



## State of Utah

SPENCER J. COX  
*Governor*

DEIDRE HENDERSON  
*Lieutenant Governor*

## Department of Environmental Quality

Kimberly D. Shelley  
*Executive Director*

DIVISION OF AIR QUALITY  
Bryce C. Bird  
*Director*

13284

### Title V Operating Permit

**PERMIT NUMBER:** 700083003

**DATE OF PERMIT:** TBD

Date of Last Revision: TBD

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

**Name of Permittee:**

Wapiti Operating, LLC  
10569 S Pariette Rd.  
Myton, UT 84052

**Permitted Location:**

Interplanetary Compressor Station  
NESW, Sec. 13, T12S-R14E  
From the junction of 9 Mile Cyn Rd and  
Harmon Cyn Rd, turn south and travel for  
approximately 6.3 miles (remote location)  
Carbon County, UT

UTM coordinates: 560,110 m Easting, 4,402,595 m Northing  
SIC code: 1311 (Crude Petroleum & Natural Gas)

By:

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Bryce C. Bird, Director

Prepared By:

Jared Crosby  
jaredcrosby@utah.gov

## **ENFORCEABLE DATES AND TIMELINES**

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

Annual Certification Due: March 1 of every calendar year that this permit is in force.

Renewal application due: TBD

Permit expiration date: TBD

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

## **ABSTRACT**

The Interplanetary Natural Gas Compressor Station, located in Carbon County, compresses natural gas at a maximum rate of 60 MMSCF/day for injection into a sales gas pipeline. Natural gas is collected from well sites and routed to an inlet scrubber to remove water and sent to nine (9) reciprocating internal combustion engines (RICE) for compression. After compression, the gas is dried by three (3) triethylene glycol (TEG) dehydrators where additional water is removed. Volatile organic compound (VOC) emissions from the dehydrator reboiler vents are first routed through BTEX condenser units, then to a flare for combustion. VOC emissions from condensate storage tanks are routed to the same flare. 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), 40 CFR 63 Subpart HH (National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities), 40 CFR 60 Subpart A (General Provisions), and 40 CFR 60 Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines) apply to this source. The compressor station is a major source for NO<sub>x</sub> and CO emissions.

## **OPERATING PERMIT HISTORY**

<b>Permit/Activity</b>	<b>Date Issued</b>	<b>Recorded Changes</b>
Title V renewal application (Project #OPP0132840005)	TBD	Changes: This renewal incorporates changes from DAQE-AN132840012-22 dated 10/28/2022, updates the emission unit list, adds additional stack testing methodologies, and makes typographical and formatting updates.
Title V renewal application (Project #OPP0132840004)	09/19/2017	Changes: Language updates due to rule changes, incorporates DAQE-AN132840009-16, and inclusion of CAM requirements for four Reciprocating Internal combustion Engines (RICE).
Title V administrative amendment - enhanced AO (Project #OPP0132840003)	05/24/2012	Changes: Incorporates DAQE-AN132840007-11 dated October 20, 2011 that adds four engines, TEG Dehydrators for an additional 60 MMSCFD and associated equipment.
Title V administrative amendment - enhanced AO (Project #OPP0132840002)	09/29/2011	Changes: Incorporates DAQE-AN132840006-11 dated May 24, 2011 that removes equipment from the permit.
Title V initial application (Project #OPP0132840001)	08/04/2010	Changes: Initial operating permit application

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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)(a)(xiii) 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  
Air Permitting and Monitoring Branch (mail code 8ARD-PM)  
1595 Wynkoop Street  
Denver, CO 80202-1129  
Phone: 303-312-6927

