proper control device operation.

III. Rationale for Selection of Indicator Ranges

The use of a thermocouple to detect the presence of a pilot flame was selected because the technique already being employed by the permittee is an effective monitoring method for proper flare operation. The pilot flame is necessary to ensure combustion of the waste gas and achieve the desired 98% destruction efficiency. Once the absence of a pilot flame is detected, an alarm will trigger an inspection and repair. Quarterly inspections of the thermocouple system will be used for quality assurance purposes.

The performance indicator requiring flare operation with no visible emissions was selected because visible emissions indicate the flare is not functioning properly. The regulations at 40 CFR Part 60.18(b) provide the visible emission requirements that formed the basis for using this as a performance indicator.

The flare is continuously observed in the plant control room via a camera and remote viewing monitoring. If the plant operator observes any visible emissions on the monitor, they will be confirmed with Method 22 readings. Any visible emissions will trigger an inspection and necessary repairs.

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CAM Plan for East Glycol Dehydrator Regenerator Vent (Unit 16)

I. Background

a. Emissions Unit

Description: East Glycol Dehydrator (regenerator vent controlled by thermal oxidizer)

Identification: Unit ID 16

Facility: Ignacio Gas Plant, Durango, Colorado

b. Applicable Regulations & Emission Limits

Regulation: PSD Permit # PSD-SU-0027-01.00

Emission limits: 5.1 tpy of VOC when both Unit 16 and Unit 17 are operating (Permit Condition II.J.5.a)

c. Control Technology & PTE

Controls: Thermal Oxidizer (Unit ID 22)

Potential pre-control device emissions: 107.7 tpy of VOC

Potential post-control device emissions: 5.1 tpy of VOC

II. Monitoring Approach

The key elements of the monitoring approach are presented in the attached table.

III. Response to Excursion

- a. An excursion outside the indicator range signaling the improper operation of the thermal oxidizer will trigger an inspection, corrective action, recordkeeping, and reporting. Maintenance personnel will inspect the control device and indicator within 24 hours and make necessary repairs as soon as practicable.
- b. Any number of excursions that exceed the Quality Improvement Plan (QIP) threshold shall trigger the requirement for a QIP for the associated indicator.

If the Tribe determines that the permittee has not used acceptable procedures in response to excursions of the indicator, the Tribe may require the permittee to prepare a QIP. The QIP will include procedures for evaluating the control performance problems and actions to correct the problems identified. Implementation of QIP shall not excuse the permittee from compliance with any emission limitation or standard, or

any existing monitoring, testing, reporting, or recordkeeping requirement that may apply under any federal, state, or local law, or any other applicable regulation under the Clean Air Act.

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Monitoring Approach: Williams Ignacio Thermal Oxidizer for East Glycol Dehydrator Regenerator Vent (Unit ID 16)

		Indicator No. 1	Indicator No. 2	Indicator No. 3
I. Indicator	Measurement Approach	Operate thermal oxidizer combustion chamber above acceptable operating temperature while the east glycol dehydrator is operating.	Operate thermal oxidizer in a manner that achieves desired VOC destruction efficiency to meet emission limits.	Ensure no bypass of the thermal oxidizer is occurring.
		Continuously measure the temperature of the combustion chamber using a thermocouple or equivalent temperature sensing device equipped with a continuous recording device.	Conduct annual stack test to determine the effectiveness of the thermal oxidizer in controlling VOC emissions.	Any bypass valve that would divert waste gas flow from the thermal oxidizer shall be maintained in a closed position.
II. Indicator Range		An excursion is defined as any detection of a temperature in the combustion chamber below 1,400°F when the dehydrator is operating. Any temperature detected below this temperature will trigger an alarm to the plant control room, an investigation to determine the problem, and to perform corrective action. Associated recordkeeping and reporting shall be conducted for each excursion event as required.	An excursion is defined as any detection of emissions above the permitted emission limit.	An excursion is defined as any occurrence in which the waste gas flow to the thermal oxidizer is diverted through a bypass line and vented to the atmosphere. The diversion of waste gas through a bypass valve to the atmosphere when necessary to maintain a safe work environment due to upset conditions is not considered an excursion for this indicator.
	QIP Threshold	No more than six (6) excursions in any semiannual reporting period.	Any excursions in any annual reporting period.	No more than two (2) excursions in any semiannual reporting period.
III. Performance	A. Data	The thermocouple will	The stack test will determine the	Monitoring to determine the

