



## State of Utah

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

## Department of Environmental Quality

Amanda Smith  
*Acting Executive Director*

DIVISION OF AIR QUALITY  
Cheryl Heying  
*Director*

10917

### Title V Operating Permit

**PERMIT NUMBER:** 5700001002

**DATE OF PERMIT:** July 9, 2009

Date of Last Revision: July 9, 2009

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

**Name of Permittee:**

Great Salt Lake Minerals Corporation  
765 North 10500 West  
Ogden, UT 84404-1190

**Permitted Location:**

Production Plant  
765 N 10500 W  
Ogden, UT 84404

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

#### UTAH AIR QUALITY BOARD

By:

Prepared By:

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M. Cheryl Heying, Executive Secretary

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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 9, 2014

Permit expiration date: July 9, 2014

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

### **ABSTRACT**

Great Salt Lake Minerals Corporation (GSL) 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<sub>2</sub>SO<sub>4</sub>), and magnesium chloride (MgCl<sub>2</sub>). 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. GSL is a major source for emissions of PM<sub>10</sub>.

## OPERATING PERMIT HISTORY

Permit/Activity	Date Issued	Recorded Changes
Title V renewal application (Project #OPP0109170006)	7/9/2009	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)	8/3/2006	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)	6/5/2003	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 <sub>10</sub> 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)	2/18/2003	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 <sub>10</sub> emissions limit was also changed.
Title V initial application (Project #OPP0109170001)	6/24/2002	

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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 Executive Secretary, within a reasonable time, any information that the Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary: (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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 unavoidable 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 Executive Secretary are to be sent to the following address or to such other address as may be required by the Executive Secretary:
- 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 Executive Secretary:
- 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 & Regulatory Assistance Air & 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 Executive Secretary 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 Executive Secretary 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-500).
- 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 **AH-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 cyclonic wet scrubber (AH-505).
- II.A.6 **AH-513: Salt Dryer**  
Salt plant natural gas fired dryer (D-500) with exhaust directed into a wet cyclone and cyclonic wet scrubber (AH-513).
- II.A.7 **AH-013: SOP Dryer (D-003)**  
SOP plant natural gas fired dryer (D-003) with exhaust directed into a dry cyclone circuit and cyclonic wet scrubber (AH-013). This unit was installed prior to 1969.
- 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, new 2003).
- II.A.9 **AH-081: SOP Compaction Circuit Dryers (D-002 & D-004)**  
SOP plant compaction circuit consisting of tray-type dryer (D-002) and rotary kiln dryer (D-004), both natural gas fired, with exhaust directed into a dry cyclone circuit and cyclonic wet scrubber (AH-081).
- II.A.10 **HE-028: SOP Dryer (D-001)**  
SOP wet process plant natural gas fired dryer (D-001) with exhaust directed into a dry cyclone circuit and a heat reclaimer packed tower (HE-028).
- II.A.11 **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.12 **BH-002: SOP Silo Storage Circuit**  
SOP silo storage building activities with exhaust directed into a fabric filter dust collector (BH-002).

- II.A.13      **SUB-COMP: SOP Submerged Combustion Process**  
SOP plant submerged combustion system consisting of a water process tank and four (4) natural gas fired burners. No unit-specific applicable requirements.
- II.A.14      **BLAST: Abrasive Blast Machine**  
Self contained abrasive blast machine.
- II.A.15      **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.16      **BH-003: SOP Compaction Plant Pneumatic Conveying**  
SOP pneumatic conveying system within the compaction building. Exhaust from the system is directed into a fabric filter dust collector (BH-003) then vented back into the building. Unit is listed for informational purposes only.
- II.A.17      **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.18      **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.19      **GENSET: Emergency Diesel Generator**  
Stand-by generator to be used under emergency situations.
- II.A.20      **ROADS: Roads and Unpaved Operational Areas**  
Various roads and disturbed, unpaved areas.
- II.A.21      **MP WS: Magnesium Chloride Plant Wet Scrubber**  
A hi energy venturi wet scrubber controls particulate from the cooling belt, packaging, handling, that produces MgCl<sub>2</sub> brines & hexahydrate flake. All exhaust air from the process streams shall be routed to the wet scrubber prior to venting to atmosphere. No unit-specific applicable requirements.
- II.A.22      **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.23      **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.24      **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.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 natural gas for fuel for all burners. [Origin: DAQE-AN0917021-06] [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:**

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 Executive Secretary 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-AN0917021-06] [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 20 percent opacity, unless otherwise specified in this permit. [Origin: R307-201, DAQE-AN0917021-06] [R307-201-3(2)]

