



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

**Federal Minor New Source Review Program in Indian Country Permit
Pursuant to Clean Air Act Title I and 40 CFR 49.151-165**

Permit Number: **TMNSR-SU-000496-2023.002**

Source ID: **SU-000496**

Issue Date: **February 19, 2025**

Effective Date: **February 19, 2025**

Permittee: **Red Cedar Gathering Company**

Red Cedar CO₂ Capture Facility

This Permittee is authorized to construct/modify in the following location:

**Latitude 37.054865, Longitude -107.785088
La Plata County, Colorado
Southern Ute Indian Reservation**

Pursuant to the provisions of Clean Air Act (CAA) sections 110(a) and 301(d) and the Code of Federal Regulations (CFR) title 40, sections 49.151-165, the Southern Ute Indian Tribe is issuing an amended permit in accordance with the Federal Minor New Source Review Program in Indian Country (Tribal Minor NSR Program). The permitted source is a true minor source, as defined at 40 CFR 49.152, because it has the potential to emit regulated pollutants in amounts that are less than major source levels. This permit contains enforceable emission limitations for the operation of emission units and activities designed to capture, treat, and compress carbon dioxide (CO₂) from the amine treatment operations at Red Cedar's existing Arkansas Loop and Simpson Treating Plants for transport off-site via pipeline. The CO₂ is otherwise vented to the atmosphere at the Arkansas Loop and Simpson Treating Plants. This permit also includes associated monitoring, recordkeeping and reporting requirements to ensure compliance with the enforceable emission limitations. The enforceable emission limitations ensure that each affected emissions unit will comply with all applicable requirements of 40 CFR parts 60, 61 and 63.

The Permittee is authorized to construct and operate the permitted equipment as described herein, in accordance with the permit application and accompanying material, the Tribal Minor NSR Program regulations at 40 CFR 49.151-165, and other terms and conditions set forth in this permit. As the Permittee, you must comply with all conditions of your permit, including emission limitations that apply to the affected emissions units at your source. Noncompliance with any permit term or condition is a violation of the permit and may constitute a violation of the CAA and is grounds for enforcement action and for a permit termination or revocation. This permit does not release you from any liability for compliance with other applicable federal and Tribal environmental laws and regulations, including the CAA.

On June 11, 2024, EPA Region 8 delegated partial administrative authority to the Southern Ute Indian Tribe (the Tribe), limited to the area of the Tribe's Reservation, to assist the EPA in administering the Tribal Minor NSR Program. 89 FR 65212 (August 9, 2024). Pursuant to the delegation, the Tribe is authorized to implement the Tribal Minor NSR Program, with certain limited exceptions. For example, while the Tribe is authorized to conduct inspections and investigations on its Reservation to evaluate compliance with the Tribal Minor NSR Program, the EPA retains authority to conduct enforcement of any noncompliance. Also, for Tribal Minor NSR Program permit applications submitted to and deemed complete by the EPA prior to June 11, 2024, the EPA retains authority to process those applications, and to approve or deny them. Because the EPA received and deemed complete the application for Red Cedar CO₂ Capture Facility before June 11, 2024, and because the facility will be located within the Tribe's Reservation, the EPA processed the application for the initial permit. Thereafter, the Tribe will exercise its authority under the delegation to assist the EPA in administering the Tribal Minor NSR Program concerning the Red Cedar CO₂ Capture Facility.

Pursuant to 40 CFR 49.159(a), this permit will become effective on the date specified above unless review is requested on the permit pursuant to 40 CFR 49.159(d).

Daniel Powers

2/19/2025

Daniel Powers
Air Quality Division Head
Environmental Programs Department
Southern Ute Indian Tribe

Date

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Abbreviations, Acronyms and Symbols

§, §§	section/sections
AQD	Southern Ute Indian Tribe Air Quality Division
bhp	brake horsepower
Btu	British thermal units
CAA	Clean Air Act [42 U.S.C. § 7401, <i>et seq.</i>]
CFR	Code of Federal Regulations
CO	Carbon monoxide
EPA	U. S. Environmental Protection Agency, Region 8
Facility	Red Cedar CO ₂ Capture Facility
	Latitude 37.054865, Longitude -107.785088
gal	gallon
g/hp-hr	grams per horsepower-hour
hp	horsepower
hr	hour
MNSR	Minor New Source Review
Mscf	thousand standard cubic feet
MMscf/d	million standard cubic feet per day
MW	megawatt
NA	not applicable / not available
NAAQS	National Ambient Air Quality Standards
Ng/J	nanograms per joule
NO _x	Nitrogen oxides
NSCR	Nonselective catalytic reduction
Operator	Red Cedar Gathering Company
Permittee	Red Cedar Gathering Company
PSD	Prevention of Significant Deterioration
psig	pounds per square inch gauge
Red Cedar	Red Cedar Gathering Company (Operator/Permittee)
RICE	reciprocating internal combustion engine
SCADA	Supervisory Control and Data Acquisition
SI RICE	spark ignition reciprocating internal combustion engine
SMNSR	Synthetic Minor New Source Review
TEG	triethylene glycol
TMNSR	True Minor New Source Review
Tribe	Southern Ute Indian Tribe
tpy	tons per year
VOC	volatile organic compounds
yr	year
4SRB	4-stroke rich burn