**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 Condensate Truck Loading (TLO)**  
Condensate Truck Loading shall be submerged fill service only. No unit specific applicable requirements.
- II.A.3 Fugitives (FUG)**  
Fugitive Leaks from equipment. No unit specific applicable requirements.
- II.A.4 Generators (GE-01 and GE-02)**  
Two (2) natural gas fired, internal combustion, non-emergency power generation engines. Only one generator engine shall be operated at any one point in time. The engines may be any of the following: 203 brake-horsepower (bhp) Caterpillar G3306TA (GE-01), or 118 bhp Cummings G8.3 (GE-02). Construction for both engines commenced after June 12, 2006, and are considered new units at an area source of HAPs for 40 CFR 63 Subpart ZZZZ. Both engines are subject to 40 CFR 60 Subpart JJJJ. Initial testing has been performed on both engines.
- II.A.5 Enclosed Vapor Combustor (FLR)**  
One (1) 10 MMBTU/hr enclosed combustor (flare) with a thermocouple detecting pilot flame for combusting vapor from the vapor collection system. Flare is equipped with an auto-igniter.
- II.A.6 RICE Compressor Engines (CE-01 thru CE-04)**  
Four (4) Waukesha L-7044 GSI natural gas-fired, spark ignition, internal combustion engines (controlled by non-selective catalytic reduction at each exhaust stack). Site rating: 1,680 hp - each. Minimum stack height of 28 feet above ground elevation.
- II.A.7 RICE Compressor Engines (CE-05 thru CE-07)**  
Three (3) Caterpillar 3608 TALE natural gas-fired, spark ignition, internal combustion engines (controlled by oxidation catalyst at each exhaust stack). Site rating: 2,445 hp - each. Minimum stack height of 28 feet above ground elevation. Subject to 40 CFR 60 Subpart JJJJ.
- II.A.8 RICE Compressor Engine (CE-09)**  
One (1) natural gas-fired, spark ignition, screw compression, internal combustion engine, 577 hp. Minimum stack height of 28 feet above ground elevation. No unit specific applicable requirements.
- II.A.9 RICE Compressor Engine (CE-10)**  
One (1) natural gas-fired, spark ignition, screw compression, internal combustion engine, 577 hp. Minimum stack height of 28 feet above ground elevation. Subject to 40 CFR 60 Subpart JJJJ.
- II.A.10 Dehydrators (DHY-01 thru DHY-03) and Reboilers (BLR-01 thru BLR-03)**  
Three (3) 20 million standard cubic feet per day (MMSCFD) TEG Dehydrators each with a 0.75 MMBtu/hr heat input reboiler. All units are natural gas-fired. Still vent emissions shall be routed through BTEX condensers. Liquids discharged from the BTEX condensers shall be routed to the condensate storage tanks. All BTEX condenser off-gas shall be routed to the enclosed combustor.
- II.A.11 Condensate Storage Tanks (TK-01 thru TK-06) with Heaters (HTR-01 thru HTR-06)**  
Six (6) Condensate, water, or oil storage tanks with maximum capacity of 400 bbl. each. Emissions shall be vented to the enclosed combustor. Six (6) storage Tank Heaters only fired by natural gas, 0.75

MMBtu/hr heat input each. No unit-specific applicable requirements.

II.A.12 **Miscellaneous Storage Tanks (M-TKS)**

Two (2) 4,200 gallons diesel fuel (fuel oil) storage tanks. Two (2) 1,008 gallons methanol storage tanks. Twenty-four (24) 2,016 gallons Lube oil/TEG/Misc. storage tanks. No unit-specific applicable requirements.

II.A.13 **Gas Driven Pneumatic Devices (PNE)**

Various gas driven pneumatic devices. No unit specific requirements.

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:**

The permittee shall conduct periodic monitoring as defined in II.B.1.a.1 to detect the presence of fugitive VOC or HAP emissions. [Origin: DAQE-AN132840012-22]. [R307-401-8]

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

- (a) During periodic monitoring all process valves, relief valves, pump seals, sample connections, open-ended lines, connectors, and flanges shall be tested.
- (b) All testing shall be performed using EPA approved methods in 40 CFR 60 Subpart KKK. Such methods include, but are not limited to, 40 CFR 60 Appendix A - Method 21, flame ionization detection, or optical gas imaging technology.
- (c) A leaking component is any component with a detected concentration of VOC or HAP greater than 10,000 parts per million (ppm) at the time of testing.
- (d) All leaking components shall be repaired as per the provision specified in 40 CFR 60.482-2, and 60.482-4 through 60.482-10. (40 CFR 60.632 (Subpart KKK) refers to these standards which are contained in 40 CFR Subpart VV)).
- (e) Initial monitoring shall be conducted no more than 180 days after start-up of the modified operation. Subsequent periodic monitoring shall be conducted as follows:
  - (1) If the percentage of components with detected leaking during a monitoring event is less than 2 percent, the frequency of subsequent monitoring events shall be quarterly for the first 12 months, biannually for the second 12 months, and annually thereafter.
  - (2) If the percentage of components with detected leaking during a monitoring event is greater than 2 percent, the frequency of subsequent monitoring shall be quarterly until the percentage of components found to be leaking is less than 2 percent, at which time the monitoring frequency specified in (e)(1) starts over.

II.B.1.a.2 **Recordkeeping:**

The permittee shall record the total number of components monitored, the number found to be leaking, the number repaired, the number where repair was delayed and the reason for the delay in each case. 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:**

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 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. All maintenance performed on permitted equipment shall be recorded. [Origin: DAQE-AN132840012-22]. [R307-401-8]

II.B.1.b.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.b.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.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:**

Visible emissions shall be no greater than 10 percent opacity except as otherwise specified in this permit. [Origin: DAQE-AN132840012-22]. [R307-401-8]

II.B.1.c.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.c.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.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:**

For all fuel burning equipment located on the site, the permittee shall only use pipeline quality natural gas as fuel. [Origin: DAQE-AN132840012-22]. [R307-401-8]

**II.B.1.d.1                    Monitoring:**

Records required for this permit condition will serve as monitoring.

