State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

10917

Title V Operating Permit

PERMIT NUMBER: 5700001003
DATE OF PERMIT: July 11, 2016
Date of Last Revision: July 11, 2016

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

Name of Permittee:

Compass Minerals International
9900 W 109th St.
Overland Park, KS 66210

Permitted Location:

Compass Minerals Ogden Inc.
765 North 10500 West
Ogden, UT 84404

UTM coordinates: 396,986 m Easting, 4,565,172 m Northing
SIC code: 2819 (Industrial Inorganic Chemicals, NEC)

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:	June 24 of every calendar year that this permit is in force.
Renewal application due:	January 11, 2021
Permit expiration date:	July 11, 2021
Definition of "prompt":	written notification within 14 days.

ABSTRACT

Compass Minerals Corporation (CMP) operates a mineral recovery facility on the eastern shore of the south arm of the Great Salt Lake near Ogden, Utah in Weber County. This facility produces sodium chloride (NaCl), sulfate of potash (SOP) (K_2SO_4), and magnesium chloride ($MgCl_2$). The process uses crystallized salts, including halite (sodium chloride) and a mixed salt containing potassium sulfate and magnesium sulfate from solar evaporation ponds. The raw halite is washed, wet-screened, dried, cooled, dry-screened, packaged, and shipped. The mixed salt is washed, slurried, thickened, crystallized, and converted to schoenite which is then filtered, dried, screened, half granulated/compacted, and shipped as sulfate of potash. The collective pump station operations located on the west side of the Great Salt Lake are not included in this permit since it has been designated as a separate source. CMP is a major source for emissions of PM_{10} and HAPs, and is subject to 40 CFR 60 Subpart A-General Provisions, 40 CFR 60 Subpart Db-Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60 Subpart IIII-Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, and 40 CFR 60 Subpart JJJJ-Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 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 DDDDD-National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.

OPERATING PERMIT HISTORY

Permit/Activity	Date Issued	Recorded Changes
Title V renewal application (Project #OPP0109170016)	07/11/2016	Changes: The renewal permit incorporates DAQE-AN109170035-16, dated January 15, 2016, that permits three emergency generators, a new SOP Compaction plant (D-1545, AH-1547, AH-1555, SC-460, B-1520), and removes dryer D-005 and baghouse BH-006. DAQE-AN109170035-16 supersedes DAQE-AN109170033-15 that replaced the SOP dryer (D-003) and scrubber (AH-013) with a new dryer (D-1400) and baghouse (BH-1400). Other changes to the renewal permit include updates to CAM, updates to state rule conditions, and updates to federal rule conditions due to major HAP status.
Title V Operational Flexibility Change (Project #OPP0109170012)	04/19/2013	Changes: Update operating permit to include the Reduction in Air Contaminants approval order, DAQE-AN109170032-13, dated March 7, 2013 that replaces the HE-028 scrubber with a baghouse (BH-014).
Title V administrative amendment - enhanced AO (Project #OPP0109170011)	02/06/2013	Changes: To incorporate revisions approved in DAQE-AN109170031-12, dated 11/29/12, to permit a 450 kW diesel-fired emergency fire pump engine and update monitoring language.
Title V administrative amendment - enhanced AO (Project #OPP0109170010)	11/20/2012	Changes: Revision incorporates DAQE-AN109170030A-12, dated 8/21/12, that administratively amended DAQE-AN109170030-12, dated 7/30/12, to make minor corrections. This permit revision incorporates the approved changes, including addition of two natural gas-fired boilers, replacement of scrubber AH-505 with a baghouse (BH-505) on the Salt Special Products Circuit, removal of the requirements previously associated with AH-505, removal of 40 CFR 63 Subpart BBBBBBB requirements, addition of 40 CFR 60 Subpart Db and GHG requirements, correction to fuel sulfur content, correction to GHG monitoring, and updates to citations.
Title V administrative amendment - enhanced AO (Project #OPP0109170009)	12/06/2010	Changes: To incorporate revisions approved in DAQE-AN0109170028-10, dated 9/15/10, including addition of a baghouse (BH-502) to the Salt Bulk Load-out area, incorporation of 40 CFR 63 BBBBBBB requirements on AH-505: Salt Special Products Circuit, and citation updates. This revision also contains applicable requirements from 40 CFR 63 Subpart ZZZZ.
Title V significant modification (Project #OPP0109170007)	04/30/2010	Changes: The changes approved in DAQE-AN0109170027-09, dated 12/3/2009, have been incorporated including replacement of wet scrubber (AH-

		081) on the SOP Compaction Circuit Dryers with a baghouse (BH-008) for the tray dryer (D-002) and a high efficiency wet scrubber (AH-075) for the rotary kiln dryer (D-004); addition of a new fluid bed heater (D-005) with baghouse (BH-006); addition of PM_{10} limits on the new equipment; removal of requirements associated with AH-081; revision of fuel sulfur content limit; clarification of approved fuel in the emergency generator; increase in salt production; removal of SOP compaction plant pneumatic conveying (BH-003); and revision to opacity limit for all scrubbers. Monitoring has been updated on CAM units as a result of performance testing.
Title V renewal application (Project #OPP0109170006)	07/09/2009	Changes: CAM applies to ten units and has been included in the renewal permit under conditions II.B.3.a, II.B.4.a, II.B.5.a, II.B.6.b, II.B.8.b, II.B.9.a, II.B.10.a, II.B.11.a, II.B.12.a, II.B.14.b. Conditions II.B.17 and II.B.18 have been removed because installation notification has been received for the Magnesium Chloride Plant Wet Scrubber and the Magnesium Chloride Plant Cooling Tower. A permit shield was granted for 40 CFR 60 Subpart UUU in Section III of the renewal permit.
Title V administrative amendment by source (Project #OPP0109170004)	08/03/2006	Changes: To incorporate changes approved in DAQE-AN0917021-06, dated 3/23/2006, including addition of a wet scrubber to control particulate from the end of the brine cooling belt, packaging and handling, and addition of a cooling tower to provide the water for cooling the belt. A few updates were also made to reflect current rule numbering, reviewer comments, and permit language.
Title V administrative amendment by DAQ (Project #OPP0109170003)	06/05/2003	Changes: To change equipment from wet scrubber AH-054 in SOP Compaction Building Circuit to baghouse BH-005, as approved in AN0917020-03 (4/2/03). New PM_{10} limits and associated stack testing were added. Opacity limit on point changed from 40% to 10%. Installation notice requirement for BH-501 was removed, as the requirement has been met.
Title V administrative amendment by DAQ (Project #OPP0109170002)	02/18/2003	Changes: Modification to increase hourly maximum of dry salt produced in the salt plant dryer from 100 TPH to 120 TPH. Salt plant dryer (D-500) wet cyclone and wet scrubber stack (AH-513) PM_{10} emissions limit was also changed.
Title V initial application (Project #OPP0109170001)	06/24/2002	

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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: 303-312-6440

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 **SALT: Salt Plant**
Salt production plant consisting of the salt screen cooler circuit, salt sizing screen & storage circuit, salt special products circuit, and salt dryer system (D-501).

II.A.3 **AH-500: Salt Cooler Circuit**
Salt cooling circuit ancillary equipment with exhaust directed into a cyclonic wet scrubber (AH-500).

II.A.4 **AH-502: Salt Plant Circuit**
Salt plant circuit with dried salt fed to screens, surge bins, bagging operations and conveyed to truck and railcar loadout areas. Exhaust is directed into a cyclonic wet scrubber (AH-502).

II.A.5 **BH-505: Salt Special Products Circuit**
Salt plant special products circuit consisting of compaction of dried salt and pre-mixed mineral powder into blocks. Exhaust is directed into a baghouse (BH-505) and then back into the building, not to the atmosphere. No unit-specific applicable requirements.

II.A.6 **AH-513: Salt Dryer (D-501)**
Salt plant natural gas fired dryer (D-501) with exhaust directed into a wet cyclone and cyclonic wet scrubber (AH-513).

II.A.7 **BH-1400: SOP Dryer (D-1400)**
SOP plant natural gas fired dryer (D-1400) with exhaust directed into a baghouse (BH-1400). The dryer is equipped with an ultra-low NO_x burner system.

II.A.8 **BH-005: SOP Compaction Building Circuit**
SOP Compaction, screening, crushing and conveyor transfer points vented to a dry cyclone circuit and pulse-jet baghouse (BH-005).

II.A.9 **AH-1547: SOP Plant Dryer (D-1545)**
SOP plant natural gas fired dryer (D-1545) with exhaust directed into a wet scrubber (AH-1547). The dryer is equipped with a low NO_x burner system.

II.A.10 **AH-1555: SOP Plant Compaction Building**
Emissions from the SOP plant compaction building are controlled by a wet scrubber (AH-1555). This unit also includes a natural gas-fired process heater (B-1520) rated at less than 5 MMBtu/hr. Exhaust from the process heater is directed to the SOP plant compaction building wet scrubber (AH-1555).

II.A.11 **BH-008: SOP Compaction Circuit Dryer (D-002)**
Natural gas fired tray-type dryer (D-002) in the SOP plant compaction circuit with exhaust directed into a pulse-jet baghouse (BH-008).

II.A.12 **AH-075: SOP Compaction Circuit Dryer (D-004)**
Natural gas fired rotary kiln dryer (D-004) in the SOP plant compaction circuit, with exhaust

directed into a high efficiency wet scrubber (AH-075).

II.A.13 **BH-014: SOP Dryer (D-001)**

SOP wet process plant natural gas fired dryer (D-001) with exhaust directed into a fabric filter baghouse (BH-014).

II.A.14 **BH-001: SOP Bulk Load-Out Circuit**

SOP bulk load-out area with exhaust from the handling and transfer of material directed into a fabric filter dust collector (BH-001).

II.A.15 **BH-002: SOP Silo Storage Circuit**

SOP silo storage building activities with exhaust directed into a fabric filter dust collector (BH-002).

II.A.16 **SUB-COMP: SOP Submerged Combustion Process**

SOP plant submerged combustion system consisting of a water process tank and four (4) natural gas fired burners. This unit includes the SOP Plant Submerged Combustion Water Heater (SC-460) rated at 60 MMBtu/hr.

II.A.17 **BLAST: Abrasive Blast Machine**

Self-contained abrasive blast machine.

II.A.18 **KCL: Potassium Chloride Conveyor System**

Potassium Chloride transfer system consisting of railcar unloading and four (4) covered conveyor belts. No unit-specific applicable requirements.

II.A.19 **BH-501: Salt Cooler**

Salt cooler (F-506) with exhaust directed into a fabric filter dust collector (BH-501). Dust collector exhaust air will be diverted either into the building, dryer (D-501) combustion air, or salt cooler (F-506) fluidized cooler air.

II.A.20 **BH-004: SOP Conveyor Transfer in Tunnels**

SOP conveyor transfer and drop points in tunnels underneath silos with exhaust directed into a fabric filter dust collector (BH-004). Baghouse exhaust is vented back into the building. Unit is listed for informational purposes only.

II.A.21 **GENSET: Emergency Diesel Generators**

Three diesel fired generators: one 175 kW emergency generator, one 455 kW emergency fire pump engine, and one 300 kW emergency generator.

II.A.22 **ROADS: Roads and Unpaved Operational Areas**

Various roads and disturbed, unpaved areas.

II.A.23 **MP WS: Magnesium Chloride Plant Wet Scrubber**

A high energy venturi wet scrubber controls process streams from the cooling belt, packaging, handling, that produces $MgCl_2$ brines & hexahydrate flake. All exhaust air from the process streams shall be routed to the wet scrubber prior to venting to atmosphere.

II.A.24 **MP CT: Magnesium Chloride Plant Cooling Tower**

The mag plant cooling tower provides irrigation water that is sprayed on the bottom surface of steel belts to cool the concentrated hot brine into a solid sheet. No unit-specific applicable requirements.

II.A.25 **TANKS: Petroleum Storage Tanks**

One 6,000 gal. gasoline, one 12,000 gal. diesel and four 10,000 gal. diesel above ground storage tanks. No unit-specific applicable requirements.

II.A.26 **MISC: Miscellaneous Emissions**

Emission sources listed for informational purposes only such as: main office boiler, laboratory fume hoods, comfort heaters, cooling towers, pallet plant operations, degreasing stations and air ventilation systems. No unit-specific applicable requirements.

II.A.27 **BH-502: Salt Bulk Load-out**

Salt bulk load-out area with exhaust from the handling and transfer of material directed into a cartridge filter dust collector (BH-502).

II.A.28 **Boilers**

Two natural gas-fired watertube boilers rated at 108.11 MMBtu/hr each. Each boiler is equipped with Ultra Low-NO_x burners and internal flue gas recirculation and continuous oxygen trim systems that maintain an optimum air to fuel ratio.

II.A.29 **NG GEN: Emergency NG Generator**

One natural gas fired emergency generator rated at approximately 25 kW.

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 comply with the applicable requirements for recycling and emission reduction for class I and class II refrigerants pursuant to 40 CFR 82, Subpart F - Recycling and Emissions Reduction. [Origin: 40 CFR 82]. [40 CFR 82.150(b)]

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

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart F.

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

All records required in 40 CFR 82, Subpart F shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

II.B.1.a.3 **Reporting:**

All reports required in 40 CFR 82, Subpart F shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

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

The permittee shall comply with the applicable requirements for servicing of motor vehicle air conditioners pursuant to 40 CFR 82, Subpart B - Servicing of Motor Vehicle Air Conditioners. [Origin:

40 CFR 82]. [40 CFR 82.30(b)]

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

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart B.

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

All records required in 40 CFR 82, Subpart B shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

II.B.1.b.3 **Reporting:**

All reports required in 40 CFR 82, Subpart B shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

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

The permittee shall use only pipeline quality natural gas for fuel for all boilers and burners. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

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

Records required for this permit condition will serve as monitoring.

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

An operating log will be maintained to document any period when plant equipment is operated using any fuel other than natural gas.

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:**

Unless otherwise specified, at all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected emission units, 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-AN109170035-16]. [40 CFR 60.11(d), R307-401-8(1)(a)(BACT), R307-401-8(2)]

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

Records required for this permit condition will serve as monitoring.

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

Visible emissions shall be no greater than 15 percent opacity, unless otherwise specified in this permit. This includes, but is not limited to, all scrubbers and all conveyor drop and transfer points. [Origin: DAQE-AN109170035-16]. [R307-305-3, R307-401-8(1)(a)(BACT)]

II.B.1.e.1 **Monitoring:**

Unless otherwise specified, a visual opacity survey of each affected emission unit shall be performed on a monthly basis while the unit is operating. Permittee is not required to perform monthly surveys on natural gas combustion sources and petroleum storage tanks. The visual opacity survey shall be performed by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than condensed water vapor are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director, for point sources, and in accordance 58 FR 61640 Method 203A, or other EPA-approved testing method, as acceptable to the Director, for fugitive sources.

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

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9 and/or 58 FR 61640 Method 203A, or other EPA-approved testing method, as acceptable to the Director, 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:**

Sulfur content of any fuel oil or diesel burned shall be no greater than 0.0015 percent by weight. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.1.f.1 **Monitoring:**

For each delivery of fuel oil or diesel, the permittee shall either:

(1) Determine the fuel sulfur content expressed as wt% in accordance with the methods of the American Society for Testing Materials (ASTM); or
(2) Inspect the fuel sulfur content expressed as wt% determined by the vendor using methods of the ASTM; or
(3) Inspect documentation provided by the vendor that demonstrates compliance with this provision (directly or indirectly).

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

The records required for monitoring shall be maintained as described by Provision S.1 in Section I 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.1.g **Condition: [State-only Requirement]**

Unless otherwise specified in this permit, visible emissions caused by fugitive dust shall not exceed 10% at the property boundary, and 20% onsite. Opacity shall not apply when the wind speed exceeds 25 miles per hour if the permittee has implemented, and continues to implement, the accepted fugitive dust control plan and administers at least one of the following contingency measures:
(1) Pre-event watering;
(2) Hourly watering;
(3) Additional chemical stabilization;
(4) Cease or reduce fugitive dust producing operations;
(5) Other contingency measure approved by the director.
[Origin: R307-309]. [R307-309-5, R307-309-6]

II.B.1.g.1 **Monitoring:**

In lieu of monitoring via visible emissions observations, adherence to the most recently approved fugitive dust control plan shall be monitored to demonstrate that appropriate measures are being implemented to control fugitive dust. Wind speed may be measured by a hand-held anemometer or equivalent device.