Part 49 Permit Issuance History

Date of Issuance	Permit Number	Description of Permit Action
November 26, 2024	TMNSR-SU-000496-2023.001	True Minor NSR permit
February 19, 2025	TMNSR-SU-000496-2023.002	True Minor NSR administrative permit amendment

Source/Project Description

On December 17, 2021, Red Cedar applied for a proposed minor modification to the existing major source Arkansas Loop and Simpson Treating Plants (current effective permit number SMNSR-SU-000010-2020.001B). The Arkansas Loop and Simpson Treatment Plants were first permitted on June 5, 2014, and were most recently revised on September 12, 2022. The new plant would be installed adjacent to the existing facilities and would compress and treat CO₂ from the existing facilities, treating it to pipeline quality CO₂ for transfer to a sequestration facility.

On March 29, 2023, Red Cedar submitted a replacement application to reflect substantial revisions to the proposed equipment. On April 21, 2023, Red Cedar submitted a single source determination request. On August 24, 2023, the EPA issued a source determination classifying the proposed CO₂ Capture Facility as a separate source from the Arkansas Loop and Simpson Treating Plants.

On October 23, 2023, Red Cedar submitted a replacement application to reflect the source determination and further changes to the proposed equipment¹. The application sought authorization for the installation of one (1) 9-megawatt (MW) turbine, one (1) 701 horsepower (hp) generator engine, one (1) triethylene glycol (TEG) dehydration unit (dehydrator, reboiler and ancillary equipment), one (1) dirty water storage tank², two (2) compressor oil storage tanks, and one (1) used oil storage tank.

The equipment for this project is designed to compress and treat CO₂ vented from the Arkansas Loop and Simpson Treating Plants and deliver it to a CO₂ pipeline for off-site downstream sequestration. The CO₂ is compressed from atmospheric pressure to approximately 900 pounds per square inch gauge (psig), dehydrated to make it safe for pipeline transport, and further compressed to a discharge pressure of approximately 2,200 psig. The TEG dehydration unit still vent emissions are routed to an overhead condenser and separator where the water vapor is condensed and separated. A percentage of the aqueous phase is refluxed back to the still for further stripping of liquid benzene, toluene, ethylbenzene and xylenes (BTEX), known as a reflux loop. The reflux loop ensures the desired BTEX vapors are removed from the aqueous phase. The portion of the aqueous phase that is not refluxed is sent to storage for offsite disposal. The vapors leaving the overhead separator are recycled back to the CO₂ Capture Facility inlet separator through a closed-vent system.

The turbine provides primary facility power for the CO₂ compression and dehydration operations. The generator engine provides backup facility power, power to assist with turbine startup, power to run lubrication pumps when the turbine shuts down until it stops spinning, and emergency lights, heating, building doors and other critical equipment. The generator engine is expected to operate for only a few minutes during each turbine startup, and for at least 4 hours following each turbine shutdown. The EPA determined that add-on emission controls are not necessary for the turbine and generator engine or other equipment due to the anticipated emissions of the plant and a review of the applicable

¹ The October 23, 2023, application was a minor NSR application for authorization to construct the CO₂ Capture Facility as a new true minor source. Prior to the August 24, 2023, source determination, previous permit applications were submitted as a minor modification to an existing major source.

² The dirty water storage tank contains trace amounts of TEG, amine, and lube oil entrained with the CO₂ routed to the facility from the Arkansas Loop and Simpson Treating Plants and from the CO₂ compression process.

federal regulations and standards. These regulations and standards include: the New Source Performance Standards (NSPS) General Provisions at 40 CFR part 60, subpart A (NSPS A) for the turbine and generator engine; the NSPS for Stationary Combustion Turbines at 40 CFR part 60, Subpart KKKK (NSPS KKKK) for the turbine; the NSPS for Stationary Spark Ignition Internal Combustion Engines at 40 CFR part 60, subpart JJJJ (NSPS JJJJ) for the generator engine; and the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines at 40 CFR part 63, subpart ZZZZ (NESHAP ZZZZ) for the generator engine. The generator engine is certified by the manufacturer to conform with the standards of NSPS JJJJ and is configured to operate with an oxidation catalyst per the manufacturer specifications.

