



CITY OF HUNTSVILLE
DEPARTMENT OF NATURAL RESOURCES AND
ENVIRONMENTAL MANAGEMENT

MAJOR SOURCE OPERATING PERMIT

Issued to: Saint Gobain Ceramic Materials

Location: 219 Cap Adkins Road

Huntsville, Alabama 35803

Permit Number(s)

Description of Source(s)

7-09-P056-Z001

Manufacturing of Abrasives, Refractories, and Ceramic Material:

Electric Arc Furnacing
Crushing & Sizing Operations
Materials Handling & Conveying
Product Calcining
Reclaimed Materials Drying
Diesel-Fired Emergency Generators

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, Code of Alabama 1975, 22-28-1 to 22-28-23 (the "AAPCA") and the Alabama Environmental Management Act, as amended, Code of Alabama 1975, 22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and the City of Huntsville Air Pollution Control Rules and Regulations, Ordinance 72-156, as amended ("COHRAR") and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to operate the equipment, device(s) or other article(s) described above.

Pursuant to the Clean Air Act of 1990, all conditions of this permit are federally enforceable by EPA, the Alabama Department of Environmental Management ("ADEM"), the City of Huntsville Department of Natural Resources and Environmental Management ("the Department"), and citizens in general. Those provisions which are not required under the Clean Air Act of 1990 are considered to be local permit provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate sections of this permit.

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Date of Issuance: 11/13/2022

Expiration Date: 11/13/2027

Permit Renewal Application Deadline: 05/13/2027

DIRECTOR

DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL MANAGEMENT
CITY OF HUNTSVILLE, ALABAMA

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Saint Gobain Ceramic Materials
219 Cap Adkins Road
Huntsville, Alabama 35803

I. FEDERALLY ENFORCEABLE GENERAL (FACILITY-WIDE) PERMIT CONDITIONS

I.A. General Air Pollution Control Requirements

1. Duty to Comply

- (A) The permittee shall comply with all conditions of COHRAR. Noncompliance with this permit will constitute a violation of the Clean Air Act of 1990, and COHRAR, and may result in an enforcement action; including but not limited to, permit termination, revocation and reissuance, or modification; or denial of a permit renewal application by the permittee. [COHRAR §§ 3.1.4; 3.9.5(h)]
- (B) The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this Permit would have required halting or reducing the permitted activity. [COHRAR § 3.9.5(i)]

2. Additional Rules and Regulations

This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules. [COHRAR § 3.1.4]

3. Schedule of Compliance

- (A) The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance. [COHRAR §§ 3.1.4; 3.9.5(r)]
- (B) The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit. [COHRAR §§ 3.1.4; 3.9.5(r)]

4. Operation of Capture and Control Devices

All air pollution control devices and capture systems for which this Permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established. [COHRAR § 1.12]

5. Circumvention

The permittee shall not cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes any emission of air contaminant which would otherwise violate this Permit or COHRAR. [COHRAR § 1.15]

6. Opacity Limitations

- (A) The permittee shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant of a shade or density darker than that designated as twenty percent (20%) opacity. [COHRAR § 6.1.1]
- (B) Compliance with opacity standards shall be determined by conducting observations in accordance with Reference Method 9 in 40 CFR Part 60, Appendix A. [COHRAR § 6.1.2]

7. Particulate Matter Emissions Limitations

Hourly particulate matter emissions from any source within the facility shall not exceed the amount calculated using the following equations: [COHRAR § 6.4.1]

$$E = 3.59P^{0.62} \quad \text{for } P < 30 \text{ tons per hour}$$
$$E = 17.31P^{0.16} \quad \text{for } P \geq 30 \text{ tons per hour}$$

where E = Particulate emission rate in pounds per hour
P = Process weight throughput in tons per hour

8. Fugitive Dust

Materials handling areas in which dusty materials are conveyed, transferred, blended, or otherwise handled or processed shall be enclosed and/or equipped with capture and control equipment to prevent emission of fugitive dust. [COHRAR § 6.2.1(c)]