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

If wind speeds are measured to establish an exception from the above visible emissions limits, records of the administered contingency measures and the wind speed measurements shall be maintained. Records required by the most recently approved fugitive dust control plan shall be maintained in accordance with the plan.

Records that demonstrate compliance with this condition shall be available to the director upon request. [R307-309-12] Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.g.3 **Reporting:**

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

II.B.1.h **Condition:**

The permittee shall submit a fugitive dust control plan to the Director in accordance with R307-309-6. Activities regulated by R307-309 shall not commence before the fugitive dust control plan is approved by the director. If site modifications result in emission changes, the permittee shall submit an updated fugitive dust control plan. At a minimum, the fugitive dust control plan shall include the requirements in R307-309-6(4) as applicable. The fugitive dust control plan shall include contact information, site address, total area of disturbance, expected start and completion dates, identification of dust suppressant

and plan certification by signature of a responsible person. [Origin: R307-309]. [R307-309-5(2), R307-309-6]

II.B.1.h.1 **Monitoring:**

Adherence to the most recently approved fugitive dust control plan shall be monitored to demonstrate that appropriate measures are being implemented to control fugitive dust.

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

Records that demonstrate compliance with this condition shall be available to the director upon request. [R307-309-12]

Records required by the most recently approved fugitive dust control plan shall be maintained in accordance with the plan and section I.S.1 of this permit.

II.B.1.h.3 **Reporting:**

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

II.B.1.i **Condition:**

If the permittee owns, operates or maintains a new or existing material storage, handling or hauling operation, the permittee shall prevent, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site. If materials are deposited that may create fugitive dust on a public or private paved road, the permittee shall clean the road promptly. [Origin: R307-309]. [R307-309-7]

II.B.1.i.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

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

Records that demonstrate compliance with this condition and records required by the most recently approved fugitive dust control plan shall be maintained in accordance with the plan and section I.S.1 of this permit.

II.B.1.i.3 **Reporting:**

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

II.B.1.j **Condition:**

Fugitive emissions shall not exceed 15% opacity. [Origin: R307-309]. [R307-309-4]

II.B.1.j.1 **Monitoring:**

(a) For intermittent sources, opacity observations shall be performed on a monthly basis in accordance with 40 CFR 60, Appendix A, Method 9, however, the requirement for observations to be made at 15 second intervals over a six-minute period shall not apply
(b) An opacity observation of fugitive emissions from each affected emission unit shall be

conducted on a monthly basis in accordance with 40 CFR 60, Appendix A, Method 9, while the unit is operating.

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

The permittee shall keep a log of the following information for each opacity observation: date and time visual emissions observed, emission point location and description, time and date of opacity test, and percent opacity. Records shall be kept of all data required by 40 CFR 60, Appendix A, Method 9. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.j.3 **Reporting:**

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

II.B.1.k **Condition: [State-only Requirement]**

By January 1, 2017, low NO_x burner technology with a minimum manufacturer guarantee of 77 percent NO_x removal efficiency shall be in operation on all dryers. [Origin: Utah SIP IX.H]. [R307-110]

II.B.1.k.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

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

Records that demonstrate compliance with this condition shall be maintained in accordance with section I.S.1 of this permit. Records shall include, but are not limited to, copies of the manufacturer's written guarantee of NO_x removal efficiency, the date that low NO_x burner technology was installed on each dryer, the date that low NO_x burner technology began operating on each dryer.

II.B.1.k.3 **Reporting:**

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

II.B.2 **Conditions on SALT: Salt Plant.**

II.B.2.a **Condition:**

Production of dried salt shall be no greater than 960,000 tons per 12-month rolling total. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

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

Production shall be determined using an operations log. Production shall be monitored on a daily basis. Annual production shall be determined on a rolling 12-month total. Based on the first day of each month a new 12-month total shall be calculated using data from the previous 12 months. Monthly calculations shall be made no later than 20 days after the end of each calendar month using the daily operations logs or records.

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

Results of monitoring 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.3 **Conditions on AH-500: Salt Cooler Circuit.**

II.B.3.a **Condition:**

Emissions of PM_{10} and $PM_{2.5}$ shall be no greater than 7.65 pounds per hour and 0.020 grains/dscf (68 degrees F, and 29.92 in Hg). [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.3.a.1 **Monitoring:**

A. Stack testing shall be performed as specified below:
   i) Frequency. Emissions shall be tested every three years. The source may also be tested at any time if directed by the Director.
   ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.
   iii) Methods.
      (a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.
      (b) The following methods shall be used to measure filterable particulate emissions: 40 CFR 51, Appendix M, Method 201, or 201A, or other EPA-approved testing method, as acceptable to the Director. If other approved testing methods are used which cannot measure the $PM_{10}/PM_{2.5}$ fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered $PM_{10}/PM_{2.5}$ as applicable. The portion of the filterable particulate emissions considered $PM_{10}/PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration.
      (c) The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.
      (d) The condensable particulate emissions shall be used for compliance demonstration and for inventory purposes.
      (e) 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director, shall be used to determine the volumetric flow rate.
   iv) 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.
   v) 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.

B. At all times the affected emission unit is operating, scrubber liquid flow rate shall be monitored as specified below and as approved by the Director.
   i) Measurement Approach: The permittee shall continuously measure the scrubber liquid flow rate using a flow meter.
   ii) Indicator Range: An excursion is defined as an average scrubber liquid flow rate over a one-hour period that is less than 57 gallons per minute (gpm). Excursions trigger an inspection, corrective action, and a reporting requirement.
   iii) Performance Criteria:
      (a) Data Representativeness: The scrubber liquid flow rate shall be measured using a flow meter located on the scrubber liquid recirculation line. The scrubber liquid flow rate shall be accurate to five (5) gpm or as approved by the Director.
      (b) QA/QC Practices and Criteria: The flow meter shall be calibrated according to the manufacturer's recommendations or at least annually. The data acquisition system shall be operated and maintained according to the manufacturer's recommendations.
      (c) Monitoring Frequency: The scrubber liquid flow rate shall be measured continuously.
      (d) Data Collection Procedure: An average scrubber liquid flow rate shall be calculated during each hour of operation. The hourly average shall be recorded for comparison to the excursion level.
      (e) Averaging Period: One hour.

   (40 CFR 64.6(c))

C. During the stack test required in A. above, the permittee shall acquire new test data to evaluate or update the indicator range and excursion level for the indicators. Any resultant changes to the monitoring shall be addressed in accordance with 40 CFR 64.7(e).

II.B.3.a.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

The permittee shall maintain a file of activities for installation of the scrubber liquid flow meter and data acquisition system. The permittee shall maintain records of test data from the most recent stack test and any calculations used to establish, evaluate, or revise the indicator ranges and excursion levels.

The permittee shall keep copies of Director approval of the monitoring including, but not limited to, the most recently approved indicator ranges and excursion levels. The permittee shall maintain records of all verifications, calibration checks, adjustments and maintenance.

In addition to the recordkeeping requirement described in Provision I.S.1 of this permit, 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.3.a.3 **Reporting:**

In addition to the reporting requirements in Provision I.S.2 of this permit,

(a) Monitoring reports shall include, at a minimum, the following information, as applicable:
  (i) 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) 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))

(b) The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. Reports shall include test data and any calculations used to evaluate or revise the indicator range and excursion level as specified in II.B.3.a.1.C.

II.B.3.b **Condition: [State-only Requirement]**

Emissions of PM_{10} shall not exceed the following concentration: 0.01 grains/dscf (at 68 degrees F and 29.92 in Hg). [Origin: Utah SIP IX.H]. [R307-110]

II.B.3.b.1 **Monitoring:**

A. Stack testing shall be performed as specified below:
  i) Frequency. Emissions shall be tested at least once every three years. The source may also be tested at any time if directed by the Director.
  ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.
  iii) Methods.
    (a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.
    (b) PM_{10}: 40 CFR 51, Appendix M, Methods 201a and 202, or other EPA-approved testing methods acceptable to the Director. If a method other than 201a is used, the portion of the front half of the catch considered PM_{10} shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.
    (c) Volumetric Flow Rate: 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director.
    (d) For PM_{10}: The condensable particulate emissions shall not be used for compliance demonstration, but shall be used for inventory purposes.
  iv) 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.
  v) 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 all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

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

The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.4 **Conditions on AH-502: Salt Plant Circuit.**

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

Emissions of PM_{10} and $PM_{2.5}$ from the #2 stack shall be no greater than 5.24 pounds per hour and 0.040 grains/dscf (68 degrees F, and 29.92 in Hg). [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

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

A. Stack testing shall be performed as specified below:
   i) Frequency. Emissions shall be tested every three years. The source may also be tested at any time if directed by the Director.
   ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.
   iii) Methods.
      (a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.
      (b) The following methods shall be used to measure filterable particulate emissions: 40 CFR 51, Appendix M, Method 201, or 201A, or other EPA-approved testing method, as acceptable to the Director. If other approved testing methods are used which cannot measure the $PM_{10}/PM_{2.5}$ fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered $PM_{10}/PM_{2.5}$ as applicable. The portion of the filterable particulate emissions considered $PM_{10}/PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration.
      (c) The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.
      (d) The condensable particulate emissions shall be used for compliance demonstration and for inventory purposes.
      (e) 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as

acceptable to the Director, shall be used to determine the volumetric flow rate.

iv) 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.

v) 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.

B. At all times the affected emission unit is operating, scrubber liquid flow rate shall be monitored as specified below and as approved by the Director.

i) Measurement Approach: The permittee shall continuously measure the scrubber liquid flow rate using a flow meter.

ii) Indicator Range: An excursion is defined as an average scrubber liquid flow rate over a one-hour period that is less than 9 gallons per minute (gpm). Excursions trigger an inspection, corrective action, and a reporting requirement.

iii) Performance Criteria:

(a) Data Representativeness: The scrubber liquid flow rate shall be measured using a flow meter located on the scrubber liquid recirculation line. The scrubber liquid flow rate shall be accurate to five (5) gpm or as approved by the Director.

(b) QA/QC Practices and Criteria: The flow meter shall be calibrated according to the manufacturer's recommendations or at least annually. The data acquisition system shall be operated and maintained according to the manufacturer's recommendations.

(c) Monitoring Frequency: The scrubber liquid flow rate shall be measured continuously.

(d) Data Collection Procedure: An average scrubber liquid flow rate shall be calculated during each hour of operation. The hourly average shall be recorded for comparison to the excursion level.

(e) Averaging Period: One hour.

(40 CFR 64.6(c))

C. During the stack test required in A. above, the permittee shall acquire new test data to evaluate or update the indicator range and excursion level for the 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 recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

The permittee shall maintain a file of activities for installation of the scrubber liquid flow meter and data acquisition system. The permittee shall maintain records of test data from the most recent stack test and any calculations used to establish, evaluate, or revise the indicator ranges and excursion levels.

The permittee shall keep copies of Director approval of the monitoring including, but not limited to, the most recently approved indicator ranges and excursion levels. The permittee shall maintain records of all verifications, calibration checks, adjustments and maintenance.

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

In addition to the reporting requirements in Provision I.S.2 of this permit,

(a) Monitoring reports shall include, at a minimum, the following information, as applicable:
  (i) 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) 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))

(b) The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. Reports shall include test data and any calculations used to evaluate or revise the indicator range and excursion level as specified in II.B.4.a.1.C.

II.B.4.b **Condition: [State-only Requirement]**

Emissions of PM_{10} shall not exceed the following concentration: 0.01 grains/dscf (at 68 degrees F and 29.92 in Hg). [Origin: Utah SIP IX.H]. [R307-110]

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

A. Stack testing shall be performed as specified below:
  i) Frequency. Emissions shall be tested at least once every three years. The source may also be tested at any time if directed by the Director.
  ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.
  iii) Methods.
    (a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.
    (b) PM_{10}: 40 CFR 51, Appendix M, Methods 201a and 202, or other EPA-approved testing methods acceptable to the Director. If a method other than 201a is used, the portion of the front half of the catch considered PM_{10} shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.
    (c) Volumetric Flow Rate: 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director.
    (d) For PM_{10}: The condensable particulate emissions shall not be used for compliance demonstration, but shall be used for inventory purposes.

iv) 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.

v) 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 all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.4.b.3 **Reporting:**

The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.5 **Conditions on AH-513: Salt Dryer.**

II.B.5.a **Condition:**

Production of dried salt shall be no greater than 120 tons per hour. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

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

Production shall be determined using measured weigh scale tonnages. Production shall be monitored on an hourly basis for all periods that the plant is in operation.

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

Records shall be kept on a daily basis for determination of hourly/daily rates. Records shall be kept 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.5.b **Condition:**

Emissions of PM_{10} and $PM_{2.5}$ from the #4 stack shall be no greater than 1.45 pounds per hour and 0.0114 grains/dscf (68 degrees F, and 29.92 in Hg). [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

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

A. Stack testing shall be performed as specified below:

i) Frequency. Emissions shall be tested every three years. The source may also be tested at any time if directed by the Director.

ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.

iii) Methods.

(a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.

(b) The following methods shall be used to measure filterable particulate emissions: 40 CFR 51, Appendix M, Method 201, or 201A, or other EPA-approved testing method, as acceptable to the Director. If other approved testing methods are used which cannot measure the $PM_{10}/PM_{2.5}$ fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered $PM_{10}/PM_{2.5}$ as applicable. The portion of the filterable particulate emissions considered $PM_{10}/PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration.

(c) The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.

(d) The condensable particulate emissions shall be used for compliance demonstration and for inventory purposes.

(e) 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director, shall be used to determine the volumetric flow rate.

iv) 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.

v) 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.

B. At all times the affected emission unit is operating, scrubber liquid flow rate shall be monitored as specified below and as approved by the Director.

i) Measurement Approach: The permittee shall continuously measure the scrubber liquid flow rate using a flow meter.

ii) Indicator Range: An excursion is defined as an average scrubber liquid flow rate over a one-hour period that is less than 45 gallons per minute (gpm). Excursions trigger an inspection, corrective action, and a reporting requirement.

iii) Performance Criteria:

(a) Data Representativeness: The scrubber liquid flow rate shall be measured using a flow meter located on the scrubber liquid recirculation line. The scrubber liquid flow rate shall be accurate to five (5) gpm or as approved by the Director.

(b) QA/QC Practices and Criteria: The flow meter shall be calibrated according to the manufacturer's recommendations or at least annually. The data acquisition system shall be operated and maintained according to the manufacturer's recommendations.

(c) Monitoring Frequency: The scrubber liquid flow rate shall be measured continuously.

(d) Data Collection Procedure: An average scrubber liquid flow rate shall be calculated during each hour of operation. The hourly average shall be recorded for comparison to the excursion level.

(e) Averaging Period: One hour.

(40 CFR 64.6(c))

C. During the stack test required in A. above, the permittee shall acquire new test data to evaluate or update the indicator range and excursion level for the indicators. Any resultant changes to the monitoring shall be addressed in accordance with 40 CFR 64.7(e).

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

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

The permittee shall maintain a file of activities for installation of the scrubber liquid flow meter and data acquisition system. The permittee shall maintain records of test data from the most recent stack test and any calculations used to establish, evaluate, or revise the indicator ranges and excursion levels.

The permittee shall keep copies of Director approval of the monitoring including, but not limited to, the most recently approved indicator ranges and excursion levels. The permittee shall maintain records of all verifications, calibration checks, adjustments and maintenance.

In addition to the recordkeeping requirement described in Provision I.S.1 of this permit, 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.5.b.3 **Reporting:**

In addition to the reporting requirements in Provision I.S.2 of this permit,

(a) Monitoring reports shall include, at a minimum, the following information, as applicable:
   (i) 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) 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))

(b) The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. Reports shall include test data and any calculations used to evaluate or revise the indicator range and excursion level as specified in II.B.5.b.1.C.