Through this permit action, the EPA is issuing the permit as proposed by Red Cedar. The Source is a true minor source with respect to the Tribal Minor NSR Program, because the potential to emit each regulated pollutant for the project is greater than the minor source thresholds for carbon monoxide (CO), nitrogen oxides (NO_x), volatile organic compounds (VOC), and particulate matter 2.5 microns or less in diameter (PM_{2.5}), as specified in Table 1 of 40 CFR 49.153, and are less than the major source thresholds for all Minor NSR-regulated pollutants as specified at 40 CFR 52.21(b)(1)(i)(b). The enforceable emission limitations in this permit ensure that each affected emissions unit will comply with all applicable requirements of 40 CFR parts 60, 61 and 63, including NSPS JJJJ, NSPS KKKK and NESHAP ZZZZ. The NO_x, CO, VOC, and sulfur dioxide (SO₂) emission limitations for the turbine and generator engine are based on the manufacturer-specified emission rates and are more stringent than the applicable emission limitations in NSPS KKKK for the turbine and NSPS JJJJ for the generator engine. Those emission limitations and the associated testing, monitoring, recordkeeping and reporting requirements apply to the turbine and generator engine. The EPA held a public comment period for the proposed permit from September 9, 2024, to October 9, 2024, and no substantive comments were received.

The Tribe submitted an informal request via email on September 24, 2024, to make minor revisions to the permit provisions for submittal of required notifications and reports such that reports must be submitted to the EPA and the Tribe, instead of the EPA or the Tribe. The Tribe asked that the Tribe's mailing address be included in the permit for communication with the Tribe. The EPA has included these requested changes in the final permit and considers the changes to be non-substantive changes necessary to align with the intent of the permit, given the Tribe's delegated authority to implement the Tribal Minor NSR program on the Southern Ute Indian Reservation.

On November 26, 2024, EPA Region 8 Issued a True Minor NSR permit for Red Cedar Gathering Company's CO₂ Capture Facility.

On December 2, 2024, the Southern Ute Tribe Air Quality Division (AQD) received a permit amendment request from Red Cedar to correct errors found for the permitted equipment capacity for the TEG dehydrator and the two compressor oil storage tanks (TK-304 & TK-306). Red Cedar requested the TEG dehydrator throughput capacity be corrected from 15 MMscf/d to 21 MMscf/d of CO₂. Emissions from the TEG dehydrator is routed to a closed vent system and the increased capacity will not result in an increase in emissions. The tank capacity for TK-304 and TK-306 was requested to be corrected from 500 gal to 587 gal. Additionally, the Tribe replaced the EPA as the permit issuance authority and as the primary agency for TMSNR permit administration and reporting. The AQD has verified that the changes qualify as an administrative revision per 40 CFR 49.159(f). On February 19, 2025, the AQD Issued the administrative permit amendment.

The permitted facility is located on Indian country lands within the Southern Ute Indian Reservation in La Plata County, Colorado. The EPA determined that this approval will not cause or contribute to violations of the National Ambient Air Quality Standards (NAAQS) or have potentially adverse effects on ambient air quality. The descriptions provided in this section are for informational purposes only.

Table 1 - Source Information and Emission Units

Emissions Unit Description	Maximum Power/ Output/Capacity	EPA Certification/Control Technology	Fuel Type, Quantity and Heating Value	Applicable Regulations and Standards
Turbine	9 MW (9,284.0 kW)	N/A	High pressure pipeline quality natural gas, 1,005.1 MMscf/yr, 275 Mscf/d, 11,473 scf/hr, 97.74 MMBtu/hr	NSPS Subpart A and Subpart KKKK
Generator Engine, 4-Stroke Rich Burn (4SRB)	701 bhp	500-hour 12-month rolling average operating limit	Pipeline quality natural gas, 56.5 MMscf/yr, 153 Mscf/d, 6,392 scf/hr, 905.0 Btu/scf	NSPS Subpart A and Subpart JJJJ (Including Emission Standards, Table 1 from Subpart JJJJ for Non-Emergency SI Natural Gas Engines $\geq$ 500 hp); Area Source NESHAP Subpart ZZZZ applicability only.
Triethylene glycol (TEG) CO ₂ Dehydration Unit consisting of: Dehydrator Still Vent TEG Reboiler	21 MMscf/d throughput 0.500 MMBtu/hr (reboiler) Still vent emissions routed through closed-vent system to overhead condenser and separator and BTEX reflux loop	N/A	Natural gas, 4.87 MMscf/yr, 13.3 Mscf/d, 556 scf/hr, based on 900 Btu/scf heat content	N/A
Dirty Water Storage Tank (vertical fixed roof)	21,000 gal	N/A	N/A	N/A
Two (2) - Compressor Oil Storage Tanks (horizontal)	587 gal each	N/A	N/A	N/A
Used Oil Storage Tank (vertical fixed roof)	3,780 gal	N/A	N/A	N/A
Fugitive Emissions	-	N/A	N/A	N/A