I.B. General Monitoring, Inspection, Record-Keeping and Monitoring Requirements

1. Monitoring, Records and Reporting

- (A) The Director may require the permittee to establish and maintain records; make reports; install, use and maintain monitoring equipment or methods; sample emissions in accordance with such methods, at such locations and intervals, and using such procedures and provide such emissions reports as are prescribed by the Director to demonstrate compliance with the terms of this Permit and with COHRAR. [COHRAR § 1.9.1]
- (B) Records and Reports as the Director shall prescribe on air contaminants or fuel shall be recorded, compiled and submitted on forms provided by the Director or in formats

approved by the Director. [COHRAR § 1.9.2]

- (C) All required sampling and testing shall be made and the results calculated in accordance with sampling and testing procedures and methods approved by the Director. All required samples and tests shall be made under the direction of persons qualified by training and/or experience in the field of air pollution control. To the extent practicable, test methods and procedures established by Part 60, Part 61 and Part 63 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised, shall be employed. [COHRAR §§ 1.10.1; 1.10.2]

2. Inspection and Entry

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the City of Huntsville Department of Natural Resources & Environmental Management to:

- (A) enter upon the permittee's premises where a source is located or emissions-related activity is conducted, or where records must be kept pursuant to the conditions of this Permit; [COHRAR §§ 1.8; 3.9.5(q)(1)]
- (B) review and/or copy, at reasonable times, any records that must be kept pursuant to the conditions of this Permit; [COHRAR §§ 1.8; 1.9, 3.9.5(q)(2)]
- (C) inspect, at reasonable times, this facility's equipment (including monitoring equipment and air pollution control equipment), practices, or operations regulated or required pursuant to this Permit; [COHRAR §§ 1.8; 3.9.5(q)(3)]
- (D) sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this Permit or other applicable requirements. [COHRAR §§ 1.10.3; 3.9.5(q)(4)]

3. Record Keeping Requirements

All monitoring records maintained pursuant to this Permit shall include the following information, as appropriate: [COHRAR § 3.9.5(d)(1)]

- (A) the date, time and location of all sampling or measurements;
- (B) the date(s) analyses were performed;
- (C) the company or entity that performed the analyses;
- (D) the analytical techniques or methods used;
- (E) the results of all analyses; and

- (F) the operating conditions that existed at the time of sampling or measurement.

4. Records Retention

Records of all required monitoring data and support information shall be retained by the permittee for a period of at least five (5) years from the date of the monitoring, sampling, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this Permit. [COHRAR § 3.9.5(d)(2)]

5. Display of Permit

The permittee shall keep this Permit under file or on display at all times at the permitted facility and shall make this Permit available for inspection by any and all persons who may request to see it. [COHRAR § 3.1.7]

6. Semi-Annual Monitoring Report Submission

On a semi-annual basis, the permittee shall submit monitoring reports to the Department which contain the results of all monitoring specifically required by Part III of this Permit. All instances of deviations from permit requirements of this Permit shall be clearly identified in the monitoring reports and must be certified by a responsible official in accordance with Part I.B.7. of this Permit. These monitoring reports shall be submitted not later than May 1 and November 1 of each year. Submittal of the monitoring report due no later than May 1 may coincide with submittal of the Annual Compliance Certification required by Part I.B.8. of this Permit and the payment of Annual Emissions Fees in accordance with Part I.C. of this Permit. The report due on May 1 shall cover the monitoring period from October 1 of the previous year through March 31 of the year of submission. The report due on November 1 shall cover the monitoring period from April 1 through September 30. [COHRAR § 3.9.5(e)(1)]

7. Certification of Truth, Accuracy, and Completeness

Any application form, report, test data, monitoring data, or compliance certification submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. 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. [COHRAR §§ 3.9.4(a); 3.9.5(p)]

8. Compliance Certification

A compliance certification shall be submitted annually at the time of annual emissions fees payments made pursuant to I.C of this Permit. The permittee shall provide a means for monitoring the compliance of its air pollution sources with the emissions limitation, standards and work practices listed or referenced within this Permit. [COHRAR § 3.9.5(t)]

