



State of Utah

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Governor

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Lieutenant Governor

Department of Environmental Quality

Alan Matheson
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

11532

Title V Operating Permit

PERMIT NUMBER: 900001004

DATE OF PERMIT: November 28, 2017

Date of Last Revision: November 28, 2017

This Operating Permit is issued to, and applies to the following:

Name of Permittee:

Dominion Energy Questar Pipeline, LLC
1140 West 200 South
PO Box 45360
Salt Lake City, UT 84145-0360

Permitted Location:

Kastler Marushack Compressor Station
Section 16, T3N, R24E
N4539184 E 650257
Daggett County, UT 84145

UTM coordinates: 650,257 m Easting, 4,539,184 m Northing
SIC code: 4922 (Natural Gas Transmission)

By:

Bryce C. Bird, Director

Prepared By:

Brandy Cannon

ENFORCEABLE DATES AND TIMELINES

The following dates or timeframes are referenced in
Section I: General Provisions of this permit.

Annual Certification Due: March 31 of every calendar year that this permit is in force.

Renewal application due: May 28, 2022

Permit expiration date: November 28, 2022

Definition of “prompt”: written notification within 14 days.

ABSTRACT

The Kastler Compressor Station compresses natural gas for injection and delivery into a natural gas reservoir. Six reciprocating internal combustion engines and three gas turbines are used to drive nine compressors in the station. Natural gas is the fuel source for the engines and turbines. The station also includes the Clay Basin Dew Point (CBDP) Process Unit. The CBDP process unit receives and processes natural gas from a storage reservoir and from the main lines. The CBDP process unit includes an ethylene glycol regenerator, liquid hydrocarbon loading rack, and miscellaneous process stream equipment. The Kastler Compressor Station is a major source of NO_x, CO, and VOC and is subject to 40 CFR 60 Subpart A-General Provisions, 40 CFR 60 Subpart GG-Standards of Performance for Stationary Gas Turbines, 40 CFR 60 Subpart KKK-Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants, 40 CFR 63 Subpart A-General Provisions, 40 CFR 63 Subpart ZZZZ-National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, and 40 CFR 63 Subpart CCCCCC-National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities.

OPERATING PERMIT HISTORY

Permit/Activity	Date Issued	Recorded Changes
Title V renewal application (Project #OPP0115320009)	11/28/2017	Changes: Updates to requirements from 40 CFR 63 Subpart ZZZZ and State rules; update to CAM condition.
Title V administrative amendment - enhanced AO (Project #OPP0115320008)	04/04/2016	Changes: Incorporate provisions approved in DAQE-AN115320010-16, 1/6/16, to update the equipment list and add an emergency flare with associated LDAR conditions. Requirements from 40 CFR 63 Subpart CCCCCC have also been included in this permit revision.
Title V renewal application (Project #OPP0115320007)	10/22/2012	Changes: Incorporate 40 CFR 63 Subpart ZZZZ requirements, update CAM plan, update emission unit description list, various language updates and typographical corrections.
Title V administrative amendment - enhanced AO (Project #OPP0115320006)	02/06/2008	Changes: Incorporate provisions approved in DAQE-AN0115320007A-08, 1/23/08, to allow use of portable testing monitors in NO _x and CO monitoring for ICE-1 and ICE-2, and to expand gas processing capacity by installing three JT skids, two process heaters (less than 5 MMBtu/hr each), and a flare to control emissions from the ethylene glycol regenerator.
Title V renewal application (Project #OPP0115320004)	03/08/2007	Changes: Action initiated by a renewal of an operating permit. One unit identified as subject to CAM.
Title V significant modification (Project #OPP0115320003)	03/26/2002	Changes: Add a compressor unit.
Title V administrative amendment by source (Project #OPP0115320002)	04/18/2001	Changes: to add the Clay Basin Dew Point Process Unit to further process the gas stream at the Kastler Compressor Station.
Title V initial application (Project #OPP0115320001)	11/20/1998	

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Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

SECTION I: GENERAL PROVISIONS

I.A Federal Enforcement.

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

I.B Permitted Activity(ies).

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

I.C Duty to Comply.

- I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))
- I.C.2 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. (R307-415-6a(6)(b))
- I.C.3 The permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director copies of records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))
- I.C.4 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

I.D Permit Expiration and Renewal.

I.D.1 This permit is issued for a fixed term of five years and expires on the date shown under "Enforceable Dates and Timelines" at the front of this permit. (R307-415-6a(2))

I.D.2 Application for renewal of this permit is due on or before the date shown under "Enforceable Dates and Timelines" at the front of this permit. An application may be submitted early for any reason. (R307-415-5a(1)(c))

I.D.3 An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))

I.D.4 Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

I.E **Application Shield.**

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Director takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Director any additional information identified as being needed to process the application. (R307-415-7b(2))

I.F **Severability.**

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

I.G **Permit Fee.**

I.G.1 The permittee shall pay an annual emission fee to the Director consistent with R307-415-9. (R307-415-6a(7))

I.G.2 The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

I.H **No Property Rights.**

This permit does not convey any property rights of any sort, or any exclusive privilege. (R307-415-6a(6)(d))

I.I **Revision Exception.**

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (R307-415-6a(8))

I.J **Inspection and Entry.**

I.J.1 Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director or an authorized representative to perform any of the following:

- I.J.1.a Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit. (R307-415-6c(2)(a))
- I.J.1.b Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))
- I.J.1.c Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. (R307-415-6c(2)(c))
- I.J.1.d Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))
- I.J.2 Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))

I.K **Certification.**

Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. 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. (R307-415-5d)

I.L **Compliance Certification.**

- I.L.1 Permittee shall submit to the Director an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than the date shown under "Enforceable Dates and Timelines" at the front of this permit, and that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))
- I.L.1.a The identification of each term or condition of this permit that is the basis of the certification;
- I.L.1.b The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period. Such methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;
- I.L.1.c The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and

- I.L.1.d Such other facts as the Director may require to determine the compliance status.
- I.L.2 The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Director: (R307-415-6c(5)(d))

Environmental Protection Agency, Region VIII
Office of Enforcement, Compliance and Environmental Justice
(mail code 8ENF)
1595 Wynkoop Street
Denver, CO 80202-1129

I.M **Permit Shield.**

- I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:
- I.M.1.a Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))
- I.M.1.b Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))
- I.M.2 Nothing in this permit shall alter or affect any of the following:
- I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))
- I.M.2.b The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(g) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b))
- I.M.2.c The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))
- I.M.2.d The ability of the Director to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))

I.N **Emergency Provision.**

- I.N.1 An "emergency" is any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. (R307-415-6g(1))
- I.N.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the affirmative defense is demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- I.N.2.a An emergency occurred and the permittee can identify the causes of the emergency. (R307-415-6g(3)(a))

- I.N.2.b The permitted facility was at the time being properly operated. (R307-415-6g(3)(b))
- I.N.2.c During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this permit. (R307-415-6g(3)(c))
- I.N.2.d The permittee submitted notice of the emergency to the Director within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirement of Provision I.S.2.c below. (R307-415-6g(3)(d))
- I.N.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. (R307-415-6g(4))
- I.N.4 This emergency provision is in addition to any emergency or upset provision contained in any other section of this permit. (R307-415-6g(5))
- I.O **Operational Flexibility.**
- Operational flexibility is governed by R307-415-7d(1).
- I.P **Off-permit Changes.**
- Off-permit changes are governed by R307-415-7d(2).
- I.Q **Administrative Permit Amendments.**
- Administrative permit amendments are governed by R307-415-7e.
- I.R **Permit Modifications.**
- Permit modifications are governed by R307-415-7f.
- I.S **Records and Reporting.**
- I.S.1 Records.
- I.S.1.a The records of all required monitoring data and support information shall be retained by the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. (R307-415-6a(3)(b)(ii))
- I.S.1.b For all monitoring requirements described in Section II, Special Provisions, the source shall record the following information, where applicable: (R307-415-6a(3)(b)(i))
- I.S.1.b.1 The date, place as defined in this permit, and time of sampling or measurement.
- I.S.1.b.2 The date analyses were performed.