**II.B.1.d.2                    Recordkeeping:**

A log shall be maintained which identifies any time fuel other than natural gas is used and the fuel type used for each affected equipment. 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.1.e                    Condition:**

- (1) General requirements for prevention of emissions and use of good air pollution control practices.
  - (a) All crude oil, 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.e.1                    Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.e.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.e.3

**Reporting:**

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

II.B.1.f

**Condition:**

The permittee shall not operate GE-01 and GE-02 simultaneously. [Origin: DAQE-AN132840012-22]. [R307-401-8]

II.B.1.f.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.f.2

**Recordkeeping:**

The permittee shall keep records of all periods of operation of GE-01 and GE-02 to demonstrate compliance with this condition. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.f.3

**Reporting:**

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

II.B.2

**Conditions on Generators (GE-01 thru GE-02)**

II.B.2.a

**Condition:**

The permittee shall comply with all applicable requirements in 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

- (1) For Stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP)(except gasoline and rich burn engines that use LPG), the permittee shall comply with the emission standards in Table 1 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4233(e)]
- (2) After July 1, 2010, the permittee shall not install stationary SI ICE with a maximum engine power of less 500 HP that do not meet the applicable requirements in 40 CFR 60.4233. [40 CFR 60.4236(a)]
- (3) The air-to-fuel ratio controller shall be maintained and operate appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [40 CFR 60.4243(g)]
- (4) The permittee shall operate and maintain stationary SI ICE that achieve the emission standards as required in 40 CFR 60.4233 over the entire life of the engine. [40 CFR 60.4234]
- (5) The permittee shall comply with the applicable general provision in 40 CFR 60.1-19 (40 CFR 60 Subpart A) as identified in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246 and 40 CFR 60 Subpart JJJJ Table 3]



II.B.2.a.1

**Monitoring:**

- (a) The permittee shall demonstrate compliance according to one of the methods specified in (a)(1) and (2) of this section.
  - (1) Purchasing an engine certified according to procedures specified in this condition, for the same model year and demonstrating compliance according to one of the methods specified in 40 CFR 60.4243(a). [40 CFR 60.4243(b)(1)]
  - (2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in 40 CFR 60.4233(d) and according to the requirements specified in 40 CFR 60.4244, as applicable, and according (2)(i) below:
    - (i) The permittee of a stationary SI internal combustion engine greater than 25 HP and less than or equal to 500 HP shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emission. In addition, the permittee shall conduct an initial performance test to demonstrate compliance.
- (b) For affected emission units less than or equal to 500 HP and the permittee purchases a non-certified engine or does not operate and maintain the certified affected emission unit and control device according to the manufacturer's written emission-related instruction, the permittee is required to perform initial performance testing as indicated in this section, but is not required to conduct subsequent performance testing unless the stationary engine undergoes rebuild, major repair, or maintenance as specified in 40 CFR 60.4243(f). [40 CFR 60.4243(f)]
- (c) The permittee shall comply with the applicable general monitoring provisions in 40 CFR 60.1-19 as identified in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246]

II.B.2.a.2

**Recordkeeping:**

The permittee shall keep records of the following:

- (1) All notifications submitted to comply with this subpart and all documentation supporting any notification. [40 CFR 60.4245(a)(1)]
- (2) Maintenance conducted on the engine. [40 CFR 60.4245(a)(2)]
- (3) If the permittee operates and maintains a certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the permittee shall keep records of conducted maintenance to demonstrate compliance. [40 CFR 60.4243(a)(1)]
- (4) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 1048, 1054, and 1060, as applicable. [40 CFR 60.4245(a)(3)]
- (5) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards. [40 CFR 60.4245(a)(4)]

The permittee shall comply with the applicable general recordkeeping provisions in 40 CFR 60.1-19 as identified in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246]

Records shall be maintained as described in Provision I.S.1 of this permit.

- II.B.2.a.3            **Reporting:**
- The permittee shall comply with the applicable general reporting provisions in 40 CFR 60.1-19 as identified in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246]
- There are no additional reporting requirements for this provision except those specified in Section I of this permit
- II.B.3                **Conditions on Enclosed Vapor Combustor (FLR)**
- II.B.3.a            **Condition:**
- The combustor shall be operated with no visible emissions. [Origin: DAQE-AN132840012-22]. [R307-401-8]
- II.B.3.a.1           **Monitoring:**
- Visible emissions monitoring shall be conducted once in each quarter that the affected emission unit is operated. The observer must understand the variables that affect the plume and factors that affect selection of the observation location as described in 40 CFR 60, Appendix A, Method 22, section 2.3.
- II.B.3.a.2           **Recordkeeping:**
- Results from visible emission observations 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:**
- 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.3.b.1           **Monitoring:**
- Records required for this permit condition will serve as monitoring.
- II.B.3.b.2           **Recordkeeping:**
- The permittee shall maintain records demonstrating the date 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.3.b.3           **Reporting:**
- There are no reporting requirements for this provision except those specified in Section I of this permit.