II.B.5.c **Condition: [State-only Requirement]**

Emissions of PM_{10} shall not exceed the following concentration: 0.01 grains/dscf (at 68 degrees F and 29.92 in Hg). [Origin: Utah SIP IX.H]. [R307-110]

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

A. Stack testing shall be performed as specified below:

i) Frequency. Emissions shall be tested at least once every three years. The source may also be tested at any time if directed by the Director.

ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.

iii) Methods.

(a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.

(b) PM_{10}: 40 CFR 51, Appendix M, Methods 201a and 202, or other EPA-approved testing methods acceptable to the Director. If a method other than 201a is used, the portion of the front half of the catch considered PM_{10} shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.

(c) Volumetric Flow Rate: 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director.

(d) For PM_{10}: The condensable particulate emissions shall not be used for compliance demonstration, but shall be used for inventory purposes.

iv) 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.

v) 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.5.c.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

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

The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.6 **Conditions on BH-1400: SOP Dryer (D-1400)**

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

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

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

A visual opacity survey of each affected emission unit shall be performed on a monthly basis while the unit is operating by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than steam are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed while the unit is operating in accordance with 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director.

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

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director, shall also 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:**

Emissions of PM_{10} shall be no greater than 4.54 pounds per hour and 0.01 grains/dscf (68 degrees F, and 29.92 in Hg). [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

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

A. Stack testing shall be performed as specified below:
   i) Frequency. Initial testing shall be performed as soon as possible and in no case later than 180 days after start up. After the initial compliance testing, emissions shall be tested every three years. The source may also be tested at any time if directed by the Director.
   ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.
   iii) Methods.
      (a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.
      (b) The following methods shall be used to measure filterable particulate emissions: 40 CFR 51, Appendix M, Method 201, or 201A, or other EPA-approved testing method, as acceptable to the Director. If other approved testing methods are used which cannot measure the PM_{10} fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered PM_{10}. The portion of the filterable particulate emissions considered PM_{10} shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data

acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration.

(c) The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.

(d) The condensable particulate emissions shall not be used for compliance demonstration, but shall be used for inventory purposes.

(e) 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director, shall be used to determine the volumetric flow rate.

iv) 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.

v) Test Conditions. The production rate during all compliance testing shall be no less than 90% of the permitted production rate. If the maximum permitted production rate has not been achieved at the time of the test, the following procedure shall be followed:

(a) Testing shall be at no less than 90% of the production rate achieved to date.

(b) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.

(c) Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum permitted production rate is achieved.

Subsequent tests shall be conducted at a production rate of no less than 90% of the maximum production achieved in the previous three (3) years.

B. Based on results from the testing outlined below, the permittee shall use a bag leak detection system (BLDS) to provide reasonable assurance of compliance with the PM_{10} emission limitation. [40 CFR 64.6(c), (d)]

i) Within 60 days of the final permit issuance date, the permittee shall install and calibrate a BLDS on the baghouse exhaust.

ii) Within 90 days of the final permit issuance date, the permittee shall install a data acquisition system to record data from the BLDS.

iii) The permittee shall verify the operational status of the BLDS and data acquisition system prior to performing the stack test required in condition B.iv below.

iv) Within 120 days of the final permit issuance date, the permittee shall perform a stack test, as required in A. above, while concurrently monitoring the results from the BLDS as an indicator of compliance with the PM_{10} emission limitation. The permittee shall use the test data to justify and establish the indicator range and excursion level.

v) Within 180 days of the final permit issuance date, the permittee shall monitor output from the BLDS to provide reasonable assurance of compliance with the PM_{10} emission limit. At all times the affected emission unit is operating, the BLDS shall be monitored as specified below and as approved by the Director according to II.B.6.b.3.

(a) Measurement Approach:

1. Indicator: A BLDS shall generate an analog signal corresponding to the particulate emission level.

(b) Indicator Range:

1. Indicator: An excursion is defined as a signal greater than the percent of scale determined during the stack test required in II.B.6.b.1.B.iv and approved by the Director. Excursions trigger an inspection, corrective action, and a reporting requirement.

(c) Performance Criteria:

1. Data Representativeness: The BLDS probe shall be installed in the final

discharge duct of the baghouse.

2. QA/QC Practices and Criteria: The BLDS shall be installed and calibrated according to the manufacturer's recommendations. The data acquisition system shall be operated and maintained according to the manufacturer's recommendations. Additionally, the BLDS probe shall be inspected for dust buildup at least monthly, or as approved by the Director.
3. Monitoring Frequency: The BLDS signal shall be monitored continuously.
4. Data Collection Procedure: Data from the BLDS shall be collected and recorded at least once each hour for comparison to the excursion level and additionally, as approved by the Director following the stack test required in II.B.6.b.1.B.iv.
5. Averaging Period: None.

C. Once every three years, during the stack test required in A. above, the permittee shall acquire new test data to evaluate or update the indicator range and excursion level for the indicator. Any resultant changes to the monitoring shall be addressed in accordance with 40 CFR 64.7(e).

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

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

The permittee shall maintain a file of activities for installation of the BLDS and data acquisition system. The permittee shall maintain records of test data from the most recent stack test and any calculations used to establish, evaluate, or revise the indicator ranges and excursion levels.

The permittee shall keep copies of Director approval of the monitoring for II.B.6.b.1.B.v including, but not limited to, the most recently approved indicator range and excursion level. The permittee shall maintain records of all verifications, calibration checks, adjustments and maintenance.

In addition to the recordkeeping requirement described in Provision I.S.1 of this permit, 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.6.b.3 **Reporting:**

Within 150 days of the final permit issuance date, the permittee shall submit to the Director for approval, the indicator range and excursion level for each indicator, the test data used to justify and establish the indicator range and excursion level, the results of the performance test required in II.B.6.b.1.B.iv, and any proposed revisions to the monitoring described in II.B.6.b.1.B.v. (40 CFR 64.6(c)(2))

In addition to the reporting requirements in Provision I.S.2 of this permit,

(a) Monitoring reports shall include, at a minimum, the following information, as applicable:
    (i) 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) 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))

(b) The results of stack testing required in II.B.6.b.1.A shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. Reports shall include test data and any calculations used to evaluate or revise the indicator range and excursion level as specified in II.B.6.b.1.C.

II.B.6.c **Condition:**

Emissions of $PM_{2.5}$ shall be no greater than 2.65 pounds per hour and 0.01 grains/dscf (68 degrees F, and 29.92 in Hg). [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

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

A. Stack testing shall be performed as specified below:

i) Frequency. Initial testing shall be performed as soon as possible and in no case later than 180 days after start up. After the initial compliance testing, emissions shall be tested every three years. The source may also be tested at any time if directed by the Director.

ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.

iii) Methods.

(a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.

(b) The following methods shall be used to measure filterable particulate emissions: 40 CFR 51, Appendix M, Method 201, or 201A, or other EPA-approved testing method, as acceptable to the Director. If other approved testing methods are used which cannot measure the $PM_{2.5}$ fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered $PM_{2.5}$. The portion of the filterable particulate emissions considered $PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration.

(c) The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.

(d) The condensable particulate emissions shall be used for compliance demonstration and for inventory purposes.

(e) 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director, shall be used to determine the volumetric flow rate.

iv) 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.

v) Test Conditions. The production rate during all compliance testing shall be no less than 90% of the permitted production rate. If the maximum permitted production rate has not been achieved at the time of the test, the following procedure shall be followed:
   (a) Testing shall be at no less than 90% of the production rate achieved to date.
   (b) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
   (c) Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum permitted production rate is achieved.

Subsequent tests shall be conducted at a production rate of no less than 90% of the maximum production achieved in the previous three (3) years.

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

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.6.c.3 **Reporting:**

The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.7 **Conditions on BH-005: SOP Compaction Building Circuit.**

II.B.7.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.7.a.1 **Monitoring:**

A visual opacity survey of each affected emission unit shall be performed on a monthly basis while the unit is operating by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than steam are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed while the unit is operating in accordance with 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director.

II.B.7.a.2 **Recordkeeping:**

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director shall also be maintained in accordance with 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.7.b **Condition:**

Emissions of PM_{10} and $PM_{2.5}$ shall be no greater than 0.9 pounds per hour and 0.01 grains/dscf (68 degrees F, and 29.92 in Hg). [Origin: DAQE-AN109170035-16, Utah SIP IX.H]. [R307-401-8(1)(a)(BACT)]

II.B.7.b.1 **Monitoring:**

A. Stack testing shall be performed as specified below:
   i) Frequency. A test shall be conducted at least once every 5 years, based on the date of the most recent stack test.
   ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.
   iii) Methods.
      (a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.
      (b) The following methods shall be used to measure filterable particulate emissions: 40 CFR 51, Appendix M, Method 201, or 201A, or other EPA-approved testing method, as acceptable to the Director. If other approved testing methods are used which cannot measure the $PM_{10}/PM_{2.5}$ fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered $PM_{10}/PM_{2.5}$ as applicable. The portion of the filterable particulate emissions considered $PM_{10}/PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration.
      (c) The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.
      (d) The condensable particulate emissions shall be used for compliance demonstration and for inventory purposes.
      (e) 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director, shall be used to determine the volumetric flow rate.
   iv) Calculations. To determine mass emission rates (lb/hr) 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.
   v) Test Conditions. Testing shall be at no less than 90% of the maximum production rate achieved in the previous three years. During the tests, the source shall maintain process conditions representative of normal operations.

B. At all times the affected emission unit is operating, output from a bag leak detection system (BLDS) shall be monitored as specified below and as approved by the Director.
   i) Measurement Approach: A BLDS shall generate an analog signal corresponding to the

particulate emission level.

ii) Indicator Range: An excursion is defined as an average BLDS signal over a one-hour period that is greater than 74 picoamps (pA). Excursions trigger an inspection, corrective action, and a reporting requirement.

iii) Performance Criteria:

(a) Data Representativeness: The BLDS probe shall be installed in the final discharge duct of the baghouse.

(b) QA/QC Practices and Criteria: The BLDS shall be installed and calibrated according to the manufacturer's recommendations. The data acquisition system shall be operated and maintained according to the manufacturer's recommendations. Additionally, the BLDS probe shall be inspected for dust buildup at least monthly, or as approved by the Director.

(c) Monitoring Frequency: The BLDS signal shall be monitored continuously.

(d) Data Collection Procedure: An average BLDS signal shall be calculated during each hour of operation. The hourly average shall be recorded for comparison to the excursion level.

(e) Averaging Period: One hour.

(40 CFR 64.6(c))

C. During the stack test required in A. above, the permittee shall acquire new test data to evaluate or update the indicator range and excursion level for the indicators. Any resultant changes to the monitoring shall be addressed in accordance with 40 CFR 64.7(e).

II.B.7.b.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

The permittee shall maintain a file of activities for installation of the BLDS and data acquisition system. The permittee shall maintain records of test data from the most recent stack test and any calculations used to establish, evaluate, or revise the indicator ranges and excursion levels.

The permittee shall keep copies of Director approval of the monitoring including, but not limited to, the most recently approved indicator ranges and excursion levels. The permittee shall maintain records of all verifications, calibration checks, adjustments and maintenance.

In addition to the recordkeeping requirement described in Provision I.S.1 of this permit, 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.7.b.3 **Reporting:**

In addition to the reporting requirements in Provision I.S.2 of this permit,

(a) Monitoring reports shall include, at a minimum, the following information, as applicable:

(i) 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) 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))

(b) The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. Reports shall include test data and any calculations used to evaluate or revise the indicator range and excursion level as specified in II.B.7.b.1.C.

II.B.7.c **Condition:**

Following completion of construction of the new compaction plant and commencement of operation of the SOP Plant Dryer (D-1545), defined as the date identified in the written notification required by condition II.B.8.b of this permit, the permittee shall cease operation of the SOP plant compaction baghouse (BH-005). BH-005 shall not be operated once production has begun at the new SOP compaction plant. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.7.c.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.7.c.2 **Recordkeeping:**

The permittee shall record the date and time operation of the SOP Plant Dryer (D-1545) commenced and the date and time operation of BH-005 ceased. The permittee shall document activities performed to ensure BH-005 shall not be operated once production has begun at the new SOP compaction plant. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.7.c.3 **Reporting:**

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

II.B.8 **Conditions on AH-1547: SOP Plant Dryer (D-1545)**

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

Emissions of PM_{10} and $PM_{2.5}$ shall be no greater than 2.57 pounds per hour and 0.01 grains/dscf (68 degrees F, and 29.92 in Hg). [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

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

A. Stack testing shall be performed as specified below:
   i) Frequency. Initial testing shall be performed as soon as possible and in no case later than 180 days after start up. After the initial compliance testing, emissions shall be tested every three years. The source may also be tested at any time if directed by the Director.
   ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.
   iii) Methods.
      (a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing

method, as acceptable to 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.

(b) The following methods shall be used to measure filterable particulate emissions: 40 CFR 51, Appendix M, Method 201, or 201A, or other EPA-approved testing method, as acceptable to the Director. If other approved testing methods are used which cannot measure the $PM_{10}/PM_{2.5}$ fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered $PM_{10}/PM_{2.5}$ as applicable. The portion of the filterable particulate emissions considered $PM_{10}/PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration.

(c) The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.

(d) The condensable particulate emissions shall be used for compliance demonstration and for inventory purposes.

(e) 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director, shall be used to determine the volumetric flow rate.

iv) 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.

v) Test Conditions. The production rate during all compliance testing shall be no less than 90% of the permitted production rate. If the maximum permitted production rate has not been achieved at the time of the test, the following procedure shall be followed:

(a) Testing shall be at no less than 90% of the production rate achieved to date.

(b) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.

(c) Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum permitted production rate is achieved.

Subsequent tests shall be conducted at a production rate of no less than 90% of the maximum production achieved in the previous three (3) years.

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

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

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

The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.8.b **Condition:**

The permittee shall notify the Director in writing when the installation of the SOP Plant Dryer (D-1545) and wet scrubber (AH-1547) has been completed and is operational. To ensure proper credit when

notifying the Director, send your correspondence to the Director, attn: Compliance Section.

If installation has not been completed by July 15, 2017, the Director shall be notified in writing on the status of the installation. At that time, the Director shall require documentation of the continuous construction and/or installation of the operation and may revoke construction approval in accordance with R307-401-18, UAC. [Origin: DAQE-AN109170035-16]. [R307-401-18, R307-401-8(1)(a)(BACT)]

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

Records required for this permit condition will serve as monitoring.

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

As applicable, the permittee shall maintain a copy of each notification required by this permit condition 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.9 **Conditions on AH-1555: SOP Plant Compaction Building**

II.B.9.a **Condition:**

Emissions of PM_{10} and $PM_{2.5}$ shall be no greater than 2.57 pounds per hour and 0.01 grains/dscf (68 degrees F, and 29.92 in Hg). [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.9.a.1 **Monitoring:**

A. Stack testing shall be performed as specified below:
   i) Frequency. Initial testing shall be performed as soon as possible and in no case later than 180 days after start up. After the initial compliance testing, emissions shall be tested every three years. The source may also be tested at any time if directed by the Director.
   ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.
   iii) Methods.
      (a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.
      (b) The following methods shall be used to measure filterable particulate emissions: 40 CFR 51, Appendix M, Method 201, or 201A, or other EPA-approved testing method, as acceptable to the Director. If other approved testing methods are used which cannot measure the $PM_{10}/PM_{2.5}$ fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered $PM_{10}/PM_{2.5}$ as applicable. The portion of the filterable particulate emissions considered $PM_{10}/PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable

particulate emissions shall be used for compliance demonstration.

(c) The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.

(d) The condensable particulate emissions shall be used for compliance demonstration and for inventory purposes.

(e) 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director, shall be used to determine the volumetric flow rate.

iv) 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.

v) Test Conditions. The production rate during all compliance testing shall be no less than 90% of the permitted production rate. If the maximum permitted production rate has not been achieved at the time of the test, the following procedure shall be followed:

(a) Testing shall be at no less than 90% of the production rate achieved to date.

(b) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.

(c) Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum permitted production rate is achieved.