- I.S.1.b.3 The company or entity that performed the analyses.
- I.S.1.b.4 The analytical techniques or methods used.
- I.S.1.b.5 The results of such analyses.
- I.S.1.b.6 The operating conditions as existing at the time of sampling or measurement.
- I.S.1.c Additional record keeping requirements, if any, are described in Section II, Special Provisions.
- I.S.2 Reports.
- I.S.2.a Monitoring reports shall be submitted to the Director every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))
- I.S.2.b All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i))
- I.S.2.c The Director shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. Prompt, as used in this condition, shall be defined as written notification within the number of days shown under "Enforceable Dates and Timelines" at the front of this permit. Deviations from permit requirements due to breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))
- I.S.3 Notification Addresses.
- I.S.3.a All reports, notifications, or other submissions required by this permit to be submitted to the Director are to be sent to the following address or to such other address as may be required by the Director:
- Utah Division of Air Quality
P.O. Box 144820
Salt Lake City, UT 84114-4820
Phone: 801-536-4000
- I.S.3.b All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Director:
- For annual compliance certifications:
- Environmental Protection Agency, Region VIII
Office of Enforcement, Compliance and Environmental Justice
(mail code 8ENF)
1595 Wynkoop Street
Denver, CO 80202-1129
- For reports, notifications, or other correspondence related to permit modifications,

applications, etc.:

Environmental Protection Agency, Region VIII
Office of Partnerships and Regulatory Assistance Air and Radiation Program (mail
code 8P-AR)
1595 Wynkoop Street
Denver, CO 80202-1129
Phone: 303-312-6114

I.T **Reopening for Cause.**

I.T.1 A permit shall be reopened and revised under any of the following circumstances:

I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))

I.T.1.b The Director or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))

I.T.1.c EPA or the Director determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))

I.T.1.d Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))

I.T.2 Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the Acid Rain Program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into this permit. (R307-415-7g(1)(b))

I.T.3 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))

I.U **Inventory Requirements.**

An emission inventory shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)

I.V **Title IV and Other, More Stringent Requirements**

Where an applicable requirement is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, Acid Deposition Control, both provisions shall be incorporated into this permit. (R307-415-6a(1)(b))

SECTION II: SPECIAL PROVISIONS

- II.A **Emission Unit(s) Permitted to Discharge Air Contaminants.**
(R307-415-4(3)(a) and R307-415-4(4))
- II.A.1 **Permitted Source**
Source-wide
- II.A.2 **ICE-1: Turbines for Gas Compression**
Three pipeline quality natural gas-fired turbines rated at 5,152 Hp each. Turbines are used to compress gas and each turbine is equipped with low NO_x burners.
- II.A.3 **ICE-2: Turbines for Backup Power**
Two pipeline quality natural gas-fired turbines rated at 800 kW each. Turbines used to generate backup power only.
- II.A.4 **ICE-3: Internal Combustion Engines**
Five pipeline quality natural gas-fired four-stroke lean burn (4SLB) reciprocating internal combustion engines (ICE) rated at 2,600 Hp each. These reciprocating ICEs are used to compress gas.
- II.A.5 **ICE-4: Internal Combustion Engine - Controlled**
One pipeline quality natural gas-fired four-stroke rich burn (4SRB) reciprocating internal combustion engine (ICE) rated at 1,680 Hp. The engine is equipped with three-way non-selective catalytic reduction and is used to compress gas.
- II.A.6 **EC-1: Hot Water Boilers**
Pipeline quality natural gas-fired hot water boilers rated at no more than 9 MMBtu/hr combined. No unit-specific applicable requirements.
- II.A.7 **EC-2: Miscellaneous Heating Units**
Pipeline-quality natural gas-fired heating units rated at no more than 9 MMBtu/hr combined.
- II.A.8 **TNK-1: Condensate Tanks**
Three condensate tanks, 16,800 gallons each. No unit-specific applicable requirements.
- II.A.9 **TNK-2: Underground Gasoline Storage Tank**
One 12,000 gallon underground gasoline storage tank.
- II.A.10 **TNK-3: Diesel Tank**
One 940 gallon diesel storage tank. No unit-specific applicable requirements.
- II.A.11 **TNK 4: Triethylene Glycol Tanks**
Two triethylene glycol storage tanks, 15,000 gallons combined. No unit-specific applicable requirements.
- II.A.12 **TNK-5: Ambitrol Tanks**
Two 3,178 gallon ethylene glycol storage tanks. No unit-specific applicable requirements.
- II.A.13 **TNK-6: Reflux Produced Water Tanks**
Two produced water storage tanks, 5,000 gallons combined. No unit-specific applicable requirements.

- II.A.14 **TNK-7: Waste Water Tank**
One 11,382 gallon waste water storage tank.
- II.A.15 **TNK-8: Waste Oil Tanks**
Three waste oil storage tanks, no more than 22,000 gallons combined. No unit-specific applicable requirements.
- II.A.16 **TNK-9: Propane Refrigerant Make-up Tanks**
Four propane tanks, 1,000 gallons each. No unit-specific applicable requirements.
- II.A.17 **TNK-10: Oil Tanks**
One 2,500 gallon and one 5,000 gallon oil storage tank. No unit-specific applicable requirements.
- II.A.18 **TNK-11: Lube Oil Tanks**
Two lube oil storage tanks, 5,000 gallons combined. No unit-specific applicable requirements.
- II.A.19 **TNK-12: Dew Point Plant Slop Tanks**
Two process waste storage tanks, 5,000 gallons combined. No unit-specific applicable requirements.
- II.A.20 **TNK-13: Pressurized Condensate Tanks**
Two 45,000 gallon each pressurized condensate tanks associated with the loading rack in the Clay Basin Dew Point process unit. No unit-specific applicable requirements.
- II.A.21 **TNK-14: Oil Expansion Tank**
One 6,900 gallon expansion tank for heat transfer oil associated with EC-3. No unit-specific applicable requirements.
- II.A.22 **MISC-1: Venting of Natural Gas**
Fourteen vents for methane and ethane. No unit-specific applicable requirements.
- II.A.23 **MISC-2: Miscellaneous Parts Cleaner**
Parts washer using mineral spirits. No unit-specific applicable requirements.
- II.A.24 **MISC-3: Emergency Flare**
Vent pipe to remove any vapors that may be present in the DPP building and process piping during upset conditions. Controlled by an elevated flare.
- II.A.25 **CBDP-1: Onshore Natural Gas Processing Plant**
The Dew Point Plant includes miscellaneous process stream equipment and fugitive emissions including pumps, compressors, pressure relief devices, open-ended valves and lines, valves, flanges and other connectors that are in VOC or wet gas service. Includes equipment in CBDP-2, CBDP-3, CBDP-4, EC-3, and TNK-13.
- II.A.26 **CBDP-2: Liquid Hydrocarbon Loading Rack**
One liquid hydrocarbon loading rack controlled using a vapor balancing system. No unit-specific applicable requirements.
- II.A.27 **CBDP-3: Ethylene Glycol Regenerator**
One rich/lean exchanger, one flash tank, and one still. A flare controls the reflux vent stream from the ethylene glycol regenerator.
- II.A.28 **CBDP-4: JT Processing Skids**
Three JT processing skids, with a 3-phase separator and stabilizer tower, remove liquid hydrocarbons from the natural gas stream and lower the cricondentherm dew point of the gas.