Section 1: General Provisions

1. *Definitions*

The terms used herein shall have the meaning as defined in 40 CFR 49.152, unless otherwise defined in this permit. If a term is not defined, it shall be interpreted in accordance with normal business use.

2. *Location and Equipment*

This permit authorizes the Permittee to construct and operate the permitted emission units only in the location(s) listed in the permit. Unless otherwise specified, the terms and conditions of this permit apply to the emission units and control devices identified in Table 1.

3. *Inspection and Entry*

Upon presentation of proper credentials, the Permittee must allow the EPA Regional Administrator, and/or an authorized representative (including the Tribe), to:

- a. Enter upon the premises where the source is located, or emissions-related activity is conducted or where records are required to be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- c. Inspect, during normal business hours or while the source is in operation, any facilities, equipment (including monitoring and air pollution control equipment), practices or operations regulated or required under the permit;
- d. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- e. Record any inspection by use of written, electronic, magnetic and photographic media.

4. *Severability*

The provisions of this permit are severable. If any portion of this permit is held to be invalid, the remaining terms and conditions of the permit shall remain valid and in force.

5. *Compliance*

The Permittee must comply with all conditions of this permit. Noncompliance with any permit term or condition is a violation of the permit and may constitute a violation of the CAA and is grounds for an enforcement action and for the EPA or the Tribe to terminate or revoke the permit. The Permittee shall construct and operate the equipment described in Table 1 in compliance with this permit, the application on which this permit is based, and all other applicable federal and Tribal air quality regulations.

6. *Unavailable Defense*

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

7. *Property Rights*

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

8. *Credible Evidence*

For the purpose of establishing whether the Permittee 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 Permittee had performed the appropriate performance or compliance test procedure.

9. *Shakedown Period*

The emission limits and requirements in Sections 3 and 4 of this permit shall not apply during the shakedown period. Shakedown is defined as the period beginning with initial startup and ending no later than the initial performance test, during which the Permittee conducts operational and contractual testing and tuning to ensure the safe, efficient and reliable operation of the equipment. The shakedown period shall not exceed 180 consecutive days.

10. *Liability*

This permit does not relieve the Permittee of the responsibility to comply fully with applicable provisions of any EPA-approved implementation plan, federal implementation plan or Tribal implementation plan and any other requirements under applicable law.

11. *National Ambient Air Quality Standards (NAAQS)/Prevention of Significant Deterioration (PSD) Protection*

The permitted source must not cause or contribute to a NAAQS violation and, in an attainment area, must not cause or contribute to a PSD increment violation.

12. *Information Requests*

The Permittee shall furnish to the Tribe, within a reasonable time, any information that the Tribe may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit as specified or to determine compliance with the permit. For any such information claimed to be confidential, the Permittee must submit a claim of confidentiality in accordance with 40 CFR part 2, subpart B.

13. *Posting of Permit*

This permit must be posted prominently at the source.

14. *Permit Becomes Invalid*

As provided in 40 CFR 49.155(b), unless the Tribe grants an extension, this Permit shall become invalid if construction is not commenced (as defined in 40 CFR 49.152(d)) within 18 months after the effective date of this permit, is discontinued for a period of 18 months or more or is not completed within a reasonable time. The Tribe may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project, in which case the Permittee must commence construction of each such phase within 18 months of the projected and approved commencement date.

15. *Proposed Modifications*

For proposed modifications, as defined at 40 CFR 49.152(d), that would increase an emission unit's allowable emissions of a regulated NSR pollutant above its existing permitted annual allowable emissions limit, the Permittee shall first obtain a permit revision pursuant to 40 CFR 49.154 and 49.155 approving the increase. For a proposed modification that is not otherwise subject to review under major NSR or under the program established under 40 CFR part 49, such proposed increase in the annual allowable emissions limit shall be approved through an administrative permit revision as provided at 40 CFR 49.159(f).

16. *Revising, Reopening, Revoking and Reissuing or Terminating for Cause*

The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance, does not stay any condition of this permit.

