



State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF AIR QUALITY
Rusty Ruby
Acting Director

10311

Title V Operating Permit

PERMIT NUMBER: 2700001003
DATE OF PERMIT: April 12, 2010
Date of Last Revision: April 12, 2011

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

Name of Permittee:

Materion Natural Resources Inc.
PO Box 815
Delta UT 846240

Permitted Location:

Materion Natural Resources Inc.: Delta Mill
PO Box 815
Delta UT 84624

UTM coordinates: 376,000 m Easting, 4,370,000 m Northing
SIC code: 1099 (Miscellaneous Metals Ores, NEC)

UTAH AIR QUALITY BOARD

By:

Prepared By:

Rusty Ruby, Acting Executive Secretary

Jennifer He

ENFORCEABLE DATES AND TIMELINES

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

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

Renewal application due: October 12, 2014

Permit expiration date: April 12, 2015

Definition of “prompt”: written notification within 10 days.

ABSTRACT

Materion Natural Resources Inc. produces beryllium carbonate and beryllium hydroxide concentrate at its mill located about 10 miles north of Delta, Millard County, Utah. Millard County is an attainment area of the National Ambient Air Quality Standards for all pollutants.

Materion Natural Resources began construction and operations at the mill in 1968 and 1969. Raw materials used in this process include bertrandite ore mined from the Materion Natural Resources mine approximately 47 miles west of the mill and beryl ore imported from various locations throughout the world. The original installation is therefore grandfathered from the Approval Order requirements of R307-401. Since the original installation, Materion Natural Resources has completed plant expansions and installation of additional processes which required Approval Orders to be issued by the Division of Air Quality. The Materion Natural Resource is a major source for VOC and is subject to 40 CFR Part 61, Subpart C (National Emission Standards for Beryllium) and 40 CFR 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines).

OPERATING PERMIT HISTORY

| Permit/Activity | Date Issued | Recorded Changes |
|---|-------------|--|
| Title V administrative amendment - enhanced AO (Project #OPP0103110012) | 4/12/2011 | Changes: to incorporate changes approved under AO DAQE-AN0103110018-11 which includes the changing of milling solvent and adding 3 dust control units |
| Title V renewal application (Project #OPP0103110008) | 4/12/2010 | Changes: Some minor name changes in some emission units. |
| Title V administrative amendment - enhanced AO (Project #OPP0103110010) | 09/04/2009 | Changes: Brush Resources Incorporated has received an approval order change to add the Elmore Recovery Concentrate process at the Delta Mill. It will be used when the Pilot Plant process is not operating. The Pilot Plant is a small scale solvent extraction process that extracts beryllium using an organic solution. A new process, the Elmore Recovery Concentrate process, will use non-organic solution to process drums of wet sludge. Sulfuric acid is used to leach beryllium out of the sludge. The Elmore Recovery Concentrate process operates as an entirely wet process and will use some of the same equipment that was used for the Pilot Plant process. The Elmore Recovery Concentrate process and the Pilot Plant share use of a scrubber with the Aluminum Iron Sludge process. DAQE-AN0103110015-08 |
| Title V administrative amendment by DAQ (Project #OPP0103110005) | 11/13/2003 | Changes: to incorporate conditions allowing natural gas combustion at S-10 and S-11 per DAQE-AN0311012-03. |
| Title V renewal application (Project #OPP0103110004) | 1/24/2003 | Changes: Renewal with minor changes. Removed scrubber STC-1 as non-existent, and modified opacity monitoring from semi-annual Method 9 to monthly survey with Method 9/203A follow-up if indicated. See reviewer comments for details on renewal actions. |
| Title V administrative amendment by source (Project #OPP0103110003) | 6/15/2000 | Changes: A Notice of Intent by Brush Wellman, Inc. was submitted on January 7, 2000 proposing the installation of a screen, a conveyor system, and one 40 KW generator system to process ore from existing stockpiles, causing less than five (5) tons per year additional emissions. Additionally, Brush Wellman, Inc. requested to change the fuel requirements for their 12.66 MMBtu/hr boiler from #5 fuel oil to #6 fuel oil causing no change in emissions. Also, the PM ₁₀ , SO ₂ , and Nox emission limits and testing requirements listed in Condition 6 of Approval Order DAQE-1191-95 dated December 22, 1995 for the backup boiler and 100 KW backup generator were removed in the new Approval Order DAQE-330-00 to make the AO consistent with the Title V permit. |

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| Title V reopening for cause by DAQ (Project #OPP0103110002) | 2/19/1998 | Changes: to reopen the permit to include the Title VI applicable requirements initially omitted. |
| Title V initial application (Project #OPP0103110001) | 2/19/1997 | |

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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 **S-1: OJS - 1**
 Bertrandite Ore Wet Grinder with Wet Scrubber
- II.A.3 **S-2: LJS - 1**
 Old Leach System with Wet Scrubber
- II.A.4 **S-3: LJS - 2**
 New Leach System with Wet Scrubber
- II.A.5 **S5: OPS-1**
 Beryllium Product Drumming and Wet Scrubber
- II.A.6 **S-6A: S - 4, AJS - 1**
 Beryllium Ammonium Recovery, Wet Jet Scrubber
- II.A.7 **S-6B: SJS - 1**
 Beryllium Scavenger Recovery, Wet Jet Scrubber
- II.A.8 **S-7A: BDC - 1**
 Beryl Ore Jaw Crusher with Baghouse
- II.A.9 **S-7B: FDC - 1**
 Beryl Melting (Electric Furnace) with Baghouse
- II.A.10 **S-8A: BDC - 2**
 Beryl Heat Treater and Grinding with Baghouse
- II.A.11 **S-8B: OBV - 1**
 Beryl Grinding with Ground Ore Cyclone, Bleed Air Dust Collector
- II.A.12 **S-9A: Demister**
 Beryl Sulfate Mill Demister
- II.A.13 **S-9B: SS**
 Beryl Sulfate Mill Secondary Scrubber
- II.A.14 **S-9C: PS**
 Beryl Sulfate Mill Primary Scrubber
- II.A.15 **S-9D: VSST-1**
 Beryl Sulfate Mill Venturi Scrubber
- II.A.16 **S-10: Backup (small) Boiler**
 12.66 MMBTU/hr approved to operate only on #6, or lighter, fuel oil; or on natural gas