- II.A.29 **EC-3: Hot Oil Heater**
One pipeline quality natural gas-fired heater rated at 3.0 MMBtu/hr, used for heat transfer in the CBDP process unit. No unit-specific applicable requirements.
- II.A.30 **NESHAP SI RICE: Reciprocating IC Engines**
Existing spark ignition (SI) reciprocating internal combustion engines (RICE) that commenced construction or reconstruction before June 12, 2006. These units are subject to 40 CFR 63 Subpart ZZZZ and meet the criteria for remote defined in 40 CFR 63.6675. The unit includes the engines listed under units ICE-3 and ICE-4.
- II.B **Requirements and Limitations**
- The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated:
- II.B.1 **Conditions on permitted source (Source-wide).**
- II.B.1.a **Condition:**
- Unless otherwise specified in this permit, at all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, 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 Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Origin: DAQE-AN115320010-16]. [40 CFR 60.11(d), R307-401-8(2)]
- II.B.1.a.1 **Monitoring:**
- Records required for this permit condition will serve as monitoring.
- II.B.1.a.2 **Recordkeeping:**
- Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.
- II.B.1.a.3 **Reporting:**
- There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.1.b **Condition:**
- Visible emissions shall be no greater than 10 percent opacity from all natural gas-fired emission units. [Origin: DAQE-AN115320010-16]. [R307-401-8(1)(a)(BACT)]
- II.B.1.b.1 **Monitoring:**
- Records required for this permit condition will serve as monitoring.
- II.B.1.b.2 **Recordkeeping:**
- In lieu of monitoring via visible emission observations, the permittee shall keep one of the following sets of records for each affected emission unit, as applicable:

- (1) Documentation that the emission unit can only burn pipeline quality natural gas;
- (2) Documentation that the fuels other than pipeline quality natural gas cannot be supplied to the emission unit without modification of the fuel supply system; or
- (3) Fuel bills or fuel meter readings that demonstrate only pipeline quality natural gas are combusted in the emission unit.

The permittee shall keep a log which includes the location and description of each affected emission unit. For each affected emission unit the log shall include the type of records that will be used in lieu of monitoring via visible emission observations. If fuel bills or fuel meter readings will be used in lieu of monitoring via visible emission observations, the permittee shall review fuel bills or fuel meter readings once per quarter and record in the log the types of fuel combusted. The records and log required by this condition shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.b.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.c

Condition:

- 1) General requirements for prevention of emissions and use of good air pollution control practices.
 - (a) All condensate, and intermediate hydrocarbon liquids collection, storage, processing and handling operations, regardless of size, shall be designed, operated and maintained so as to minimize emission of VOCs to the atmosphere to the extent reasonably practicable.
 - (b) At all times, including periods of start-up, shutdown, and malfunction, the installation and air pollution control equipment shall be maintained and operated in a manner consistent with good air pollution control practices for minimizing emissions.
 - (c) Determination of whether or not acceptable operating and maintenance procedures are being used will be based on information available to the director, which may include, but is not limited to, monitoring results, infrared camera images, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- (2) General requirements for air pollution control equipment.
 - (a) All air pollution control equipment shall be operated and maintained pursuant to the manufacturing specifications or equivalent to the extent practicable and consistent with technological limitations and good engineering and maintenance practices.
 - (b) In addition, all such air pollution control equipment shall be adequately designed and sized to achieve the control efficiency rates established in rules or in approval orders issued under R307-401 and to handle reasonably foreseeable fluctuations in emissions of VOCs during normal operations. Fluctuations in emissions that occur when the separator dumps into the tank are reasonably foreseeable.

[Origin: R307-501-4]. [R307-501-4]

II.B.1.c.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.1.c.2

Recordkeeping:

The permittee shall keep manufacturer specifications or equivalent on file and shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.c.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this

permit.

II.B.1.d Condition:

All existing pneumatic controllers shall meet the standards established for pneumatic controller affected facilities that are constructed, modified or reconstructed on or after October 15, 2013 as specified in 40 CFR 60, Subpart OOOO Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution. [Origin: R307-502-4]. [R307-502-4]

II.B.1.d.1 Monitoring:

The tagging requirements in 40 CFR 60.5390(b)(2) and 40 CFR 60.5390(c)(2), incorporated by reference in R307-210, are modified to not require the month and year of installation, reconstruction or modification for existing pneumatic controllers. Records required for this permit condition will serve as monitoring.

II.B.1.d.2 Recordkeeping:

The recordkeeping requirements in 40 CFR 60.5420(c)(4)(i), incorporated by reference in R307-210, are modified to not require records of the date of installation or manufacturer specifications for existing pneumatic controllers. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.d.3 Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2 Conditions on Turbines for Gas Compression (ICE-1).

II.B.2.a Condition:

Sulfur content of any fuel burned shall be no greater than 0.8% by weight. [Origin: 40 CFR 60 Subpart GG]. [40 CFR 60.333(b)]

II.B.2.a.1 Monitoring:

The Federal Energy Regulatory Commission (FERC) gas tariff serves as the monitoring. [40 CFR 60.334(h)(3)(i)].

II.B.2.a.2 Recordkeeping:

The total sulfur limit in the FERC gas tariff shall be recorded and converted to percent sulfur by weight to determine the sulfur content. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.2.a.3 Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.b Condition:

Combined hours of operation shall be no greater than 24,120 hours per rolling 12-month period. [Origin: DAQE-AN115320010-16]. [R307-401-8(1)(a)(BACT)]

II.B.2.b.1

Monitoring:

An hour meter shall be used to continuously monitor the hours of operation for the affected equipment. Readings shall be taken monthly to determine the total operating hours for that month. Compliance with the limitation shall be determined on a rolling 12-month total. Each month, a new 12-month total shall be calculated using data from the previous 12 months.

II.B.2.b.2

Recordkeeping:

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.2.b.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.c

Condition:

Emissions of NO_x shall be no greater than 7.43 lb/hr and 0.0042% by volume (15% O₂, dry) for each turbine. [Origin: DAQE-AN115320010-16]. [40 CFR 60 Subpart GG, R307-401-8(1)(a)(BACT)]

II.B.2.c.1

Monitoring:

Stack testing shall be performed as specified here:

- (a) Frequency. Each unit shall be tested every five years, based on the date of the latest stack test.
- (b) Notification. At least 30 days before the test, the source shall notify the Director of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Director.
- (c) Sample Point The emission sample points shall be selected following Method 20 or Method 1 in accordance with 40 CFR 60.335(a)(4) and (5).
- (d) Methods
 - (1) 40 CFR 60, Appendix A, Method 20; ASTM D6522-00; or 40 CFR 60, Appendix A, Method 7E and either 40 CFR 60, Appendix A Method 3 or 3A, to determine NO_x and diluent concentration;
 - (2) 40 CFR 60, Appendix A, Method 19 may be used to determine the volumetric flow rate based on the fuel flow determined by fuel gas meter and exhaust O₂ concentration.
 - (3) Fuel-bound nitrogen content factor F shall be 0;
- (e) Calculations. The nitrogen oxides emission rate (NO_x) shall be computed for each run using the following equation:

$$\text{NO}_x = (\text{NO}_{x0}) (\text{Pr}/\text{Po})^{0.5} e^{19(\text{Ho}-0.00633)} (288^\circ\text{K}/\text{Ta})^{1.53}$$

where:

- NO_x = emission rate of NO_x at 15% O₂ and ISO standard ambient conditions, volume percent.
- NO_{x0} = observed NO_x concentration, ppm by volume.
- Pr = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.
- Po = observed combustor inlet absolute pressure at test, mm Hg.
- Ho = observed humidity of ambient air, g H₂O/g air.
- e = transcendental constant, 2.718.
- Ta = ambient temperature, °K.

To determine mass emission rates (lb/hr, etc.), the pollutant concentration as determined by

the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Director to give the results in the specified units of the emission limitation.

- (f) Production Rate During Testing. The operational rate during all compliance testing shall be no less than 90% of the maximum rate achieved in the previous three (3) years.

II.B.2.c.2

Recordkeeping:

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.2.c.3

Reporting:

Results of required stack testing shall be submitted to the Director within 60 days of completion of the testing. The submittal shall clearly identify results and indicate compliance status. The annual compliance certification required by Provision L in Section I of this permit shall use the most recent test results as a basis for stating compliance status for this limitation.