17. *Cause means with respect to the Tribe's ability to terminate coverage under this permit that:*

- a. The Permittee is not in compliance with the provisions of this permit;
- b. The Tribe determines that the emissions resulting from the operation of the permitted source significantly contribute to NAAQS violations, which are not adequately addressed by the requirements in this permit;
- c. The Tribe has reason to believe that the Permittee obtained approval of the permit by fraud or misrepresentation; or
- d. The Permittee failed to disclose a material fact required by the regulations applicable to the permitted source of which the Permittee had or should have had knowledge at the time the Permittee submitted the application.

18. *Changes in Ownership or Operator*

In the event of any changes in control or ownership of the source, this permit shall be binding on all subsequent owners and operators. The Permittee shall notify the succeeding owner or operator of the existence of this permit and its conditions by letter, a copy of which shall be forwarded to the Tribe within 90 days after the change in ownership or operator is effective. In the submittal, the new owner or operator must provide a written agreement containing a specific date for transfer of ownership or operator, and an effective date on which the new owner or operator assumes partial and/or full coverage and liability under this permit. The submittal must identify the previous owner and operator, and update the name, street address, mailing address, contact information, and any other information about the source, if such information would change as a result of the change of ownership or operator. The Permittee shall ensure that the permitted source remains in compliance with the permit until any such transfer of ownership or operator is effective. The Permittee shall ensure the new owner or operator is provided all records required by this permit prior to the transfer of ownership or operator. The Tribe may change the Permittee name and contact information to reflect the new owner or operator in accordance with the administrative amendment provisions in 40 CFR 49.159(f).

[Note: to help meet notification requirements, the AQD has a form "OWN" (for notifications of change in ownership). The form is available at: <https://www.southernutensn.gov/government/departments/epd/air-quality/src-review-permit/>]

19. Notification of Closure

The Permittee must submit a report of any permanent or indefinite closure to the Tribe within 90 days after the cessation of all operations at the permitted source. It is not necessary to submit a report of closure for regular, seasonal closures.

[Note: to help meet notification requirements, the AQD has a form “CLOSURE” (for notifications of facility closure). The form is available at: <https://www.southernute-nsn.gov/government/departments/epd/air-quality/src-review-permit/>

20. Notification and Report Submittals

The Permittee shall send all required reports and notifications to the Tribe electronically via airquality@southernute-nsn.gov and EPA electronically via EPA’s Central Data Exchange/Compliance and Emission Data Reporting Interface (CDX/CEDRI) with a copy to R8AirPermitting@epa.gov.

CDX/CEDRI

<https://cdx.epa.gov>

First-time users will need to register with CDX. Select the reporting option “part 49” available in CEDRI. If that specific reporting option is not available, select “Other Reports.” If the system is unavailable contact the EPA Region 8 at R8AirReportEnforcement@epa.gov and R8AirPermitting@epa.gov. If electronic submittal is not possible, such documents may be submitted to the EPA and the Tribe at the following addresses:

Mail: EPA Region 8
Branch Manager, Air and Toxics Enforcement Branch, 8ECA-AT
Enforcement and Compliance Assurance Division
U.S. Environmental Protection Agency, Region 8
1595 Wynkoop Street
Denver, Colorado 80202

And: Section Supervisor, Permitting and Modeling Section, 8ARD-AP-P
Air and Radiation Division
U.S. Environmental Protection Agency, Region 8
1595 Wynkoop Street
Denver, Colorado 80202

And: by United States Postal Service:
Southern Ute Indian Tribe
Air Quality Division
P.O. Box 737 MS #84
Ignacio, Colorado 81137

Or by Common Carrier:
Southern Ute Indian Tribe
Air Quality Division
398 Ouray Drive
Ignacio, CO 81137

Reports and notifications sent by mail shall be postmarked by the applicable due date identified in this permit.

21. *Signature Verifying Truth, Accuracy, and Completeness*

All reports and notifications required by this permit shall be signed by a responsible official as to the truth, accuracy and completeness of the information. The certification must state that, based on information and belief formed after reasonable inquiry, the statements and information in the documents are true, accurate and complete. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

Responsible official means one of the following:

- a. For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is directly responsible for the overall operation of the permitted source.
- b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively.
- c. For a public agency: Either a principal executive officer or ranking elected official, such as a chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

Section 2: Source wide Requirements

22. *Construction Requirements*

- a. The Permittee is authorized to install and operate no more than one turbine used for electric power generation to compress CO₂ gas, meeting the following specifications and operated and maintained as specified in Section 3 of this permit.
 - i. Limited to a maximum site rating of 9 megawatts;
 - ii. Limited to a maximum heat input capacity of 97.74 MMBtu/hr; and
 - iii. Fired only with high-pressure pipeline-quality natural gas fuel.
- b. The Permittee is authorized to install and operate no more than one 4SRB spark ignition (SI) reciprocating internal combustion engine (RICE) used for electric power generation, meeting the following specifications and operated, maintained, and controlled as specified in Section 4 this permit.
 - i. Limited to a maximum site rating of 701 hp;
 - ii. Fired only with pipeline quality natural gas fuel;
 - iii. Equipped with an oxidation catalyst control system;