Subsequent tests shall be conducted at a production rate of no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.9.a.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.9.a.3 **Reporting:**

The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.9.b **Condition:**

The permittee shall notify the Director in writing when the installation of the SOP Plant Compaction Building wet scrubber (AH-1555) has been completed and is operational. To ensure proper credit when notifying the Director, send your correspondence to the Director, attn: Compliance Section.

If installation has not been completed by July 15, 2017, the Director shall be notified in writing on the status of the installation. At that time, the Director shall require documentation of the continuous construction and/or installation of the operation and may revoke construction approval in accordance with R307-401-18, UAC. [Origin: DAQE-AN109170035-16]. [R307-401-18, R307-401-8(1)(a)(BACT)]

II.B.9.b.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.9.b.2 **Recordkeeping:**

As applicable, the permittee shall maintain a copy of each notification required by this permit condition in accordance with Provision I.S.1 of this permit.

II.B.9.b.3 **Reporting:**

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

II.B.9.c **Condition:**

The permittee shall notify the Director in writing when the installation of the SOP Plant process heater (B-1520) has been completed and is operational. To ensure proper credit when notifying the Director, send your correspondence to the Director, attn: Compliance Section.

If installation has not been completed by July 15, 2017, the Director shall be notified in writing on the status of the installation. At that time, the Director shall require documentation of the continuous construction and/or installation of the operation and may revoke construction approval in accordance with R307-401-18, UAC. [Origin: DAQE-AN109170035-16]. [R307-401-18, R307-401-8(1)(a)(BACT)]

II.B.9.c.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.9.c.2 **Recordkeeping:**

As applicable, the permittee shall maintain a copy of each notification required by this permit condition in accordance with Provision I.S.1 of this permit.

II.B.9.c.3 **Reporting:**

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

II.B.10 **Conditions on BH-008: SOP Compaction Circuit Dryer (D-002).**

II.B.10.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.10.a.1 **Monitoring:**

A visual opacity survey of each affected emission unit shall be performed on a monthly basis while the unit is operating by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than steam are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed while the unit is operating in accordance with 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director.

II.B.10.a.2 **Recordkeeping:**

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director, shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.10.a.3 **Reporting:**

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

II.B.10.b **Condition:**

Emissions of PM_{10} and $PM_{2.5}$ shall be no greater than 3.72 pounds per hour and 0.015 grains/dscf (68 degrees F, and 29.92 in Hg). [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.10.b.1 **Monitoring:**

A. Stack testing shall be performed as specified below:
   i) Frequency. Emissions shall be tested every 3 years. The source may also be tested at any time if directed by the Director.
   ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.
   iii) Methods.
      (a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.
      (b) The following methods shall be used to measure filterable particulate emissions: 40 CFR 51, Appendix M, Method 201, or 201A, or other EPA-approved testing method, as acceptable to the Director. If other approved testing methods are used which cannot measure the $PM_{10}/PM_{2.5}$ fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered $PM_{10}/PM_{2.5}$ as applicable. The portion of the filterable particulate emissions considered $PM_{10}/PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration.
      (c) The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.
      (d) The condensable particulate emissions shall be used for compliance demonstration and for inventory purposes.
      (e) 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director, shall be used to determine the volumetric flow rate.
   iv) Calculations. To determine mass emission rates (lb/hr) 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.

v) Test Conditions. The production rate during all compliance testing shall be no less than 90% of the permitted production rate. If the maximum permitted production rate has not been achieved at the time of the test, the following procedure shall be followed:
   (a) Testing shall be at no less than 90% of the production rate achieved to date.
   (b) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
   (c) Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum permitted production rate is achieved.

   Subsequent tests shall be conducted at a production rate of no less than 90% of the maximum production achieved in the previous three (3) years.

B. At all times the affected emission unit is operating, output from a bag leak detection system (BLDS) shall be monitored as specified below and as approved by the Director.
   i) Measurement Approach: A BLDS shall generate an analog signal corresponding to the particulate emission level.
   ii) Indicator Range: An excursion is defined as an average BLDS signal over a one-hour period that is greater than 92 picoamps (pA). Excursions trigger an inspection, corrective action, and a reporting requirement.
   iii) Performance Criteria:
      (a) Data Representativeness: The BLDS probe shall be installed in the final discharge duct of the baghouse.
      (b) QA/QC Practices and Criteria: The BLDS shall be installed and calibrated according to the manufacturer's recommendations. The data acquisition system shall be operated and maintained according to the manufacturer's recommendations. Additionally, the BLDS probe shall be inspected for dust buildup at least monthly, or as approved by the Director.
      (c) Monitoring Frequency: The BLDS signal shall be monitored continuously.
      (d) Data Collection Procedure: An average BLDS signal shall be calculated during each hour of operation. The hourly average shall be recorded for comparison to the excursion level.
      (e) Averaging Period: One hour.

   (40 CFR 64.6(c))

C. During the stack test required in A. above, the permittee shall acquire new test data to evaluate or update the indicator range and excursion level for the indicators. Any resultant changes to the monitoring shall be addressed in accordance with 40 CFR 64.7(e).

II.B.10.b.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

The permittee shall maintain a file of activities for installation of the BLDS and data acquisition system. The permittee shall maintain records of test data from the most recent stack test and any calculations used to establish, evaluate, or revise the indicator ranges and excursion levels.

The permittee shall keep copies of Director approval of the monitoring including, but not limited to, the most recently approved indicator ranges and excursion levels. The permittee shall maintain records of all verifications, calibration checks, adjustments and maintenance.

In addition to the recordkeeping requirement described in Provision I.S.1 of this permit, 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.10.b.3 **Reporting:**

In addition to the reporting requirements in Provision I.S.2 of this permit,

(a) Monitoring reports shall include, at a minimum, the following information, as applicable:
  (i) 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) 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))

(b) The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. Reports shall include test data and any calculations used to evaluate or revise the indicator range and excursion level as specified in II.B.10.b.1.C.

II.B.10.c **Condition: [State-only Requirement]**

Emissions of PM_{10} shall not exceed the following concentration: 0.01 grains/dscf (at 68 degrees F and 29.92 in Hg). [Origin: Utah SIP IX.H]. [R307-110]

II.B.10.c.1 **Monitoring:**

A. Stack testing shall be performed as specified below:
  i) Frequency. Emissions shall be tested at least once every three years. The source may also be tested at any time if directed by the Director.
  ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.
  iii) Methods.
    (a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.
    (b) PM_{10}: 40 CFR 51, Appendix M, Methods 201a and 202, or other EPA-approved testing methods acceptable to the Director. If a method other than 201a is used, the portion of the front half of the catch considered PM_{10} shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.

(c) Volumetric Flow Rate: 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director.
(d) For PM_{10}: The condensable particulate emissions shall not be used for compliance demonstration, but shall be used for inventory purposes.

iv) 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.

v) 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.10.c.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.10.c.3 **Reporting:**

The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.10.d **Condition:**

Following completion of construction of the new compaction plant and commencement of operation of the SOP Plant Dryer (D-1545), defined as the date identified in the written notification required by condition II.B.8.b of this permit, the permittee shall cease operation of the SOP compaction circuit dryer (D-002) and baghouse (BH-008). D-002 and BH-008 shall not be operated once production has begun at the new SOP compaction plant. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.10.d.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.10.d.2 **Recordkeeping:**

The permittee shall record the date and time operation of the SOP Plant Dryer (D-1545) commenced and the date and time operation of the SOP compaction circuit dryer (D-002) and baghouse (BH-008) ceased. The permittee shall document activities performed to ensure D-002 and BH-008 shall not be operated once production has begun at the new SOP compaction plant. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.10.d.3 **Reporting:**

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

II.B.11 **Conditions on AH-075: SOP Compaction Circuit Dryer (D-004).**

II.B.11.a **Condition:**

Emissions of PM_{10} and $PM_{2.5}$ shall be no greater than 2.66 pounds per hour and 0.015 grains/dscf (68 degrees F, and 29.92 in Hg). [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.11.a.1 **Monitoring:**

A. Stack testing shall be performed as specified below:
   i) Frequency. Emissions shall be tested every 3 years. The source may also be tested at any time if directed by the Director.
   ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.
   iii) Methods.
      (a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.
      (b) The following methods shall be used to measure filterable particulate emissions: 40 CFR 51, Appendix M, Method 201, or 201A, or other EPA-approved testing method, as acceptable to the Director. If other approved testing methods are used which cannot measure the $PM_{10}/PM_{2.5}$ fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered $PM_{10}/PM_{2.5}$ as applicable. The portion of the filterable particulate emissions considered $PM_{10}/PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration.
      (c) The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.
      (d) The condensable particulate emissions shall be used for compliance demonstration and for inventory purposes.
      (e) 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director, shall be used to determine the volumetric flow rate.
   iv) Calculations. To determine mass emission rates (lb/hr) 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.
   v) Test Conditions. The production rate during all compliance testing shall be no less than 90% of the permitted production rate. If the maximum permitted production rate has not been achieved at the time of the test, the following procedure shall be followed:
      (a) Testing shall be at no less than 90% of the production rate achieved to date.
      (b) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
      (c) Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum permitted production rate is achieved.

   Subsequent tests shall be conducted at a production rate of no less than 90% of the maximum production achieved in the previous three (3) years.

B. The permittee shall monitor two indicators of scrubber performance to provide reasonable assurance of compliance with the PM_{10} emission limit. At all times the affected emission

unit is operating, scrubber liquid flow rate and fan frequency shall be monitored as specified below and as approved by the Director.

i) Measurement Approach:
   (a) Primary Indicator: The permittee shall continuously measure the scrubber liquid flow rate using a flow meter.
   (b) Secondary Indicator: The permittee shall continuously monitor output from the variable frequency drive (VFD) on the fan to ensure adequate air flow to the scrubber.

ii) Indicator Range:
   (a) Primary Indicator: An excursion is defined as an average scrubber liquid flow rate over a one-hour period that is less than 130 gallons per minute (gpm). Excursions trigger an inspection, corrective action, and a reporting requirement.
   (b) Secondary Indicator: An excursion is defined as an average VFD output over a one-hour period that is less than 36.7 Hz. Excursions trigger an inspection, corrective action, and a reporting requirement.

iii) Performance Criteria:
   (a) Data Representativeness:
      1. Primary Indicator: The scrubber liquid flow rate shall be measured using a flow meter located on the scrubber liquid recirculation line. The scrubber liquid flow rate shall be accurate to five (5) gpm or as approved by the Director.
      2. Secondary Indicator: The VFD is part of the fan located in the air inlet to the scrubber. The VFD output shall be accurate to +/- 0.4 Hz or as approved by the Director.
   (b) QA/QC Practices and Criteria: The flow meter and VFD shall be calibrated according to the manufacturer's recommendations or at least annually. Additionally, the speed of the motor shaft and fan shall be checked with a tachometer once each quarter. Calculations shall be performed on the tachometer output to compare VFD output against fan speed once each quarter.
   The data acquisition system shall be operated and maintained according to the manufacturer's recommendations.
   (c) Monitoring Frequency:
      1. Primary Indicator: The scrubber liquid flow rate shall be measured continuously.
      2. Secondary Indicator: The fan frequency on the scrubber shall be measured continuously.
   (d) Data Collection Procedure:
      1. Primary Indicator: An average scrubber liquid flow rate shall be calculated during each hour of operation. The hourly average shall be recorded for comparison to the excursion level.
      2. Secondary Indicator: An average fan frequency shall be calculated during each hour of operation. The hourly average shall be recorded for comparison to the excursion level.
   (e) Averaging Period: One hour.

(40 CFR 64.6(c))

C. During the stack test required in A. above, the permittee shall acquire new test data to evaluate or update the indicator range and excursion level for the indicators. Any resultant changes to the monitoring shall be addressed in accordance with 40 CFR 64.7(e).

II.B.11.a.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

The permittee shall maintain a file of activities for installation of the scrubber liquid flow meter, the gauge to read VFD output, and data acquisition system. The permittee shall maintain records of test data from the most recent stack test and any calculations used to establish, evaluate, or revise the indicator ranges and excursion levels.

The permittee shall keep copies of Director approval of the monitoring including, but not limited to, the most recently approved indicator ranges and excursion levels. The permittee shall maintain records of all verifications, calibration checks, adjustments and maintenance.

In addition to the recordkeeping requirement described in Provision I.S.1 of this permit, 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.11.a.3 **Reporting:**

In addition to the reporting requirements in Provision I.S.2 of this permit,

(a) Monitoring reports shall include, at a minimum, the following information, as applicable:
  (i) 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) 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))

(b) The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. Reports shall include test data and any calculations used to evaluate or revise the indicator range and excursion level as specified in II.B.11.a.1.C.

II.B.11.b **Condition: [State-only Requirement]**

Emissions of PM_{10} shall not exceed the following concentration: 0.01 grains/dscf (at 68 degrees F and 29.92 in Hg). [Origin: Utah SIP IX.H]. [R307-110]

II.B.11.b.1 **Monitoring:**

A. Stack testing shall be performed as specified below:
  i) Frequency. Emissions shall be tested at least once every three years. The source may also be tested at any time if directed by the Director.
  ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.
  iii) Methods.
    (a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing

method, as acceptable to 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.

(b) PM_{10}: 40 CFR 51, Appendix M, Methods 201a and 202, or other EPA-approved testing methods acceptable to the Director. If a method other than 201a is used, the portion of the front half of the catch considered PM_{10} shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.

(c) Volumetric Flow Rate: 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director.

(d) For PM_{10}: The condensable particulate emissions shall not be used for compliance demonstration, but shall be used for inventory purposes.

iv) 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.

v) 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.11.b.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.11.b.3 **Reporting:**

The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.11.c **Condition:**

Following completion of construction of the new compaction plant and commencement of operation of the SOP Plant Dryer (D-1545), defined as the date identified in the written notification required by condition II.B.8.b of this permit, the permittee shall cease operation of the SOP compaction circuit dryer (D-004) and wet scrubber (AH-075). D-004 and AH-075 shall not be operated once production has begun at the new SOP compaction plant. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.11.c.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.11.c.2 **Recordkeeping:**

The permittee shall record the date and time operation of the SOP Plant Dryer (D-1545) commenced and the date and time operation of the SOP compaction circuit dryer (D-004) and wet scrubber (AH-075) ceased. The permittee shall document activities performed to ensure D-004 and AH-075 shall not be operated once production has begun at the new SOP compaction plant. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.11.c.3 **Reporting:**

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

II.B.12 **Conditions on BH-014: SOP Dryer (D-001).**

II.B.12.a **Condition:**

Emissions of PM_{10} and $PM_{2.5}$ shall be no greater than 1.29 pounds per hour and 0.015 grains/dscf (68 degrees F, and 29.92 in Hg). [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.12.a.1 **Monitoring:**

A. Stack testing shall be performed as specified below:
   i) Frequency. Emissions shall be tested every three years. The source may also be tested at any time if directed by the Director.
   ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.
   iii) Methods.
      (a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.
      (b) The following methods shall be used to measure filterable particulate emissions: 40 CFR 51, Appendix M, Method 201, or 201A, or other EPA-approved testing method, as acceptable to the Director. If other approved testing methods are used which cannot measure the $PM_{10}/PM_{2.5}$ fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered $PM_{10}/PM_{2.5}$ as applicable. The portion of the filterable particulate emissions considered $PM_{10}/PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration.
      (c) The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.
      (d) The condensable particulate emissions shall be used for compliance demonstration and for inventory purposes.
      (e) 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director, shall be used to determine the volumetric flow rate.
   iv) 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.
   v) Test Conditions. The production rate during all compliance testing shall be no less than 90% of the permitted production rate. If the maximum permitted production rate has not been achieved at the time of the test, the following procedure shall be followed:
      (a) Testing shall be at no less than 90% of the production rate achieved to date.
      (b) If the test is passed, the new maximum allowable production rate shall be 110% of

the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.

(c) Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum permitted production rate is achieved.

Subsequent tests shall be conducted at a production rate of no less than 90% of the maximum production achieved in the previous three (3) years.