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 for point sources, and in accordance 58 FR 61640 Method 203A 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 indicated, all data required by 40 CFR 60, Appendix A, Method 9 and/or 58 FR 61640 Method 203A 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 0.5 percent by weight. [Origin: DAQE-AN0917021-06] [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.2           **Conditions on SALT: Salt Plant**
- II.B.2.a           **Condition:**
- Production of dried salt shall be no greater than 800,000 tons per 12-month rolling period. [Origin: DAQE-AN0917021-06] [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 within the first 20 calendar days of each month, for the previous month, using the daily operations logs or records. The total shall then be added to the previous 11 months total for a 12 month rolling total.
- 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<sub>10</sub> 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-AN0917021-06] [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 Executive Secretary.
  - ii) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
  - iii) Methods.
    - (a) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
    - (b) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.
    - (c) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM<sub>10</sub>.
    - (d) The back half condensibles 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 Executive Secretary 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. Based on results from the testing outlined below, the permittee shall monitor scrubber liquid flow rate and differential pressure as indicators to provide reasonable assurance of compliance with the PM<sub>10</sub> 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 flow meter to monitor liquid flow rate to the scrubber and a differential pressure transmitter to monitor differential pressure across the scrubber.
  - ii) Within 90 days of the final permit issuance date, the permittee shall install a data acquisition system to record scrubber liquid flow rates and differential pressure.
  - iii) The permittee shall verify the operational status of the flow meter, differential pressure transmitter, 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 measuring scrubber liquid flow rate and differential pressure as indicators of compliance with the PM<sub>10</sub> emission limitation. The permittee shall use the test data to justify and establish the indicator range and excursion level for each indicator.
  - v) Within 180 days of the final permit issuance date, the permittee shall monitor two indicators of scrubber performance to provide reasonable assurance of compliance with the PM<sub>10</sub> emission limit. At all times the affected emission unit is operating, scrubber liquid flow rate and differential pressure shall be monitored as specified below and as approved by the executive secretary according to II.B.3.a.3.
    - (a) Measurement Approach:
      - 1. Primary Indicator: The permittee shall continuously measure the scrubber liquid flow rate using a flow meter.
      - 2. Secondary Indicator: The permittee shall continuously measure the differential pressure across the scrubber using a differential pressure transmitter.
    - (b) Indicator Range:
      - 1. Primary Indicator: An excursion is defined as one scrubber liquid flow rate in a one-hour period that is outside the range as approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.
      - 2. Secondary Indicator: An excursion is defined as one differential pressure measurement in a one-hour period that is outside the range as approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.
    - (c) Performance Criteria:
      - 1. Data Representativeness:
        - i. 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 executive secretary.
        - ii. Secondary Indicator: Differential pressure shall be measured across the inlet and outlet ducts using a differential pressure transmitter. Accuracy of the differential pressure transmitter shall be as submitted and approved by the executive secretary.
      - 2. QA/QC Practices and Criteria: The flow meter and the differential pressure transmitter 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.
      - 3. Monitoring Frequency:
        - i. Primary Indicator: The scrubber liquid flow rate shall be measured continuously.
        - ii. Secondary Indicator: Differential pressure shall be measured continuously.
      - 4. Data Collection Procedure:
        - i. Primary Indicator: One scrubber liquid flow rate per hour shall be collected and recorded for comparison to the indicator range.
        - ii. Secondary Indicator: One differential pressure measurement per hour shall be collected and recorded for comparison to the indicator range.
      - 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 indicators. Any resultant changes to the monitoring shall be addressed in accordance with 40 CFR 64.7(e).

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, differential pressure transmitter, 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 executive secretary approval of the monitoring for II.B.3.a.1.B.v 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:**

Within 150 days of the final permit issuance date, the permittee shall submit to the executive secretary for approval, the indicator range and excursion level for each indicator, the test data used to justify and establish the indicator ranges and excursion levels, the results of the performance test required in II.B.3.a.1.B.iv, and any proposed revisions to the monitoring described in II.B.3.a.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.3.a.1.A shall be submitted to the Executive Secretary 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.4

##### **Conditions on AH-502: Salt Plant Circuit**

#### II.B.4.a

##### **Condition:**

Emissions of PM<sub>10</sub> 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-AN0917021-06] [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 Executive Secretary.
- ii) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- iii) Methods.
  - (a) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
  - (b) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.
  - (c) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered  $PM_{10}$ .
  - (d) The back half condensibles 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 Executive Secretary 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. Based on results from the testing outlined below, the permittee shall monitor scrubber liquid flow rate and differential pressure as indicators 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 flow meter to monitor liquid flow rate to the scrubber and a differential pressure transmitter to monitor differential pressure across the scrubber.
- ii) Within 90 days of the final permit issuance date, the permittee shall install a data acquisition system to record scrubber liquid flow rates and differential pressure.
- iii) The permittee shall verify the operational status of the flow meter, differential pressure transmitter, 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 measuring scrubber liquid flow rate and differential pressure as indicators 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 for each indicator.
- v) Within 180 days of the final permit issuance date, 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 differential pressure shall be monitored as specified below and as approved by the executive secretary according to II.B.4.a.3.
  - (a) Measurement Approach:
    - 1. Primary Indicator: The permittee shall continuously measure the scrubber liquid flow rate using a flow meter.
    - 2. Secondary Indicator: The permittee shall continuously measure the differential pressure across the scrubber using a differential pressure transmitter.

- (b) Indicator Range:
  1. Primary Indicator: An excursion is defined as one scrubber liquid flow rate in a one-hour period that is outside the range as approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.
  2. Secondary Indicator: An excursion is defined as one differential pressure measurement in a one-hour period that is outside the range as approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.
- (c) Performance Criteria:
  1. Data Representativeness:
    - i. 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 executive secretary.
    - ii. Secondary Indicator: Differential pressure shall be measured across the inlet and outlet ducts using a differential pressure transmitter. Accuracy of the differential pressure transmitter shall be as submitted and approved by the executive secretary.
  2. QA/QC Practices and Criteria: The flow meter and the differential pressure transmitter 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.
  3. Monitoring Frequency:
    - i. Primary Indicator: The scrubber liquid flow rate shall be measured continuously.
    - ii. Secondary Indicator: Differential pressure shall be measured continuously.
  4. Data Collection Procedure:
    - i. Primary Indicator: One scrubber liquid flow rate per hour shall be collected and recorded for comparison to the indicator range.
    - ii. Secondary Indicator: One differential pressure measurement per hour shall be collected and recorded for comparison to the indicator range.
  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 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, differential pressure transmitter, 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 executive secretary approval of the monitoring for II.B.4.a.1.B.v 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:**

Within 150 days of the final permit issuance date, the permittee shall submit to the executive secretary for approval, the indicator range and excursion level for each indicator, the test data used to justify and establish the indicator ranges and excursion levels, the results of the performance test required in II.B.4.a.1.B.iv, and any proposed revisions to the monitoring described in II.B.4.a.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.4.a.1.A shall be submitted to the Executive Secretary 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.5 **Conditions on AH-505: Salt Special Products Circuit**

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

Emissions of PM<sub>10</sub> shall be no greater than 2.16 pounds per hour and 0.040 grains/dscf (68 degrees F, and 29.92 in Hg). [Origin: DAQE-AN0917021-06] [R307-401-8(1)(a)(BACT)]

##### II.B.5.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 Executive Secretary.
  - ii) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
  - iii) Methods.
    - (a) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
    - (b) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.
    - (c) For stacks in which liquid drops are present, methods to eliminate the liquid drops

should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM<sub>10</sub>.