**II.B.4                    Conditions on RICE Engines (CE-01 thru CE-04)**

**II.B.4.a                Condition:**

Emissions to the atmosphere from each of the 4 engines shall not exceed the following rates:

NO<sub>x</sub>:.....2.59 lb/hr and 63.4 ppmvd at 15% O<sub>2</sub>-dry  
CO:.....3.70 lb/hr and 148.5 ppmvd at 15% O<sub>2</sub>-dry  
VOC:.....0.19 lb/hr and 4.7 ppmvd at 15% O<sub>2</sub>-dry

[Origin: DAQE-AN132840012-22]. [R307-401-8]

**II.B.4.a.1             Monitoring:**

(A) Stack testing shall be performed as specified below:

- (1) Frequency. Emissions shall be tested every two years or perform annual portable analyzer testing, subsequent to the initial compliance test. The source may also be tested at any time if directed by the Director.
- (2) 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 permittee shall conduct testing according to the approved test protocol. The Director may reject emission test data if the test did not follow the approved source test protocol or if the Director was not provided an opportunity to have an observer present at the test. The source shall attend a pretest conference if determined necessary by the Director. The test protocol shall be approved by the Director. The source test protocol shall include:
  - (a) The proposed test methodologies
  - (b) The stack to be tested
  - (c) The procedures to be used
  - (d) Any deviation from an EPA-approved test method
  - (e) Explanation of any deviation from an EPA-approved test method.
- (3) Sample Location - the emission point shall 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) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (4) Methods
  - (a) For NO<sub>x</sub>: 40 CFR 60, Appendix A-4, Method 7, 7A, 7B, 7C, 7D, or 7E, 40 CFR 63, Appendix A, Method 320, ASTM Method D6522-00 (Reapproved 2005), ASTM Method D6348-03, or other approved EPA testing method acceptable to the Director shall be used to determine the pollutant emission rate.
  - (b) For CO: 40 CFR 60, Appendix A-4, Method 10, ASTM D6522-00 (reapproved 2005), ASTM Method 6348-03, 40 CFR 63 Method 320, or other approved EPA testing methods acceptable to the Director shall be used to determine the pollutant emission rate
  - (c) For VOC: 40 CFR 60, Appendix A-6 and A-7, Method 18, Method 25, Method 25A with the use of a hydrocarbon cutter as described in 40 CFR 1065.265, 40 CFR 63 Method 320, ASTM Method D6348-03, or other approved EPA testing methods acceptable to the Director shall be used to determine the pollutant emission rate.
  - (d) For volumetric flow rate: 40 CFR 60, Appendix A, Method 2, 19 or other approved EPA testing method acceptable to the Director shall be used.
- (5) Portable Testing Analyzers: These may be used to test natural gas fired IC engines. Notification of each annual portable test shall be provided as specified in (A)(2) of this monitoring section.
  - (a) For NO<sub>x</sub>: If portable analyzer testing is employed, a correction must be established

- during an initial test between the portable testing analyzer and Method 7, 7A, 7B, 7C, 7D, or 7E. The portable analyzer shall be calibrated as per the manufacturer's specifications prior to each test.
- (b) For CO: If portable analyzer testing is employed, a correlation must be established during an initial test between the portable testing analyzer and Method 10. The portable analyzer shall be calibrated as per the manufacturer's specifications prior to each test.
  - (c) For VOC: If portable analyzer testing is employed, a correlation must be established during an initial test between the portable testing analyzer and Method 18, 25, and 25A. The portable analyzer shall be calibrated as per the manufacturer's specifications prior to each test.
- (6) 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.
  - (7) 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. Until three years of data is available, compliance testing shall be conducted at no less than 90% of the maximum production rate achieved during operation.
- (B) In addition to the stack testing required above, for each engine, the permittee shall use two indicators, temperature and pressure drop, to provide reasonable assurance of compliance with the emission limitation. [40 CFR 64.6]
- (1) Measurement Approach:
    - (a) Indicator No. 1: Temperature of exhaust gas at the inlet to the catalyst shall be measured using a thermocouple mounted in the gas stream.
    - (b) Indicator No. 2: Pressure drop across the catalyst shall be measured using a differential pressure measurement device, or equivalent, as approved by the Director.
  - (2) Indicator Range: Excursions are defined for the two indicators as follows. Each Project excursion triggers an inspection, corrective action, and a reporting requirement.
    - (a) Indicator No. 1: An excursion is defined as a temperature outside the catalyst operating range of 750-1250 degrees F, as read at the time of inspection.
    - (b) Indicator No. 2: An excursion is defined as a pressure drop across the catalyst 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.
  - (3) Performance Criteria:
    - (a) Data Representativeness:
      - (i) Indicator No. 1: The thermocouple shall be installed in the exhaust gas stream at the inlet to the catalyst. The thermocouple shall have a minimum accuracy of +/- 8 degrees F at typical catalyst temperatures.
      - (ii) Indicator No. 2: The differential pressure measurement device shall measure pressure drop with pressure taps located at the catalyst inlet and outlet. The minimum accuracy of the device shall be +/-0.25 percent of full scale, or equivalent, as approved by the Director.
    - (b) QA/QC Practices and Criteria:
      - (i) Indicator No. 1: The thermocouple shall be calibrated according to the manufacturer's recommendations. The thermocouple shall be replaced if a malfunction is detected.
      - (ii) Indicator No. 2: The differential pressure measurement device shall be calibrated according to the manufacturer's recommendations. Pressure taps shall be checked for plugging if a malfunction is evident during the monthly check.
    - (c) Monitoring Frequency:
      - (i) Indicator No. 1: Catalyst inlet temperature shall be measured and inspected daily to determine if a temperature excursion has occurred.