B. At all times the affected emission unit is operating, output from a bag leak detection system (BLDS) shall be monitored as specified below and as approved by the Director.

i) Measurement Approach: A BLDS shall generate an analog signal corresponding to the particulate emission level.

ii) Indicator Range: An excursion is defined as an average BLDS signal over a one-hour period that is greater than 11 picoamps (pA). Excursions trigger an inspection, corrective action, and a reporting requirement.

iii) Performance Criteria:

(a) Data Representativeness: The BLDS probe shall be installed in the final discharge duct of the baghouse.

(b) QA/QC Practices and Criteria: The BLDS shall be installed and calibrated according to the manufacturer's recommendations. The data acquisition system shall be operated and maintained according to the manufacturer's recommendations. Additionally, the BLDS probe shall be inspected for dust buildup at least monthly, or as approved by the Director.

(c) Monitoring Frequency: The BLDS signal shall be monitored continuously.

(d) Data Collection Procedure: An average BLDS signal shall be calculated during each hour of operation. The hourly average shall be recorded for comparison to the excursion level.

(e) Averaging Period: One hour.

(40 CFR 64.6(c))

C. During the stack test required in A. above, the permittee shall acquire new test data to evaluate or update the indicator range and excursion level for the indicators. Any resultant changes to the monitoring shall be addressed in accordance with 40 CFR 64.

II.B.12.a.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

The permittee shall maintain a file of activities for installation of the BLDS and data acquisition system. The permittee shall maintain records of test data from the most recent stack test and any calculations used to establish, evaluate, or revise the indicator ranges and excursion levels.

The permittee shall keep copies of Director approval of the monitoring including, but not limited to, the most recently approved indicator ranges and excursion levels. The permittee shall maintain records of all verifications, calibration checks, adjustments and maintenance.

In addition to the recordkeeping requirement described in Provision I.S.1 of this permit, 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.12.a.3 **Reporting:**

In addition to the reporting requirements in Provision I.S.2 of this permit,

(a) Monitoring reports shall include, at a minimum, the following information, as applicable:
  (i) 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) 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))

(b) The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. Reports shall include test data and any calculations used to evaluate or revise the indicator range and excursion level as specified in II.B.12.a.1.C.

II.B.12.b **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.12.b.1 **Monitoring:**

A visual opacity survey of each affected emission unit shall be performed on a monthly basis while the unit is operating by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than steam are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed while the unit is operating in accordance with 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director.

II.B.12.b.2 **Recordkeeping:**

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director, shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.12.b.3 **Reporting:**

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

II.B.12.c **Condition: [State-only Requirement]**

Emissions of PM_{10} shall not exceed the following concentration: 0.01 grains/dscf (at 68 degrees F and 29.92 in Hg). [Origin: Utah SIP IX.H]. [R307-110]

II.B.12.c.1 **Monitoring:**

A. Stack testing shall be performed as specified below:
   i) Frequency. Emissions shall be tested at least once every three years. The source may also be tested at any time if directed by the Director.
   ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.
   iii) Methods.
      (a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.
      (b) PM_{10}: 40 CFR 51, Appendix M, Methods 201a and 202, or other EPA-approved testing methods acceptable to the Director. If a method other than 201a is used, the portion of the front half of the catch considered PM_{10} shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.
      (c) Volumetric Flow Rate: 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director.
      (d) For PM_{10}: The condensable particulate emissions shall not be used for compliance demonstration, but shall be used for inventory purposes.
   iv) 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.
   v) 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.12.c.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.12.c.3 **Reporting:**

The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.13 **Conditions on BH-001: SOP Bulk Load-Out Circuit.**

II.B.13.a **Condition:**

Emissions of PM_{10} and $PM_{2.5}$ shall be no greater than 1.64 pounds per hour and 0.01 grains/dscf (68 degrees F, and 29.92 in Hg). [Origin: DAQE-AN109170035-16, Utah SIP IX.H]. [R307-401-8(1)(a)(BACT)]

II.B.13.a.1 **Monitoring:**

A. Stack testing shall be performed as specified below:
   i) Frequency. Emissions shall be tested every five years, based on the date of the most recent stack test. The source may also be tested at any time if directed by the Director.
   ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.
   iii) Methods.
      (a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.
      (b) The following methods shall be used to measure filterable particulate emissions: 40 CFR 51, Appendix M, Method 201, or 201A, or other EPA-approved testing method, as acceptable to the Director. If other approved testing methods are used which cannot measure the $PM_{10}/PM_{2.5}$ fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered $PM_{10}/PM_{2.5}$ as applicable. The portion of the filterable particulate emissions considered $PM_{10}/PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration.
      (c) The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.
      (d) The condensable particulate emissions shall be used for compliance demonstration and for inventory purposes.
      (e) 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director, shall be used to determine the volumetric flow rate.
   iv) 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.
   v) 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.

B. At all times the affected emission unit is operating, output from a bag leak detection system (BLDS) shall be monitored as specified below and as approved by the Director.
   i) Measurement Approach: A BLDS shall generate an analog signal corresponding to the particulate emission level.
   ii) Indicator Range: An excursion is defined as an average BLDS signal over a one-hour period that is greater than 1,247 picoamps (pA). Excursions trigger an inspection, corrective action, and a reporting requirement.
   iii) Performance Criteria:
      (a) Data Representativeness: The BLDS probe shall be installed in the final discharge duct of the baghouse.
      (b) QA/QC Practices and Criteria: The BLDS shall be installed and calibrated according to the manufacturer's recommendations. The data acquisition system shall be operated and maintained according to the manufacturer's recommendations. Additionally, the BLDS probe shall be inspected for dust buildup at least monthly, or

as approved by the Director.

(c) Monitoring Frequency: The BLDS signal shall be monitored continuously.

(d) Data Collection Procedure: An average BLDS signal shall be calculated during each hour of operation. The hourly average shall be recorded for comparison to the excursion level.

(e) Averaging Period: One hour.

(40 CFR 64.6(c))

C. During the stack test required in A. above, the permittee shall acquire new test data to evaluate or update the indicator range and excursion level for the indicators. Any resultant changes to the monitoring shall be addressed in accordance with 40 CFR 64.7(e).

II.B.13.a.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

The permittee shall maintain a file of activities for installation of the BLDS and data acquisition system. The permittee shall maintain records of test data from the most recent stack test and any calculations used to establish, evaluate, or revise the indicator ranges and excursion levels.

The permittee shall keep copies of Director approval of the monitoring including, but not limited to, the most recently approved indicator ranges and excursion levels. The permittee shall maintain records of all verifications, calibration checks, adjustments and maintenance.

In addition to the recordkeeping requirement described in Provision I.S.1 of this permit, 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.13.a.3 **Reporting:**

In addition to the reporting requirements in Provision I.S.2 of this permit,

(a) Monitoring reports shall include, at a minimum, the following information, as applicable:

(i) 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) 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))

(b) The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. Reports shall include test data and any calculations used to evaluate or revise the indicator range and excursion level as specified in II.B.13.a.1.C.

II.B.13.b **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.13.b.1 **Monitoring:**

A visual opacity survey of each affected emission unit shall be performed on a monthly basis while the unit is operating by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than steam are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed while the unit is operating in accordance with 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director.

II.B.13.b.2 **Recordkeeping:**

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director, shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.13.b.3 **Reporting:**

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

II.B.13.c **Condition:**

Sulfate of Potash loading rate shall be no greater than 300 tons per hour and no greater than 5,600 hours per rolling 12-month total for potash silos loadout. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.13.c.1 **Monitoring:**

Sulfate of Potash loading rate and hours shall be determined using an operations log. Production shall be monitored on an hourly basis. Annual hours of operation shall be determined on a rolling 12-month total. Based on the first day of each month a new 12-month total shall be calculated using data from the previous 12 months. Monthly calculations shall be made no later than 20 days after the end of each calendar month using operations logs or records.

II.B.13.c.2 **Recordkeeping:**

Records of production and hours shall be kept for all periods of operation. Records shall be kept on a daily basis for determination of hourly limit with monthly totals for determination of annual rolling totals. Records shall be kept in accordance with Provision I.S.1 of this permit

II.B.13.c.3 **Reporting:**

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

II.B.14 **Conditions on BH-002: SOP Silo Storage Circuit.**

II.B.14.a **Condition:**

Emissions of PM_{10} and $PM_{2.5}$ shall be no greater than 1.37 pounds per hour and 0.01 grains/dscf (68

degrees F, and 29.92 in Hg). [Origin: DAQE-AN109170035-16, Utah SIP IX.H]. [R307-401-8(1)(a)(BACT)]

II.B.14.a.1 **Monitoring:**

A. Stack testing shall be performed as specified below:
   i) Frequency. Emissions shall be tested every five years, based on the date of the most recent stack test. The source may also be tested at any time if directed by the Director.
   ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.
   iii) Methods.
      (a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.
      (b) The following methods shall be used to measure filterable particulate emissions: 40 CFR 51, Appendix M, Method 201, or 201A, or other EPA-approved testing method, as acceptable to the Director. If other approved testing methods are used which cannot measure the $PM_{10}/PM_{2.5}$ fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered $PM_{10}/PM_{2.5}$ as applicable. The portion of the filterable particulate emissions considered $PM_{10}/PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration.
      (c) The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.
      (d) The condensable particulate emissions shall be used for compliance demonstration and for inventory purposes.
      (e) 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director, shall be used to determine the volumetric flow rate.
   iv) 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.
   v) 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.

B. At all times the affected emission unit is operating, output from a bag leak detection system (BLDS) shall be monitored as specified below and as approved by the Director.
   i) Measurement Approach: A BLDS shall generate an analog signal corresponding to the particulate emission level.
   ii) Indicator Range: An excursion is defined as an average BLDS signal over a one-hour period that is greater than 195 picoamps (pA). Excursions trigger an inspection, corrective action, and a reporting requirement.
   iii) Performance Criteria:
      (a) Data Representativeness: The BLDS probe shall be installed in the final discharge duct of the baghouse.
      (b) QA/QC Practices and Criteria: The BLDS shall be installed and calibrated

according to the manufacturer's recommendations. The data acquisition system shall be operated and maintained according to the manufacturer's recommendations. Additionally, the BLDS probe shall be inspected for dust buildup at least monthly, or as approved by the Director.

(c) Monitoring Frequency: The BLDS signal shall be monitored continuously.

(d) Data Collection Procedure: An average BLDS signal shall be calculated during each hour of operation. The hourly average shall be recorded for comparison to the excursion level.

(e) Averaging Period: One hour.

(40 CFR 64.6(c))

C. During the stack test required in A. above, the permittee shall acquire new test data to evaluate or update the indicator range and excursion level for the indicators. Any resultant changes to the monitoring shall be addressed in accordance with 40 CFR 64.7(e).

II.B.14.a.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

The permittee shall maintain a file of activities for installation of the BLDS and data acquisition system. The permittee shall maintain records of test data from the most recent stack test and any calculations used to establish, evaluate, or revise the indicator ranges and excursion levels.

The permittee shall keep copies of Director approval of the monitoring including, but not limited to, the most recently approved indicator ranges and excursion levels. The permittee shall maintain records of all verifications, calibration checks, adjustments and maintenance.

In addition to the recordkeeping requirement described in Provision I.S.1 of this permit, 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.14.a.3 **Reporting:**

In addition to the reporting requirements in Provision I.S.2 of this permit,

(a) Monitoring reports shall include, at a minimum, the following information, as applicable:

(i) 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) 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))

(b) The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. Reports shall include test data and any calculations used to evaluate or revise the indicator range and excursion level as specified in II.B.14.a.1.C.

II.B.14.b **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.14.b.1 **Monitoring:**

A visual opacity survey of each affected emission unit shall be performed on a monthly basis while the unit is operating by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than steam are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed while the unit is operating in accordance with 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director.

II.B.14.b.2 **Recordkeeping:**

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director, shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.14.b.3 **Reporting:**

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

II.B.15 **Conditions on SUB-COMP: SOP Submerged Combustion Process**

II.B.15.a **Condition:**

The permittee shall notify the Director in writing when the installation of the SOP Plant Submerged Combustion Water Heater (SC-460) has been completed and is operational. To ensure proper credit when notifying the Director, send your correspondence to the Director, attn: Compliance Section.

If installation has not been completed by July 15, 2017, the Director shall be notified in writing on the status of the installation. At that time, the Director shall require documentation of the continuous construction and/or installation of the operation and may revoke construction approval in accordance with R307-401-18, UAC. [Origin: DAQE-AN109170035-16]. [R307-401-18, R307-401-8(1)(a)(BACT)]

II.B.15.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.15.a.2 **Recordkeeping:**

As applicable, the permittee shall maintain a copy of each notification required by this permit condition in accordance with Provision I.S.1 of this permit.

II.B.15.a.3 **Reporting:**

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

II.B.16 **Conditions on BLAST: Abrasive Blast Machine.**

II.B.16.a **Condition:**

(1) Except as provided in (2) below, visible emissions from abrasive blasting operations shall not exceed 20% opacity except for an aggregate period of three minutes in any one hour.
(2) If the abrasive blasting operation complies with the performance standards in R307-306-6, visible emissions from the operation shall not exceed 40% opacity, except for an aggregate period of 3 minutes in any one hour.

[Origin: R307-306]. [R307-306-4]

II.B.16.a.1 **Monitoring:**

(a) Visible emissions shall be measured at least monthly using EPA Method 9, or other EPA-approved testing method, as acceptable to the Director, if the affected emission unit was operated during the month. Visible emissions from intermittent sources shall use procedures similar to Method 9, but the requirement for observations to be made at 15 second intervals over a six-minute period shall not apply.
(b) Visible emissions from unconfined blasting shall be measured at the densest point of the emission after a major portion of the spent abrasive has fallen out, at a point not less than five feet nor more than twenty-five feet from the impact surface from any single abrasive blasting nozzle.
(c) An unconfined blasting operation that uses multiple nozzles shall be considered a single source unless it can be demonstrated by the permittee that each nozzle, measured separately, meets the emission and performance standards provided in R307-306-4.
(d) Visible emissions from confined blasting shall be measured at the densest point after the air contaminant leaves the enclosure.

II.B.16.a.2 **Recordkeeping:**

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

II.B.16.a.3 **Reporting:**

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

II.B.17 **Conditions on BH-501: Salt Cooler.**

II.B.17.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.17.a.1 **Monitoring:**

A visual opacity survey of each affected emission unit shall be performed on a monthly basis while the unit is operating by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than steam are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed while the unit is operating in accordance with 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director.

II.B.17.a.2 **Recordkeeping:**

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director, shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.17.a.3 **Reporting:**

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

II.B.17.b **Condition:**

Emissions of PM_{10} and $PM_{2.5}$ shall be no greater than 0.9 pounds per hour and 0.01 grains/dscf (68 degrees F, and 29.92 in Hg). [Origin: DAQE-AN109170035-16, Utah SIP IX.H]. [R307-401-8(1)(a)(BACT)]

II.B.17.b.1 **Monitoring:**

A. Stack testing shall be performed as specified below:
   i) Frequency. A test shall be conducted at least once every 5 years, based on the date of the most recent stack test.
   ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.
   iii) Methods.
      (a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.
      (b) The following methods shall be used to measure filterable particulate emissions: 40 CFR 51, Appendix M, Method 201, or 201A, or other EPA-approved testing method, as acceptable to the Director. If other approved testing methods are used which cannot measure the $PM_{10}/PM_{2.5}$ fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered $PM_{10}/PM_{2.5}$ as applicable. The portion of the filterable particulate emissions considered $PM_{10}/PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration.
      (c) The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.
      (d) The condensable particulate emissions shall be used for compliance demonstration and for inventory purposes.
      (e) 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director, shall be used to determine the volumetric flow rate.
   iv) Calculations. To determine mass emission rates (lb/hr) 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.

v) Test Conditions. Testing shall be at no less than 90% of the maximum production rate achieved in the previous three years. During the tests, the source shall maintain process conditions representative of normal operations.

B. At all times the affected emission unit is operating, output from a bag leak detection system (BLDS) shall be monitored as specified below and as approved by the Director.

i) Measurement Approach: A BLDS shall generate an analog signal corresponding to the particulate emission level.

ii) Indicator Range: An excursion is defined as an average BLDS signal over a one-hour period that is greater than 58 picoamps (pA). Excursions trigger an inspection, corrective action, and a reporting requirement.

iii) Performance Criteria:

(a) Data Representativeness: The BLDS probe shall be installed in the final discharge duct of the baghouse.