- (A) The compliance certification shall include the following:
- (1) the identification of each term or condition of this permit that is the basis of the certification;
 - (2) the compliance status;
 - (3) whether compliance has been continuous or intermittent; and
 - (4) the method(s) used for determining the compliance status of the source, currently and over the reporting period, consistent with COHRAR §§ 3.9.5(c) and 3.9.5(d) (Monitoring and Record Keeping Requirements), and the specific terms included in Part III of this Permit.
- (B) The compliance certification shall be submitted to the Department and to the Environmental Protection Agency (EPA) at the following addresses:

City of Huntsville
Department of Natural Resources & Environmental Management
P. O. Box 308
Huntsville, AL 35804

and to:

U.S. EPA Region 4 via email at: EPA_R4_CAA_Reports@epa.gov
or through the EPA's Compliance and Emissions Data Reporting Interface (CEDRI)

9. Non-compliance Reporting

The permittee shall report deviations from requirements of this Permit within two (2) working days of such deviations, unless a shorter reporting time is specified in this Permit (e.g. for equipment malfunction reporting pursuant to I.B.10(B) of this Permit). The report shall include the probable cause of the deviation and describe corrective actions or preventive measures that were taken. [COHRAR § 3.9.5(e)(2)]

10. Equipment Maintenance or Breakdown

- (A) In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than one (1) hour, the intent to shut down shall be reported to the Department at least twenty-four (24) hours prior to the planned shut-down. The Department shall be notified when maintenance on the air pollution control equipment is complete and the equipment is operating. [COHRAR § 1.12.2]
- (B) In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than one (1) hour, the person responsible for such equipment shall notify the Department within an additional twenty-four (24) hours

and provide a statement giving all pertinent facts, including the duration of the breakdown. The Department shall be notified when the breakdown has been corrected. [COHRAR § 1.12.3]

11. Progress Reports

If any air pollution source owned or operated by the permittee is not in compliance with the emissions limitations, standards and work practices listed or referenced within this permit, the permittee shall submit a progress report for that air pollution source. The first schedule of compliance shall be submitted within three (3) months of the date the permittee or Department determines that the air pollution source is not in compliance. Subsequent reports shall be submitted every sixth month following the initial report. The progress reports shall contain the following: [COHRAR § 3.9.5(s)]

- (A) the dates for achieving the activities, milestone, or compliance required in the schedule of compliance, and/or dates when such activities, milestones or compliance were achieved; and
- (B) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

I.C. Fee Payments

1. Annual Emissions Fees

On an annual basis the permittee shall:

- (A) pay emissions fees based on actual emissions of each regulated air pollutant, except carbon monoxide (CO), emitted during the preceding calendar year; [COHRAR § 3.7.4(c)]
- (B) determine emissions fees payments at the rate of \$25 per ton of each regulated air pollutant, plus the difference in the CPI (Consumer Price Index) of the year the fees are assessed and the CPI for 1989; [COHRAR § 3.7.4(c)]
- (C) make payment of annual emissions fees on or before May 1 of each calendar year; [COHRAR § 3.7.5(a)]
- (D) pay a late fee of three percent (3%) of the original fee per month or fraction thereof if fees are not paid within thirty (30) days of the due date; and [COHRAR § 3.7.5(d)]
- (E) make fees and remittances payable to the City of Huntsville. [COHRAR § 3.7.5(e)]
- (F) All fees paid pursuant to COHRAR Part 3.7 shall be non-refundable. [COHRAR § 3.7.5(d)]

2. Fee Payments

For this Permit to remain effective, all applicable fees must be paid in accordance with COHRAR Parts 3.6 and 3.7. [COHRAR § 3.9.5(m)]

3. Conflict With State Law

In the event there is a conflict between State law, or the regulations promulgated thereto, and the fee schedule included in I.C.1. and I.C.2. of this Permit, then the fee schedule established under State law shall take precedence. [Ala. Code 1975 § 22-28-23; COHRAR §§ 3.6.8; 3.7.4(g)]

I.D. Permit Modification, Renewal, and Termination

1. Transfer

This permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another, except as provided in COHRAR § 3.9.11(a)(1)(v). [COHRAR § 3.1.5]