- iv. Equipped with a non-resettable hour meter;
 - v. Limited to 500 hours of operation in any 12 consecutive calendar months; and
 - vi. Model year 2024 or later and certified by the manufacturer to the emissions standards in 40 CFR 60.4231, as applicable, for the same engine class and maximum engine power.
- c. The Permittee is authorized to install and operate no more than one TEG dehydration unit used for CO₂ gas dehydration, configured, operated and maintained with the following specifications:
- i. Equipped with a reboiler with a maximum heat input capacity of 0.500 million British thermal units per hour (MMBtu/hr);
 - ii. Limited to a maximum CO₂ throughput of 21 million standard cubic feet per day (MMscf/d);
 - iii. Emissions from the still vent shall be routed through a closed vent system to an overhead condenser and separator and BTEX reflux loop to remove BTEX vapors from the water vapor. A portion of the aqueous phase shall be refluxed back to the still for further stripping of liquid BTEX. The portion of the aqueous phase that is not refluxed shall be routed to onsite storage in the dirty water storage tank for off-site disposal. The vapor phase leaving the overhead separator shall be recycled back to the CO₂ Capture Facility inlet separator through a closed-vent system.
- d. The Permittee is authorized to install and operate no more than one vertical fixed roof dirty water storage tank with a maximum storage capacity of 21,000 gallons.
- e. The Permittee is authorized to install and operate no more than two horizontal compressor oil storage tanks with a maximum storage capacity of 587 gallons each.
- f. The Permittee is authorized to install and operate no more than one vertical fixed roof used oil storage tank with a maximum storage capacity of 3,780 gallons.
23. The Permittee shall maintain and operate each approved emission unit or activity, including any associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions of Tribal Minor NSR-regulated pollutants and considering the manufacturer's recommended operating procedures at all times, including periods of start-up, shutdown, maintenance and malfunction. The Tribe will determine whether the Permittee is using acceptable operating and maintenance procedures based on information available, which may include, but is not limited to, monitoring results, review of operating and maintenance procedures and inspection of the facility.
24. Emission limits and operational limitations shall apply at all times, unless otherwise specified in this permit.

Section 3: Requirements for Turbine

25. *Emission Limits*

- a. NO_x: Emissions from the turbine shall not exceed 15 parts per million (ppm) at 15% Dioxygen (O₂) or 76.9 nanograms per joule (ng/J) of useful output, equivalent to 0.61 lbs per megawatt-hour (lb/MWh) gross output.
- b. SO₂: The Permittee shall comply with either paragraph (i) or (ii) below:
 - i. The Permittee shall not cause to be discharged into the atmosphere any gases which contain SO₂ in excess of 110 ng/J of useful output, equivalent to 0.90 lb per megawatt-hour (lb/MWh) gross output; or
 - ii. The Permittee shall not burn in the turbine any natural gas fuel that contains total potential sulfur emissions in excess of 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input.
- c. Emission limits shall apply at all times, including periods of startups, shutdowns and malfunctions, unless otherwise specified in this permit.

26. *Operational Requirements*

- a. The Permittee shall operate and maintain the turbine 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. The Permittee may overhaul or replace the permitted turbine with a turbine of the same heat input and hp rating and configured to operate in a same manner as the turbine being overhauled or replaced. Any emission limits, requirements, restrictions, testing or other provisions that apply to the permitted turbine that is replaced shall also apply to the replacement turbine.

27. *Testing Requirements*

- a. The Permittee shall conduct an initial performance test for NO_x and SO₂ within 60 days after achieving the maximum production rate at which the turbine will be operated, but not later than 180 days after initial startup of the turbine to demonstrate compliance with the emission limits specified in Condition 25 of this permit.
- b. Subsequent NO_x and SO₂ performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test).
- c. Each performance test shall be conducted at a load condition within plus or minus 25% of 100% of peak load.
- d. NO_x performance tests shall be conducted using one of the following methods:
 - i. Measure the NO_x concentration (in ppm), using EPA Method 7E or EPA Method 20 in Appendix A of 40 CFR part 60, and in accordance with the applicable procedures in 40 CFR 60.6440; or
 - ii. Measure the NO_x and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of 40 CFR part 60, and in accordance with the applicable procedures in 40 CFR 60.6440.