Criteria	Representativeness	measure the temperature in the combustion chamber downstream of the combustion zone. The minimum accuracy of the thermocouple is $\pm 5^{\circ}\text{F}$. Requiring the temperature of the combustion chamber above this temperature will ensure the system is operating correctly.	destruction efficiency achieved by the thermal oxidizer meets the permitted emission limits.	bypass control valves for waste gas are maintained in a closed position will assure all the waste gas is routed to the control device.
	B. Verification of Operational Status	Not applicable.	Not applicable.	The observation of waste gas bypass valve in open position and diverted waste gas away from the control device will indicate the control device is malfunctioning.
	C. QA/QC Practices/Criteria	The thermal oxidizer system has two (2) thermocouples for redundancy. The backup thermocouple will operate if the primary thermocouple detects a temperature outside the temperature range.	Annual stack test will validate the thermal oxidizer is effectively controlling VOC emissions. The inlet flow and outlet flow of the thermal oxidizer will be measure during the stack test to confirm the destruction efficiency.	All bypass valves which have the potential to divert waste gas away from the thermal oxidizer shall be visually inspected to confirm they are in a closed position on a weekly basis.
	D. Monitoring Frequency	The combustion chamber temperature shall be monitored continuously.	The performance test will be conducted annually.	All bypass valves shall be visually inspected on a weekly basis. A flow meter that detects waste gas flow in the bypass line or an electronic monitoring system with alarm notification will satisfy the visual inspection requirement.
	E. Data Collection Procedures	The thermocouple shall be equipped with a continuous	Records of all performance tests shall be provided to the Tribe in an	A log shall be kept at the facility documenting all weekly

		recording device such as a data logger or chart recorder to monitor proper thermocouple operation. Records of all inspection, maintenance, and repair activities shall be maintained on-site.	annual report.	inspections of bypass valves. Any excursion shall be documented in the log, along with the date/time of excursion, the personnel that performed the inspection, and the corrective action taken.
	F. Averaging Time	Averaging is not necessary since the thermocouple will operate continuously.	None.	None.

Justification

I. Background

This facility processes natural gas from the San Juan Basin gathering system. The East Glycol dehydrator uses a glycol solution to remove water from the plant inlet gas stream. The glycol functions in a continuous, closed-loop system, and is regenerated in a thermal reaction. This thermal reaction also removes any hydrocarbons that have been stripped away from the inlet gas stream. Hydrocarbon emissions from the East Dehydration Unit (Unit ID 16) are routed to thermal oxidizer for the destruction of volatile organic compounds.

The elevated combustion temperatures found in a thermal oxidizer are required to ensure sufficient destruction (98%+) of the VOCs while overcoming the flame-dampening characteristics found in a carbon dioxide (CO₂) rich environment.

II. Rationale for Selection of Performance Indicators

The effectiveness of a thermal oxidizer in terms of waste gas destruction efficiency is usually linked to the operating temperature of the combustion chamber. The rate at which VOCs are oxidized is greatly affected by temperature. A higher operating temperature results in more of the waste gas oxidized to water and carbon dioxide. The combustion chamber operating temperature is used as a performance indicator to monitor the proper operation of the thermal oxidizer.

The destruction efficiency of the thermal oxidizer will be monitored by annual performance test. Performance test measuring the concentration of VOCs in the inlet and outlet flow of the waste gas stream will indicate proper operation of the control device.

Monitoring the status of bypass valves was selected as a performance indicator because bypass valves must be kept in a closed position so that all waste gas is being routed to the control device and not to the atmosphere.

Regular inspections of the performance indicators will ensure the monitoring of proper control device operation.

III. Rationale for Selection of Indicator Ranges

Since the waste gas stream temperature is generally much lower than that required for combustion, energy must be supplied to the incinerator to raise the waste gas temperature. The core of the thermal oxidizer is a nozzle-stabilized flame maintained by combustion of the auxiliary fuel, waste gas compounds, and supplemental air when necessary. Upon passing through the flame, the waste gas is heated from its inlet

temperature to its ignition temperature. The ignition temperature is the temperature at which the combustion reaction rate exceeds the rate of heat losses, raising the temperature of the gases to some higher value. Thus, any organic/air mixture will ignite if its temperature is raised to a sufficiently high level. The organic-containing mixture ignites at a temperature between the preheat temperature and the reaction temperature. That is, ignition occurs at some point during the heating of the waste gas stream as it passes through the nozzle-stabilized flame regardless of its concentration. It is this ignition temperature that is monitored to ensure the sufficient destruction of VOCs.