- (ii) Indicator No. 2: Pressure drop across the catalyst shall be measured and inspected monthly to determine if an excursion has occurred.
- (d) Data Collection Procedure:
  - (i) Indicator No. 1: The measured catalyst inlet temperature shall be collected and recorded for comparison to the indicator range once per 24-hour period.
  - (ii) Indicator No. 2: The measured pressure drop reading shall be collected and recorded for comparison to the indicator range once per calendar month.
- (e) Averaging Period: None.

(C) During the stack test required in (A) 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 stack testing shall be maintained in accordance with Provision I.S.1 of this permit.

The permittee shall maintain records of test data from the most recent stack test and any calculations used to evaluate or revise the indicator range and excursion level. The permittee shall maintain records of all calibration checks, adjustments and maintenance.

In addition to the recordkeeping requirement described in Provision I.S.1 of this permit, the permittee shall maintain records 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:**

Reporting shall be in accordance with Section I of this permit.

The results of 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.

In addition to the reporting requirements described in Provision I.S.2 of this permit, monitoring reports shall also 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))
- (b) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable). (40 CFR 64.9(a)(2)(ii))
- (c) Test data and any calculations used to evaluate or revise the indicator range and excursion level.

#### II.B.5

##### **Conditions on RICE Engines (CE-5 thru CE-07)**

#### II.B.5.a

##### **Condition:**

Emissions to the atmosphere from each of the three engines shall be no greater than:

NO<sub>x</sub>:.....3.77 lb/hr and 92.2 ppmvd at 15% O<sub>2</sub>-dry  
CO:.....1.35 lb/hr and 54.0 ppmvd at 15% O<sub>2</sub>-dry  
VOC:.....1.62 lb/hr and 41.2 ppmvd at 15% O<sub>2</sub>-dry

[Origin: DAQE-AN132840012-22]. [R307-401-8]

II.B.5.a.1

**Monitoring:**

Stack testing shall be performed as specified below:

- (1) Frequency. Emissions shall be tested every two years or perform annual portable analyzer testing, subsequent to the initial compliance test. The source may also be tested at any time if directed by the Director.
- (2) 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 permittee shall conduct testing according to the approved source test protocol. The Director may reject emission test data if the test did not follow the approved source test protocol or if the Director was not provided an opportunity to have an observer present at the test. The source shall attend a pretest conference if determined necessary by the Director. The test protocol shall be approved by the Director. The source test protocol shall include:
  - (a) The proposed test methodologies
  - (b) The stack to be tested
  - (c) The procedures to be used
  - (d) Any deviation from an EPA-approved test method
  - (e) Explanation of any deviation from an EPA-approved test method.
- (3) Sample Location - the emission point shall 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) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (4) Methods.
  - (a) For NO<sub>x</sub>: 40 CFR 60, Appendix A-4, Method 7, 7A, 7B, 7C, 7D, 7E, 40 CFR 63, Appendix A, Method 320, ASTM Method D6522-00 (reapproved 2005), ASTM Method D6348-03, or other approved EPA testing methods acceptable to the Director shall be used to determine the pollutant emission rate.
  - (b) For CO: If portable analyzer testing is employed, a correlation must be established during an initial test between the portable testing analyzer and Method 10. The portable analyzer shall be calibrated as per the manufacturer's specifications prior to each test.
  - (c) For VOC: If portable analyzer testing is employed, a correlation must be established during an initial test between the portable testing analyzer and Method 18, 25, and 25A. The portable analyzer shall be calibrated as per the manufacturer's specifications prior to each test.
  - (d) 40 CFR 60, Appendix A, Method 2, 19 or other approved EPA testing methods acceptable to the Director shall be used to determine the volumetric flow rate.
- (5) Portable Testing Analyzing: These may be used to test natural gas fired IC engines. Notification of each annual portable test shall be provided as specified in (2) of this monitoring section.
  - (a) For NO<sub>x</sub>: If portable analyzer testing is employed, a correction must be established during an initial test between the portable testing analyzer and Method 7, 7A, 7B, 7C, 7D, or 7E. The portable analyzer shall be calibrated as per the manufacturer's specifications prior to each test.
  - (b) For CO: If portable analyzer testing is employed, a correlation must be established during an initial test between the portable testing analyzer and Method 10. The portable analyzer

shall be calibrated as per the manufacturer's specifications prior to each test.