- II.A.17 **S-11: Main (Larger) Boiler**
81.2 MMBTU/hr approved to operate only on #6, or lighter, fuel oil; or on natural gas
- II.A.18 **T-1: Fuel Oil Tank**
Above ground storage tank for fuel oil. No unit-specific applicable requirements.
- II.A.19 **T-2: Fuel Oil Tank**
Above ground storage tank for fuel oil. No unit-specific applicable requirements.
- II.A.20 **T-3: Fuel Oil Tank**
Above ground storage tank for fuel oil. No unit-specific applicable requirements.
- II.A.21 **T-4: Fuel Oil Tank**
Above ground storage tank for fuel oil. No unit-specific applicable requirements.
- II.A.22 **T-5: Sodium Hydroxide Tank**
Above ground storage tank for sodium hydroxide. No unit-specific applicable requirements.
- II.A.23 **T-6: Solvent Tank**
Above ground storage tank for solvent.
- II.A.24 **F-1: Paved Haul Road, Bertrandite Ore**
Fugitive Emissions of Bertrandite Ore from Paved Haul Road. No unit-specific applicable requirements.
- II.A.25 **F-2: Bertrandite Ore Storage Piles**
Fugitive Emissions of Bertrandite Ore from the Storage Piles
- II.A.26 **F-3: Beryl Ore Storage Pile**
Fugitive Emissions of Beryl Ore from the Storage Pile
- II.A.27 **F-4: Paved Haul Road, Beryl Ore**
Fugitive Emissions of Beryl Ore from the Paved Haul Road. No unit-specific applicable requirements.
- II.A.28 **F-5: Portable Impact Crusher Feed**
Portable Impact Crusher with Fabric Filter rated at 250 tons per hour
- II.A.29 **F-5A: Impact Crusher Hopper, Final Prod Discharge**
Emissions from the Feed Hopper and Final Product Discharge
- II.A.30 **F-7: Tailings Pond**
A structure used to contain waste material
- II.A.31 **F-8: Solvent Extraction Process**
Fugitive VOC Emissions from the Solvent Extraction Process. No unit-specific applicable requirements.
- II.A.32 **Misc-1: Flakelining**
Fugitive Emissions from the Flakelining process. No unit-specific applicable requirements.
- II.A.33 **Misc-2: Parts Washers**
Approximately 5- 10 Parts Washers throughout the source. No unit-specific applicable requirements.

- II.A.34 **Misc-3: Ammonia Emissions**
Fugitive Ammonia Emissions. No unit-specific applicable requirements.
- II.A.35 **Misc-4: ERC/Pilot Plant Proces (Misc-4, BVS-2 &BP)**
Elmore Recovery Concentrate (ERC) Plant will be used when the Pilot Plant is not operating. The Pilot Plant is a small scale solvent extraction process that extracts beryllium using an organic solution. The ERC and the Pilot Plant share use of two scrubbers (BVS-2 & BPS-1) with the Aluminum Iron Sludge (AIS) process.
- II.A.36 **Misc-5: Aboveground Fuel Storage Tanks**
Approximately 5-10 propane, gas, and diesel aboveground storage tanks. No unit-specific applicable requirements.
- II.A.37 **Misc-6: Sandblasting**
Sandblasting intermittent throughout the source controlled with a cyclone.
- II.A.38 **Misc-7A: Fire Pump (Diesel)**
240 BHP Diesel Engine powered Fire Pump
- II.A.39 **Misc-7B: Backup Generator (325 KW) (Beryl South)**
Diesel Backup Generator at the east side of Beryl Plant
- II.A.40 **Misc-7C: Backup Generator (100 KW) (Beryl West)**
Diesel Backup Generator at the south side of the Beryl Plant
- II.A.41 **Misc-7D: Backup Generator (250 KW) (Utilities)**
Diesel Backup Generator located at the Utilities Building
- II.A.42 **40 CFR 63 Subpart ZZZZ Emergency CI Engines**
Includes Misc-7A, 7B, 7C, and 7D, classified as existing emergency CI RICE.
- II.A.43 **Misc-7E: Screen Plant Motor (40 KW)**
Diesel motor located at the screen plant
- II.A.44 **Misc-8: Laboratory Baghouse**
Baghouse located at the Laboratory
- II.A.45 **Misc-9: Screen Conveyor Transfer Points**
Conveyor system and drop points associated with the screening system
- II.A.46 **Screen-1: Screening Plant**
300 ton/hr rated capacity screen (10 ton/hr operating capacity) with fugitive emissions controlled by water sprays
- II.A.47 **Storage Silos**
Two lime bins, one beryl ore bin, and one lime storage bin in AIS recovery area. Each silo is equipped with a baghouse.
- II.A.48 **Sand Blasting Baghouse**
Sand blasting with a baghouse
- II.A.49 **Ore Wet Grind with Baghouse**
Ore wet grind system with a baghouse

II.A.50 **Trailer-Mounted Vacuum**
 Vacuum unit powered by a 127 kW diesel-fired engine, portable unit and listed for information purpose.

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.**

II.B.1.a **Condition:**

Ambient air concentration of Beryllium Compounds shall be no greater than 0.01 ug/cubic-meter/month based on a 30 day average. [Originated in 40 CFR 61 (Subpart C)] Authority: [40 CFR 61 Subpart C]

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

The ambient air emissions shall be monitored in accordance with the most recently approved "Ambient Beryllium NESHAP Compliance Monitoring Plan". The plan must comply with 40 CFR 61.32(b)(1)(iii), including provisions for daily monitoring, description and location of monitoring equipment, and quality assurance and quality control procedures to ensure that the equipment operates as intended and produces valid ambient data. (Origin: 40 CFR 61 Subpart C).

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

Records shall be recorded as described in the most recently approved Ambient Beryllium NESHAP Compliance Monitoring Plan.