- (d) The back half condensibles 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 Executive Secretary 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. Based on results from the testing outlined below, the permittee shall monitor scrubber liquid flow rate and differential pressure as indicators to provide reasonable assurance of compliance with the PM<sub>10</sub> 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 flow meter to monitor liquid flow rate to the scrubber and a differential pressure transmitter to monitor differential pressure across the scrubber.
  - ii) Within 90 days of the final permit issuance date, the permittee shall install a data acquisition system to record scrubber liquid flow rates and differential pressure.
  - iii) The permittee shall verify the operational status of the flow meter, differential pressure transmitter, 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 measuring scrubber liquid flow rate and differential pressure as indicators of compliance with the PM<sub>10</sub> emission limitation. The permittee shall use the test data to justify and establish the indicator range and excursion level for each indicator.
  - v) Within 180 days of the final permit issuance date, the permittee shall monitor two indicators of scrubber performance to provide reasonable assurance of compliance with the PM<sub>10</sub> emission limit. At all times the affected emission unit is operating, scrubber liquid flow rate and differential pressure shall be monitored as specified below and as approved by the executive secretary according to II.B.5.a.3.
    - (a) Measurement Approach:
      - 1. Primary Indicator: The permittee shall continuously measure the scrubber liquid flow rate using a flow meter.
      - 2. Secondary Indicator: The permittee shall continuously measure the differential pressure across the scrubber using a differential pressure transmitter.
    - (b) Indicator Range:
      - 1. Primary Indicator: An excursion is defined as one scrubber liquid flow rate in a one-hour period that is outside the range as approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.
      - 2. Secondary Indicator: An excursion is defined as one differential pressure measurement in a one-hour period that is outside the range as approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.
    - (c) Performance Criteria:
      - 1. Data Representativeness:
        - i. 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 executive secretary.

- ii. Secondary Indicator: Differential pressure shall be measured across the inlet and outlet ducts using a differential pressure transmitter. Accuracy of the differential pressure transmitter shall be as submitted and approved by the executive secretary.
  - 2. QA/QC Practices and Criteria: The flow meter and the differential pressure transmitter 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.
  - 3. Monitoring Frequency:
    - i. Primary Indicator: The scrubber liquid flow rate shall be measured continuously.
    - ii. Secondary Indicator: Differential pressure shall be measured continuously.
  - 4. Data Collection Procedure:
    - i. Primary Indicator: One scrubber liquid flow rate per hour shall be collected and recorded for comparison to the indicator range.
    - ii. Secondary Indicator: One differential pressure measurement per hour shall be collected and recorded for comparison to the indicator range.
  - 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 indicators. Any resultant changes to the monitoring shall be addressed in accordance with 40 CFR 64.7(e).

II.B.5.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, differential pressure transmitter, 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 executive secretary approval of the monitoring for II.B.5.a.1.B.v 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.a.3

**Reporting:**

Within 150 days of the final permit issuance date, the permittee shall submit to the executive secretary for approval, the indicator range and excursion level for each indicator, the test data used to justify and establish the indicator ranges and excursion levels, the results of the performance test required in II.B.5.a.1.B.iv, and any proposed revisions to the monitoring

described in II.B.5.a.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.5.a.1.A shall be submitted to the Executive Secretary 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.a.1.C.

II.B.6 **Conditions on AH-513: Salt Dryer**

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

Production of dried salt shall be no greater than 120 tons per hour. [Origin: DAQE-AN0917021-06] [R307-401-8(1)(a)(BACT)]

II.B.6.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.6.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.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<sub>10</sub> 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-AN0917021-06] [R307-401-8(1)(a)(BACT)]

II.B.6.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 Executive Secretary.
  - ii) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
  - iii) Methods.
    - (a) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall

- be provided to the test location.
- (b) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.
  - (c) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered  $PM_{10}$ .
  - (d) The back half condensibles 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 Executive Secretary 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. Based on results from the testing outlined below, the permittee shall monitor scrubber liquid flow rate and differential pressure as indicators 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 flow meter to monitor liquid flow rate to the scrubber and a differential pressure transmitter to monitor differential pressure across the scrubber.
  - ii) Within 90 days of the final permit issuance date, the permittee shall install a data acquisition system to record scrubber liquid flow rates and differential pressure.
  - iii) The permittee shall verify the operational status of the flow meter, differential pressure transmitter, 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 measuring scrubber liquid flow rate and differential pressure as indicators 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 for each indicator.
  - v) Within 180 days of the final permit issuance date, 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 differential pressure shall be monitored as specified below and as approved by the executive secretary according to II.B.6.b.3.
    - (a) Measurement Approach:
      - 1. Primary Indicator: The permittee shall continuously measure the scrubber liquid flow rate using a flow meter.
      - 2. Secondary Indicator: The permittee shall continuously measure the differential pressure across the scrubber using a differential pressure transmitter.
    - (b) Indicator Range:
      - 1. Primary Indicator: An excursion is defined as one scrubber liquid flow rate in a one-hour period that is outside the range as approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.
      - 2. Secondary Indicator: An excursion is defined as one differential pressure measurement in a one-hour period that is outside the range as approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.
    - (c) Performance Criteria:

1. Data Representativeness:
    - i. 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 executive secretary.
    - ii. Secondary Indicator: Differential pressure shall be measured across the inlet and outlet ducts using a differential pressure transmitter. Accuracy of the differential pressure transmitter shall be as submitted and approved by the executive secretary.
  2. QA/QC Practices and Criteria: The flow meter and the differential pressure transmitter 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.
  3. Monitoring Frequency:
    - i. Primary Indicator: The scrubber liquid flow rate shall be measured continuously.
    - ii. Secondary Indicator: Differential pressure shall be measured continuously.
  4. Data Collection Procedure:
    - i. Primary Indicator: One scrubber liquid flow rate per hour shall be collected and recorded for comparison to the indicator range.
    - ii. Secondary Indicator: One differential pressure measurement per hour shall be collected and recorded for comparison to the indicator range.
  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 indicators. 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 scrubber liquid flow meter, differential pressure transmitter, 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 executive secretary approval of the monitoring for II.B.6.b.1.B.v 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.6.b.3

**Reporting:**

Within 150 days of the final permit issuance date, the permittee shall submit to the executive secretary for approval, the indicator range and excursion level for each indicator, the test data used to justify and establish the indicator ranges and excursion levels, 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 Executive Secretary 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.7

**Conditions on AH-013: SOP Dryer (D-003)**

II.B.7.a

**Condition:**

Visible emissions shall be no greater than 40 percent opacity. [Origin: R307-201, DAQE-AN0917021-06] [R307-201-3(1)]

II.B.7.a.1

**Monitoring:**

A visual opacity survey of each affected emission unit shall be performed on a monthly basis 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 in accordance with 40 CFR 60, Appendix A, Method 9.