II.B.2.d

Condition:

Emissions of CO shall be no greater than 5.38 lb/hr and 50 ppm_{dv} (15% O₂, dry) for each turbine. [DAQE-AN115320010-16]. [R307-401-8(1)(a)(BACT)]

II.B.2.d.1

Monitoring:

Stack testing shall be performed as specified here:

- (a) Frequency. Test every five years (based on the date of the latest stack test) using 40 CFR 60, Appendix A, Method 10, 10A, or 10B or every two years with a portable testing monitor. If a portable testing monitor is to be used, a correlation must be established during the initial test between the portable testing monitor and the reference method test. Subsequently, the portable testing monitor results shall be correlated with the results of the periodic reference method test at least once every five years.
- (b) Notification. At least 30 days before the test, the source shall notify the Director of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Director.
- (c) The emission sample point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.
- (d) Methods to be used:
 - (1) To determine stack volumetric flow rate - 40 CFR 60, Method 19 based on the fuel flow determined by fuel gas meter and exhaust O₂ concentration.
 - (2) To test for CO emissions - 40 CFR 60, Appendix A, Method 10, 10A, 10B, or other EPA-approved testing method acceptable to the Director. A portable testing monitor may be used in lieu of the reference test method provided the requirements of (a) are met. If the requirements of (a) are not met, the reference test method must be used for subsequent tests.
- (e) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors to give the results in the specified units of the emission limitation.
- (f) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.2.d.2

Recordkeeping:

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.2.d.3

Reporting:

Results of required stack testing shall be submitted to the Director within 60 days of completion of the testing. The submittal shall clearly identify results and indicate compliance status. The annual compliance certification required by Provision L in Section I of this permit shall use the most recent test results as a basis for stating compliance status for this limitation.

II.B.3

Conditions on Turbines for Backup Power (ICE-2).

II.B.3.a

Condition:

Combined hours of operation shall be no greater than 400 hours per rolling 12-month period. [Origin: DAQE-AN115320010-16]. [R307-401-8(1)(a)(BACT)]

II.B.3.a.1

Monitoring:

An hour meter shall be used to continuously monitor the hours of operation for the affected equipment. Readings shall be taken monthly to determine the total operating hours for that month. Compliance with the limitation shall be determined on a rolling 12-month total. Each month, a new 12-month total shall be calculated using data from the previous 12 months.

II.B.3.a.2

Recordkeeping:

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.3.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3.b

Condition:

Emissions of NO_x shall be no greater than 3.80 lb/hr and 76.4 ppm_{dv} (15% O₂, dry) for each generator. [Origin: DAQE-AN115320010-16]. [R307-401-8(1)(a)(BACT)]

II.B.3.b.1

Monitoring:

Stack testing shall be performed as specified here:

- (a) Frequency. Test every five years (based on the date of the latest stack test) using 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E or every two years with a portable testing monitor. If a portable testing monitor is to be used, a correlation must be established during the initial test between the portable testing monitor and the reference method test. Subsequently, the portable testing monitor results shall be correlated with the results of the periodic reference method test at least once every five years.
- (b) Notification. At least 30 days before the test, the source shall notify the Director of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Director.
- (c) The emission sample point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.
- (d) Methods to be used:
 - (1) To determine stack volumetric flow rate - 40 CFR 60, Method 19 based on the fuel flow determined by fuel gas meter and exhaust O₂ concentration.
 - (2) To test for NO_x emissions - 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, 7E, or other EPA-approved testing method acceptable to the Director. A portable testing monitor may be used in lieu of the reference test method provided the requirements of

- (a) are met. If the requirements of (a) are not met, the reference test method must be used for subsequent tests.
- (e) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors to give the results in the specified units of the emission limitation.
- (f) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.3.b.2

Recordkeeping:

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.3.b.3

Reporting:

Results of required stack testing shall be submitted to the Director within 60 days of completion of the testing. The submittal shall clearly identify results and indicate compliance status. The annual compliance certification required by Provision L in Section I of this permit shall use the most recent test results as a basis for stating compliance status for this limitation.

II.B.4

Conditions on Internal Combustion Engine - Controlled (ICE-4).

II.B.4.a

Condition:

Emissions of NO_x shall be no greater than 3.70 lb/hr. [Origin: DAQE-AN115320010-16]. [R307-401-8(1)(a)(BACT)]

II.B.4.a.1

Monitoring:

- I. Stack testing shall be performed as specified below:
 - (a) Testing Frequency: Test every 2200 hours of operation or every five years (based on the date of the latest stack test), whichever comes first, using 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D or 7E. Additionally, if an excursion (as defined below) occurs, the unit shall be tested with a portable testing monitor upon restart. The portable testing monitor results shall be correlated with the results of the periodic reference method test at least once every five years. If testing is triggered by operating hours, the permittee shall perform the test within 90 days after reaching 2200 hours of operation.
 - (b) Notification: The Director shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Director. Notification shall not be required for post-excursion testing using the portable testing monitor.
 - (c) Methods
 - (1) Sample Location: The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Director. An Occupational Safety and Health Administration (OSHA) approved access shall be provided to the test location
 - (2) Volumetric Flow Rate: 40 CFR 60, Appendix A, Method 2 or 40 CFR 60, Appendix A, Method 19 based on the fuel flow determined by fuel gas meter and exhaust gas O₂ concentration.
 - (3) Oxides of Nitrogen (NO_x): 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, 7E, or other EPA-approved testing method acceptable to the Director must be used for the initial test. After performing the initial test, a portable NO_x monitor may be used in lieu of Method 7, 7A, 7B, 7C, 7D or 7E provided the requirements of I(a) are met. If the requirements of I(a) are not met, Method 7, 7A, 7B, 7C, 7D or 7E must be used for subsequent tests.
 - (d) Calculations: To determine mass emission rates (lb/hr, etc.) the pollutant concentration

as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Director, to give the results in the specified units of the emission limitation.

- (e) Production Rate During Testing: The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II. Monitor CAM Indicator #1 (Pressure drop across catalyst) in accordance with 40 CFR 64.7(c) when unit is operating.

- (a) Measurement approach: Measure pressure drop across catalyst beds using a differential pressure gauge.
- (b) Indicator range: An excursion is defined as a pressure drop of two (2) inches of water or greater beyond the baseline value determined in the most recent test, based on the measurement at the time of inspection. If an excursion occurs, corrective action will be taken in accordance with 40 CFR 64.7(d)(1).
- (c) Performance criteria:
 - (1) Data representativeness: Pressure drop is measured at catalyst inlet and outlet during engine operation.
 - (2) Verification of operational status: Pressure gauge is functioning correctly.
 - (3) QA/QC practices and criteria: Pressure gauge shall be calibrated and pressure taps checked for plugging when gauge malfunction is evident during daily check.
 - (4) Monitoring frequency: Differential pressure shall be continuously measured and inspected monthly to determine if a pressure drop excursion has occurred.
 - (5) Data collection: Each monthly reading shall be documented by the observer.

III. Monitor CAM Indicator #2 (Temperature of exhaust entering catalyst) in accordance with 40 CFR 64.7(c) when unit is operating.

- (a) Measurement approach: Temperature of gas flowing from the engine to the catalyst is measured using a thermocouple mounted in the gas stream.
- (b) Indicator range: An excursion is defined as a temperature outside the catalyst operating range of 750-1250 degrees F (399-676 degrees C), as read at the time of inspection. If an excursion occurs, corrective action will be taken in accordance with 40 CFR 64.7(d)(1).
- (c) Performance criteria:
 - (1) Data representativeness: Temperature is measured at the inlet to the catalyst beds using a thermocouple. The thermocouple shall have a minimum accuracy of +/- 4 degrees F at typical catalyst temperatures.
 - (2) Verification of operational status: No control system alarms or shutdowns have occurred.
 - (3) QA/QC practices and criteria: Thermocouple is replaced when a malfunction is detected.
 - (4) Monitoring frequency: Catalyst inlet temperature shall be measured continuously and inspected daily to determine if a temperature excursion has occurred.
 - (5) Data collection: Each daily reading shall be documented by the observer.

IV. During the stack test required in I. above, the permittee shall acquire new test data to evaluate or update the ranges and excursion levels for the two indicators. Any resultant changes to the monitoring shall be addressed in accordance with 40 CFR 64.7(e).

II.B.4.a.2

Recordkeeping:

Results of all monitoring shall be maintained as described in Provision I.S.1 of this permit. In addition, the permittee shall maintain a file of the occurrence and duration of any excursion, corrective actions taken, and any other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Instead of paper records, the permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche,

provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. (40 CFR 64.9(b)).