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

Monitoring results shall be reported in accordance with the most recently approved "Ambient Beryllium NESHAP Compliance Monitoring Plan", which in general shall specify that a report of the monitoring results shall be submitted to the executive secretary every 30 days. (Origin: 40 CFR 61 Subpart C).

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

A Risk Management Plan (RMP) developed in accordance with 40 CFR Part 68 shall be submitted to the United States Environmental Protection Agency not later than the applicable date in 40 CFR 68. (Origin: 40 CFR 68) Authority: [40 CFR 68]

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

Records required for this permit condition will serve as monitoring.

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

A copy of the Risk Management Plan shall be available to the Executive Secretary upon request along with a copy of the transmittal letter to EPA.

II.B.1.b.3

Reporting:

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

II.B.1.c

Condition:

Sulfur content of the diesel fuels combusted shall be no greater than 0.05 percent by weight. [Origin: DAQE-AN0103110018-11] Authority: [R307-203-1]

II.B.1.c.1

Monitoring:

Compliance with this limitation for fuel oil diesel fuel shall be demonstrated by records of fuel type purchased. Sulfur content shall be determined by ASTM D-4294-89, or approved equivalent. Certification of fuel used shall be either by the Permittee's own testing or test reports from the fuel marketer.

II.B.1.c.2

Recordkeeping:

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

II.B.1.c.3

Reporting:

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

II.B.1.d

Condition:

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 Subpart B] Authority: [40 CFR 82.30(b)]

II.B.1.d.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.d.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.d.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.e

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 Subpart F] Authority: [40 CFR 82.150(b)]

II.B.1.e.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.e.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.e.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.2

Conditions on OJS-1 (S-1) (Bertrandite Ore Scrubber).

II.B.2.a

Condition:

Visible emissions shall be no greater than 40 percent opacity [Origin: R307-203(1)] Authority: [R307-201-3(1)]

II.B.2.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 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.2.a.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A 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 LJS-1 (S-2) (Old Leach Scrubber).

II.B.3.a

Condition:

Visible emissions shall be no greater than 40 percent opacity [Origin: R307-201-3(1)] Authority: [R307-201-3(1)]

II.B.3.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 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.3.a.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.3.a.3

Reporting:

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

II.B.4

Conditions on LJS-2 (S-3) (New Leach Scrubber).

II.B.4.a

Condition:

Visible emissions shall be no greater than 20 percent opacity [Origin: R307-201-3(2)] Authority: [R307-201-3(2)]

II.B.4.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 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.4.a.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.4.a.3

Reporting:

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

II.B.5

Conditions on OPS-1 (S-5) (Beryllium Product Scrubber).

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

Visible emissions shall be no greater than 40 percent opacity [Origin: R307-201-3(1)] Authority: [R307-201-3(1)]

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

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

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

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

II.B.6 **Conditions on AJS-1(S-4) (S6-A) (Ammonium Jet Scrubber).**

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

Visible emissions shall be no greater than 40 percent opacity [Origin: R307-201-3(1)] Authority: [R307-201-3(1)]

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

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A 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.7

Conditions on SJS-1 (S-6B) (Scavenger Jet Scrubber).

II.B.7.a

Condition:

Visible emissions shall be no greater than 40 percent opacity [Origin: R307-201-3(1)] Authority: [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 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.7.a.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A 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 BDC-1 (S7-A) (Beryl Ore Crusher Dust Collector).

II.B.8.a

Condition:

Visible emissions shall be no greater than 20 percent opacity [Origin: R307-201-3(2)] Authority: [R307-201-3(2)]

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 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.8.a.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A 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.9

Conditions on FDC-1 (S-7B) (Beryl Furnace Dust Collector).

II.B.9.a

Condition:

Visible emissions shall be no greater than 20 percent opacity [Origin: R307-201-3(2)] Authority: [R307-201-3(2)]

II.B.9.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 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.9.a.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.9.a.3

Reporting:

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

II.B.10

Conditions on BDC-2 (S-8A) (Beryl Heater Treater & Grinding Dust Collector).

II.B.10.a

Condition:

Visible emissions shall be no greater than 20 percent opacity [Origin: R307-201-3(2)] Authority: [R307-201-3(2)]

II.B.10.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 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.10.a.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.10.a.3

Reporting:

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

II.B.11

Conditions on OBV-1 (S-8B) (Beryl Ball Mill Ore Cyclone Bin Vent).

II.B.11.a

Condition:

Visible emissions shall be no greater than 20 percent opacity [Origin: R307-201-3(2)] Authority: [R307-201-3(2)]

II.B.11.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 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.11.a.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.11.a.3

Reporting:

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

II.B.12

Conditions on Demister (S-9A) (Beryl Sulfate Mill Demister).

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

Visible emissions shall be no greater than 20 percent opacity [Origin: R307-201-3(2)] Authority: [R307-201-3(2)]

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

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

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

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

II.B.13 **Conditions on SS (S-9B) (Beryl Secondary Scrubber).**

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

Visible emissions shall be no greater than 20 percent opacity [Origin: R307-201-3(2)] Authority: [R307-201-3(2)]

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

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A 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 PS (S-9C) (Beryl Primary Scrubber).

II.B.14.a

Condition:

Visible emissions shall be no greater than 20 percent opacity [Origin: R307-201-3(2)] Authority: [R307-201-3(2)]

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 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.14.a.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A 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.15

Conditions on VSST-1 (S-9D) (Beryl Sulfate Mill Ejector Venturi Scrubber on VSST-1).

II.B.15.a

Condition:

Visible emissions shall be no greater than 20 percent opacity [Origin: R307-201-3(2)] Authority: [R307-201-3(2)]

II.B.15.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 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.15.a.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.15.a.3

Reporting:

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

II.B.16

Conditions on Backup (Small) Boiler (S-10).