(b) QA/QC Practices and Criteria: The BLDS shall be installed and calibrated according to the manufacturer's recommendations. The data acquisition system shall be operated and maintained according to the manufacturer's recommendations. Additionally, the BLDS probe shall be inspected for dust buildup at least monthly, or as approved by the Director.

(c) Monitoring Frequency: The BLDS signal shall be monitored continuously.

(d) Data Collection Procedure: An average BLDS signal shall be calculated during each hour of operation. The hourly average shall be recorded for comparison to the excursion level.

(e) Averaging Period: One hour.

(40 CFR 64.6(c))

C. During the stack test required in A. above, the permittee shall acquire new test data to evaluate or update the indicator range and excursion level for the indicators. Any resultant changes to the monitoring shall be addressed in accordance with 40 CFR 64.7(e).

II.B.17.b.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

The permittee shall maintain a file of activities for installation of the BLDS and data acquisition system. The permittee shall maintain records of test data from the most recent stack test and any calculations used to establish, evaluate, or revise the indicator ranges and excursion levels.

The permittee shall keep copies of Director approval of the monitoring including, but not limited to, the most recently approved indicator ranges and excursion levels. The permittee shall maintain records of all verifications, calibration checks, adjustments and maintenance.

In addition to the recordkeeping requirement described in Provision I.S.1 of this permit, 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.17.b.3 **Reporting:**

In addition to the reporting requirements in Provision I.S.2 of this permit,

(a) Monitoring reports shall include, at a minimum, the following information, as applicable:
  (i) 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) 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))

(b) The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. Reports shall include test data and any calculations used to evaluate or revise the indicator range and excursion level as specified in II.B.17.b.1.C.

II.B.18 **Conditions on GENSET: Emergency Diesel Generators.**

II.B.18.a **Condition:**

Hours of operation for maintenance firing purposes shall be no greater than 100 hours per rolling 12-month total on the 175 kW emergency generator and the 300 kW emergency generator. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.18.a.1 **Monitoring:**

Hours of operation for maintenance firing purposes for each affected emission unit shall be determined by an hour meter and/or a log. Based on the first day of each month a new 12-month total shall be calculated using data from the previous 12 months. Monthly calculations shall be made no later than 20 days after the end of each calendar month.

II.B.18.a.2 **Recordkeeping:**

Records of hours of operation for maintenance firing purposes shall be kept on a monthly basis for each affected emission unit. Records shall be kept for all periods the plant is in operation. Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.18.a.3 **Reporting:**

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

II.B.18.b **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.18.b.1 **Monitoring:**

A visual opacity survey of each affected emission unit shall be performed on a monthly basis while the unit is operating by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than steam are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed while the unit is

operating in accordance with 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director.

II.B.18.b.2 **Recordkeeping:**

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director, shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.18.b.3 **Reporting:**

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

II.B.18.c **Condition:**

The permittee shall comply with the following at all times for the 175 kW emergency generator:

1. The permittee shall operate the emergency affected emission unit according to the requirements in paragraphs 1.a through 1.c. In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than as described in 40 CFR 63.6640(f) is prohibited. If the engine is not operated according to the requirements in 40 CFR 63.6640(f), it will not be considered an emergency engine and shall meet all requirements for non-emergency engines.
    a. There is no time limit on the use of emergency stationary RICE in emergency situations.
    b. Emergency stationary RICE may be operated for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) counts as part of the 100 hours per calendar year allowed by this paragraph.
        (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. A petition for approval of additional hours to be used for maintenance checks and readiness testing is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
    c. The permittee may operate the affected emission unit up to 50 hours per calendar year in non-emergency situations as specified in 40 CFR 63.6640(f)(3).
2. The permittee shall meet the following requirements at all times, except during periods of startup:
    a. Change oil and filter every 500 hours of operation or annually, whichever comes first;
    b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;
    c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

    During periods of startup the permittee shall minimize the engine's time spent at idle and minimize the engine's startup time 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 Subpart ZZZZ Table 2c, 40 CFR 63 Subpart ZZZZ Table 8, 40 CFR 63.6602, 40 CFR 63.6605(a), 40 CFR 63.6625(h), 40 CFR 63.6640(f), 40 CFR 63.6665]

II.B.18.c.1 **Monitoring:**

The permittee shall install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the required schedule or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice shall be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. [40 CFR 63 Subpart ZZZZ Table 2c Footnote 1]

The permittee shall demonstrate continuous compliance by operating and maintaining the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written operation and maintenance instructions or develop and follow their own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e), 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(i).

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.18.c.2 **Recordkeeping:**

The permittee shall keep the records described in 40 CFR 63.6655(a)(1)-(5) as applicable. [40 CFR 63.6655(a)]

For each affected emission unit that does not meet the standards applicable to non-emergency engines, the permittee shall keep the records required in 40 CFR 63.6655(f).

If additional hours are to be used for maintenance checks and readiness testing, the permittee shall maintain records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. [40 CFR 63.6640(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.18.c.3 **Reporting:**

The permittee shall report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. [40 CFR 63 Subpart ZZZZ Table 2c Footnote 1]

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] 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.B.18.d **Condition:**

For applicable requirements originating in 40 CFR 63 Subpart ZZZZ:
At all times the permittee shall operate and maintain the 175 kW emergency generator, 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.18.d.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.18.d.2 **Recordkeeping:**

The permittee shall keep the records described in 40 CFR 63.6655(a)(1)-(5) as applicable. [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.18.d.3 **Reporting:**

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

II.B.18.e **Condition:**

Hours of operation for maintenance firing purposes shall be no greater than 100 hours per rolling 12-month total on the 455 kW emergency fire pump engine. The engine shall be used only for emergency purposes or for maintenance and readiness testing. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.18.e.1 **Monitoring:**

Hours of operation for maintenance firing purposes for each affected emission unit shall be determined by an hour meter and/or a log. Based on the first day of each month a new 12-month

total shall be calculated using data from the previous 12 months. Monthly calculations shall be made no later than 20 days after the end of each calendar month.

II.B.18.e.2 **Recordkeeping:**

Records of hours of operation for maintenance firing purposes shall be kept on a monthly basis. Records of usage shall be kept for all periods the plant is in operation and shall include the date of usage, the hours of usage, and the reason for usage. Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.18.e.3 **Reporting:**

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

II.B.18.f **Condition:**

For the 455 kW emergency fire pump engine:
Affected emission units with a displacement of less than 30 liters per cylinder shall comply with the emission standards in Table 4 of 40 CFR 60 Subpart IIII, for all pollutants. If the permittee conducts performance tests in-use on emergency stationary CI ICE with a displacement of less than 30 liters per cylinder they shall meet the not-to-exceed (NTE) standards as indicated in 40 CFR 60.4212. [Origin: 40 CFR 60 Subpart IIII]. [40 CFR 60.4205(c), 40 CFR 60.4205(e), 40 CFR 63 Subpart ZZZZ]

II.B.18.f.1 **Monitoring:**

For affected emission units that are manufactured during or after the applicable model years for fire pump engine power rating in Table 3 of 40 CFR 60 Subpart IIII, the permittee shall comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(c) for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted below. (Origin: 40 CFR 60.4211(c))

If the permittee does not install, configure, operate, and maintain affected emission units and control devices according to the manufacturer's emission-related written instructions, or changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall demonstrate compliance as follows:

(a) For affected emission units greater than 500 HP:
    i. Keep a maintenance plan and records of conducted maintenance; and
    ii. To the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions; and
    iii. Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after changing emission-related settings in a way that is not permitted by the manufacturer. The permittee shall conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

(Origin: 40 CFR 60.4211(g)).

II.B.18.f.2 **Recordkeeping:**

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

II.B.18.f.3 **Reporting:**

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

II.B.18.g **Condition:**

For the 300 kW emergency engine, the permittee shall comply with paragraphs (1) through (2).
(1) After December 31, 2008, the permittee shall not install affected emission units (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.
(2) The permittee shall not import affected emission units with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (1) of this condition after the date specified in paragraphs (1) of this condition.
[Origin: 40 CFR 60 Subpart IIII]. [40 CFR 60.4208, 40 CFR 63 Subpart ZZZZ]

II.B.18.g.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.18.g.2 **Recordkeeping:**

The permittee shall keep records of the install date of each affected emission unit and the applicable requirements under 40 CFR 60 Subpart IIII for the respective model year engine. Records shall be maintained as described in Provision I.S.1 of this permit.

II.B.18.g.3 **Reporting:**

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

II.B.18.h **Condition:**

For the 300 kW emergency engine:
2007 model year and later emergency affected emission units with a displacement of less than 30 liters per cylinder that are not fire pump engines shall comply with the emission standards for new nonroad CI ICE in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. If the permittee conducts performance tests in-use on emergency stationary CI ICE with a displacement of less than 30 liters per cylinder they shall meet the not-to-exceed (NTE) standards as indicated in 40 CFR 60.4212. [Origin: 40 CFR 60 Subpart IIII]. [40 CFR 60.4205(b), 40 CFR 60.4205(e), 40 CFR 63 Subpart ZZZZ]

II.B.18.h.1 **Monitoring:**

The permittee shall comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted below. (Origin: 40 CFR 60.4211(c))

If the permittee does not install, configure, operate, and maintain affected emission units and control devices according to the manufacturer's emission-related written instructions, or changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall demonstrate compliance as follows:
(a) For affected emission units greater than or equal to 100 HP and less than or equal to 500 HP:

i. Keep a maintenance plan and records of conducted maintenance; and
ii. To the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions; and
iii. Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after changing emission-related settings in a way that is not permitted by the manufacturer.

(Origin: 40 CFR 60.4211(g)).

II.B.18.h.2 **Recordkeeping:**

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

II.B.18.h.3 **Reporting:**

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

II.B.18.i **Condition:**

For both the 455 kW emergency fire pump engine and the 300 kW emergency engine:
The permittee shall operate and maintain affected emission units that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. The permittee shall do all of the following, except as permitted in II.B.18.i.1(b):

(1) Operate and maintain the stationary CI ICE and control device according to the manufacturer's emission-related written instructions;
(2) Change only those emission-related settings that are permitted by the manufacturer; and
(3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as applicable.

[Origin: 40 CFR 60 Subpart IIII]. [40 CFR 60.4206, 40 CFR 60.4211(a), 40 CFR 63 Subpart ZZZZ]

II.B.18.i.1 **Monitoring:**

(a) The permittee shall document activities performed to assure proper operation and maintenance.
(b) If the permittee does not install, configure, operate, and maintain affected emission units and control devices according to the manufacturer's emission-related written instructions, or changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall demonstrate compliance as follows:
    (1) For affected emission units greater than or equal to 100 HP and less than or equal to 500 HP:
        a. Keep a maintenance plan and records of conducted maintenance; and
        b. To the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions; and
        c. Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after changing emission-related settings in a way that is not permitted by the manufacturer.
    (2) For affected emission units greater than 500 HP:
        a. Keep a maintenance plan and records of conducted maintenance; and
        b. To the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions; and

c. Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after changing emission-related settings in a way that is not permitted by the manufacturer. The permittee shall conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

(Origin: 40 CFR 60.4211(g)).

II.B.18.i.2 **Recordkeeping:**

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

II.B.18.i.3 **Reporting:**

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

II.B.18.j **Condition:**

For both the 455 kW emergency fire pump engine and the 300 kW emergency engine:
The permittee of affected emission units with a displacement of less than 30 liters per cylinder shall purchase diesel fuel that meets the following per gallon standards of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

1. Sulfur content no greater than 15 ppm (0.0015 percent) by weight and
2. A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

[Origin: 40 CFR 60 Subpart IIII]. [40 CFR 60.4207(b), 40 CFR 63 Subpart ZZZZ]

II.B.18.j.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.18.j.2 **Recordkeeping:**

For each fuel load received, the permittee shall maintain either fuel receipt records or other documentation showing fuel meets the specifications of ASTM D975 for the cetane index and sulfur content for Grades No. 1-D S15 or 2-D S15 diesel. The permittee shall maintain documentation demonstrating compliance with the condition. These records shall be maintained in accordance with Provision I.S.1. of this permit.

II.B.18.j.3 **Reporting:**

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

II.B.18.k **Condition:**

For both the 455 kW emergency fire pump engine and the 300 kW emergency engine:
The permittee shall operate the emergency affected emission unit according to the requirements in paragraphs (1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60 Subpart IIII, any operation other than as described in 40 CFR 60.4211(f), is prohibited. If the engine is not operated according to the requirements in 40 CFR 60.4211(f), it will not be considered an

emergency engine and shall meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(2) Emergency stationary ICE may be operated for any combination of the purposes specified in 40 CFR 60.4211(f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by this paragraph.

  (a) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. A petition for approval of additional hours to be used for maintenance checks and readiness testing is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(3) The permittee may operate the emergency stationary ICE up to 50 hours per calendar year in non-emergency situations as specified in 40 CFR 60.4211(f)(3). This requirement applies to the 300 kW emergency engine only.

[Origin: 40 CFR 40 CFR 60 Subpart IIII]. [40 CFR 60.4211(f), 40 CFR 63 Subpart ZZZZ]

II.B.18.k.1 **Monitoring:**

If an emergency affected emission unit does not meet the standards applicable to non-emergency engines, the permittee shall install a non-resettable hour meter prior to startup of the engine. [origin: 40 CFR 60.4209(a)] Records required for this permit condition will serve as monitoring.

II.B.18.k.2 **Recordkeeping:**

Records of each affected emission unit shall be kept on a monthly basis in an operation and maintenance log. Records shall distinguish between maintenance-related hours and emergency use-related hours. If additional hours are to be used for maintenance checks and readiness testing, the permittee shall maintain records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. (Origin: 40 CFR 60.4211(f))

Starting with the model years in Table 5 of 40 CFR 60 Subpart IIII, if an affected emission unit does not meet the standards applicable to non-emergency engines in the applicable model year, the permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. (Origin: 40 CFR 60.4214(b))

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

II.B.18.k.3 **Reporting:**

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

II.B.19 **Conditions on ROADS: Roads and Unpaved Operational Areas.**

II.B.19.a **Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.19.a.1 **Monitoring:**

In lieu of monitoring via visible emissions observations, adherence to the most recently approved fugitive dust control plan shall be monitored to demonstrate that appropriate measures are being implemented to control fugitive dust.

II.B.19.a.2 **Recordkeeping:**

Records required by the most recently approved fugitive dust control plan shall be maintained in accordance with the plan and section I.S.1 of this permit.

II.B.19.a.3 **Reporting:**

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

II.B.19.b **Condition:**

i) If the permittee is responsible for construction or maintenance of any existing road or has right-of-way easement or possesses the right to use the same whose activities result in fugitive dust from the road, the permittee shall minimize fugitive dust to the maximum extent possible. If materials are deposited that may create fugitive dust on a public or private paved road, the permittee shall clean the road promptly.
ii) Unpaved Roads. If the permittee is responsible for construction or maintenance of any new or existing unpaved road, the permittee shall prevent, to the maximum extent possible, the deposit of material from the unpaved road onto any intersecting paved road during construction or maintenance. If materials are deposited that may create fugitive dust on a public or private paved road, the permittee shall clean the road promptly.

[Origin: R307-309]. [R307-309-9]

II.B.19.b.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.19.b.2 **Recordkeeping:**

Records that demonstrate compliance with this condition and records required by the most recently approved fugitive dust control plan shall be maintained in accordance with the plan and section I.S.1 of this permit.