II.B.4.a.3

Reporting:

- I) Results of required stack testing shall be submitted to the Director within 60 days of completion of the testing. The submittal shall clearly identify results and indicate compliance status. The annual compliance certification required by Provision L in Section I of this permit shall use the most recent test results as a basis for stating compliance status for this limitation.
- II) In addition to the reporting requirements described in Provision I.S.2 of this permit, the monitoring report required by Provision I.S.2.a shall include, at a minimum, the following information, as applicable: (a) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken. (40 CFR 64.9(a)(2)(i)).

II.B.4.b

Condition:

Emissions of CO shall be no greater than 3.70 lb/hr. [Origin: DAQE-AN115320010-16]. [R307-401-8(1)(a)(BACT)]

II.B.4.b.1

Monitoring:

Stack testing shall be performed as specified below:

- (a) Testing Frequency: Test every five years (based on the date of the latest stack test) using 40 CFR 60, Appendix A, Method 10 or every two years with a portable testing monitor. If portable testing monitor is to be used, a correlation must be established during the initial test between the portable testing monitor and Method 10. Subsequently, the portable testing monitor results shall be correlated with the results of the periodic reference method test at least once every five years.
- (b) Notification: The Director shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Director.
- (c) Methods
 - (1) Sample Location
The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Director. An Occupational Safety and Health Administration (OSHA) approved access shall be provided to the test location.
 - (2) Volumetric Flow Rate
40 CFR 60, Appendix A, Method 2 or 40 CFR 60, Appendix A, Method 19 based on the fuel flow determined by fuel gas meter and exhaust gas O₂ concentration.
 - (3) Carbon Monoxide (CO)
40 CFR 60, Appendix A, Method 10, or other EPA-approved testing method acceptable to the Director must be used for the initial test. After performing the initial test, a portable CO monitor may be used in lieu of Method 10 provided the requirements of (a) are met. If the requirements of (a) are not met, Method 10 must be used for subsequent tests.
- (d) Calculations
To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Director, to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.4.b.2

Recordkeeping:

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.4.b.3

Reporting:

Results of required stack testing shall be submitted to the Director within 60 days of completion of the testing. The submittal shall clearly identify results and indicate compliance status. The annual compliance certification required by Provision L in Section I of this permit shall use the most recent test results as a basis for stating compliance status for this limitation.

II.B.4.c

Condition:

For each compressor, the permittee shall comply with the requirements of 40 CFR 60.482-3, as soon as practicable, but no later than 180 days after initial startup of the affected process unit, or demonstrate that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service. [Origin: 40 CFR 60 Subpart KKK]. [40 CFR 60.632(a), 40 CFR 60.632(f)]

II.B.4.c.1

Monitoring:

For each compressor, the permittee shall:

- a. demonstrate compliance with the requirements of 40 CFR 60.482-3 within 180 days of initial startup of the affected process unit and comply with the monitoring requirements of 40 CFR 60.482-3 after the initial compliance demonstration; or
- b. demonstrate that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f).

Compliance with 40 CFR 60.482-3 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a - c).

II.B.4.c.2

Recordkeeping:

For compressors, except those compressors where it is demonstrated that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a - c), (e), (h) and (k). For compressors, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j), 40 CFR 60.635(c) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.4.c.3

Reporting:

For compressors, except those compressors where it is demonstrated that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a - c), and (e). For compressors, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.5

Conditions on Underground Gasoline Storage Tank (TNK-2)

II.B.5.a

Condition:

The permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

- i) Minimize gasoline spills;
- ii) Clean up spills as expeditiously as practicable;
- iii) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
- iv) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

At all times, the permittee shall operate and maintain any affected emission unit, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available 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.

The permittee shall comply with the applicable general provisions in 40 CFR 63.1-15 as identified in Table 3 of 40 CFR 63 Subpart CCCCCC.

[Origin: 40 CFR 63 Subpart CCCCCC]. [40 CFR 63.11111(b), 40 CFR 63.11115, 40 CFR 63.11116, 40 CFR 63.11130]

II.B.5.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring. Additionally, the permittee shall comply with the applicable general provisions in 40 CFR 63.1-15 as identified in Table 3 of 40 CFR 63 Subpart CCCCCC. [40 CFR 63.11130].

II.B.5.a.2 **Recordkeeping:**

The permittee shall keep records demonstrating monthly throughput is less than the 10,000-gallon threshold level. Records shall be available within 24 hours of a request by the Director to document gasoline throughput in the affected emission unit. [40 CFR 63.11111(e), 40 CFR 63.11116(b)]

The permittee shall keep records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. Records shall be kept of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.11115(b), 40 CFR 63.11125(d)]

The permittee shall comply with the applicable general provisions in 40 CFR 63.1-15 as identified in Table 3 of 40 CFR 63 Subpart CCCCCC. [40 CFR 63.11130]

Documentation shall be kept that demonstrates compliance with this provision. Records shall be maintained in accordance with Provision I.S.1. of this permit.

II.B.5.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.6 **Conditions on Emergency Flare (MISC-3)**

II.B.6.a **Condition:**

1. The permittee shall conduct a leak detection inspection for each new or modified fugitive emission component installed or modified as part of the project (MISC-3, Emergency Flare). Each individual inspection shall encompass valve(s), flange(s) or other connection, pump(s), compressor(s), pressure

relief device(s) or other vent(s), process drain(s), open-ended valve(s), pump seal(s), compressor seal(s), and access door seal(s) or other seal containing or contacting a process stream with hydrocarbons that is associated with the approved emission unit. Leak detection inspections shall be conducted according to the following schedule:

- A. No later than 180 days from the issuance date of the referenced Approval Order.
 - B. At least once every 12 months after the initial leak detection inspection.
2. The permittee is exempt from inspecting a valve, flange or other connection, pump or compressor, pressure relief device, process drain, open-ended valve, pump or compressor seal system degassing vent, accumulator vessel vent, agitator seal, or access door seal under any of the following circumstances:
- A. The contacting process stream only contains glycol, amine, methanol, or produced water.
 - B. Monitoring could not occur without elevating the monitoring personnel more than six feet above a supported surface or without the assistance of a wheeled scissor-lift or hydraulic type scaffold.
 - C. Monitoring could not occur without exposing monitoring personnel to an immediate danger as a consequence of completing monitoring.
 - D. The item to be inspected is buried, insulated in a manner that prevents access to the components by a monitor probe, or obstructed by equipment or piping that prevents access to the components by a monitor probe.

[Origin: DAQE-AN115320010-16]. [R307-401-8(1)(a)(BACT)]

II.B.6.a.1

Monitoring:

- A. Inspections shall be conducted in one of two ways:
 - i. An analyzer that meets U.S. EPA Method 21, 40 CFR Part 60, Appendix A
 - ii. An optical gas imaging instrument as defined in 40 CFR 60.18(g)(4)
The optical gas imaging instrument shall meet requirements specified in 40 CFR 60.18(i)(3).

Any emissions detected with an optical gas imaging instrument shall be considered a leak in need of repair unless the permittee evaluates the leak with an analyzer meeting U.S. EPA Method 21, 40 CFR Part 60 and the analyzer reading is less than 500 ppmv. A reading of 500 ppmv or greater shall be considered a leak in need of repair.

Emissions detected from tank gauging, load-out operations, venting of pneumatics, properly operating pressure relief valves, or other maintenance activities shall not be considered leaks.

- B. If a leak is detected at any time, the permittee shall attempt to repair the leak no later than 5 calendar days after detection. Repair of the leak shall be completed no later than 15 calendar days after detection, unless parts are unavailable or unless repair is technically infeasible without a shutdown. The permittee shall inspect the repaired leak no later than 15 calendar days after the leak was repaired to verify that it is no longer leaking.

If replacement parts are unavailable, the replacement parts must be ordered no later than 5 calendar days after detection, and the leak must be repaired no later than 15 calendar days after receipt of the replacement parts.

If repair is technically infeasible without a shutdown, the leak must be repaired by the end of the next shutdown. If a shutdown is required to repair a leak, the shutdown must occur no later than 6 months after the detection of the leak unless the permittee demonstrates that emissions generated from the shutdown are greater than the fugitive emissions likely to result from delay of repair.