II.B.16.a

Condition:

Visible emissions shall be no greater than 20 percent opacity [Origin: DAQE-AN010311018-11]
Authority: [R307-201-3(2)]

II.B.16.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 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.16.a.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.16.a.3

Reporting:

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

II.B.16.b

Condition:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the 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-AN0103110018-11] Authority: [R307-401-8(2)]

II.B.16.b.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.16.b.2

Recordkeeping:

The 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.16.b.3

Reporting:

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

II.B.16.c

Condition:

The backup boiler (S-10) shall not be operated when the main boiler (S-11) is operating except during maintenance or repair periods and/or starting up or shutting down of either boiler. [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)]

II.B.16.c.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.16.c.2

Recordkeeping:

A log showing the reason for operation shall be maintained in accordance with provision I.S.I for all periods when the unit is operated.

II.B.16.c.3

Reporting:

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

II.B.16.d

Condition:

The permittee shall use only natural gas or fuel oil #6 or lighter in this unit. [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]

II.B.16.d.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.16.d.2

Recordkeeping:

The permittee shall maintain records of the types of fuel combusted.

II.B.16.d.3

Reporting:

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

II.B.17

Conditions on Main (Larger) Boiler (S-11).

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

Visible emissions shall be no greater than 40 percent opacity [Origin: R307-201-3(1)] Authority: [R307-201-3(1)]

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

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

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

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

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

The permittee shall use only natural gas or fuel oil #6 or lighter in this unit. [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]

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

Records required for this permit condition will serve as monitoring.

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

The permittee shall maintain records of the types of fuel combusted.

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

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

II.B.18 **Conditions on Solvent Tank (T-6)**

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

The emissions of VOCs and HAPs from the T-6 solvent tank and associated operations shall not exceed:

139.49 tons per fiscal year for VOCs
100 pounds per fiscal year for Hexane
85 pounds per fiscal year for naphthalene

475 pounds per fiscal year for all Xylenes
50 pounds per fiscal year for all HAPs combined not listed above
[Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]

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

Compliance with each limitation shall be determined on a fiscal year basis. The fiscal year is defined as a 52 week period, starting with the first Saturday of each year. Based on the last day of each fiscal year, a new 12-month total shall be calculated by February 28th using data from the previous fiscal year.

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

The permittee shall maintain the record of VOC and HAP emitting materials used each fiscal year. The record shall include the following data for each material used:

A. Name of the VOC and HAPs emitting material, such as: paint, adhesive, solvent, thinner, reducers, chemical compounds, toxics, isocyanates, etc.

B. Density of each material used (pounds per gallon)

C. Percent by weight of all VOC and HAP in each material used

D. Gallons of each VOC and HAP emitting material used

E. The amount of VOC and HAP emitted by each material used shall be calculated by the following procedure:

$$\text{VOC} = \% \text{ VOC by Weight}/100 \times [\text{Density (lb)}/(\text{gal})] \times \text{Gal Consumed} \times 1 \text{ ton}/2000 \text{ lb}$$

$$\text{HAP} = \% \text{ HAP by Weight}/100 \times [\text{Density (lb)}/(\text{gal})] \times \text{Gal Consumed} \times 1 \text{ ton}/2000 \text{ lb}$$

F. The amount of VOC or HAP emitted from all materials used during the fiscal year.

G. The amount of VOCs or HAPs reclaimed for the fiscal year shall be similarly quantified and subtracted from the quantities calculated above to provide the yearly total VOC or HAP emissions.

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

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

II.B.19 **Conditions on Bertrandite Ore Storage Piles (F-2).**

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

Visible emissions shall be no greater than 40 percent opacity [Origin: R307-201-3(1)] Authority: [R307-201-3(1)]

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

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

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

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

II.B.20 **Conditions on Beryl Ore Storage Piles (F-3).**

II.B.20.a **Condition:**

Visible emissions shall be no greater than 40 percent opacity [Origin: R307-201-3(1)] Authority: [R307-201-3(1)]

II.B.20.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 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.20.a.2 **Recordkeeping:**

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

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

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

II.B.21 **Conditions on Portable Impact Crusher Feed (F-5).**

- II.B.21.a Condition:**
- Quantity of bertrandite ore processed shall be no greater than 540,000 tons per fiscal year. "Fiscal year", as used in this condition, is defined as a 52-week period starting with the first Saturday of each year. [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]
- II.B.21.a.1 Monitoring:**
- Compliance with the limitation shall be determined on a fiscal-year total. The permittee shall calculate a new total by February 28th of each year using data from the previous fiscal year.
- II.B.21.a.2 Recordkeeping:**
- Records of daily throughput shall be maintained in accordance with Provision I.S.I for all periods of operation. Throughput shall be determined using operator's logs.
- II.B.21.a.3 Reporting:**
- There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.21.b Condition:**
- At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the 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-AN0103110018-11] Authority: [R307-401-8(2)]
- II.B.21.b.1 Monitoring:**
- Records required for this permit condition will serve as monitoring.
- II.B.21.b.2 Recordkeeping:**
- The 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.21.b.3 Reporting:**
- There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.21.c Condition:**
- Visible emissions shall be no greater than 15 percent opacity [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]
- II.B.21.c.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 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.21.c.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.21.c.3

Reporting:

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

II.B.22

Conditions on Impact Crusher Hopper, Final Product Discharge (F-5A).

II.B.22.a

Condition:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the 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-AN0103110018-11] Authority: [R307-401-8(2)]

II.B.22.a.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.22.a.2

Recordkeeping:

The 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.22.a.3

Reporting:

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

II.B.22.b

Condition:

Visible emissions shall be no greater than 20 percent opacity [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]

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

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

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

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

II.B.23 **Conditions on Tailings Pond (F-7).**

II.B.23.a **Condition:**

Visible emissions shall be no greater than 40 percent opacity [Origin: R307-201-3(1)] Authority: [R307-201-3(1)]

II.B.23.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 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.23.a.2 **Recordkeeping:**

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.23.a.3 **Reporting:**

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

II.B.24 **Conditions on ERC/Pilot Plant Process (Misc-4, BVS-2 & BPS-1).**

II.B.24.a **Condition:**

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the 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-AN0103110018-11] Authority: [R307-401-8(2)]

II.B.24.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.24.a.2 **Recordkeeping:**

The 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.24.a.3 **Reporting:**

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

II.B.24.b **Condition:**

Visible emissions shall be no greater than 15 percent opacity when only the ERC or pilot plant is operating; 20 percent opacity when the AIS is operating. [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]