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 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.8

**Conditions on BH-005: SOP Compaction Building Circuit**

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

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0917021-06] [R307-401-8(1)(a)(BACT)]

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

A visual opacity survey of each affected emission unit shall be performed on a monthly basis 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 in accordance with 40 CFR 60, Appendix A, Method 9.

**II.B.8.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 shall also be maintained in accordance with Provision I.S.1 of this permit.

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

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

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

Emissions of PM<sub>10</sub> 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-AN0917021-06] [R307-401-8(1)(a)(BACT)]

**II.B.8.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, unless the affected emission unit was not operated during the 5 year period.
  - ii) Notification. At least 30 days prior to conducting the test, the permittee shall notify the Executive Secretary of the date, time, and place of testing. A copy of the test protocol shall be provided with the notification. The permittee and tester shall attend a pretest conference at least 30 days prior to the test if determined necessary by the Executive Secretary.
  - iii) Methods.
    - (a) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.
    - (b) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201A. 40 CFR 51, Appendix M, Method 202 shall be used to determine condensibles.
    - (c) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM<sub>10</sub>.
    - (d) The condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

- 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.
  - 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. Based on results from the testing outlined below, the permittee shall use a bag leak detection system (BLDS) and a single point pressure transmitter to provide reasonable assurance of compliance with the PM<sub>10</sub> 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 and a single point pressure transmitter on the supply air line to the baghouse.
  - ii) Within 90 days of the final permit issuance date, the permittee shall install a data acquisition system to record data from the BLDS and supply air pressure transmitter.
  - iii) The permittee shall verify the operational status of the BLDS, supply air pressure transmitter, 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 and the supply air pressure transmitter as indicators of compliance with the PM<sub>10</sub> emission limitation. The permittee shall use the test data to justify and establish the indicator range and excursion level for each indicator.
  - v) Within 180 days of the final permit issuance date, the permittee shall monitor two indicators of baghouse performance to provide reasonable assurance of compliance with the PM<sub>10</sub> emission limit. At all times the affected emission unit is operating, the BLDS and the supply air pressure transmitter shall be monitored as specified below and as approved by the executive secretary according to II.B.8.b.3.
    - (a) Measurement Approach:
      - 1. Primary Indicator: A BLDS shall generate an analog signal corresponding to the particulate emission level.
      - 2. Secondary Indicator: The permittee shall measure the pressure in the supply air line using a single point pressure transmitter.
    - (b) Indicator Range:
      - 1. Primary Indicator: An excursion is defined as a signal greater than the percent of scale determined during the stack test required in II.B.8.b.1.B.iv and approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.
      - 2. Secondary Indicator: An excursion is defined as an alarm from the single point pressure transmitter. The alarm level shall be determined during the stack test required in II.B.8.b.1.B.iv and approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.
    - (c) Performance Criteria:
      - 1. Data Representativeness:
        - i. Primary Indicator: The BLDS probe shall be installed in the final discharge duct of the baghouse.
        - ii. Secondary Indicator: The single point pressure transmitter shall be installed in the baghouse supply air line. Accuracy of the pressure transmitter shall be as submitted and approved by the executive secretary.
      - 2. QA/QC Practices and Criteria: The BLDS and the single point pressure transmitter 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 executive secretary.

3. Monitoring Frequency:
  - i. Primary Indicator: The BLDS signal shall be monitored continuously.
  - ii. Secondary Indicator: Supply air pressure shall be measured continuously.
4. Data Collection Procedure:
  - i. Primary Indicator: 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 executive secretary following the stack test required in II.B.8.b.1.B.iv.
  - ii. Secondary Indicator: All alarms from the supply air pressure transmitter shall be collected and recorded.
5. Averaging Period: None.

C. Once every five 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 indicators. Any resultant changes to the monitoring shall be addressed in accordance with 40 CFR 64.7(e).

## II.B.8.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, single point pressure transmitter, 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 executive secretary approval of the monitoring for II.B.8.b.1.B.v 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.8.b.3

### **Reporting:**

Within 150 days of the final permit issuance date, the permittee shall submit to the executive secretary for approval, the indicator range and excursion level for each indicator, the test data used to justify and establish the indicator ranges and excursion levels, the results of the performance test required in II.B.8.b.1.B.iv, and any proposed revisions to the monitoring described in II.B.8.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.8.b.1.A shall be submitted to the Executive Secretary 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.8.b.1.C.

II.B.9 **Conditions on AH-081: SOP Compaction Circuit Dryers (D-002 & D-004)**

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

Emissions of PM<sub>10</sub> shall be no greater than 43 pounds per hour. [Origin: DAQE-AN0917021-06] [R307-401-8(1)(a)(BACT)]

II.B.9.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 Executive Secretary.
  - ii) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
  - iii) Methods.
    - (a) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
    - (b) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.
    - (c) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM<sub>10</sub>.
    - (d) The back half condensibles 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 Executive Secretary 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. Based on results from the testing outlined below, the permittee shall monitor scrubber liquid flow rate and differential pressure as indicators to provide reasonable assurance of compliance with the PM<sub>10</sub> 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 flow meter to monitor liquid flow rate to the scrubber and a differential pressure transmitter to monitor differential pressure across the scrubber.
  - ii) Within 90 days of the final permit issuance date, the permittee shall install a data acquisition system to record scrubber liquid flow rates and differential pressure.