II.B.6.a.2

Recordkeeping:

Records of inspections and leak detection and repair shall include the following:

- A. The date of the inspection

- B. The name of the person conducting the inspection
- C. Any component not exempt under II.B.6.a that is not inspected and the reason it was not inspected
- D. The identification of any component that was determined to be leaking
- E. All records shall be maintained for optical gas imaging instrument as per 40 CFR 60.18(i)(4)(vi)
- F. The date of first attempt to repair the leaking component
- G. Any component with a delayed repair
- H. The reason for a delayed repair
 - i. For Unavailable Parts:
 - a) The date of ordering a replacement component
 - b) The date the replacement component was received
 - ii. For a Shutdown:
 - a) The reason the repair is technically infeasible
 - b) The date of the shutdown
 - c) Emission estimates of the shutdown and the repair if the delay is longer than 6 months
- I. Corrective action taken
- J. The date corrective action was completed
- K. The date the component was verified to no longer be leaking
- L. The records of each component exempt under II.B.6.a:
 - i. Type of component
 - ii. Description of qualifying exemption

Records and results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.6.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.6.b

Condition:

Flares used to control emissions of volatile organic compounds shall be equipped with and operate an auto-igniter. [Origin: R307-503-4]. [R307-503-4]

II.B.6.b.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.6.b.2

Recordkeeping:

The permittee shall maintain records demonstrating the date of installation and manufacturer specifications for each auto-igniter required under R307-503-4. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.6.b.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.7

Conditions on Onshore Natural Gas Processing Plant (CBDP-1).

II.B.7.a

Condition:

For each pump in light liquid service, the permittee shall comply with the requirements of 40 CFR

60.482-2 or demonstrate that the pump is neither in VOC service nor in wet gas service. [Origin: 40 CFR 60 Subpart KKK]. [40 CFR 60.632(a), 40 CFR 60.632(f)]

II.B.7.a.1 Monitoring:

For each pump in light liquid service, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-2; or
- b. demonstrate that the pump is neither in VOC service nor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f).

Compliance with 40 CFR 60.482-2 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a - c). The permittee shall demonstrate that a pump is in light liquid service in accordance with 40 CFR 60.485(e) or 40 CFR 60.633(h)(2).

II.B.7.a.2 Recordkeeping:

For pumps in light liquid service, except those pumps where it is demonstrated that the pump is neither in VOC service nor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a - c), (e), (h) and (k). For pumps in light liquid service, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.7.a.3 Reporting:

For pumps in light liquid service, except those pumps where it is demonstrated that the pump is neither in VOC service nor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a - c) and (e). For pumps in light liquid service, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.7.b Condition:

For each compressor, the permittee shall comply with the requirements of 40 CFR 60.482-3 or demonstrate that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service. [Origin: 40 CFR 60 Subpart KKK]. [40 CFR 60.632(a), 40 CFR 60.632(f)]

II.B.7.b.1 Monitoring:

For each compressor, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-3; or
- b. demonstrate that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f).

Compliance with 40 CFR 60.482-3 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a - c).

II.B.7.b.2 Recordkeeping:

For compressors, except those compressors where it is demonstrated that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a - c), (e), (h) and (k). For compressors, the permittee shall also comply with the recordkeeping requirements

of 40 CFR 60.486(j), 40 CFR 60.635(c) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.7.b.3 Reporting:

For compressors, except those compressors where it is demonstrated that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a - c), and (e). For compressors, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.7.c Condition:

For each pressure relief device in gas/vapor service, the permittee shall comply with the requirements of 40 CFR 60.482-4 or 40 CFR 60.633(b) or demonstrate that the pressure relief device is neither in VOC service nor in wet gas service. [Origin: 40 CFR 60 Subpart KKK]. [40 CFR 60.632(a), 40 CFR 60.632(f)]

II.B.7.c.1 Monitoring:

For each pressure relief device in gas/vapor service, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-4 or 40 CFR 60.633(b); or
- b. demonstrate that the pressure relief device is neither in VOC service nor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f).

Compliance with 40 CFR 60.482-4 and 40 CFR 60.633(b) will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a - c).

II.B.7.c.2 Recordkeeping:

For pressure relief devices in gas/vapor service, except those pressure relief devices where it is demonstrated that the pressure relief device is neither in VOC service nor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a), (e) and (k), and 40 CFR 60.635(b). For pressure relief devices in gas/vapor service, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.7.c.3 Reporting:

For pressure relief devices in gas/vapor service, except those pressure relief devices where it is demonstrated that the pressure relief device is neither in VOC service nor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a), (c) and (e), and 40 CFR 60.636(b) and (c). For pressure relief devices in gas/vapor service, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.7.d Condition:

For each open-ended valve and line, the permittee shall comply with the requirements of 40 CFR 60.482-6 or demonstrate that the open-ended valve or line is neither in VOC service nor in wet gas service. [Origin: 40 CFR 60 Subpart KKK]. [40 CFR 60.632(a), 40 CFR 60.632(f)]

- II.B.7.d.1 Monitoring:**
- For each open-ended valve and line, the permittee shall:
- a. comply with the monitoring requirements of 40 CFR 60.482-6; or
 - b. demonstrate that the open-ended valve or line is neither in VOC service nor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f).
- Compliance with 40 CFR 60.482-6 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a).
- II.B.7.d.2 Recordkeeping:**
- For open-ended valves and lines, except those open-ended valves and lines where it is demonstrated that the open-ended valve or line is neither in VOC service nor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a), (e) and (k). For open-ended valves and lines, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j) and any additional recordkeeping requirements in Section I.S.1 of this permit.
- II.B.7.d.3 Reporting:**
- For open-ended valves and lines, except those open-ended valves and lines where it is demonstrated that the open-ended valve or line is neither in VOC service nor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a), (c), and (e). For open-ended valves and lines, the permittee shall also comply with the reporting provisions contained in Section I of this permit.
- II.B.7.e Condition:**
- For each valve in gas/vapor service or light liquid service, the permittee shall comply with the requirements of 40 CFR 60.482-7 or demonstrate that the valve is neither in VOC service nor in wet gas service. [Origin: 40 CFR 60 Subpart KKK]. [40 CFR 60.632(a), 40 CFR 60.632(f)]
- II.B.7.e.1 Monitoring:**
- For each valve in gas/vapor service or light liquid service, the permittee shall:
- a. comply with the monitoring requirements of 40 CFR 60.482-7; or
 - b. demonstrate that the valve is neither in VOC service nor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f).
- Compliance with 40 CFR 60.482-7 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a - c). The permittee shall demonstrate that a valve is in light liquid service in accordance with 40 CFR 60.485(e) or 40 CFR 60.633(h)(2).
- II.B.7.e.2 Recordkeeping:**
- For valves in gas/vapor service or light liquid service, except those valves where it is demonstrated that the valve is neither in VOC service nor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a - c), (e - g), and (k). For valves in gas/vapor service or light liquid service, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.7.e.3

Reporting:

For valves in gas/vapor service or light liquid service, except those valves where it is demonstrated that the valve is neither in VOC service nor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a - e). For valves in gas/vapor service or light liquid service, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.7.f

Condition:

For each pressure relief device in light liquid service, the permittee shall comply with the requirements of 40 CFR 60.482-8 or demonstrate that the pressure relief device is neither in VOC service nor in wet gas service. [Origin: 40 CFR 60 Subpart KKK]. [40 CFR 60.632(a), 40 CFR 60.632(f)]

II.B.7.f.1

Monitoring:

For each pressure relief device in light liquid service, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-8; or
- b. demonstrate that the pressure relief device is neither in VOC service nor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f).

Compliance with 40 CFR 60.482-8 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a, b). The permittee shall demonstrate that a pressure relief device is in light liquid service in accordance with 40 CFR 60.485(e) or 40 CFR 60.633(h)(2).