II.B.24.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 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.24.b.2 **Recordkeeping:**

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.24.b.3 **Reporting:**

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

- II.B.24.c Condition:**
- The permittee shall use only non-organic acids in the ERC process. [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]
- II.B.24.c.1 Monitoring:**
- Records required for this permit condition will serve as monitoring.
- II.B.24.c.2 Recordkeeping:**
- The permittee shall maintain records of all acids used in the ERC process.
- II.B.24.c.3 Reporting:**
- There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.24.d Condition:**
- The pH of the solution in the ERC process shall not be greater than 4.0. [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]
- II.B.24.d.1 Monitoring:**
- The permittee shall monitor the pH of the ERC process on a monthly basis.
- II.B.24.d.2 Recordkeeping:**
- The permittee shall keep a record of the pH measurement take for the ERC process.
- II.B.24.d.3 Reporting:**
- There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.24.e Condition:**
- The permittee should not operate the Pilot Plant process and the ERC process during the same 7-day period. [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]
- II.B.24.e.1 Monitoring:**
- The permittee shall monitor the operation the Pilot Plant and the ERC process on a weekly basis.
- II.B.24.e.2 Recordkeeping:**
- The permittee should keep a record of the hours or operation of the Pilot Plant process and the ERC process.

II.B.24.e.3

Reporting:

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

II.B.25

Conditions on Sandblasting (Misc-6).

II.B.25.a

Condition:

The permittee shall not discharge into the atmosphere from any abrasive blasting any air contaminant for a period or periods aggregating more than three minutes in any one hour which is a shade or density darker than 40%. [Origin: R307-206-4] Authority: [R307-206-4]

II.B.25.a.1

Monitoring:

Visible emission evaluation shall be conducted every six months in accordance with the following procedure, if abrasive blasting operations are conducted.

(a) Visible emissions shall be measured using EPA Method 9. 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) Emissions from unconfined blasting shall be read 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) Emissions from unconfined blasting employing multiple nozzles shall be judged as a single source unless it can be demonstrated by the owner or operator that each nozzle, evaluated separately, meets the emission and performance standards provided for in R307-206-2 through 4.

(d) Emissions from confined blasting shall be read at the densest point after the air contaminant leaves the enclosure. [R307-206-5]

II.B.25.a.2

Recordkeeping:

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

II.B.25.a.3

Reporting:

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

II.B.26

Conditions on Fire Pump (Diesel) (Misc-7A).

II.B.26.a

Condition:

The permittee shall use only #1 or #2 fuel oil in this unit. [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)]

II.B.26.a.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.26.a.2

Recordkeeping:

The permittee shall maintain records of the types of fuel combusted.

II.B.26.a.3

Reporting:

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

II.B.26.b

Condition:

Visible emissions shall be no greater than 20 percent opacity. [Origin: R307-201-3(2)] Authority: [R307-201-3(2)]

II.B.26.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 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.26.b.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.26.b.3

Reporting:

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

II.B.26.c

Condition:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the 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-AN0103110018-11] Authority: [R307-401-8(2)]

II.B.26.c.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.26.c.2

Recordkeeping:

The 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.26.c.3

Reporting:

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

II.B.27

Conditions on Backup Generator (325 KW) (Misc-7B) (Beryl South).

II.B.27.a

Condition:

Visible emissions shall be no greater than 20 percent opacity. [Origin: R307-201-3(2)] Authority: [R307-201-3(2)]

II.B.27.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 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.27.a.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.27.a.3

Reporting:

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

II.B.28

Conditions on Backup Generator (100 KW) (Misc-7C) (Beryl West).

II.B.28.a

Condition:

The permittee shall use only #1 or #2 fuel oil in this unit. [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]

II.B.28.a.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.28.a.2

Recordkeeping:

The permittee shall maintain records of the types of fuel combusted.

II.B.28.a.3

Reporting:

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

II.B.28.b Condition:

Hours of operation shall be no greater than 336 hours per fiscal year unless otherwise specified. "Fiscal year", as used in this condition, is defined as a 52-week period starting with the first Saturday of each year. [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]

II.B.28.b.1 Monitoring:

Compliance with the limitation shall be determined on a fiscal-year total. The permittee shall calculate a new total by February 28th of each year using data from the previous fiscal year.

II.B.28.b.2 Recordkeeping:

A log of all hours of engine operation shall be maintained on a monthly basis, when the generator is in operation, and shall include the results of required monitoring. Records shall be maintained as described in Provision I.S.1 of this permit.

II.B.28.b.3 Reporting:

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

II.B.28.c Condition:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the 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-AN0103110018-11] Authority: [R307-401-8(2)]

II.B.28.c.1 Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.28.c.2 Recordkeeping:

The 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.28.c.3 Reporting:

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

II.B.28.d Condition:

Visible emissions shall be no greater than 20 percent opacity [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]

II.B.28.d.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 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.28.d.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.28.d.3

Reporting:

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

II.B.29

Conditions on Backup Generator (250 KW) (Misc-7D) (Utilities).

II.B.29.a

Condition:

Visible emissions shall be no greater than 40 percent opacity [Origin: R307-201-3(1)] Authority: [R307-201-3(1)]

II.B.29.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 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.29.a.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.29.a.3

Reporting:

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

II.B.30

Conditions on 40 CFR 63 Subpart ZZZZ Emergency CI Engines (Misc-7A, 7B, 7C, and 7D)

II.B.30.a Condition:

Effective May 3, 2013, at all times the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [Origin: 40 CFR 63.6595(a), 40 CFR 63.6605(b)]. [40 CFR 63 Subpart ZZZZ]

II.B.30.a.1 Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.30.a.2 Recordkeeping:

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

The permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with 40 CFR 63.6660 and Provision I.S.1 of this permit.

II.B.30.a.3 Reporting:

The permittee shall keep the records described in 40 CFR 63.6655(a)(1)-(5) as applicable. [40 CFR 63.6655(a)] The permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with 40 CFR 63.6660 and Provision I.S.1 of this permit.