If the annual performance test indicates the thermal oxidizer is not achieving the destruction efficiency required to meet the permitted emission limits, the permittee shall inspect the control device and make any necessary repairs to correct the problem. By demonstrating compliance with the permitted emission limits, the performance test indicates the control device is operating correctly.

Any detection of waste gas being diverted through a bypass valve away from the thermal oxidizer was selected because it would result in uncontrolled emissions to the atmosphere. All bypass valves should be maintained in a closed position to effectively route all waste gas to the control device.

CAM Plan for Amine Unit Regenerator Vent (Unit 17)

I. Background

a. Emission Unit

Description: Amine Unit (regenerator vent controlled by thermal oxidizer)

Identification: Unit ID 17

Facility: Ignacio Gas Plant, Durango, Colorado

b. Applicable Regulations & Emission Limits

Regulation: PSD Permit #PSD-SU-0027-01.00

Emission Limits: 5.1 tpy of VOC when both Unit 16 and Unit 17 are operating (Permit Condition II.J.5.a)

c. Control Technology & PTE

Controls: Thermal Oxidizer (Unit ID 22)

Potential pre-control device emissions: 296.0 tpy of VOC

Potential post-control device emissions: 3.0 tpy of VOC

II. Monitoring Approach

The key elements of the monitoring approach are presented in the attached table.

III. Response to Excursion

- a. An excursion outside the indicator range signaling the improper operation of the thermal oxidizer will trigger an inspection, corrective action, recordkeeping, and reporting. Maintenance personnel will inspect the control device and indicator within 24 hours and make necessary repairs as soon as practicable.
- b. Any number of excursions that exceed the Quality Improvement Plan (QIP) threshold shall trigger the requirement for a QIP for the associated indicator.

If the Tribe determines that the permittee has not used acceptable procedures in response to excursions of the indicator, the Tribe may require the permittee to prepare a QIP. The QIP will include procedures for evaluating the control performance problems and actions to correct the problems identified, implementation of QIP shall not excuse the permittee from compliance with any emission limitation or standard, or any existing monitoring, reporting, or

recordkeeping requirement that may apply under any federal, state, or local law, or any other applicable regulation under the Clean Air Act.

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Monitoring Approach: Williams Ignacio Thermal Oxidizer for Amine Unit Regenerator Vent (Unit ID 17)

		Indicator No. 1	Indicator No. 2	Indicator No. 3
I. Indicator		Operate thermal oxidizer combustion chamber above acceptable operating temperature while the east glycol dehydrator is operating.	Operate thermal oxidizer in a manner that achieves desired VOC destruction efficiency to meet emission limits.	Ensure no bypass of the thermal oxidizer is occurring.
	Measurement Approach	Continuously measure the temperature of the combustion chamber using a thermocouple or equivalent temperature sensing device equipped with a continuous recording device.	Conduct annual stack test to determine the effectiveness of the thermal oxidizer in controlling VOC emissions.	Any bypass valve that would divert waste gas flow from the thermal oxidizer shall be maintained in a closed position.
II. Indicator Range		An excursion is defined as any detection of a temperature in the combustion chamber below 1,400°F when the dehydrator is operating. Any temperature detected below this temperature will trigger an alarm to the plant control room, an investigation to determine the problem, and to perform corrective action. Associated recordkeeping and reporting shall be conducted for each excursion event as required.	An excursion is defined as any detection of emissions above the permitted emission limit.	An excursion is defined as any occurrence in which the waste gas flow to the thermal oxidizer is diverted through a bypass line and vented to the atmosphere. The diversion of waste gas through a bypass valve to the atmosphere when necessary to maintain a safe work environment due to upset conditions is not considered an excursion for this indicator.
	QIP Threshold	No more than six (6) excursions in any semiannual reporting period.	Any excursions in any annual reporting period.	No more than two (2) excursions in any semiannual reporting period.
III. Performance	A. Data	The thermocouple will	The stack test will determine the	Monitoring to determine the