- iii) The permittee shall verify the operational status of the flow meter, differential pressure transmitter, 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 measuring scrubber liquid flow rate and differential pressure as indicators of compliance with the PM<sub>10</sub> emission limitation. The permittee shall use the test data to justify and establish the indicator range and excursion level for each indicator.
- v) Within 180 days of the final permit issuance date, the permittee shall monitor two indicators of scrubber performance to provide reasonable assurance of compliance with the PM<sub>10</sub> emission limit. At all times the affected emission unit is operating, scrubber liquid flow rate and differential pressure shall be monitored as specified below and as approved by the executive secretary according to II.B.9.a.3.
  - (a) Measurement Approach:
    - 1. Primary Indicator: The permittee shall continuously measure the scrubber liquid flow rate using a flow meter.
    - 2. Secondary Indicator: The permittee shall continuously measure the differential pressure across the scrubber using a differential pressure transmitter.
  - (b) Indicator Range:
    - 1. Primary Indicator: An excursion is defined as an average scrubber liquid flow rate over a one-hour period that is outside the range as approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.
    - 2. Secondary Indicator: An excursion is defined as an average differential pressure measurement over a one-hour period that is outside the range as approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.
  - (c) Performance Criteria:
    - 1. Data Representativeness:
      - i. 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 executive secretary.
      - ii. Secondary Indicator: Differential pressure shall be measured across the inlet and outlet ducts using a differential pressure transmitter. Accuracy of the differential pressure transmitter shall be as submitted and approved by the executive secretary.
    - 2. QA/QC Practices and Criteria: The flow meter and the differential pressure transmitter 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.
    - 3. Monitoring Frequency:
      - i. Primary Indicator: The scrubber liquid flow rate shall be measured continuously.
      - ii. Secondary Indicator: Differential pressure shall be measured continuously.
    - 4. Data Collection Procedure:
      - i. Primary Indicator: Four or more scrubber liquid flow rates equally spaced over each hour shall be collected and recorded. The four collected values shall be averaged each hour for comparison to the indicator range.
      - ii. Secondary Indicator: Four or more differential pressure measurements equally spaced over each hour shall be collected and recorded. The four collected values shall be averaged each hour for comparison to the indicator range.
    - 5. Averaging Period: One hour.

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 indicators. Any resultant changes to the monitoring shall be addressed in accordance with 40 CFR 64.7(e).

#### 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.

The permittee shall maintain a file of activities for installation of the scrubber liquid flow meter, differential pressure transmitter, 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 executive secretary approval of the monitoring for II.B.9.a.1.B.v 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.9.a.3

##### **Reporting:**

Within 150 days of the final permit issuance date, the permittee shall submit to the executive secretary for approval, the indicator range and excursion level for each indicator, the test data used to justify and establish the indicator ranges and excursion levels, the results of the performance test required in II.B.9.a.1.B.iv, and any proposed revisions to the monitoring described in II.B.9.a.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.9.a.1.A shall be submitted to the Executive Secretary 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.9.a.1.C.

#### II.B.10

##### **Conditions on HE-028: SOP Dryer (D-001)**

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

Emissions of PM<sub>10</sub> shall be no greater than 40 pounds per hour. [Origin: DAQE-AN0917021-06] [R307-401-8(1)(a)(BACT)]

**II.B.10.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 Executive Secretary.
  - ii) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
  - iii) Methods.
    - (a) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
    - (b) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.
    - (c) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM<sub>10</sub>.
    - (d) The back half condensibles 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 Executive Secretary 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. Based on results from the testing outlined below, the permittee shall monitor scrubber liquid flow rate and differential pressure as indicators to provide reasonable assurance of compliance with the PM<sub>10</sub> 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 flow meter to monitor liquid flow rate to the scrubber and a differential pressure transmitter to monitor differential pressure across the scrubber.
  - ii) Within 90 days of the final permit issuance date, the permittee shall install a data acquisition system to record scrubber liquid flow rates and differential pressure.
  - iii) The permittee shall verify the operational status of the flow meter, differential pressure transmitter, 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 measuring scrubber liquid flow rate and differential pressure as indicators of compliance with the PM<sub>10</sub> emission limitation. The permittee shall use the test data to justify and establish the indicator range and excursion level for each indicator.
  - v) Within 180 days of the final permit issuance date, the permittee shall monitor two indicators of scrubber performance to provide reasonable assurance of compliance with

the PM<sub>10</sub> emission limit. At all times the affected emission unit is operating, scrubber liquid flow rate and differential pressure shall be monitored as specified below and as approved by the executive secretary according to II.B.10.a.3.

- (a) Measurement Approach:
    1. Primary Indicator: The permittee shall continuously measure the scrubber liquid flow rate using a flow meter.
    2. Secondary Indicator: The permittee shall continuously measure the differential pressure across the scrubber using a differential pressure transmitter.
  - (b) Indicator Range:
    1. Primary Indicator: An excursion is defined as an average scrubber liquid flow rate over a one-hour period that is outside the range as approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.
    2. Secondary Indicator: An excursion is defined as an average differential pressure measurement over a one-hour period that is outside the range as approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.
  - (c) Performance Criteria:
    1. Data Representativeness:
      - i. 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 executive secretary.
      - ii. Secondary Indicator: Differential pressure shall be measured across the inlet and outlet ducts using a differential pressure transmitter. Accuracy of the differential pressure transmitter shall be as submitted and approved by the executive secretary.
    2. QA/QC Practices and Criteria: The flow meter and the differential pressure transmitter 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.
    3. Monitoring Frequency:
      - i. Primary Indicator: The scrubber liquid flow rate shall be measured continuously.
      - ii. Secondary Indicator: Differential pressure shall be measured continuously.
    4. Data Collection Procedure:
      - i. Primary Indicator: Four or more scrubber liquid flow rates equally spaced over each hour shall be collected and recorded. The four collected values shall be averaged each hour for comparison to the indicator range.
      - ii. Secondary Indicator: Four or more differential pressure measurements equally spaced over each hour shall be collected and recorded. The four collected values shall be averaged each hour for comparison to the indicator range.
    5. Averaging Period: One hour.
- 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 indicators. Any resultant changes to the monitoring shall be addressed in accordance with 40 CFR 64.7(e).

II.B.10.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, differential pressure transmitter, 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 executive secretary approval of the monitoring for II.B.10.a.1.B.v 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.a.3

**Reporting:**

Within 150 days of the final permit issuance date, the permittee shall submit to the executive secretary for approval, the indicator range and excursion level for each indicator, the test data used to justify and establish the indicator ranges and excursion levels, the results of the performance test required in II.B.10.a.1.B.iv, and any proposed revisions to the monitoring described in II.B.10.a.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.10.a.1.A shall be submitted to the Executive Secretary 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.a.1.C.