II.B.30.b Condition:

Effective May 3, 2013, the permittee shall comply with the following operating limitations at all times for each emergency affected emission unit:

(1) The permittee shall operate the affected emission unit according to the requirements in paragraphs (1)(a) through (1)(c). Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 1.a through 1.c, is prohibited. If the engine is not operated in accordance with paragraphs 1.a through 1.c, it will not be considered an emergency engine and shall meet all requirements for non-emergency engines.

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

(b) Operation for the purpose of maintenance checks and readiness testing is limited to 100 hours per year, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. A petition for approval of additional hours to be used for maintenance checks and readiness testing is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(c) The permittee may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing and shall meet the requirements in 40 CFR 63.6640(f)(1)(iii).

(2) The permittee shall meet the following requirements at all times, except during periods of startup:

- (a) Change oil and filter every 500 hours of operation or annually, whichever comes first.
 - (b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
 - (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- (3) The permittee have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in paragraph (2)(a) of this condition.
- (4) During periods of startup the permittee shall minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
- (5) The permittee shall comply with the applicable general provisions in 40 CFR 63.1-15 as identified in Table 8 of 40 CFR 63 Subpart ZZZZ.
 [Origin: 40 CFR 63.6595(a)(1), 40 CFR 636603(a), 40 CFR 63.6605(a), 40 CFR 63.6625(h), 40 CFR 63.6640(f), 40 CFR 63.6665, 40 CFR 63 Subpart ZZZZ Table 2d(4), 40 CFR 63 Subpart ZZZZ Table 2d(footnote 1), 40 CFR 63 Subpart ZZZZ Table 8] [40 CFR 63 Subpart ZZZZ]

II.B.30.b.1

Monitoring:

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

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

The permittee shall demonstrate continuous compliance by operating and maintaining the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written operation and maintenance instructions or develop and follow their own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e), 40 CFR 63.6640(a), 40 CFR 63 Subpart ZZZZ Table 6]

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

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

II.B.30.b.2

Recordkeeping:

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

For each affected emission unit that does not meet the standards applicable to non-emergency engines, the permittee shall keep records of the hours of operation of the engine that are recorded through the non-resettable hour meter. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the permittee shall keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [40 CFR 63.6655(f)]

If additional hours are to be used for maintenance checks and readiness testing, the permittee shall maintain records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [40 CFR 63.6640(f)(1)(ii)]

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

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

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

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

II.B.30.b.3

Reporting:

The permittee shall report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR 63 Subpart ZZZZ Table 2d Footnote 2]

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

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

II.B.31

Conditions on Screen Plant Motor (40 KW) (Misc-7E)

II.B.31.a

Condition:

The permittee shall use only #1 or #2 fuel oil in this unit [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]

II.B.31.a.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.31.a.2

Recordkeeping:

The permittee shall maintain records of the types of fuel combusted.

II.B.31.a.3

Reporting:

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

II.B.31.b

Condition:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the 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-AN0103110018-11] Authority: [R307-401-8(2)]

II.B.31.b.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.31.b.2

Recordkeeping:

The 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.31.b.3

Reporting:

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

II.B.31.c

Condition:

Visible emissions shall be no greater than 20 percent opacity. [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]

II.B.31.c.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 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.31.c.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.31.c.3 Reporting:

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

II.B.31.d Condition:

Hours of operation shall be no greater than 900 hours per fiscal year. "Fiscal year", as used in this condition, is defined as a 52-week period starting with the first Saturday of each year. [Origin: DAQE-AN0103110011-18] Authority: [R307-401-8(1)(a)(BACT)]

II.B.31.d.1 Monitoring:

Compliance with the limitation shall be determined on a fiscal-year total. The permittee shall calculate a new total by February 28th of each year using data from the previous fiscal year.

II.B.31.d.2 Recordkeeping:

A log of all hours of engine operation shall be maintained on a monthly basis, when the generator is in operation, and shall include the results of required monitoring. Records shall be maintained as described in Provision I.S.1 of this permit.

II.B.31.d.3 Reporting:

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

II.B.32 Conditions on Laboratory Baghouse (Misc-8).

II.B.32.a Condition:

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]

II.B.32.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 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.32.a.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.32.a.3

Reporting:

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

II.B.33

Conditions on Screen Conveyor Transfer Points (Misc-9).

II.B.33.a

Condition:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the 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-AN0103110018-11] Authority: [R307-401-8(2)]

II.B.33.a.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.33.a.2

Recordkeeping:

The 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.33.a.3

Reporting:

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

II.B.33.b

Condition:

The permittee shall operate water sprays or dust suppression sprays as appropriate to control fugitive emissions. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary. Sprays shall not be required during periods of freezing temperatures. [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]

II.B.33.b.1

Monitoring:

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

II.B.33.b.2

Recordkeeping:

An operators log shall be maintained of all monitoring provisions listed above. Records of water spray system inspections shall be kept for all periods of operation and the ambient temperature shall be recorded any time water should be applied but can not be due to freezing conditions.

II.B.33.b.3

Reporting:

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

II.B.33.c

Condition:

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103110018-11]
Authority: [R307-401-8(1)(a)(BACT)]

II.B.33.c.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 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.33.c.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.33.c.3

Reporting:

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

II.B.34

Conditions on Screening Plant (Screen-1).

II.B.34.a

Condition:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the 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-AN0103110018-11] Authority: [R307-401-8(2)]

II.B.34.a.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.34.a.2

Recordkeeping:

The 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.34.a.3

Reporting:

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

II.B.34.b

Condition:

The permittee shall operate water sprays or dust suppression sprays as appropriate to control fugitive emissions. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary. Sprays shall not be required during periods of freezing temperatures. [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]

II.B.34.b.1

Monitoring:

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

II.B.34.b.2

Recordkeeping:

An operators log shall be maintained of all monitoring provisions listed above. Records of water spray system inspections shall be kept for all periods of operation and the ambient temperature shall be recorded any time water should be applied but can not be due to freezing conditions.