- e. If the NO_x emission result from the performance test is less than or equal to 75% of the NO_x emissions limits in Condition 25 of this permit, the Permittee 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% of the NO_x emissions limits in Condition 25 of this permit, the Permittee must resume annual performance tests.
- f. SO₂ performance tests shall be conducted using one of the following methodologies:
 - i. The use of a current, valid purchase contract, tariff sheet, or transportation contract for the fuel specifying the maximum total sulfur content of the fuel combusted in the turbine. Alternatively, the fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFR part 75 may be used;
 - ii. Periodically determine the sulfur content of the fuel combusted in the turbine, a representative fuel sample may be collected either by an automatic sampling system or manually, according to the procedures specified in 40 CFR 60.4415(a)(2);
 - iii. Measure the SO₂ concentration (in ppm), using EPA Methods 6, 6C, 8, or 20 in appendix A of 40 CFR part 60 and the additional procedures specified in 40 CFR 60.4415(a)(3); or
 - iv. Measure SO₂ and diluent gas concentrations, using either EPA Methods 6, 6C, or 8 and 3A, or 20 in appendix A of 40 CFR part 60 and the additional procedures specified in 40 CFR 60.4415(a)(4).
 - v. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half of the applicable limit, ASTM (formerly known as American Society for Testing and Materials) methods D4084, D4810, D5504, or D6228, or Gas Processors Association (GPA) Standard 2377 (incorporated by reference in 40 CFR 60.17), which measure the major sulfur compounds, may be used.

28. *Recordkeeping Requirements*

- a. Records shall be kept of specifications and maintenance requirements developed by manufacturer, vendor, or Permittee for the turbine.
- b. Records shall be kept of all calibration, maintenance and required testing conducted for the turbine. The records shall include the following:
 - i. The date, place, and time of sampling or measurements;
 - ii. The date(s) analyses were performed;
 - iii. The company or entity that performed the analyses;
 - iv. The analytical techniques or methods used;
 - v. The results of such analyses or measurements; and

- vi. The operating conditions as existing at the time of sampling or measurement.
- c. Records shall be kept of any overhaul or replacement of an existing permitted turbine with a turbine of the same heat input and hp rating and configured to operate in the same manner as the turbine being rebuilt or replaced.
- d. The Permittee shall retain all records required by this permit for a period of at least 5 years from the date the record was created.

Section 4: Requirements for Generator Engine

29. Emission Limits

Emissions from the 701 hp rich-burn SI RICE shall not exceed the following:

- a. NO_x: 1.00 g/hp-hr and 0.4 tons per year (tpy);
- b. CO: 2.00 g/hp-hr and 0.8 tpy; and
- c. VOC: 0.70 g/hp-hr and 0.3 tpy.

30. Operational Requirements

- a. The Permittee must operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions.
- b. The Permittee shall operate and maintain the certified engine to achieve the emission limits specified in Condition 29 of this permit over the entire life of the engine.
- c. The Permittee shall follow, for the generator engine and any respective catalytic control system, the manufacturer recommended maintenance schedules and procedures to ensure optimum performance of the certified engine and its respective catalytic control system.
- d. The Permittee may overhaul or replace an existing permitted engine with an engine of the same hp rating and configured to operate in the same manner as the engine being overhauled or replaced. Any emission limits, requirements, control technologies, testing or other provisions that apply to the permitted engines that are replaced shall also apply to the replacement engines.
- e. The Permittee's completion of any or all of these actions shall not constitute, nor qualify as, an exemption from any other emission limits in this permit.

31. Testing Requirements

- a. The Permittee shall maintain the certification on the generator engine and operate the generator engine and control device according to the manufacturer's emission-related written instructions, including conducting maintenance, to demonstrate compliance with the emission limits specified in Condition 29 of this permit.
- b. Performance testing is not required.

32. *Monitoring Requirements*

- a. The Permittee shall conduct maintenance activities on the engine according to the manufacturer's emission-related written instructions to demonstrate compliance with the manufacturer-certified emission limits specified in condition 29 of this permit.
- b. The Permittee shall monitor and record the hours of operation of the certified engine at the end of each calendar month, beginning with the first calendar month of operation under this permit, using the non-resettable hour meter. Prior to 12 full calendar months of operation under this permit, at the end of each month, the Permittee shall add the hours for that month to the hours for the previous months and record the total. Thereafter, at the end of each calendar month, the Permittee shall add the hours for each month to the total hours for the preceding 11 months and record a new 12-month total.