Criteria	Representativeness	measure the temperature in the combustion chamber downstream of the combustion zone. The minimum accuracy of the thermocouple is $\pm 5^{\circ}\text{F}$. Requiring the temperature of the combustion chamber above this temperature will ensure the system is operating correctly.	destruction efficiency achieved by the thermal oxidizer meets the permitted emission limits.	bypass control valves for waste gas are maintained in a closed position will assure all the waste gas is routed to the control device.
	B. Verification of Operational Status	Not applicable.	Not applicable.	The observation of waste gas bypass valve in open position and diverted waste gas away from the control device will indicate the control device is malfunctioning.
	C. QA/QC Practices/Criteria	The thermal oxidizer system has two (2) thermocouples for redundancy. The backup thermocouple will operate if the primary thermocouple detects a temperature outside the temperature range.	Annual stack test will validate the thermal oxidizer is effectively controlling VOC emissions. The inlet flow and outlet flow of the thermal oxidizer will be measure during the stack test to confirm the destruction efficiency.	All bypass valves which have the potential to divert waste gas away from the thermal oxidizer shall be visually inspected to confirm they are in a closed position on a weekly basis.
	D. Monitoring Frequency	The combustion chamber temperature shall be monitored continuously.	The performance test will be conducted annually.	All bypass valves shall be visually inspected on a weekly basis. A flow meter that detects waste gas flow in the bypass line or an electronic monitoring system with alarm notification will satisfy the visual inspection requirement.
	E. Data Collection Procedures	The thermocouple shall be equipped with a continuous	Records of all performance tests shall be provided to the Tribe in an	A log shall be kept at the facility documenting all weekly

		recording device such as a data logger or chart recorder to monitor proper thermocouple operation. Records of all inspection, maintenance, and repair activities shall be maintained on-site.	annual report.	inspections of bypass valves. Any excursion shall be documented in the log, along with the date/time of excursion, the personnel that performed the inspection, and the corrective action taken.
	F. Averaging Time	None.	None.	None.

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Justification

I. Background

This facility processes natural gas from the San Juan Basin gathering system. Amine Treatment Systems are often used at natural gas processing facilities to remove acid gases such as hydrogen sulfide and CO₂ from natural gas streams. The two main processes within an amine unit are absorption and regeneration. A natural gas inlet stream containing acid gases is introduced into an absorption column where the inlet stream is counter-currently contacted with an amine solution. The amine solution absorbs the acid gases, and to some extent small quantities of hydrocarbons in the inlet stream. After the absorption process, the rich amine must be regenerated before it can be reused. The rich amine is sent to a regeneration column to strip the absorbed gas from the amine. These regeneration processes result in acid gases and hydrocarbons released to the atmosphere, a thermal oxidizer is used to control these emissions. The elevated combustion temperatures found in a thermal oxidizer are required to ensure sufficient destruction (98%+) of the VOCs while overcoming the flame-dampening characteristics found in a CO₂-rich environment.

II. Rationale for Selection of Performance Indicators

The effectiveness of a thermal oxidizer in terms of waste gas destruction efficiency is usually linked to the operating temperature of the combustion chamber. The rate at which VOCs are oxidized is greatly affected by temperature. A higher operating temperature results in more of the waste gas oxidized to water and carbon dioxide. The combustion chamber operating temperature is used as a performance indicator to monitor the proper operation of the thermal oxidizer.

The destruction efficiency of the thermal oxidizer will be monitored by annual performance test. Performance test measuring the concentration of OVCs in the inlet and outlet flow of the waste gas stream will indicate proper operation of the control device.

Monitoring the status of bypass valves was selected as a performance indicator because bypass valves must be kept in a closed position so that all waste gas is being routed to the control device and not to the atmosphere.

Regular inspections of the performance indicators will ensure the monitoring of proper control device operation.

III. Rationale for Selection of Indicator Ranges

Since the waste gas stream temperature is generally much lower than that required for combustion, energy must be supplied to the incinerator to raise the waste gas temperature. The core of the thermal oxidizer is a nozzle-stabilized flame maintained by combustion of the auxiliary fuel, waste gas compounds, and

supplemental air when necessary. Upon passing through the flame, the waste gas is heated from its inlet temperature to its ignition temperature. The ignition temperature is the temperature at which the combustion reaction rate exceeds the rate of heat losses, raising the temperature of the gases to some higher value. Thus, any organic/air mixture will ignite if its temperature is raised to a sufficiently high level. The organic-containing mixture ignites at a temperature between the preheat temperature and the reaction temperature. That is, ignition occurs at some point during the heating of the waste gas stream as it passes through the nozzle-stabilized flame regardless of its concentration. It is this ignition temperature that is monitored to ensure the sufficient destruction of VOCs.

If the annual performance test indicates the thermal oxidizer is not achieving the destruction efficiency required to meet the permitted emission limits, the permittee shall inspect the control device and make any necessary repairs to correct the problem. By demonstrating compliance with the permitted emission limits, the performance test indicates the control device is operating correctly.

Any detection of waste gas being diverted through a bypass valve away from the thermal oxidizer was selected because it would result in uncontrolled emissions to the atmosphere. All bypass valves should be maintained in a closed position to effectively route all waste gas to the control device.