II.B.34.b.3

Reporting:

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

II.B.34.c

Condition:

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]

II.B.34.c.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 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.34.c.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.34.c.3

Reporting:

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

II.B.34.d

Condition:

Production of ore shall be no greater than 3,000 tons per fiscal year. "Fiscal year", as used in this condition, is defined as a 52-week period starting with the first Saturday of each year. [Origin: DAQE-AN0103110018-11] Authority: [R307-401-8(1)(a)(BACT)]

II.B.34.d.1

Monitoring:

Compliance with the limitation shall be determined on a fiscal-year total. The permittee shall calculate a new total by February 28th of each year using data from the previous fiscal year.

II.B.34.d.2

Recordkeeping:

Records of daily throughput shall be maintained in accordance with Provision I.S.I for all periods of operation. Throughput shall be determined using operator's logs.

II.B.34.d.3

Reporting:

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

II.B.35

Conditions on Storage Silos (2 lime storage bins, one beryl ore bin, one lime storage bin in AIS Recovery Area)

II.B.35.a

Condition:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the 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-AN0103110018-11] Authority: [R307-401-8(2)]

II.B.35.a.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.35.a.2

Recordkeeping:

The 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.35.a.3

Reporting:

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

II.B.35.b

Condition:

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103110018-11]. [R307-401-8(1)(a)(BACT)]

II.B.35.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 when the affected emission unit is operating. 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.35.b.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.35.b.3

Reporting:

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

II.B.36

Conditions on Sand Blasting Baghouse

II.B.36.a

Condition:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the 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-AN0103110018-11] Authority: [R307-401-8(2)]

II.B.36.a.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.36.a.2

Recordkeeping:

The 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.36.a.3

Reporting:

The 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.36.b

Condition:

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103110018-11]
Authority: [R307-401-8(1)(a)(BACT)]

II.B.36.b.1

Monitoring:

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 when the affected emission unit is operating. 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.36.b.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.36.b.3

Reporting:

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

II.B.37

Conditions on Ore Wet Grind with Baghouse

II.B.37.a

Condition:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the 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-AN0103110018-11] Authority: [R307-401-8(2)]

II.B.37.a.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.37.a.2

Recordkeeping:

The 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.37.a.3

Reporting:

The 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.37.b

Condition:

Visible emissions shall be no greater than 10 percent opacity. [Origin: DAQE-AN0103110018-11]
Authority: [R307-401-8(1)(a)(BACT)]

II.B.37.b.1

Monitoring:

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 when the affected emission unit is operating. 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.37.b.2

Recordkeeping:

The permittee shall record the date of each visual opacity survey and a list of the emission points checked during the visual opacity survey. The permittee shall maintain all records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 or by Method 203A in accordance with Provision I.S.1 of this permit.

II.B.37.b.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.

II.E

Source-specific Definitions.
[R307-415-6a]

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. this permit (R307-401-5 (Notice of Intent))

This regulation is not applicable to the Permitted source for the following reason(s): BPS-1 pre November 29, 1969, therefore "grandfathered" to the requirement to have an Approval Order

III.B. (R307-401-5 (Notice of Intent))

This regulation is not applicable to the S5: OPS-1 for the following reason(s): pre November 29,1969, therefore "grandfathered" to the requirement to have an Approval Order

III.C. (40 CFR, Part 60, Subpart OOO (Non-metallic mineral processing))

This regulation is not applicable to the F-5: Portable Impact Crusher Feed for the following reason(s): the ore being processed does not contain over 50% of any of the materials listed in the NSPS Subpart OOO standard. Letter from J.Dean Gillam, EPA Region VIII to Tim Blanchard DAQ 3/26/1996

III.D. (40 CFR, Part 61, Subpart LL (Metallic mineral processing))

This regulation is not applicable to the F-5: Portable Impact Crusher Feed for the following reason(s): the ore being processed does not meet the definition of metallic mineral in NSPS Subpart LL. Letter from J. Dean Gillam, Region VIII EPA to Tim Blanchard DAQ 3/26/96

III.E. (R307-401-5 (Notice of Intent))

This regulation is not applicable to the Misc-5: Aboveground Fuel Storage Tanks for the following reason(s): pre November 29,1969, therefore "grandfathered" to the requirement to have an Approval Order

III.F. (R307-401-5 (Notice of Intent))

This regulation is not applicable to the Misc-6: Sandblasting for the following reason(s): pre November 29,1969, therefore "grandfathered" to the requirement to have an Approval Order

III.G. (R307-401-5 (Notice of Intent))

This regulation is not applicable to the Misc-7D: Backup Generator (250 KW) (Utilities) for the following reason(s): pre November 29,1969, therefore "grandfathered" to the requirement to have an Approval Order

III.H. (R307-401-5 (Notice of Intent))

This regulation is not applicable to the S-11: Main (Larger) Boiler for the following reason(s): pre November 29,1969, therefore "grandfathered" to the requirement to have an Approval Order

III.I. (R307-401-5 (Notice of Intent))

This regulation is not applicable to the S-1: OJS - 1 for the following reason(s): pre November 29,1969, therefore "grandfathered" to the requirement to have an Approval Order

III.J. (R307-401-5 (Notice of Intent))

This regulation is not applicable to the S-2: LJS - 1 for the following reason(s): pre November 29,1969, therefore "grandfathered" to the requirement to have an Approval Order

III.K. (R307-401-5 (Notice of Intent))

This regulation is not applicable to the S-6A: S - 4, AJS - 1 for the following reason(s): pre November 29,1969, therefore "grandfathered" to the requirement to have an Approval Order

III.L. (R307-401-5 (Notice of Intent))

This regulation is not applicable to the S-6B: SJS - 1 for the following reason(s): pre November 29,1969, therefore "grandfathered" to the requirement to have an Approval Order

SECTION IV: ACID RAIN PROVISIONS

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

REVIEWER COMMENTS

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

| | |
|--------------|---|
| Incorporates | DAQE-AN0103110018-11 dated January 20, 2011 |
| Incorporates | Approval Order dated September 1, 1983 |
| Incorporates | Approval Order dated January 28, 1980 |
| Incorporates | Approval Order dated June 13, 1979 |
| Incorporates | Approval Order dated March 23, 1977 |