2. New Air Pollution Sources

- (A) A new permit application must be made for new sources, replacements, alterations, or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants. [COHRAR § 3.1.2(a)]
- (B) Actual construction of a major modification, as defined in COHRAR Part 3.5 (Prevention of Significant Deterioration), shall not begin prior to issuance of an Air Permit in accordance with COHRAR Part 3.5, or modification of this Permit in accordance with COHRAR § 3.1.2(h)(5). [COHRAR § 3.5.1]
- (C) Every application for a permit shall be filed in the manner and form prescribed by the Director and shall give all the information necessary to enable the Director to make the determination required by COHRAR Part 3.3. [COHRAR § 3.2.1]

3. Alternative Operating Scenarios

For those alternative operating scenarios identified in Part III of this Permit as acceptable, the permittee shall: [COHRAR § 3.9.5(o)]

- (A) Record the change from one operating scenario to another in a log at the permitted facility. The recording of the change shall be made contemporaneously with the change, and the log shall contain the scenario under which the facility is currently operating.

- (B) Ensure that terms and conditions of each alternative operating scenario meet all the requirements of this permit, as well as COHRAR Part 3.9.

4. Economic Incentives

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. [COHRAR § 3.9.5(n)]

5. Submittal of Information

The permittee must submit to the Department, within thirty (30) days or such other reasonable time as the Department may set, any information that the Department 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 receiving a specific request, the permittee shall also furnish to the Department copies of records required to be kept by this Permit. [COHRAR § 3.9.5(l)]

6. Renewals

- (A) This Permit is issued for a fixed period of five (5) years. An application for permit renewal shall be submitted at least six (6) months, but not more than eighteen (18) months, before the date of expiration of this Permit. [COHRAR §§ 3.9.5(b); 3.9.2(c)]
- (B) Authorization to operate the permitted facility shall terminate upon the expiration of this Permit unless a timely and complete renewal application has been submitted. If a timely and complete application for renewal is submitted, but the Director fails to take action to issue or deny the renewal permit before the end of the term of this Permit, then this Permit shall not expire until the renewal permit has been issued or denied. [COHRAR § 3.9.10(b)]

7. Termination for Cause

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 will not stay any permit condition. [COHRAR §§ 3.2.5; 3.9.5(j)]

8. Reopening for Cause

Under any of the following circumstances, this Permit will be reopened prior to the expiration of the permit. [COHRAR § 3.9.11(e)]

- (A) Additional applicable requirements under the Clean Air Act of 1990 become applicable to the permittee with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. 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.

- (B) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into this Permit.
- (C) The Department 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.
- (D) The Administrator or the Department determines that this Permit must be revised or revoked to assure compliance with the applicable requirements.

9. Revocation for Cause

This Permit may be revoked for any of the following causes: [COHRAR § 3.2.5]

- (A) failure to comply with any condition of this Permit or COHRAR;
- (B) failure to notify the Director prior to operation of any article, machine, equipment or other contrivance subject to the requirements of COHRAR § 3.1.2(a);
- (C) failure to establish and maintain such records, make such reports, install, use and maintain such monitoring equipment or methods; and sample such emissions in accordance with such methods at such locations, intervals and procedures as the Director may prescribe in accordance with COHRAR § 1.9.2;
- (D) failure to allow the Director or his authorized representative upon proper identification to:
 - (1) enter any premises, at reasonable times, where any article, machine, equipment or other contrivance described in COHRAR § 3.1.2 is located or in which any records required to be kept by this Permit or by COHRAR are located;
 - (2) have access to and copy any records required to be kept by this Permit or by COHRAR;
 - (3) inspect any monitoring equipment or practices being maintained pursuant to this Permit or COHRAR; or
 - (4) have access to and sample any discharge of air contaminants resulting directly or indirectly from the operation of any article, machine, equipment, or other contrivance described in COHRAR § 3.1.2.
- (E) failure to comply with the provisions of an administrative order issued by the Director concerning the permitted facility; or

- (F) for any other cause, after a hearing which establishes, in the judgement of the Director, that continuance of this Permit is not consistent with the purpose of the Act or regulations under it, or is not consistent with the purposes of the Federal Clean Air Act or regulations under it.