II.B.11

**Conditions on BH-001: SOP Bulk Load-Out Circuit**

II.B.11.a

**Condition:**

Emissions of PM<sub>10</sub> 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-AN0917021-06] [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 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 Executive

- Secretary.
  - ii) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
  - iii) Methods.
    - (a) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) approved access shall be provided to the test location.
    - (b) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.
    - (c) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered  $PM_{10}$ .
    - (d) The back half condensibles 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 Executive Secretary 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. Based on results from the testing outlined below, the permittee shall use a bag leak detection system (BLDS) and a single point pressure transmitter 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 and a single point pressure transmitter on the supply air line to the baghouse.
  - ii) Within 90 days of the final permit issuance date, the permittee shall install a data acquisition system to record data from the BLDS and supply air pressure transmitter.
  - iii) The permittee shall verify the operational status of the BLDS, supply air pressure transmitter, 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 and the supply air pressure transmitter as indicators 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 for each indicator.
  - v) Within 180 days of the final permit issuance date, the permittee shall monitor two indicators of baghouse performance to provide reasonable assurance of compliance with the  $PM_{10}$  emission limit. At all times the affected emission unit is operating, the BLDS and the supply air pressure transmitter shall be monitored as specified below and as approved by the executive secretary according to II.B.11.a.3.
    - (a) Measurement Approach:
      - 1. Primary Indicator: A BLDS shall generate an analog signal corresponding to the particulate emission level.
      - 2. Secondary Indicator: The permittee shall measure the pressure in the supply air line using a single point pressure transmitter.
    - (b) Indicator Range:
      - 1. Primary Indicator: An excursion is defined as a signal greater than the percent

of scale determined during the stack test required in II.B.11.a.1.B.iv and approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.

2. Secondary Indicator: An excursion is defined as an alarm from the single point pressure transmitter. The alarm level shall be determined during the stack test required in II.B.11.a.1.B.iv and approved by the executive secretary.

Excursions trigger an inspection, corrective action, and a reporting requirement.

(c) Performance Criteria:

1. Data Representativeness:
  - i. Primary Indicator: The BLDS probe shall be installed in the final discharge duct of the baghouse.
  - ii. Secondary Indicator: The single point pressure transmitter shall be installed in the baghouse supply air line. Accuracy of the pressure transmitter shall be as submitted and approved by the executive secretary.
2. QA/QC Practices and Criteria: The BLDS and the single point pressure transmitter 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 executive secretary.
3. Monitoring Frequency:
  - i. Primary Indicator: The BLDS signal shall be monitored continuously.
  - ii. Secondary Indicator: Supply air pressure shall be measured continuously.
4. Data Collection Procedure:
  - i. Primary Indicator: 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 executive secretary following the stack test required in II.B.11.a.1.B.iv.
  - ii. Secondary Indicator: All alarms from the supply air pressure transmitter shall be collected and recorded.
5. Averaging Period: None.

- C. Once every five 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 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 BLDS, single point pressure transmitter, 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 executive secretary approval of the monitoring for II.B.11.a.1.B.v 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:**

Within 150 days of the final permit issuance date, the permittee shall submit to the executive secretary for approval, the indicator range and excursion level for each indicator, the test data used to justify and establish the indicator ranges and excursion levels, the results of the performance test required in II.B.11.a.1.B.iv, and any proposed revisions to the monitoring described in II.B.11.a.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.11.a.1.A shall be submitted to the Executive Secretary 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:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0917021-06] [R307-401-8(1)(a)(BACT)]

II.B.11.b.1

**Monitoring:**

A visual opacity survey of each affected emission unit shall be performed on a monthly basis 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 in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.11.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 shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.11.b.3

**Reporting:**

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

**II.B.11.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 period. [Origin: DAQE-AN0917021-06] [R307-401-8(1)(a)(BACT)]

**II.B.11.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 within the first 20 calendar days of each month, for the previous month, using operations logs or records. The total shall then be added to the previous 11 months total for a 12 month rolling total.

**II.B.11.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.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-002: SOP Silo Storage Circuit**

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

Emissions of PM<sub>10</sub> 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-AN0917021-06] [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 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 Executive Secretary.
  - ii) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
  - iii) Methods.
    - (a) Sample Location - the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Occupational Safety and Health Administration (OSHA) approved access shall be provided to the test location.
    - (b) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.
    - (c) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM<sub>10</sub>.
    - (d) The back half condensibles 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 Executive Secretary 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. Based on results from the testing outlined below, the permittee shall use a bag leak detection system (BLDS) and a single point pressure transmitter to provide reasonable assurance of compliance with the PM<sub>10</sub> 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 and a single point pressure transmitter on the supply air line to the baghouse.
  - ii) Within 90 days of the final permit issuance date, the permittee shall install a data acquisition system to record data from the BLDS and supply air pressure transmitter.
  - iii) The permittee shall verify the operational status of the BLDS, supply air pressure transmitter, 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 and the supply air pressure transmitter as indicators of compliance with the PM<sub>10</sub> emission limitation. The permittee shall use the test data to justify and establish the indicator range and excursion level for each indicator.
  - v) Within 180 days of the final permit issuance date, the permittee shall monitor two indicators of baghouse performance to provide reasonable assurance of compliance with the PM<sub>10</sub> emission limit. At all times the affected emission unit is operating, the BLDS and the supply air pressure transmitter shall be monitored as specified below and as approved by the executive secretary according to II.B.12.a.3.
    - (a) Measurement Approach:
      - 1. Primary Indicator: A BLDS shall generate an analog signal corresponding to the particulate emission level.
      - 2. Secondary Indicator: The permittee shall measure the pressure in the supply air line using a single point pressure transmitter.
    - (b) Indicator Range:
      - 1. Primary Indicator: An excursion is defined as a signal greater than the percent of scale determined during the stack test required in II.B.12.a.1.B.iv and approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.
      - 2. Secondary Indicator: An excursion is defined as an alarm from the single point pressure transmitter. The alarm level shall be determined during the stack test required in II.B.12.a.1.B.iv and approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.
    - (c) Performance Criteria:
      - 1. Data Representativeness:
        - i. Primary Indicator: The BLDS probe shall be installed in the final discharge duct of the baghouse.
        - ii. Secondary Indicator: The single point pressure transmitter shall be installed in the baghouse supply air line. Accuracy of the pressure transmitter shall be as submitted and approved by the executive secretary.
      - 2. QA/QC Practices and Criteria: The BLDS and the single point pressure transmitter 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 executive secretary.
      - 3. Monitoring Frequency:

- i. Primary Indicator: The BLDS signal shall be monitored continuously.
  - ii. Secondary Indicator: Supply air pressure shall be measured continuously.
4. Data Collection Procedure:
- i. Primary Indicator: 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 executive secretary following the stack test required in II.B.12.a.1.B.iv.
  - ii. Secondary Indicator: All alarms from the supply air pressure transmitter shall be collected and recorded.
5. Averaging Period: None.