33. *Emissions Calculations*

The Permittee shall calculate engine NO_x, CO and VOC emissions as follows:

- a. Generator engine emissions shall be calculated based on the following:
 - i. Certified emission rates of NO_x, CO and VOC in g/hp-hr, converted to pounds per hour (lb/hr);
 - ii. The maximum site-rated hp of the engine;
 - iii. The number of operating hours for the engine for that month; and
 - iv. Monthly emission calculations shall include operating time spent during startup and shutdown. The catalytic control system shall be installed and working during all generator engine operations including any engine break-in period. Manufacturer provided emission factors shall be used for NO_x, CO and VOC. Uncontrolled HAP emission calculations shall use the highest emission factor between EPA's AP-42, GRI field data and GRI literature data sets.
- b. Generator engine emission calculations shall be made at the end of each calendar month, beginning with the first month that this permit is effective. Emissions shall be calculated in tons per month. Prior to 12 full months of operation under this permit, at the end of each month, the Permittee shall add the emissions in tons for that month to the calculated emissions for all previous months since the effective date of this permit and record the total. Thereafter, the Permittee shall, at the end of each month, add the emissions in tons for that month to the calculated emissions for the preceding 11 months and calculate a new 12-month total.

34. *Recordkeeping Requirements*

- a. The Permittee shall maintain the permit application and all documentation supporting that application, including the engine certification, and the manufacturer or vendor specifications, maintenance schedules, and maintenance procedures, for the duration of time that the generator engine is covered under this permit.
- b. The Permittee shall retain all records required by this permit for a period of at least 5 years from the date the record was created.

- c. Records shall be kept at the facility or the location that has day-to-day operational control over the facility.
- d. The Permittee shall maintain records of:
 - i. The hours of operation for each month as measured by the non-resettable hour meter and as calculated for each consecutive 12-month period for the generator engine;
 - ii. For the engine CAA certification, valid documentation from the manufacturer that the generator engine is certified to the applicable standards;
 - iii. The maintenance plan for the generator engine;
 - iv. All maintenance activities conducted for the generator engine to demonstrate compliance with the emission limits in Condition 29 of this permit on a monthly basis;
 - v. Monthly and consecutive 12-month NO_x, CO and VOC emission calculations for the generator engine; and
 - vi. Evidence from the supplier that the fuel for the generator engine is pipeline quality natural gas.

Section 5: Notification and Reporting Requirements

35. *Notification of construction or modification and operations*

The Permittee shall submit to the Tribe a written notice (may be electronic) within 30 days from when the Permittee begins actual construction and from when the Permittee begins or resumes operations.

36. *Annual Reports*

- a. The Permittee shall submit to the EPA and the Tribe an annual report no later than April 1st of each calendar year, beginning with the calendar year following the first calendar year of operation under this permit. The annual report shall cover the period from January 1 to December 31 of the previous calendar year. All reports shall be certified to truth and accuracy by the person primarily responsible for CAA compliance for the Permittee.
- b. The report shall include:
 - i. An evaluation of the permitted source's compliance status with the requirements in this permit;
 - ii. Summaries of the required generator engine NO_x, CO, and VOC emission calculations, as applicable;
 - iii. Summaries of the required generator engine and turbine testing, monitoring and recordkeeping in this permit; and

- iv. Summaries of deviation reports submitted pursuant to this permit.

37. *Deviation Reports*

The Permittee shall promptly submit to the EPA and the Tribe a written report of any deviations of permit requirements, including deviations attributable to start-ups, shutdowns and malfunctions. For the purposes of this permit, “promptly” shall mean to notify the EPA and the Tribe in writing by electronic mail:

- a. The deviation report shall include: the identity of the affected emissions unit or activity where the deviation occurred; the nature, duration and probable cause of the deviation; and any corrective actions or preventative measures taken to minimize emissions from the deviation and to prevent future deviations.
- b. A “prompt” deviation report is one that is submitted electronically via CEDRI or one that is post marked as follows:
 - i. Within 72 hours of discovery for deviations from any hours of operation, throughput or other operational limit in this permit; and
 - ii. By April 1st for the discovery of a deviation of recordkeeping or other permit conditions during the preceding calendar year that do not affect the Permittee’s ability to meet the limitations in this permit.

Deviation means any situation in which an emission 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 the requirements of this permit. 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:

- 1. A situation where emissions exceed an emission limitation or standard;
- 2. A situation where process or emission control device parameter values indicate that an emission limitation or standard has not been met;
- 3. A situation in which any testing, monitoring, recordkeeping or reporting required by this permit is not performed or not performed as required; and
- 4. A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit.

38. *Performance Test Reports*

The Permittee shall submit a written report for any required performance tests to the EPA Regional Office and the Tribe within 60 days after completing the tests.

- 39. The Permittee shall submit any record or report required by this permit upon request from the EPA or the Tribe.