II.B.19.b.3 **Reporting:**

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

II.B.20 **<u>Conditions on MP WS: Magnesium Chloride Plant Wet Scrubber</u>**

II.B.20.a **Condition: [State-only Requirement]**

Emissions of PM_{10} shall not exceed the following concentration: 0.01 grains/dscf (at 68 degrees F and 29.92 in Hg). [Origin: Utah SIP IX.H]. [R307-110]

II.B.20.a.1 **Monitoring:**

A. Stack testing shall be performed as specified below:
   i) Frequency. Emissions shall be tested at least once every five years. The source may also be tested at any time if directed by the Director.
   ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.
   iii) Methods.
      (a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.
      (b) PM_{10}: 40 CFR 51, Appendix M, Methods 201a and 202, or other EPA-approved testing methods acceptable to the Director. If a method other than 201a is used, the portion of the front half of the catch considered PM_{10} shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.
      (c) Volumetric Flow Rate: 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director.
      (d) For PM_{10}: The condensable particulate emissions shall not be used for compliance demonstration, but shall be used for inventory purposes.
   iv) 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.
   v) 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.20.a.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.20.a.3 **Reporting:**

The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.21 **Conditions on BH-502: Salt Bulk Load-out.**

II.B.21.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.21.a.1 **Monitoring:**

A visual opacity survey of each affected emission unit shall be performed on a monthly basis while the unit is operating by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than steam are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed while the unit is operating in accordance with 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director.

II.B.21.a.2 **Recordkeeping:**

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9, or other EPA-approved testing method, as acceptable to the Director, shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.21.a.3 **Reporting:**

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

II.B.21.b **Condition:**

Emissions of PM_{10} and $PM_{2.5}$ shall be no greater than 0.17 pounds per hour and 0.0053 grains/dscf (68 degrees F, and 29.92 in Hg). [Origin: DAQE-AN109170035-16, Utah SIP IX.H]. [R307-401-8(1)(a)(BACT)]

II.B.21.b.1 **Monitoring:**

Stack testing shall be performed as specified below:

i) Frequency. Emissions shall be tested every 5 years, based on the date of the most recent stack test. The source may also be tested at any time if directed by the Director.

ii) 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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.

iii) Methods.

(a) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.

(b) The following methods shall be used to measure filterable particulate emissions: 40 CFR 51, Appendix M, Method 201, or 201A, or other EPA-approved testing method, as acceptable to the Director. If other approved testing methods are used which cannot measure the $PM_{10}/PM_{2.5}$ fraction of the filterable particulate emissions, all of the filterable particulate emissions shall be considered $PM_{10}/PM_{2.5}$ as applicable. The portion of the filterable particulate emissions considered $PM_{10}/PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration.

(c) The following methods shall be used to measure condensable particulate emissions: 40 CFR 51, Appendix M, Method 202, or other EPA-approved testing method, as acceptable to the Director.
(d) The condensable particulate emissions shall be used for compliance demonstration and for inventory purposes.
(e) 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director, shall be used to determine the volumetric flow rate.

iv) Calculations. To determine mass emission rates (lb/hr) 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.

v) Test Conditions. The production rate during all compliance testing shall be no less than 90% of the permitted production rate. If the maximum permitted production rate has not been achieved at the time of the test, the following procedure shall be followed:
(a) Testing shall be at no less than 90% of the production rate achieved to date.
(b) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
(c) Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum permitted production rate is achieved.

Subsequent tests shall be conducted at a production rate of no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.21.b.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.21.b.3 **Reporting:**

The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.22 **Conditions on Boilers.**

II.B.22.a **Condition:**

Emissions of NO_x from each boiler shall be no greater than 1.30 pounds per hour and 9.0 ppm. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.22.a.1 **Monitoring:**

Stack testing shall be performed as specified below:
(a) Frequency. Emissions shall be tested every 3 years. The source may also be tested at any time if directed by the Director.
(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 test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. The source shall attend a pretest conference if determined necessary by the Director.

(c) Methods.
  (i) Sample Location - the emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA-approved testing method, as acceptable to 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.
  (ii) 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, 7E, or other EPA-approved testing method, as acceptable to the Director, shall be used to determine the pollutant emission rate.
  (iii) 40 CFR 60, Appendix A, Method 2, or other EPA-approved testing method, as acceptable to the Director, shall be used to determine the volumetric flow rate.

(d) Calculations. To determine mass emission rates (lb/hr) 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) Test Conditions. The production rate during all compliance testing shall be no less than 90% of the permitted production rate. If the maximum permitted production rate has not been achieved at the time of the test, the following procedure shall be followed:
  (i) Testing shall be at no less than 90% of the production rate achieved to date.
  (ii) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
  (iii) Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum permitted production rate is achieved.

  Subsequent tests shall be conducted at a production rate of no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.22.a.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.22.a.3 **Reporting:**

The results of stack testing shall be submitted to the Director within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.22.b **Condition:**

Emissions of greenhouse gas (GHG) from both boilers combined shall be no greater than 110,747 short tons of CO_2e per rolling 12-month period. GHG emissions shall include combined emissions of CO_2, CH_4, and N_2O. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.22.b.1 **Monitoring:**

Compliance with the rolling 12-month period shall be demonstrated as follows:

The permittee shall multiply the actual rolling 12-month heat input for each boiler by the appropriate emissions factor and global warming potential listed below to calculate emissions of each GHG. The sum of all GHG emissions from both boilers shall be used to evaluate

compliance with the CO_2e limit. Actual heat input values shall be determined by natural gas purchasing records.

GHG	Emission Factor	Global Warming Potential
CO_2	53.02 kg/MMBtu	1
CH_4	0.001 kg/MMBtu	21
N_2O	0.0001 kg/MMBtu	310

Based on the first day of each month a new 12-month total shall be calculated using data from the previous 12 months. Monthly calculations shall be made no later than 20 days after the end of each calendar month.

Stack testing shall be conducted once every three (3) years from August 21, 2012 to verify the CO_2 emissions from the boilers are no greater than the CO_2e emission factors listed above. CO_2 emissions shall be determined using the procedures outlined in 40 CFR 60 Appendix A, Method 3, 3A, or other EPA-approved testing method, as acceptable to the Director.

II.B.22.b.2 **Recordkeeping:**

Results of monitoring, including calculations, fuel purchase records, and stack test results verifying the CO_2e emission factors shall be recorded and maintained in accordance with Provision S.1 in Section I of this permit.

II.B.22.b.3 **Reporting:**

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

II.B.22.c **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN109170035-16]. [R307-401-8(1)(a)(BACT)]

II.B.22.c.1 **Monitoring:**

In lieu of monitoring via visible emission observations, records required for this permit condition will serve as monitoring.

II.B.22.c.2 **Recordkeeping:**

Records shall be kept for any period that a fuel other than pipeline quality natural gas is used in the affected emission unit. The records shall be recorded in a log that is kept in a readily accessible location onsite. All records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.22.c.3 **Reporting:**

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

II.B.22.d **Condition:**

Only pipeline quality natural gas with a potential SO_2 emission rate of 0.32 lb/MMBtu (140 ng/J) heat input or less shall be used as fuel for the boilers. [Origin: 40 CFR 60 Subpart Db]. [40 CFR

60.42b(k)(2)]

II.B.22.d.1 **Monitoring:**

Records required for this permit condition will serve as monitoring. [40 CFR 60.45b(j), 40 CFR 60.45b(k), 40 CFR 60.47b(f)]

II.B.22.d.2 **Recordkeeping:**

The permittee shall either:
(a) Obtain and maintain onsite fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the gaseous fuel meets the definition of natural gas in accordance with 40 CFR 60.49b(r); or
(b) Develop a site-specific fuel analysis plan for review and approval. Each fuel analysis plan shall include a minimum initial requirement of weekly testing and each analysis report shall contain, at a minimum, the information required in 40 CFR 60.49b(r).

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

II.B.22.d.3 **Reporting:**

The permittee shall submit either:
(a) Reports certifying that only natural gas as specified in 40 CFR 60.49b(r) was combusted in the boilers during the reporting period; or
(b) A site-specific fuel analysis plan as specified in 40 CFR 60.49b(r) for review and approval no later than 60 days before the compliance demonstration date.

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

II.B.22.e **Condition:**

At all times, including periods of startup, shutdown, or malfunction, emissions of NO_x (expressed as NO_2) shall be no greater than 0.20 lb/MMBtu (86 ng/J) heat input in any gases discharged into the atmosphere from each boiler. [Origin: 40 CFR 60 Subpart Db]. [40 CFR 60.44b(a), 40 CFR 60.44b(h)]

II.B.22.e.1 **Monitoring:**

Within 60 days after achieving the maximum production rate, but not later than 180 days after initial startup, the permittee shall conduct the performance test as required under 40 CFR 60.8 using the continuous system for monitoring NO_x required under 40 CFR 60.48(b).

For the initial compliance test, NO_x from the steam generating unit shall be monitored for 30 successive steam generating unit operating days and the 30-day average emission rate shall be used to determine compliance with the NO_x emission standards. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.

The permittee shall install, calibrate, maintain, and operate a CEMS for measuring NO_x and O_2 (or CO_2) emissions discharged to the atmosphere in accordance with 40 CFR 60.48b(e) and R307-170 and shall record the output of the system. The CEMS shall be operated and data recorded during all periods of operation except for CEMS breakdowns and repairs. Data shall be recorded during calibration checks, and zero and span adjustments. When NO_x emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data shall be obtained using standby monitoring systems in accordance with 40 CFR 48b(f).

The 1-hour average NO_x emission rates measured by the continuous NO_x monitor shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates in accordance with 40 CFR 60.48b(d).

II.B.22.e.2 **Recordkeeping:**

Records shall be maintained in accordance with Provision I.S.1 of this permit and R307-170. Additionally, the permittee shall record and maintain records as specified in 40 CFR 60.49b(d) and (g).

II.B.22.e.3 **Reporting:**

In addition to the reporting requirements of Section I of this permit, the permittee shall comply with the notification and reporting requirements specified in 40 CFR 60.49b(a), (b), (i), (v), and (w).

Reports shall be submitted quarterly, as required by R307-170, Continuous Emission Monitoring Program. The reports are considered prompt notification of permit deviation required in Provision I.S.2.c of this permit, if all information required by Provision I.S.2.c is included in the report.

II.B.22.f **Condition:**

The permittee shall conduct a tune-up of each affected emission unit as specified in 40 CFR 63.7540. The permittee shall be in compliance within 3 years after becoming a major HAP source. [Origin: 40 CFR 63 Subpart DDDDD]. [40 CFR 63.7495(c), 40 CFR 63.7500(a), 40 CFR 63.7500(e), 40 CFR 63 Subpart DDDDD Table 3]

II.B.22.f.1 **Monitoring:**

The permittee shall demonstrate initial compliance as specified in 40 CFR 63.7510(e). The permittee shall demonstrate continuous compliance as specified in 40 CFR 63.7540(a)(10).

Following the initial tune-up, the permittee shall conduct a tune-up of each affected emission unit every 5 years as specified in 40 CFR 63.7540(a)(10)(i)-(vi) to demonstrate continuous compliance. Each 5-year tune-up shall be conducted no more than 61 months after the previous tune-up. Burner inspection may be delayed until the next scheduled or unscheduled unit shutdown but the permittee shall inspect each burner at least once every 72 months. If the unit is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 calendar days of startup.
[40 CFR 63.7515(d), 40 CFR 63.7540(a)(10), 40 CFR 63.7540(a)(12), 40 CFR 63.7540(a)(13)].

II.B.22.f.2 **Recordkeeping:**

Records shall be kept as specified in 40 CFR 63.7555. All records shall be maintained in accordance with 40 CFR 63.7560 and Provision I.S.1 of this permit.

II.B.22.f.3 **Reporting:**

In addition to the reporting requirements of Section I of this permit, the permittee shall comply with the notification and reporting requirements specified in 40 CFR 63.7495(d), 40 CFR 63.7545(a) and (e), and 40 CFR 63.7550. [40 CFR 63 Subpart DDDDD Table 9].

II.B.22.g **Condition:**

At all times, the permittee shall operate and maintain each 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 to the Director that 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 be in compliance within 3 years after becoming a major HAP source. [Origin: 40 CFR 63 Subpart DDDDD]. [40 CFR 63.7495(c), 40 CFR 63.7500(a)(3)]

II.B.22.g.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.22.g.2 **Recordkeeping:**

Permittee shall document activities performed to assure proper operation and maintenance. Records shall be kept as specified in 40 CFR 63.7555(d)(8) and maintained in accordance with 40 CFR 63.7560 and Provision I.S.1 of this permit.

II.B.22.g.3 **Reporting:**

In addition to the reporting requirements of Section I of this permit, the permittee shall comply with the reporting requirements specified in 40 CFR 63.7550.

II.B.22.h **Condition:**

A one-time energy assessment shall be performed on each affected emission unit in accordance with Table 3 to 40 CFR 63 Subpart DDDDD. The permittee shall be in compliance within 3 years after becoming a major HAP source. [Origin: 40 CFR 63 Subpart DDDDD]. [40 CFR 63.7495(c), 40 CFR 63.7500(a), 40 CFR 63 Subpart DDDDD Table 3]

II.B.22.h.1 **Monitoring:**

The permittee shall demonstrate compliance as specified in 40 CFR 63.7510(e).

II.B.22.h.2 **Recordkeeping:**

Records shall be kept as specified in 40 CFR 63.7555. All records shall be maintained in accordance with 40 CFR 63.7560 and Provision I.S.1 of this permit.

II.B.22.h.3 **Reporting:**

In addition to the reporting requirements of Section I of this permit, the permittee shall comply with the notification and reporting requirements specified in 40 CFR 63.7495(d), 40 CFR 63.7545(a) and (e), and 40 CFR 63.7550.

II.B.23 **Conditions on NG GEN: Emergency NG Generator**

II.B.23.a **Condition:**

Hours of operation for maintenance firing purposes shall be no greater than 100 hours per rolling 12-month period on the 25 kW emergency generator. [Origin: DAQE-AN109170035-16]. [R307-401-

8(1)(a)(BACT)]

II.B.23.a.1 **Monitoring:**

Hours of operation for maintenance firing purposes for each affected emission unit shall be determined by an hour meter and/or a log. Based on the first day of each month a new 12-month total shall be calculated using data from the previous 12 months. Monthly calculations shall be made no later than 20 days after the end of each calendar month.

II.B.23.a.2 **Recordkeeping:**

Records of hours of operation for maintenance firing purposes shall be kept on a monthly basis. Records shall be kept for all periods the plant is in operation. Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.23.a.3 **Reporting:**

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

II.B.23.b **Condition:**

(a) For each affected emission unit where construction commenced (i.e., date the affected emission unit is ordered by the Permittee) after June 12, 2006, with a maximum engine power:
  (1) Greater than 19 KW (25 HP) and less than 75 KW (100 HP) the permittee shall comply with the emission standards in Table 1 of 40 CFR 60 Subpart JJJJ. (origin 40 CFR 60.4233(d))

(b) Deadline for importing or installing affected emission units produced in previous model years
  (1) For affected emission units with a maximum engine power of greater than 19 KW (25 HP), the permittee shall not install engines that do not meet the applicable requirements in section (a) of this condition after January 1, 2011. (origin 40 CFR 60.4236(c))

(c) The Permittee shall operate and maintain affected emission units that achieve the emission standards as required in this condition over the entire life of the engine (origin 40 CFR 60.4234)

(d) The air-to-fuel ratio (AFR) controller, if used, shall be maintained and operated appropriately by the Permittee in order to ensure proper operation of affected emission units and control device to minimize emissions at all times. (origin 40 CFR 60.4243(g))

[Origin: 40 CFR 60 Subpart JJJJ]. [40 CFR 60.4233, 40 CFR 60.4234, 40 CFR 60.4236, 40 CFR 60.4243, 40 CFR 63 Subpart ZZZZ]

II.B.23.b.1 **Monitoring:**

(a) The permittee shall demonstrate compliance by purchasing an engine certified according to procedures specified in 40 CFR 60 Subpart JJJJ, for the same model year and demonstrating compliance according to one of the methods specified in (a)(1) and (2) of this section.
  (1) If the Permittee operates and maintains the 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, but no performance testing is required for the Permittee. The Permittee shall also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply. If the Permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the affected emission unit will not be considered out of compliance.
  (2) If the Permittee does not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine, and the

Permittee shall demonstrate compliance according to (a)(2)(i) of this section.

(i) If the affected emission unit is less than 100 HP, the Permittee shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required for the Permittee.

(Origin: 40 CFR 60.4243(b)).