C. Once every five 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 indicators. Any resultant changes to the monitoring shall be addressed in accordance with 40 CFR 64.7(e).

#### 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, single point pressure transmitter, 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 executive secretary approval of the monitoring for II.B.12.a.1.B.v 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:**

Within 150 days of the final permit issuance date, the permittee shall submit to the executive secretary for approval, the indicator range and excursion level for each indicator, the test data used to justify and establish the indicator ranges and excursion levels, the results of the performance test required in II.B.12.a.1.B.iv, and any proposed revisions to the monitoring described in II.B.12.a.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.12.a.1.A shall be submitted to the Executive Secretary 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-AN0917021-06] [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 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 in accordance with 40 CFR 60, Appendix A, Method 9.

**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 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.13 Conditions on BLAST: Abrasive Blast Machine**

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

Visible emissions shall not exceed 40% opacity, except for an aggregate period of three minutes in any one hour. [Origin: R307-206, DAQE-AN0917021-06] [R307-206-4]

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

- (a) Visible emissions shall be measured at least monthly using EPA Method 9, 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 R307-206-2 through 4.
- (d) Visible emissions from confined blasting shall be measured at the densest point after the air contaminant leaves the enclosure.

II.B.13.a.2

**Recordkeeping:**

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

II.B.13.a.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-501: Salt Cooler**

II.B.14.a

**Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0917021-06] [R307-401-8(1)(a)(BACT)]

II.B.14.a.1

**Monitoring:**

A visual opacity survey of each affected emission unit shall be performed on a monthly basis 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 in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.14.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 shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.14.a.3

**Reporting:**

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

II.B.14.b

**Condition:**

Emissions of PM<sub>10</sub> 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-AN0917021-06] [R307-401-8(1)(a)(BACT)]

II.B.14.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, unless the affected emission unit was not operated during the 5 year period.
- ii) Notification. At least 30 days prior to conducting the test, the permittee shall notify the Executive Secretary of the date, time, and place of testing. A copy of the test protocol shall be provided with the notification. The permittee and tester shall attend a pretest conference at least 30 days prior to the test if determined necessary by the Executive Secretary.
- iii) Methods.
  - (a) Sample Location - the emission point shall conform to the requirements of 40 CFR

- 60, Appendix A, Method 1.
- (b) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201A. 40 CFR 51, Appendix M, Method 202 shall be used to determine condensibles.
  - (c) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered  $PM_{10}$ .
  - (d) The condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.
- 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.
  - 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. Based on results from the testing outlined below, the permittee shall use a bag leak detection system (BLDS) and a single point pressure transmitter 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 and a single point pressure transmitter on the supply air line to the baghouse.
  - ii) Within 90 days of the final permit issuance date, the permittee shall install a data acquisition system to record data from the BLDS and supply air pressure transmitter.
  - iii) The permittee shall verify the operational status of the BLDS, supply air pressure transmitter, 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 and the supply air pressure transmitter as indicators 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 for each indicator.
  - v) Within 180 days of the final permit issuance date, the permittee shall monitor two indicators of baghouse performance to provide reasonable assurance of compliance with the  $PM_{10}$  emission limit. At all times the affected emission unit is operating, the BLDS and the supply air pressure transmitter shall be monitored as specified below and as approved by the executive secretary according to II.B.14.b.3.
    - (a) Measurement Approach:
      - 1. Primary Indicator: A BLDS shall generate an analog signal corresponding to the particulate emission level.
      - 2. Secondary Indicator: The permittee shall measure the pressure in the supply air line using a single point pressure transmitter.
    - (b) Indicator Range:
      - 1. Primary Indicator: An excursion is defined as a signal greater than the percent of scale determined during the stack test required in II.B.14.b.1.B.iv and approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.
      - 2. Secondary Indicator: An excursion is defined as an alarm from the single point pressure transmitter. The alarm level shall be determined during the stack test required in II.B.14.b.1.B.iv and approved by the executive secretary. Excursions trigger an inspection, corrective action, and a reporting requirement.
    - (c) Performance Criteria:

1. Data Representativeness:
  - i. Primary Indicator: The BLDS probe shall be installed in the final discharge duct of the baghouse.
  - ii. Secondary Indicator: The single point pressure transmitter shall be installed in the baghouse supply air line. Accuracy of the pressure transmitter shall be as submitted and approved by the executive secretary.
2. QA/QC Practices and Criteria: The BLDS and the single point pressure transmitter 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 executive secretary.
3. Monitoring Frequency:
  - i. Primary Indicator: The BLDS signal shall be monitored continuously.
  - ii. Secondary Indicator: Supply air pressure shall be measured continuously.
4. Data Collection Procedure:
  - i. Primary Indicator: 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 executive secretary following the stack test required in II.B.14.b.1.B.iv.
  - ii. Secondary Indicator: All alarms from the supply air pressure transmitter shall be collected and recorded.
5. Averaging Period: None.

- C. Once every five 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 indicators. Any resultant changes to the monitoring shall be addressed in accordance with 40 CFR 64.7(e).

#### II.B.14.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, single point pressure transmitter, 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 executive secretary approval of the monitoring for II.B.14.b.1.B.v 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.b.3

##### **Reporting:**

Within 150 days of the final permit issuance date, the permittee shall submit to the executive secretary for approval, the indicator range and excursion level for each indicator, the test data used to justify and establish the indicator ranges and excursion levels, the results of the performance test required in II.B.14.b.1.B.iv, and any proposed revisions to the monitoring described in II.B.14.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.14.b.1.A shall be submitted to the Executive Secretary 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.b.1.C.

II.B.15 **Conditions on GENSET: Emergency Diesel Generator**

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

Hours of operation for maintenance firing purposes shall be no greater than 30 hours per rolling 12-month period. [Origin: DAQE-AN0917021-06] [R307-401-8(1)(a)(BACT)]

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

By the 20th day of each month, the permittee shall calculate the total hours of operation in the previous 12 months for maintenance firing purposes for each affected emission unit. Hours of operation for each affected emission unit shall be determined by an hour meter and/or a log.