- (c) For VOC: If portable analyzer testing is employed, a correlation must be established during an initial test between the portable testing analyzer and Method 18, 25, and 25A. The portable analyzer shall be calibrated as per the manufacturer's specifications prior to each test.
- (6) 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.
- (7) 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. Until three years of data is available, compliance testing shall be conducted at no less than 90% of the maximum production rate achieved during operation.

#### II.B.5.a.2

##### **Recordkeeping:**

Results of all stack testing shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.5.a.3

##### **Reporting:**

Reporting shall be done in accordance with Section I of his permit.

The results of 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.5.b

##### **Condition:**

The permittee shall comply with all applicable requirements in 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

- (1) The permittee of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use liquefied petroleum gas) shall comply with the emission standards in Table 1 of 40 CFR 60 Subpart JJJJ for each stationary SI ICE. [40 CFR 60.4233(e)]
- (2) After July 1, 2009, the permittee may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in 40 CFR 60.4233. [40 CFR 60.4236(b)]
- (3) The air-to-fuel ratio controller shall be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [40 CFR 60.4243(g)]
- (4) The permittee shall operate and maintain stationary SI ICE that achieve the emission standards as required in 40 CFR 60.4233 over the entire life of the engine. [40 CFR 60.4234]
- (5) The permittee shall comply with the applicable general provision in 40 CFR 60.1-19 (40 CFR 60 Subpart A) as identified in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246 and 40 CFR 60 Subpart JJJJ Table 3]

[Origin: 40 CFR Subpart JJJJ]. [40 CFR 60.4230, 40 CFR 60.4233(e), 40 CFR 60.4234, 40 CFR 60.4236(b), 40 CFR 60.4243(g), 40 CFR 60.4246]

#### II.B.5.b.1

##### **Monitoring:**

- (a) The permittee shall demonstrate compliance according to one of the methods specified in

- (a)(1) and (2) of this monitoring section.
- (1) Purchasing an engine certified according to procedures specified in this condition, for the same model year and demonstrating compliance according to one of the methods specified in 40 CFR 60.4243(a). [40 CFR 60.4243(b)(1)]
- (2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in Table 1 of 40 CFR 60 Subpart JJJJ and according to the requirements specified in 40 CFR 60.4244, as applicable, and according to paragraph (a)(2)(i) of this monitoring section.
  - (i) The permittee of a stationary SI internal combustion engine greater than 500 HP, shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. [40 CFR 60.4243(b)(2)(ii)]
- (b) The permittee shall comply with the applicable general monitoring provisions in 40 CFR 60.1-19 as identified in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246]

#### II.B.5.b.2

##### **Recordkeeping:**

The permittee shall keep records of the following:

- (1) All notifications submitted to comply with this subpart and all documentation supporting any notification. [40 CFR 60.4245(a)(1)]
- (2) Maintenance conducted on the engine. [40 CFR 60.4245(a)(2)]
- (3) If the permittee operates and maintains a certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the permittee shall keep records of conducted maintenance to determine compliance. [40 CFR 60.4243(a)(1)]
- (4) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 1048, 1054, and 1060, as applicable. [40 CFR 60.4245(a)(3)]
- (5) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards. [40 CFR 60.4245(a)(4)]

The permittee shall comply with the applicable general recordkeeping provisions in 40 CFR 60.1-19 as identified in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246]

#### II.B.5.b.3

##### **Reporting:**

If the permittee installs an engine that has not been certified by the engine manufacturer to meet the emission standards in 40 CFR 60.4231, the permittee shall submit an initial notification as required in 40 CFR 60.7(a)(1) and shall include the information in 40 CFR 60.4245(c)(1) through (5). [40 CFR 60.4245(c)]

A copy of each performance test as conducted in 40 CFR 60.4244 shall be submitted within 60 days after the test has been completed. [40 CFR 60.4245(d)]

The permittee shall comply with the applicable general reporting provisions in 40 CFR 60.1-19 as identified in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246]

There are no additional reporting requirements except as outline in Section I of this permit.



II.B.6 **Conditions on RICE Engine (CE-10)**

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

The permittee shall comply with all applicable requirements in 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

- (1) The permittee of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use liquefied petroleum gas) shall comply with the emission standards in Table 1 of 40 CFR 60 Subpart JJJJ for each stationary SI ICE. [40 CFR 60.4233(e)]
- (2) After July 1, 2009, the permittee may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in 40 CFR 60.4233. [40 CFR 60.4236(b)]
- (3) The air-to-fuel ratio controller shall be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [40 CFR 60.4243(g)]
- (4) The permittee shall operate and maintain stationary SI ICE that achieve the emission standards as required in 40 CFR 60.4233 over the entire life of the engine. [40 CFR 60.4234]
- (5) The permittee shall comply with the applicable general provision in 40 CFR 60.1-19 (40 CFR 60 Subpart A) as identified in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246 and 40 CFR 60 Subpart JJJJ Table 3]

[Origin: 40 CFR Subpart JJJJ]. [40 CFR 60.4230, 40 CFR 60.4233(e), 40 CFR 60.4234, 40 CFR 60.4236(b), 40 CFR 60.4243(g), 40 CFR 60.4246]