10. Expiration of Air Permits

All Air Permits issued to the permittee prior to the effective date of this Permit shall expire immediately following the issuance of this Permit. [COHRAR § 3.2.6(a)]

I.E. Emergency Provisions

1. Emergency Procedure

The permittee shall comply with the provisions of an emergency order to immediately reduce or discontinue the emission of air contaminants, if the Director finds that such action is necessary to protect human health or safety, in accordance with COHRAR § 2.9. [COHRAR §§ 2.9.1, 2.9.2]

2. Emission Reduction Standby Plan

Within thirty (30) days of receipt of a written request from the Director, the permittee shall prepare and submit a standby plan for reducing the emissions of air contaminants during periods of an Episode Alert, Warning and Emergency. The standby plan is subject to approval by the Director. [COHRAR § 2.8.5]

I.F. Miscellaneous Provisions

1. Property Rights

The issuance of this Permit does not convey any property rights of any sort, or any exclusive privilege. [COHRAR § 3.9.5(k)]

2. Severability

The provisions of this Permit are declared to be severable and if any section, paragraph, subparagraph, subdivision, clause, or phrase of this Permit shall be adjudged to be invalid or unconstitutional by any court of competent jurisdiction, the judgment shall not affect, impair, or invalidate the remainder of this Permit but shall be confined in its operation to the section, paragraph, subparagraph, subdivision, clause, or phrase of this permit that shall be directly involved in the controversy in which such judgment shall have been rendered. [COHRAR § 3.9.5(g)]

3. Authority of Department

Nothing in this Permit or conditions thereto shall negate any authority granted to the Department of Natural Resources or the Alabama Department of Environmental Management pursuant to the Alabama Environmental Management Act or regulations issued thereunder. [§ 22-28-23, Ala. Code (1975)]

II. NON-FEDERALLY ENFORCEABLE GENERAL (FACILITY-WIDE) PERMIT CONDITIONS

II.A. Objectionable Odors

This Permit is issued with the condition that the operation of this facility by the owner or operator will not result in the emission of objectionable odors as defined in COHRAR § 6.7. [COHRAR § 6.7]

III. FACILITY-SPECIFIC FEDERALLY ENFORCEABLE CONDITIONS

III.A. Abrasive, Refractory and Ceramic Product Manufacturing Electric Arc Furnacing Operations with Fabric Filters

1. Emission Limitations

Emissions of particulate matter (PM) shall not exceed the following limitations: [COHRAR § 6.4.1]

- (A) 4.54 pounds/hour from the baghouse serving Furnace No. 1, Furnace No. 2, and Furnace No. 3 (Unit A Furnaces) in Building 50;
- (B) 4.62 pounds/hour from the baghouse serving Furnace No. 4 (Unit D Furnace) in Building 50;
- (C) 0.56 pounds/hour from the Specialty Furnace in Building 40;
- (D) 3.57 pounds/hour from the baghouse serving the Unit C Furnace in Building 70; and [COHRAR § 3.5.4]
- (E) 3.20 pounds/hour from the baghouse serving the Unit B Furnace in Building 90.

2. Monitoring Requirements

- (A) The Department may require emissions testing to verify compliance with the emission limitations specified in III.A.1 of this Permit. Any such emissions tests shall be conducted at the maximum rated capacity of the furnace and shall be performed in accordance with EPA Reference Method 5, as described in Appendix A of 40 CFR Part 60. As a minimum,

emissions testing shall be conducted prior to the expiration date appearing on the first page of this Permit for the following emissions points: the baghouse serving the Unit A Furnaces in Building 50, the baghouse serving the Unit D Furnace in Building 50, the baghouse serving the Unit C Furnace in Building 70 and the Baghouse serving the Unit B Furnace in Building 90. [COHRAR §§ 1.9.1, 1.10.2, 3.3.4]

- (B) Each emission point shall be equipped with sampling ports, ladders, platforms and other safety equipment to facilitate testing performed pursuant to III.A.2(A) of this Permit. Access to adequate utilities for operation of sampling and testing equipment shall also be provided. [COHRAR §§ 3.1.3, 3.3.3]