1. Comment on an item originating in permit renewal (2003) regarding Permitted source
Change to standard reporting requirements: The existing reporting requirements repeated requirements of Section I. This renewal updates those reporting requirements to reflect current approach, i.e., specifies that no reporting is required other than that required by Section I. This makes no substantive change to the permit. [Comment last updated on 8/14/2002]

2. Comment on an item originating in permit renewal (2003) regarding Permitted source
Changes made based on DAQE-AN0311012-03: NSR removed the 250 tpd limit discussed above and 8% minimum moisture, so those comments were deleted. Limits on operating hours were clarified to be "rolling". Monitoring for rolling totals now requires the totals to be done by the last day of the month instead of the 25th day. The recordkeeping for production limits was reworded for clarity. [Comment last updated on 10/07/2003]

3. Comment on an item originating in permit renewal regarding Permitted source
Changes made during renewal (2003): In addition to the reporting changes described above, the following changes were made:
 - per source, unit STS-1 was never constructed, and has been removed from permit
 - opacity monitoring has been changed from semiannual method 9 to standard monthly opacity survey with observation follow-up when needed.
 - 12-month rolling totals must now be determined by 25th day of month instead of 10th day. Associated monitoring and recordkeeping are updated.
 - The condition involving 40 CFR Part 68 has been updated to incorporate the requirements from 40 CFR 68.215 for sources that have submitted the initial plan.
 - The authority for units subject to 10% opacity from DAQE-267-02 has been corrected from the rule to BACT.
 - The monitoring and recordkeeping for the fire pump has been updated to current standard language. [Comment last updated on 11/08/2002]

4. Comment on an item originating in this permit regarding Permitted source
Changes made in April 2011:
 - (1) Three new emission units and associated requirements are included. The SX-11 (10% VOC by weight) will be used as a new extraction solvent.
 - (2) 40 CFR 63 Subpart ZZZZ requirements are included for the emergency CI engines. Emission Units Misc-7A through Misc-7D are existing stationary RICE under 40 CFR 63 Subpart ZZZZ. Misc - 7E, vacuum engine, and sand blaster engine are considered portable engines and are not subject to the subpart.
 - (3) The permitted source is not major for Green House Gas (GHG) emissions and there are not requirements for GHG emissions.

[Last updated March 31, 2011]

5. Comment on an item originating in this permit regarding Permitted source
Changes made in September 2009: Condition 11 and 12 of the AO: the new unit ERC and associated requirements are added into the Title V permit (Provision II.B.24). It will co-exit with the Pilot Plant

Condition 13C of AO: 15% opacity limit is used for crushers and crusher feeds and replaces the 10% & 20% opacity limits in the Title V permit (II.B.21.c. & II.B. 22.b).

Condition 14A of AO: the averaging period for annual throughput limit is changed from per rolling 12 month to per fiscal year and Provision II.B.21.a and II.B.21.a.1 of the Title V permit have been modified accordingly.

Condition 14B of AO: the averaging period for annual production limit is changed from per rolling 12 month to per fiscal year and Provision II.B.33.d and II.B.33.d.1 of the Title V permit have been modified accordingly.

Condition 15 of AO: the annual operation hour limit is changed from per rolling 12 month to per fiscal year and Provision II.B.28.b, II.B.28.b.1, II.B.30.d and II.B.30.d.1 of the Title V permit have been modified accordingly.

Condition 17 of the AO applies to Units S-10 and S-11 and is added into the Title V permit (II.B.16.d and II.B.17.b).

Condition 21 of the AO (VOC and HAP limits) is added into the Title V permit. (II.B.18)
[Last updated September 4, 2009]
6. Comment on an item originating in permit renewal (2003) regarding Permitted source
Changes requested but denied: The source requested several changes that would base monitoring on whether the unit operates during a certain period. The following requests were not granted:

In the case of opacity monitoring, the use of opacity surveys removes any burden of checking a unit that is not operating (not operating = no visible emissions).

For water sprays on transfer points: DAQE-267-02, approved by the source after submission of the operating permit renewal application, calls for the same monitoring as currently exists in the operating permit, so it is taken from that this supersedes the earlier request. [Comment last updated on 8/14/2002]
7. Comment on an item originating in R307-205 regarding Permitted source
Common stacks: There are three common stacks: emissions units S-7A and S-7B go to a common stack; S-9A, S-9B, S-9C, and S-9D go to a common stack and; S-6A and S-6B go to a common stack. If the opacity for the common stack is less than the limit for the individual units, those individual units shall be considered in compliance with the opacity limit. If the opacity on a common stack is greater than the opacity limit, the permittee may isolate each emission unit to determine if an opacity violation has occurred. [Comment last updated on 6/15/2000]
8. Comment on an item originating in this permit regarding Permitted source
Renewal permit (2010):
 - (1) CAM has been evaluated, there are no CAM requirement in this renewal permit.
 - (2) Condition II.B.22.b: The opacity limit was accidentally changed to 15% in the last

version (September 2009) and it should be 20% per AO.

(4) Condition II.B.25.a and associated monitoring is modified in consistent with UAC R307-206-4. [Last updated April 12, 2010]

9. Comment on an item originating in R307-203-1 regarding Permitted source Sulfur content of fuels: R307-203-1 (Sulfur content of fuels) allows a source to request for approval of an alternate test method to verify compliance with this limit. Brush requested and justified that #2 DF by design contains less than 0.5 weight percent sulfur (0.262 lb/MMBtu). [Comment last updated on 6/15/2000]

10. Comment on an item originating in regarding Misc-7C: Backup Generator (100 KW) (Beryl West) 40 CFR 63 Subpart ZZZZ: condition II.B.28.b of this permit allows maintenance operation for 336 hours per fiscal year unless otherwise specified. However, this engine is also subject to requirements from 40 CFR 63.6640(f) (II.B.30.b) which limits maintenance to 100 hours per year and operation in non-emergency situations to 50 hours per year, provided those 50 hours count toward the 100 maintenance hours per year. This engine must comply with the more stringent limit of 100 maintenance hours per year, rather than the 366 hour limit that originates in the current approval order. [Last updated March 7, 2011]