II.B.7.f.2

Recordkeeping:

For pressure relief devices in light liquid service, except those pressure relief devices where it is demonstrated that the pressure relief device is neither in VOC service nor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a - c), (e), and (k). For pressure relief devices in light liquid service, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.7.f.3

Reporting:

For pressure relief devices in light liquid service, except those pressure relief devices where it is demonstrated that the pressure relief device is neither in VOC service nor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a), (c), and (e). For pressure relief devices in light liquid service, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.7.g

Condition:

For each flange and other connector, the permittee shall comply with the requirements of 40 CFR 60.482-8 or demonstrate that the flange or other connector is neither in VOC service nor in wet gas service. [Origin: 40 CFR 60 Subpart KKK]. [40 CFR 60.632(a), 40 CFR 60.632(f)]

II.B.7.g.1

Monitoring:

For each flange and other connector, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-8; or
- b. demonstrate that the flange or other connector is neither in VOC service nor in wet gas

service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f).

Compliance with 40 CFR 60.482-8 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a, b).

II.B.7.g.2

Recordkeeping:

For flanges and other connectors, except those flanges and other connectors where it is demonstrated that the flange or other connector is neither in VOC service nor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a - c), (e), and (k). For flanges and other connectors, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.7.g.3

Reporting:

For flanges and other connectors, except those flanges and other connectors where it is demonstrated that the flange or other connector is neither in VOC service nor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a), (c), and (e). For flanges and other connectors, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.7.h

Condition:

The permittee shall comply with all applicable requirements of 40 CFR 60 Subpart A. [Origin: 40 CFR 60 Subpart A]. [40 CFR 60 Subpart A]

II.B.7.h.1

Monitoring:

The permittee shall comply with the monitoring requirements of 40 CFR 60.8(a), (b), (c), (e) and (f), 60.11(a), and 60.13(b), (f), and (i).

II.B.7.h.2

Recordkeeping:

The permittee shall comply the recordkeeping requirements of provision I.S.1 of this permit and any additional recordkeeping requirements of 40 CFR 60.7(f).

II.B.7.h.3

Reporting:

The permittee shall comply with the reporting requirements in Section I of this permit and the reporting and notification requirements of 40 CFR 60.4, 60.6(b), 60.7(a) and (c), 60.8(a), 60.13(i), 60.15(d), and 60.19. The requirements of 40 CFR 60.8(d) do not apply to the affected process unit except that the permittee must notify the Director of the schedule for the initial performance tests at least 30 days before the initial performance tests.

II.B.7.i

Condition:

Flares used to control emissions of volatile organic compounds shall be equipped with and operate an auto-igniter. [Origin: R307-503-4]. [R307-503-4]

II.B.7.i.1

Monitoring:

Records required for this permit condition will serve as monitoring.

- II.B.7.i.2 Recordkeeping:**
- The permittee shall maintain records demonstrating the date of installation and manufacturer specifications for each auto-igniter required under R307-503-4. Records shall be maintained in accordance with Provision I.S.1 of this permit.
- II.B.7.i.3 Reporting:**
- There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.8 Conditions on Reciprocating IC Engines (NESHAP SI RICE).**
- II.B.8.a Condition:**
- At all times the permittee shall 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. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Director 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. [Origin: 40 CFR 63 Subpart ZZZZ]. [40 CFR 63.6605(b)]
- II.B.8.a.1 Monitoring:**
- Records required for this permit condition will serve as monitoring.
- II.B.8.a.2 Recordkeeping:**
- The permittee shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 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)] The permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with 40 CFR 63.6660 and Provision I.S.1 of this permit.
- II.B.8.a.3 Reporting:**
- There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.8.b Condition:**
- For existing, 4SLB, 4SRB, non-emergency, non-black start remote RICE > 500 hp:
- (1) The permittee shall evaluate the status of their stationary RICE every 12 months. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in 40 CFR 63.6675, the permittee shall comply with all of the requirements for existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation.
 - (2) Except during periods of startup, the permittee shall:
 - (a) Change oil and filter every 2,160 hours of operation or annually, whichever comes first;
 - (b) Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and
 - (c) Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first,

and replace as necessary.

During periods of startup the source shall minimize the engine's time spent 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 time the non-startup emission limitations apply.

- (3) The permittee shall comply with the applicable general provisions in 40 CFR 63.1-15 as identified in Table 8 of 40 CFR 63 Subpart ZZZZ.

[Origin: 40 CFR 63 Subpart ZZZZ]. [40 CFR 63.6603(a), 40 CFR 63.6603(f), 40 CFR 63.6665, 40 CFR 63 Subpart ZZZZ Table 2d(11), 40 CFR 63 Subpart ZZZZ Table 2d(8), 40 CFR 63 Subpart ZZZZ Table 8]

II.B.8.b.1

Monitoring:

The permittee shall demonstrate continuous compliance by operating and maintaining the stationary RICE according to the manufacturer's emission-related written operation and maintenance instructions or develop and follow the permittee's 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 63.6640(a), 40 CFR 63 Subpart ZZZZ Table 6]

The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in accordance with 40 CFR 63.6625(j).

The permittee shall comply with the applicable general provisions in 40 CFR 63.1-15 as identified in Table 8 of 40 CFR 63 Subpart ZZZZ. [40 CFR 63.6665].

II.B.8.b.2

Recordkeeping:

The permittee shall keep records of the initial and annual evaluation of the remote status of each affected emission unit. [40 CFR 63.6603(f)]

The permittee shall keep records that demonstrate continuous compliance with each applicable operating limitation [including, but not limited to, the manufacturer's emission-related operation and maintenance instructions or the permittee-developed maintenance plan]. [40 CFR 63.6655(d), 40 CFR 63 Subpart ZZZZ Table 6]

Records of the maintenance conducted shall be kept in order to demonstrate that the permittee operated and maintained the affected emission unit and after-treatment control device (if any) according to their own maintenance plan. [40 CFR 63.6655(e)]

The permittee shall comply with the applicable general provisions in 40 CFR 63.1-15 as identified in Table 8 of 40 CFR 63 Subpart ZZZZ. [40 CFR 63.6665]

Records shall be maintained in accordance with 40 CFR 63.6660 and Provision I.S.1 of this permit.

II.B.8.b.3

Reporting:

Each instance in which the permittee did not meet each emission limitation or operating limitation in Table 2d in 40 CFR 63 Subpart ZZZZ shall be reported according to the requirements in 40 CFR 63.6650. [40 CFR 63.6640(b)]

The permittee shall comply with the applicable general provisions in 40 CFR 63.1-15 as identified in 40 CFR 63 Subpart ZZZZ Table 8. [40 CFR 63.6665] The permittee shall also report each instance in which it did not meet the applicable requirements in Table 8. [40 CFR 63.6640(e)]

There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.C Emissions Trading
(R307-415-6a(10))

Not applicable to this source.

II.D Alternative Operating Scenarios.
(R307-415-6a(9))

Not applicable to this source.

SECTION III: PERMIT SHIELD

The following requirements have been determined to be not applicable to this source in accordance with Provision I.M, Permit Shield:

III.A. 40 CFR 63 Subpart R (National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations))

This regulation is not applicable to the Permitted Source for the following reason(s): this source is not a major source of hazardous air pollutants (63.420(b)(2)). [Last updated August 14, 2017]

III.B. 40 CFR 63 Subpart H (National Emission Standards for Organic HAPs for Equipment Leaks)

This regulation is not applicable to the Permitted Source for the following reason(s): this source has no equipment in organic hazardous air pollutants (OHAP) service. [Last updated August 14, 2017]

III.C. 40 CFR 63 Subpart B (Requirements for Control Technology Determinations for Major Sources)

This regulation is not applicable to the Permitted Source for the following reason(s): this source is not a major source of hazardous air pollutants. [Last updated August 14, 2017]

III.D. 40 CFR 60 Subpart GG (Standards of Performance for Stationary Gas Turbines)

This regulation is not applicable to the ICE-2: Turbines for Backup Power for the following reason(s): these gas turbines are used only for emergency power (NSPS 60.332(g)). [Last updated August 14, 2017]

SECTION IV: ACID RAIN PROVISIONS

This source is not subject to Title IV. This section is not applicable.