II.B.23.b.2 **Recordkeeping:**

(a) For the affected emission unit, the Permittee shall keep records of the information in paragraphs (a)(1) through (4) of this section.
  (1) All notifications submitted to comply with this condition and all documentation supporting any notification.
  (2) Maintenance conducted on each affected emission unit.
  (3) If the affected emission unit is a certified engine, documentation from the manufacturer that the affected emission unit is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
  (4) If the affected emission unit 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. (Origin: 40 CFR 60.4245(a))

(b) The permittee shall keep records of the install date of each affected emission unit and the applicable requirements under 40 CFR 60 Subpart JJJJ for the respective model year engine.

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

II.B.23.b.3 **Reporting:**

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

II.B.23.c **Condition:**

The permittee shall operate the emergency affected emission unit according to the requirements in paragraphs (1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60 Subpart JJJJ, any operation other than as described in 40 CFR 60.4243(d) is prohibited. If the engine is not operated according to the requirements in 40 CFR 60.4243(d), it will not be considered an emergency engine and shall meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(2) Emergency stationary ICE may be operated for any combination of the purposes specified in 40 CFR 60.4243(d)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4243(d)(3) counts as part of the 100 hours per calendar year allowed by this paragraph.
  (a) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. A petition for approval of additional hours to be used for maintenance checks and readiness testing is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(3) The permittee may operate the emergency stationary ICE up to 50 hours per calendar year in non-emergency situations as specified in 40 CFR 60.4243(d)(3).

The Permittee may operate affected natural gas fired emission units using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but the Permittee shall keep records of such use. If propane is used for more than 100 hours per year in an affected emission unit that is not certified to the emission standards when using propane, the Permittee is required to conduct a performance test to demonstrate compliance with the emission standards of 40 CFR 60.4233. [Origin: 40 CFR 60 Subpart JJJJ]. [40 CFR 60.4243(d), 40 CFR 60.4243(e), 40 CFR 63 Subpart ZZZZ]

II.B.23.c.1 **Monitoring:**

Records required for this permit condition will serve as monitoring. Additionally, for affected emission units less than 130 HP, built on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the Permittee shall install a non-resettable hour meter upon startup of the affected emission unit. (Origin: 40 CFR 60.4237(c)).

II.B.23.c.2 **Recordkeeping:**

For each affected emission unit greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that does not meet the standards applicable to non-emergency engines, the Permittee shall keep records of the hours of operation of the affected emission unit that are recorded through the non-resettable hour meter. The Permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. (Origin: 40 CFR 60.4245(b))

Records of each affected emission unit shall be kept on a monthly basis in an operation and maintenance log. Records shall distinguish between maintenance-related hours and emergency use-related hours. If additional hours are to be used for maintenance checks and readiness testing, the permittee shall maintain records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. (Origin: 40 CFR 60.4243(d))

Records required by the condition for propane usage and records demonstrating compliance with the condition shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.23.c.3 **Reporting:**

There are no 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 60 Subpart UUU (Standards of Performance for Calciners and Dryers in Mineral Industries)

This regulation is not applicable to the Permitted Source for the following reason(s): neither the salt plant nor the SOP plant meets the definition of mineral processing plant given in 40 CFR 60.731. Although the magnesium chloride plant could meet the definition of mineral processing plant, there is no calciner or dryer at the magnesium chloride plant. Calciners and dryers are the only affected facilities subject to Subpart UUU according to 40 CFR 60.730. [10/22/2008] [Last updated March 31, 2016]

III.B. 40 CFR 60 Subpart OOO (Standards of Performance for Nonmetallic mineral processing plants)

This regulation is not applicable to the Permitted Source for the following reason(s): the only material processed by the facility which is subject to 40 CFR Subpart OOO is sodium chloride, however, all affected facilities commenced construction, reconstruction or modification prior to August 31, 1983. [06/24/2002] [Last updated March 31, 2016]

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	Utah SIP IX.H.12.h dated December 2, 2015
Incorporates	DAQE-AN109170035-16 dated January 15, 2016

1. Comment on an item originating in 40 CFR 64 regarding Permitted Source Compliance Assurance Monitoring (CAM) applicability: CAM applies to eleven units for PM_{10} and is included in the operating permit under the following conditions.

   II.B.3.a - AH-500: Salt Cooler Circuit
   II.B.4.a - AH-502: Salt Plant Circuit
   II.B.5.b - AH-513: Salt Dryer
   II.B.6.b - BH-1400: SOP Dryer (D-1400)
   II.B.7.b - BH-005: SOP Compaction Building Circuit
   II.B.10.b - BH-008: SOP Compaction Circuit Dryer
   II.B.11.a - AH-075: SOP Compaction Circuit Dryer
   II.B.12.a - BH-014: SOP Dryer
   II.B.13.a - BH-001: SOP Bulk Load-Out Circuit
   II.B.14.a - BH-002: SOP Silo Storage Circuit
   II.B.17.b - BH-501: Salt Cooler

   The wet scrubber (AH-081) was removed in DAQE-AN0109170027-09. So the CAM monitoring previously included in condition II.B.9.a of the operating permit issued 7/9/09 has been removed from the operating permit. The wet scrubber (AH-505) was removed in DAQE-AN109170030A-12 and replaced with an internally-vented baghouse (BH-505). So the CAM monitoring previously included in condition II.B.5.a of the operating permit issued 7/9/09 has been removed from the operating permit. The packed tower scrubber (HE-028) was removed in DAQE-AN109170032-13 and replaced with a baghouse (BH-014). So the CAM monitoring previously included in condition II.B.11.a of the operating permit issued 2/6/13 has been removed. The baghouse (BH-006) for the SOP compaction fluid bed heater (D-005) was removed in DAQE-AN109170035-16. So the CAM monitoring previously included in II.B.8.b of the operating permit issued 4/9/13 has been removed. [9/30/08] [Last updated March 31, 2016]

2. Comment on an item originating in 40 CFR 63 Subpart BBBBBBB regarding BH-505: Salt Special Products Circuit

   Removal of requirements: Requirements from 40 CFR 63 Subpart BBBBBBB were included in the permit issued 12/6/2010 on unit AH-505: Salt Special Products Circuit. The component of concern was manganese in the manufacture of mineral feed blocks. Although the manufactured feed block contained 0.8% by weight manganese, certain premixes in the raw material stream contained manganese in excess of 1.0%. The permittee submitted a letter dated 12/22/2010 from EPA to North American Salt company in Minnesota that determined the subpart was not applicable to their mineral feed block manufacturing operation because the premix compounds that exceeded 1.0% manganese were purchased from vendors, not manufactured onsite. The permittee submitted a letter dated 1/31/2011, received by DAQ 2/2/2011, stating that the raw material feed specifications and final product are identical to the Minnesota plant's. Based on this information, the requirements from 40 CFR 63 Subpart BBBBBBB have been removed in

the current permit revision. [7/30/12] [Last updated March 31, 2016]

3. Comment on an item originating in DAQE-AN109170035-16 regarding BH-001: SOP Bulk Load-Out Circuit

   Baghouse test frequency for PM_{10}: A test frequency of five years has been specified for this baghouse due to a low potential for noncompliance with the PM_{10} limit. The low potential is due to the low particulate loading indicative of a low potential to emit (PTE) from this unit. This unit has a PTE of 4.6 tons per year. This is based on the 1.64 lb/hr emission limit and 5,600 hours of operation per year.
   Note: CAM requirements from 40 CFR 64 were added to this unit in the 2009 renewal permit that included installation and continuous operation of a BLDS to provide reasonable assurance of compliance with the limit in addition to the stack test requirement. [6/08/2006] [Last updated March 31, 2016]

4. Comment on an item originating in DAQE-AN109170035-16 regarding BH-002: SOP Silo Storage Circuit

   Baghouse test frequency for PM_{10}: A test frequency of five years has been specified for this baghouse due to a low potential for noncompliance with the PM_{10} limit. The low potential is due to the low particulate loading indicative of a low potential to emit (PTE) from this unit. This unit has a PTE of 6.0 tons per year. This is based on the 1.37 lb/hr emission limit and 8,760 hours of operation per year.
   Note: CAM requirements from 40 CFR 64 were added to this unit in the 2009 renewal permit that included installation and continuous operation of a BLDS to provide reasonable assurance of compliance with the limit in addition to the stack test requirement. [6/08/2006] [Last updated March 31, 2016]

5. Comment on an item originating in DAQE-AN109170035-16 regarding BH-005: SOP Compaction Building Circuit

   Baghouse test frequency for PM_{10}: A test frequency of five years has been specified for this baghouse due to a low potential for noncompliance with the PM_{10} limit. The low potential is due to the low particulate loading indicative of a low potential to emit (PTE) from this unit. This unit has a PTE of 3.9 tons per year. This is based on the 0.9 lb/hr emission limit and 8,760 hours of operation per year.
   Note: CAM requirements from 40 CFR 64 were added to this unit in the 2009 renewal permit that included installation and continuous operation of a BLDS to provide reasonable assurance of compliance with the limit in addition to the stack test requirement. [6/08/2006] [Last updated March 31, 2016]

6. Comment on an item originating in DAQE-AN109170035-16 regarding BH-501: Salt Cooler

   Baghouse test frequency for PM_{10}: A test frequency of five years has been specified for this baghouse due to a low potential for noncompliance with the PM_{10} limit. The low potential is due to the low particulate loading indicative of a low potential to emit (PTE) from this unit. This unit has a PTE of 3.9 tons per year. This is based on the 0.9 lb/hr emission limit and 8,760 hours of operation per year.
   Note: CAM requirements from 40 CFR 64 were added to this unit in the 2009 renewal permit that included installation and continuous operation of a BLDS to provide reasonable assurance of compliance with the limit in addition to the stack test requirement. [6/08/2006] [Last updated March 31, 2016]

7. Comment on an item originating in 40 CFR 63 Subpart ZZZZ, 40 CFR 60 Subpart IIII, 40 CFR 60 Subpart JJJJ regarding Permitted Source

   40 CFR 63 Subpart ZZZZ:
   Subpart ZZZZ defines 'existing' for stationary RICE less than or equal to 500 hp at major HAP sources if they '...commenced construction or reconstruction...before June 12, 2006.'

The 175 kW emergency diesel generator was installed in 2000 and meets the definition of emergency stationary RICE given in Subpart ZZZZ. Applicable requirements from 40 CFR 63 Subpart ZZZZ for existing emergency compression ignition (CI) RICE at major HAP sources have been included in the permit for the 175 kW generator.

Note: The permitted source was classified as an area source of HAP emissions when Subpart ZZZZ requirements were originally included in the operating permit issued 12/6/2010. The permittee was required to be in compliance with those requirements by May 3, 2013 per 40 CFR 63.6595(a)(1). The permitted source is now classified as a major source of HAP emissions. The compliance date for Subpart ZZZZ requirements is 3 years after an area source becomes a major source of HAP per 40 CFR 63.6595(b)(2). However, there is no difference between the requirements that apply to the 175 kW generator either as an area source or as a major source of HAP emissions. So neither reference to 40 CFR 63.6595(a)(1) nor 40 CFR 63.6595(b)(2) has been included in the 2016 renewal operating permit for the Subpart ZZZZ provisions.

Subpart ZZZZ defines 'new' for stationary RICE more than 500 hp at major HAP sources if they '...commenced construction...on or after December 19, 2002.' 40 CFR 63.6590(b)(1) states new emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) does not have to meet the requirements of 40 CFR 63 Subpart A and ZZZZ except for the initial notification requirements of 40 CFR 63.6645(f). Although the 455 kW emergency engine is an affected source under Subpart ZZZZ , it is only subject to the initial notification requirements from 40 CFR 63.6645(f).

Subpart ZZZZ defines 'new' for stationary RICE less than or equal to 500 hp at major HAP sources if they '...commenced construction...on or after June 12, 2006.' 40 CFR 63.6590(c) states new emergency stationary RICE with a site rating less than or equal to 500 brake HP located at a major source of HAP emissions shall meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII or 40 CFR 60 Subpart JJJJ. No further requirements from Subpart ZZZZ apply. Both the 300 kW and 25 kW emergency engines are in this category.

40 CFR 60 Subpart IIII:
Per 40 CFR 60.4200(a)(2), CI engines ordered after July 11, 2005 and, manufactured after July 1, 2006 for fire pump engines or manufactured after April 1, 2006 for non-fire pump engines, are affected emission units. The 455 kW emergency fire pump engine and 300 kW non-fire pump emergency engine meet the applicability criteria.

40 CFR 60 Subpart JJJJ:
Per 40 CFR 60.4230(a)(4), SI emergency engines with a maximum engine power greater than 19 KW(25 HP) ordered after June 12, 2006 and manufactured after January 1, 2009 are affected emission units. The 25 kW emergency engine meets the applicability criteria. [9/04/2008] [Last updated March 31, 2016]

8. Comment on an item originating in historical approval order regarding ROADS: Roads and Unpaved Operational Areas

Requirement to demonstrate compliance with opacity using a modified Method 9: The approval order DAQE-AN0917021-06 specified compliance demonstration with the fugitive dust opacity limit either by modified Method 9 visible emission determinations or by implementing a fugitive dust control plan. The permittee has requested that they be allowed to submit and implement a fugitive dust control plan in lieu of regular modified

Method 9 observations. Therefore, only the fugitive dust control plan monitoring has been included in this permit condition II.B.19. [6/08/2006] [Last updated March 31, 2016]

9. Comment on an item originating in 40 CFR 60.110b(a) regarding TANKS: Petroleum Storage Tanks

   Petroleum storage tanks not subject to NSPS Subpart Kb: The 12,000 gal. Diesel storage tank is not subject to NSPS, Subpart Kb because it was installed prior to July 23, 1984. All other petroleum storage tanks are not subject to NSPS, Subpart Kb due to size (less than 10,566 gal). [12/10/2001] [Last updated March 31, 2016]

10. Comment on an item originating in DAQE-AN109170035-16 regarding BH-505: Salt Special Products Circuit

    BH-505 is not subject to the ten percent opacity limit originating in the approval order for all baghouses. It is vented inside the building and listed for informational purposes only in the approval order. [7/30/2012] [Last updated March 31, 2016]

11. Comment on an item originating in 40 CFR 60 Subpart Db regarding Boilers

    The permittee has requested that the NO_x limit originating in the NSPS and the NO_x limit originating in the approval order be separate conditions in the Title V permit to clarify the monitoring that applies to each. [7/30/2012] [Last updated March 31, 2016]

12. Comment on an item originating in 40 CFR 63 Subpart DDDDD regarding Boilers

    Per 40 CFR 63.7575, oxygen trim system means a system of monitors that is used to maintain excess air at the desired level in a combustion device. A typical system consists of a flue gas oxygen and/or CO monitor that automatically provides a feedback signal to the combustion air controller. The permittee confirmed the boilers are equipped with continuous oxygen trim systems as defined in 40 CFR 63 Subpart DDDDD. [8/25/2015] [Last updated March 31, 2016]

13. Comment on an item originating in this permit regarding Permitted Source

    Wind speed exception: A fugitive dust condition originating in R307-309-5 has been added to the 2016 renewal permit. The condition is designated a 'state-only' requirement because the portion of R307-309 that contains the wind speed exception has not yet been approved by EPA into the SIP. Once the rule is federally approved, the permit condition will be modified as necessary. The wind speed exception does not apply to fugitive dust sources with 20% opacity conditions originating in the approval order. This ensures the fugitive dust requirements contained in the renewal permit are as stringent as the EPA-approved rule R307-1-4.05 and the approval order. [12/2/2015] [Last updated March 31, 2016]

14. Comment on an item originating in 40 CFR 63 Subpart DDDDD regarding Permitted Source

    Per 40 CFR 63.7575, process heater means an enclosed device using controlled flame, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material (e.g., glycol or a mixture of glycol and water) for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not come into direct contact with process materials. The permittee has evaluated and confirmed that all dryers source-wide, the burners included in the SOP submerged combustion process, and unit B-1520 are not process heaters as defined in 40 CFR 63 Subpart DDDDD because the combustion gases in those units come into direct contact with process materials. [2/17/2016] [Last updated March 31, 2016]