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

Records of hours of operation for maintenance firing purposes shall be kept on a monthly basis. Results of monitoring shall be maintained as described in 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.15.b **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0917021-06] [R307-401-8(1)(a)(BACT)]

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

A visual opacity survey of each affected emission unit shall be performed on a monthly basis 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 in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.15.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 shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.15.b.3      **Reporting:**

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

II.B.16      **Conditions on ROADS: Roads and Unpaved Operational Areas**

II.B.16.a      **Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Origin: DAQE-AN0917021-06] [R307-401-8(1)(a)(BACT)]

II.B.16.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.16.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.16.a.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 25, 2009]

- 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 25, 2009]

## **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:

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Incorporates	DAQE-AN0917021-06 dated March 23, 2006
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1. Comment on an item originating in 40 CFR 64 regarding Permitted Source Compliance Assurance Monitoring (CAM) applicability: CAM applies to ten units and has been included in the renewal 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.a - AH-505: Salt Special Products Circuit
- II.B.6.b - AH-513: Salt Dryer
- II.B.8.b - BH-005: SOP Compaction Building Circuit
- II.B.9.a - AH-081: SOP Compaction Circuit Dryers (D-002 & D-004)
- II.B.10.a - HE-028: SOP Dryer (D-001)
- II.B.11.a - BH-001: SOP Bulk Load-Out Circuit
- II.B.12.a - BH-002: SOP Silo Storage Circuit
- II.B.14.b - BH-501: Salt Cooler

The permittee will install new equipment to monitor CAM indicators. Therefore the indicators described in this permit are based on the permittee's judgment, manufacturer's recommendations, EPA's CAM Technical Guidance Document, and EPA's Fabric Filter Bag Leak Detection Guidance. CAM Illustration No. 4b and Tables A.10-1, A.12-1, A.13-1 from the CAM Technical Guidance Document were used as a reference for the indicators that were chosen for the scrubbers and baghouses listed above.

Testing is required on each unit to verify the appropriateness of the indicators and to establish their respective ranges. It is anticipated that the chosen indicators will satisfy the requirements of 40 CFR 64 once the ranges have been determined based on the results of the required performance testing.

A testing and result submittal schedule has been included in each of the above conditions to ensure that, within 180 days of permit issuance, the permittee will be monitoring using appropriate indicators and ranges that have been confirmed by performance testing and approved by the executive secretary to provide reasonable assurance of compliance with the limits subject to CAM. (40 CFR 64.6(c)(2), 64.6(d), 64.4(e), 64.7(e)) [9/30/08] [Last updated May 6, 2009]

2. Comment on an item originating in DAQE-AN0917021-06 regarding BH-001: SOP Bulk Load-Out Circuit
  - Baghouse test frequency for PM<sub>10</sub>: A test frequency of five years has been specified for this baghouse due to a low potential for noncompliance with the PM<sub>10</sub> 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. [6/08/2006] [Last updated March 25, 2009]
3. Comment on an item originating in DAQE-AN0917021-06 regarding BH-002: SOP Silo Storage Circuit
  - Baghouse test frequency for PM<sub>10</sub>: A test frequency of five years has been specified for

this baghouse due to a low potential for noncompliance with the PM<sub>10</sub> 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. [6/08/2006] [Last updated March 25, 2009]

4. Comment on an item originating in DAQE-AN0917021-06 regarding BH-005: SOP Compaction Building Circuit

Baghouse test frequency for PM<sub>10</sub>: A test frequency of five years has been specified for this baghouse due to a low potential for noncompliance with the PM<sub>10</sub> 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. [6/08/2006] [Last updated March 25, 2009]

5. Comment on an item originating in DAQE-AN0917021-06 regarding BH-501: Salt Cooler  
Baghouse test frequency for PM<sub>10</sub>: A test frequency of five years has been specified for this baghouse due to a low potential for noncompliance with the PM<sub>10</sub> 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. [6/08/2006] [Last updated March 25, 2009]

6. Comment on an item originating in 40 CFR 63 Subpart ZZZZ, 40 CFR 60 Subpart IIII regarding GENSET: Emergency Diesel Generator

63 Subpart ZZZZ and 60 Subpart IIII Applicability: 40 CFR 63 Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) has been reviewed. Subpart ZZZZ defines 'existing' for area HAP sources as stationary RICE that '...commenced construction or reconstruction...before June 12, 2006.' The emergency diesel generator was installed in 2000 and is therefore an existing RICE. The emergency diesel generator also meets both the definition of emergency stationary RICE and the definition of limited use stationary RICE. Per 40 CFR 63.6590(b)(3), existing emergency stationary RICE and existing limited use stationary RICE do not have to meet the requirements of 40 CFR 63 Subparts A and ZZZZ and no initial notification is necessary.

40 CFR 60 Subpart IIII Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE) has been reviewed. Although 40 CFR 60.4205(a) contains emission standards for pre-2007 emergency CI ICE, Subpart IIII limits applicability to engines ordered after July 11, 2005 and manufactured after April 1, 2006. (40 CFR 60.4200(a)(2)(i)) Since the emergency diesel generator was installed in 2000, Subpart IIII is not currently applicable. [9/04/2008] [Last updated March 26, 2009]

7. Comment on an item originating in DAQE-AN0917021-06 regarding MP CT: Magnesium Chloride Plant Cooling Tower

Removal of installation notice requirement: The permittee submitted notice to DAQ that the Magnesium Chloride Plant Cooling Tower has been installed in a letter received 10/17/06. The installation notice requirement for this unit has now been fulfilled, and the requirement has been removed from the permit. [6/02/2008] [Last updated March 25, 2009]

8. Comment on an item originating in DAQE-AN0917021-06 regarding MP WS: Magnesium Chloride Plant Wet Scrubber

Removal of installation notice requirement: The permittee submitted notice to DAQ that the Magnesium Chloride Plant Wet Scrubber has been installed in a letter received 10/17/06. The installation notice requirement for this unit has now been fulfilled, and the

requirement has been removed from the permit. [6/02/2008] [Last updated March 25, 2009]

9. Comment on an item originating in DAQE-AN0917021-06 regarding ROADS: Roads and Unpaved Operational Areas  
Requirement to demonstrate compliance with opacity using a modified Method 9: The referenced approval order specifies 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.16. [6/08/2006] [Last updated March 25, 2009]
  
10. 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 25, 2009]