REVIEWER COMMENTS

This operating permit incorporates all applicable requirements contained in the following documents:

Incorporates	DAQE-AN115320010-16 dated January 6, 2016
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1. Comment on an item originating in Renewal Application regarding Permitted Source
CAM plan for ICE-4: ICE-4 was verified as subject to CAM through use of AP-42 5th ed factors and fuel input. The plan submitted by the source had five parameters; three of these were used in the 3/8/2007 renewal permit. One parameter measured a change in temperature across the catalyst; it was not used because the initial performance test showed no correlation between this temperature and the ability of the catalyst to perform well. Also, in the RICE MACT preamble (p 33492-3), EPA notes the same issue and dropped this parameter from the MACT monitoring requirements. The other source-suggested parameter is an inspection and maintenance approach that is already implicit in the "proper maintenance" provision of the permit. Additionally, these parameters are in line with the results of a stack test performed on 5/18/12. Since ICE-4 is subject to 40 CFR 63 Subpart ZZZZ in the current renewal permit, the CAM plan has been modified to align more closely with the monitoring requirements in the NESHAP. Oxygen concentration into the catalyst has been dropped as an indicator, ranges for the catalyst inlet temperature indicator and the pressure drop indicator have been updated.
During the stack test performed 9/9/16, average temperature at the inlet to the catalyst was 1055 degrees F (568 degrees C) and pressure drop was 8.0 in H₂O. [5/12/2006] [Last updated August 14, 2017]
2. Comment on an item originating in 40 CFR 60 Subpart A regarding Permitted Source
Operation and maintenance requirements: 40 CFR 60.11(d) provides operation and maintenance (O & M) requirements for equipment subject to an NSPS standard. These requirements apply to the three compressor turbines and the Clay Basin Dew Point Plant. [11/12/2004] [Last updated August 14, 2017]
3. Comment on an item originating in 40 CFR 60 Subpart GG regarding ICE-1: Turbines for Gas Compression
Subpart GG NO_x standard and NO_x limit in AO: NO_x standard in Subpart GG is:

$$STD = 0.0075 (14.4)/Y + F$$

where

STD = allowable NO_x emissions (percent by volume at 15 percent oxygen and on a dry basis)

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO_x emission allowance for fuel-bound nitrogen.

EPA guideline document EMTIC, GD-009 advises to use zero for the value of F for gas turbines. So, the lowest NO_x limit is 0.0075 percent by volume when Y=14.4. NO_x limit in AO is 42 ppmv or 0.0042 percent by volume which is more stringent than the Subpart GG standard. Therefore, NSPS standard is subsumed in the AO limit. In order to use equation in 40 CFR Part 60.335(c)(1) to compute the NO_x emissions, NO_x limit is expressed in the unit of percent by volume in this permit. [2/05/2002] [Last updated

August 14, 2017]

4. Comment on an item originating in 40 CFR 60 Subpart GG regarding ICE-1: Turbines for Gas Compression

Subpart GG Requirement for Monitoring Sulfur Content: The permittee's gas transportation tariff requires that the total sulfur content in the pipeline gas be limited to no greater than 5 grains of total sulfur per Mcf which is equivalent to 0.002% by weight. This is significantly (400 times) lower than the permit limit of 0.8% by weight. Compliance with the tariff is deemed to meet the permit requirement. Questar Pipeline Company's Federal Energy Regulatory Commission (FERC) Gas Tariff functions as a procedure manual that set out the manner in which Questar is required to provide these services to its customers. The tariff is effective indefinitely. Therefore, recording of the tariff can serve as monitoring for the sulfur content. This approach is confirmed in 60.334(h)(3)(i) as added at 69 FR 41361, July 8, 2004. [3/09/2005] [Last updated August 14, 2017]

5. Comment on an item originating in 40 CFR 60 Subpart GG regarding ICE-1: Turbines for Gas Compression

Subpart GG Standard for SO₂: 40 CFR Subpart GG, 60.333 requires either emission limit of no greater than 0.015 percent by volume (15% oxygen on a dry basis) or sulfur content of no greater than 0.8 percent by weight in the fuel. The source chooses to comply with the sulfur content limit in the fuel. According to the letter from Questar dated May 7, 1998 regarding Kastler Station Operating Permit Review Questions, Questar's gas transportation tariff requires that total sulfur content in pipeline gas be limited to 0.002% by weight. [5/28/1998] [Last updated August 14, 2017]

6. Comment on an item originating in 40 CFR 60 Subpart GG regarding ICE-1: Turbines for Gas Compression

Subpart GG requirement for monitoring fuel-bound nitrogen content of turbine fuel: Subpart GG requires the monitoring of the fuel-bound nitrogen. The pipeline quality natural gas usually has no fuel-bound nitrogen. EPA guideline document, EMTIC GD-009 indicates that there is no good test method to distinguish between fuel-bound nitrogen and other forms of nitrogen such as dissolved air, in fuels used in gas turbines. A Memorandum from EPA Headquarters dated August 14, 1987 regarding Authority for Approval of Custom Fuel Monitoring Schedules Under NSPS Subpart GG states that nitrogen monitoring can be waived for pipeline quality gas since there is no fuel-bound nitrogen and since free nitrogen does not contribute appreciably to NO_x emissions. Additionally, the July 8, 2004 changes to Subpart GG only require monitoring of nitrogen content if an allowance is claimed in calculating test results; this source does not use the allowance. Therefore, Subpart GG requirement for fuel-bound nitrogen content monitoring is not incorporated into the permit. [11/12/2004] [Last updated August 14, 2017]

7. Comment on an item originating in 40 CFR 60 Subpart GG regarding ICE-1: Turbines for Gas Compression

Subpart GG requirements related to water injection and emergency fuel: Turbines have low NO_x burners to control NO_x emissions and there is no water injection. Also, this source does not use an emergency fuel. Therefore, the associated requirements with water injection and emergency fuel in Subpart GG do not apply to the turbines. [2/05/2002] [Last updated August 14, 2017]

8. Comment on an item originating in historic approval order regarding ICE-3: Internal Combustion Engines

Significant emission increase: The significant emission increase language has been removed from the current approval order because the contemporaneous period has ended and the condition is no longer needed. The corresponding condition II.B.1.c in the operating permit issued 10/22/2012 has been removed. Although the following comment

is no longer strictly relevant, it is retained for historical purposes.

In order to demonstrate that modifications approved in DAQE-AN0115320007A-08 do not result in a significant emission increase for NO_x, the permittee is required to calculate monthly emissions from the existing turbines (ICE-1) and engines (ICE-3) and keep a rolling 12-month total of incremental NO_x emissions increase from the new equipment.

According to the AO, the NO_x emissions from the existing engines and turbines are "determined by monitoring the hours of operation and utilizing emission factors from the most recent testing." However, the existing engines (ICE-3) are not subject to a NO_x limit and therefore have no testing requirements.

The permittee has voluntarily committed to NO_x testing on the ICE-3 engines similar to the portable monitoring provision allowed in the AO for other units. Testing on the ICE-3 engines will occur as follows.

The permittee will perform an initial test on each ICE-3 engine using 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E. During the initial test, a correlation must be established between the portable testing monitor and the reference method test. Thereafter, the permittee shall test every five years with the portable testing monitor.

Results of the testing for the ICE-3 engines will be used in the monthly calculations required in Condition II.B.1.c of this permit. [02/06/2008] [Last updated August 14, 2017]

9. Comment on an item originating in 40 CFR 63 Subpart ZZZZ regarding NESHAP SI RICE: Reciprocating IC Engines
The affected emission units met the criteria for remote defined in 40 CFR 63.6675 on October 19, 2013 as specified in 40 CFR 63.6603(f). The requirements on these engines have been updated to reflect that status in the permit. [Origin: May 24, 2017] [Last updated August 14, 2017]
10. Comment on an item originating in 40 CFR 60 Subpart KKK regarding CBDP-1: Onshore Natural Gas Processing Plant
Applicability of 40 CFR 60.18, via 40 CFR 60.633(g), to the flare on the ethylene glycol regenerator was reevaluated in the renewal permit. The flare was installed as a result of the BACT analysis performed in the 2008 approval order. It was not required for compliance with NSPS standards. Condition II.B.7.i in the permit issued April 4, 2016 has been removed in the renewal permit. [Origin: June 7, 2017] [Last updated August 14, 2017]