3. Reporting Requirements

- (A) The Department must be notified in writing at least ten (10) working days in advance of all emissions testing to be conducted and submitted as demonstration of compliance with this Permit. The following information shall be provided with the notification: [COHRAR § 3.3.4]
 - (1) the date the test crew is expected to arrive, the date and time of the anticipated start of the first run, how many and which emission points are to be tested, and the names of the person and/or testing company that will conduct the tests;
 - (2) a complete description of each sampling train to be used, including type of media used in determining gas stream composition, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning);
 - (3) a description of the process(es) to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity; and
 - (4) a sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

- (B) The results of all emissions tests shall be forwarded to the Department, in writing, within fifteen (15) working days of completion of testing, unless an extension of time is specifically approved by the Department. [COHRAR §§ 1.9.1, 1.9.2]

4. Record Keeping Requirements

- (A) The five-(5)-year records retention requirement specified in I.B.4. of this Permit notwithstanding, the results of the most recent testing performed at each emission point shall be kept on file, and shall be available to the Department for inspection at all

reasonable times. [COHRAR § 1.9.1]

- (B) Records of material throughput shall be maintained for use in quantifying emissions of particulate matter (PM) and sulfur dioxide (SO₂). As a minimum, such records shall include the type and quantity of each raw material fed to each furnace during each calendar quarter, the sulfur content of each combustible raw material (e.g., coal or coke) and the quantity of each product manufactured during each calendar quarter. These records shall be used to support semi-annual emissions reporting pursuant to I.B.6 of this Permit, and calculation of the required annual emissions fee payment pursuant to I.C.1. of this Permit. [COHRAR §§ 1.9.1, 1.9.2]

5. Control Device and Capture Equipment Operation and Maintenance

- (A) Each furnace shall be enclosed, hooded, or otherwise equipped such that dust emissions are captured and vented to a control device. [COHRAR § 6.2.2]
- (B) Each baghouse and capture system shall be operated and maintained at all times in a manner so as to minimize the emission of air contaminants. Procedures for ensuring proper operation and maintenance of the capture and control equipment shall conform to the requirements of III.F. of this Permit. [COHRAR § 1.12]

III.B. Abrasive, Refractory and Ceramic Product Manufacturing Crushing, Conveying, Screening, Sizing (Air Separation), and Milling Operations with Capture Equipment and Fabric Filters

1. Emission Limitations

Emissions of PM shall not exceed the following limitations: [COHRAR § 3.5.4]

- (A) 1.58 pounds per hour from the baghouse serving the primary crushing and screening operations in Building 70 (Emission Point 70-2);
- (B) 0.14 pounds per hour from the baghouse serving the product conveying operations in Building 70 (Emission Point 70-3);
- (C) 0.63 pounds per hour from the baghouse serving the secondary crushing and screening operations in Building 80 (Emission Point 80-1); and
- (D) 1.05 pounds per hour from the baghouse serving the product sizing and screening operations in Building 80 (Emission Point 80-2).

2. Process Throughput Limitations

Process throughput shall not exceed the following operational limitations: [COHRAR § 3.5.4]

- (A) 30,500 tons per year through the primary crushing and screening operations in Building 70;
- (B) 30,500 tons per year through the product conveying operation in Building 70;
- (C) 33,500 tons per year through the secondary crushing and screening operations in Building 80; and
- (D) 33,500 tons per year through the product sizing and screening operations in Building 80.

3. Monitoring Requirements

- (A) The Department may require emissions testing to verify compliance with the emission limitations specified in I.A.7 and III.B.1., or to verify compliance with the provisions of III.B.6 of this Permit. Any such emissions tests shall be conducted at maximum rated capacity of the materials processing equipment and shall be performed in accordance with EPA Reference Method 5, as described in Appendix A of 40 CFR Part 60. [COHRAR §§ 1.9.1, 1.10.2, 3.3.4]
- (B) Each emission point shall be equipped with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed pursuant to III.B.3(A) of this Permit. Access to adequate utilities for operation of sampling and testing equipment shall also be provided. [COHRAR §§ 3.1.3, 3.3.3]

4. Reporting Requirements

- (A) The Department must be notified in writing at least ten (10) working days in advance of all emissions testing to be conducted and submitted as demonstration of compliance with this Permit. The following information shall be provided with the notification: [COHRAR § 3.3.4]
 - (1) the date the test crew is expected to arrive, the date and time of the anticipated start of the first run, how many and which emission points are to be tested, and the names of the person and/or testing company that will conduct the tests;
 - (2) a complete description of each sampling train to be used, including type of media used in determining gas stream composition, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning);
 - (3) a description of the process(es) to be tested, including the feed rate, any operating

parameter used to control or influence the operations, and the rated capacity; and