II.B.6.a.1 **Monitoring:**

- (a) The permittee shall demonstrate compliance according to one of the methods specified in (a)(1) and (2) of this monitoring section.
  - (1) Purchasing an engine certified according to procedures specified in this condition, for the same model year and demonstrating compliance according to one of the methods specified in 40 CFR 60.4243(a). [40 CFR 60.4243(b)(1)]
  - (2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in Table 1 of 40 CFR 60 Subpart JJJJ and according to the requirements specified in 40 CFR 60.4244, as applicable, and according to paragraph (a)(2)(i) of this monitoring section.
    - (i) The permittee of a stationary SI internal combustion engine greater than 500 HP, shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. [40 CFR 60.4243(b)(2)(ii)]
- (b) The permittee shall comply with the applicable general monitoring provisions in 40 CFR 60.1-19 as identified in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246]

II.B.6.a.2 **Recordkeeping:**

The permittee shall keep records of the following:

- (1) All notifications submitted to comply with this subpart and all documentation supporting any notification. [40 CFR 60.4245(a)(1)]
- (2) Maintenance conducted on the engine. [40 CFR 60.4245(a)(2)]

- (3) If the permittee operates and maintains a certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the permittee shall keep records of conducted maintenance to determine compliance. [40 CFR 60.4243(a)(1)]
- (4) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 1048, 1054, and 1060, as applicable. [40 CFR 60.4245(a)(3)]
- (5) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards. [40 CFR 60.4245(a)(4)]

The permittee shall comply with the applicable general recordkeeping provisions in 40 CFR 60.1-19 as identified in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246]

#### II.B.6.a.3

##### **Reporting:**

If the permittee installs an engine that has not been certified by the engine manufacturer to meet the emission standards in 40 CFR 60.4231, the permittee shall submit an initial notification as required in 40 CFR 60.7(a)(1) and shall include the information in 40 CFR 60.4245(c)(1) through (5). [40 CFR 60.4245(c)]

A copy of each performance test as conducted in 40 CFR 60.4244 shall be submitted within 60 days after the test has been completed. [40 CFR 60.4245(d)]

The permittee shall comply with the applicable general reporting provisions in 40 CFR 60.1-19 as identified in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246]

There are no additional reporting requirements except as outlined in Section I of this permit.

#### II.B.7

##### **Conditions on Dehydrators (DHY-01 thru DHY-03) and Reboilers (BLR-01 thru BLR-3)**

#### II.B.7.a

##### **Condition:**

For each glycol dehydration unit, the actual average benzene emissions to the atmosphere (in terms of benzene emissions per year) shall be less than 0.9 megagram per year (1 TPY). [Origin: 40 CFR 63.764(e)(1), DAQE-AN132840012-22]. [40 CFR 60 Subpart HH, R307-401-8]

#### II.B.7.a.1

##### **Monitoring:**

The determination of actual average benzene emissions from a glycol dehydration unit shall be made using the procedures of either 40 CFR 63.772 (b)(2)(i) or (ii). Emissions shall be determined either uncontrolled, or with federally enforceable controls in place.

#### II.B.7.a.2

##### **Recordkeeping:**

Results of monitoring shall be maintained in accordance with 40 CFR 63.774(d)(1) and Provision I.S.1 of this permit.

#### II.B.7.a.3

##### **Reporting:**

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

II.B.8 **Conditions on Storage Tanks (TK-01 thru TK-06)**

II.B.8.a **Condition:**

The permittee shall not produce more than 38,600 barrels (1,621,200 gallons) of condensate per 12-month rolling total. [Origin: DAQE-AN132840012-22]. [R307-401-8]

II.B.8.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring

II.B.8.a.2 **Recordkeeping:**

To determine compliance with a rolling 12-month total, the permittee shall use monthly production data to calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Condensate production shall be determined with process flow meters, tank gauging records, and/or sales records. Records of production shall be kept for all periods the Interplanetary compressor station is in operation.

All records shall be maintained in accordance with 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:**

At all times after startup of production, the permittee shall route all gases, vapors, and fumes from the condensate/oil storage tanks and produced water storage tanks on site to the operating combustor (FLR). [Origin: DAQE-AN132840012-22]. [R307-401-8]

II.B.8.b.1 **Monitoring:**

Records required for this permit condition will serve as monitoring

II.B.8.b.2 **Recordkeeping:**

The permittee shall record all instances where gases, vapors, and fumes from the condensate, oil, and produced water storage tanks are not routed through the operating combustor (FLR).

All records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.8.b.3 **Reporting:**

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

II.B.8.c **Condition:**

The permittee shall keep the storage tank thief hatches and other tank openings closed and sealed except during tank unloading or other maintenance activities. [Origin: DAQE-AN132840012-22]. [R307-401-8]

II.B.8.c.1 **Monitoring:**

To demonstrate compliance with this condition, a visual inspection of the storage tank thief hatches and other tank openings shall be conducted on a quarterly basis.

II.B.8.c.2

**Recordkeeping:**

Results of quarterly visual inspection shall be kept, and all instances of improperly sealed storage tank thief hatches and other tank openings shall be recorded. Records of thief hatch inspections shall include the date of the inspection and the status of the thief hatches.

All records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.8.c.3

**Reporting:**

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

II.C

**Emissions Trading**

Not applicable to this source.

II.D

**Alternative Operating Scenarios**

Not applicable to this source.

## **SECTION III: PERMIT SHIELD**

A permit shield was not granted for any specific requirements.

## **SECTION IV: ACID RAIN PROVISIONS**

IV.A

**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:

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Incorporates	DAQE-AN132840012-22 dated October 28, 2022
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1. Comment on an item originating in 40 CFR 64 regarding RICE Engines CE-01 thru CE-07  
CAM pressure drop indicator: As part of the CAM plan approved in this permit, the permittee uses a handheld pressure measurement device to measure pressure drop across the catalyst for comparison to the indicator range and to determine if an excursion has occurred. If a new pressure measurement device is proposed, the permittee will submit for approval criteria for the new device in accordance with 40 CFR 64.4 and 40 CFR 64.7. If necessary, the operating permit will be modified to incorporate the monitoring changes. [Last updated May 23, 2023]
2. Comment on an item originating in 40 CFR 60 Subpart JJJJ regarding Permitted Source  
40 CFR 60 Subpart JJJJ applies to RICE engines CE-01 thru CE-04 and CE-09, however, the permittee has confirmed that these engines do not meet the date criteria for 40 CFR 60 Subpart JJJJ. 40 CFR 60 Subpart JJJJ applies to RICE engines CE-05 thru CE-07, CE-10, and generator engines GE-01 and GE-02. [Last updated May 23, 2023]
3. Comment on an item originating in 40 CFR 60 Subpart ZZZZ regarding Permitted Source  
RICE engines CE-01 thru CE-07, CE-09, and CE-10 commenced construction after June 12, 2006, and are considered new units at an area source of HAPs for 40 CFR 63 Subpart ZZZZ applicability. Per 40 CFR 63.6590(c), new stationary SI RICE at area sources of HAPS must meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart JJJJ. However, RICE engines CE-01-04 were manufactured prior to July 1, 2007, so they do not meet the date criteria for Subpart JJJJ applicability. RICE engine CE-09 was manufactured prior to the date criteria for Subpart JJJJ. RICE engines CE-05 thru CE-07, CE-10, and generator engines GE-01 and GE-02 are subject to the requirements of 40 CFR 60 Subpart JJJJ. [Last updated May 23, 2023]
4. Comment on an item originating in DAQE-AN132840012-22 regarding Permitted Source  
40 CFR 63 Subpart HH applicability: The dehydration units are subject to the requirements of 40 CFR 63 Subpart HH, however the permittee is following the exemptions in 63.764(e)(1)(i) and 63.764(e)(1)(ii). DAQE-AN132840012-22 requires that each dehydration unit not exceed 0.90 megagrams per year of benzene. If this limit is exceeded, then the permittee must comply with all applicable requirements in 40 CFR 63 Subpart HH. [Last updated May 23, 2023]
5. Comment on an item originating in 40 CFR 60 Subpart OOOO regarding Permitted Source  
40 CFR 60 Subpart OOOO applicability: The permittee identified RICE compressor engines, pneumatic controllers, and storage tanks as potential affected emission units under Subpart OOOO. However, the permittee confirmed all of the reciprocating compressors and storage tanks commenced construction prior to August 23, 2011, and do not meet the date criteria for Subpart OOOO Applicability. Additionally, the permittee confirmed all pneumatic controllers operate at a natural gas bleed rate equal to or less than 6 scf/hr. Therefore, no requirements from 40 CFR 60 Subpart OOOO have been included in the permit. [Last updated May 23, 2023]

6. Comment on an item originating in R307-502 regarding Permitted Source.  
R307-502 defines existing pneumatic controller to be as described in 40 CFR 60.5365(d)(1) through (3). 40 CFR 60.5365(d)(1) through (3) describes pneumatic controllers for the oil production segment, the natural gas production segment, and natural gas processing plants. The Interplanetary compressor station is part of the natural gas transmission segment and does not meet the definition for natural gas processing plant. Therefore, the requirements of R307-502 are not applicable to the source. [Last updated May 23, 2023]
7. Comment on an item originating in DAQE-AN132840012-22 regarding Permitted Source.  
40 CFR 63 Subpart HH applicability: The dehydration units are subject to the requirements of 40 CFR 63 Subpart HH, however the permittee is following the exemptions in 63.764(e)(1)(i) and 63.764(e)(1)(ii). Although the production limit of 85 thousand standard cubic meters per day is exceeded, DAQE-AN132840012-22 requires that each dehydration unit not exceed 0.90 megagrams per year of benzene. If this limit is exceeded, then the permittee must comply with all applicable requirements from Subpart HH. [Last updated May 23, 2023]