- (4) a sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

- (B) The results of all emissions tests shall be forwarded to the Department, in writing, within fifteen (15) working days of completion of testing, unless an extension of time is specifically approved by the Department. [COHRAR §§ 1.9.1, 1.9.2]

5. Record Keeping Requirements

- (A) The five-(5)-year records retention requirement specified in I.B.4. of this Permit notwithstanding, the results of the most recent testing performed at each emission point shall be kept on file, and shall be available to the Department for inspection at all reasonable times. [COHRAR § 1.9.1]
- (B) Records of material throughput shall be maintained for use in quantifying emissions of particulate matter, and to demonstrate compliance with the process throughput limitations specified in III.B.2 of this Permit. As a minimum, such records shall include the type and quantity of each raw material and product fed to each crusher, conveyor and/or screen during each calendar quarter. These records shall be used to support semi-annual emissions reporting pursuant to I.B.6 of this Permit, and calculation of the required annual emissions fee payment pursuant to I.C.1 of this Permit. [COHRAR §§ 1.9.1, 1.9.2]

6. Control Device and Capture Equipment Operation and Maintenance

- (A) Each crusher, conveyor and screen shall be enclosed, hooded, or otherwise equipped such that dust emissions are captured and vented to a control device. [COHRAR § 6.2.2]
- (B) Each baghouse and capture system shall be operated and maintained at all times in a manner so as to minimize the emission of air contaminants. Procedures for ensuring proper operation and maintenance of the capture and control equipment shall conform to the requirements of III.F of this Permit. [COHRAR § 1.12]

III.C. Abrasive, Refractory, and Ceramic Product Manufacturing Materials Handling Operations with Capture Equipment and Fabric Filters

1. Emissions Limitations

Emissions of particulate matter shall not exceed the following limitations: [COHRAR § 3.5.4]

- (A) 0.7 pounds per hour from the baghouse serving the raw materials unloading operations in Building 70 (Emission Point 70-4);
- (B) 0.7 pounds per hour from the baghouse serving the zirconia (Building 50 product) unloading operations in Building 70 (Emission Point 70-5); and
- (C) 0.53 pounds per hour from the baghouse serving the furnace feed mixing operations in Building 70 (Emission Point 70-6).

2. Process Throughput Limitations

Material throughput shall not exceed the following process operational limitations: [COHRAR § 3.5.4]

- (A) 35,000 tons per year through the raw material unloading operations in Building 70;
- (B) 9,000 tons per year through the zirconia (Building 50 product) unloading operations in Building 70; and
- (C) 35,000 tons per year through the furnace feed mixing operations in Building 70.

3. Monitoring Requirements

- (A) The Department may require emissions testing to verify compliance with the emission limitations specified in I.A.7 and III.C.1, or to verify compliance with the provisions of III.C.6 of this Permit. Any such emissions tests shall be conducted at the maximum rated capacity of the materials handling equipment and shall be performed in accordance with EPA Reference Method 5, as described in Appendix A of 40 CFR Part 60. [COHRAR §§ 1.9.1, 1.10.2, 3.3.4]
- (B) Each emission point shall be equipped with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed pursuant to III.C.3.(A) of this Permit. Access to adequate utilities for operation of sampling and testing equipment shall also be provided. [COHRAR §§ 3.1.3, 3.3.3]

4. Reporting Requirements

- (A) The Department must be notified in writing at least ten (10) working days in advance of all emissions testing to be conducted and submitted as demonstration of compliance with this Permit. The following information shall be provided with the notification: [COHRAR § 3.3.4]
 - (1) the date the test crew is expected to arrive, the date and time of the anticipated start of the first run, how many and which emission points are to be tested, and the names of the person and/or testing company that will conduct the tests;

- (2) a complete description of each sampling train to be used, including type of media used in determining gas stream composition, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning);
- (3) a description of the process(es) to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity; and
- (4) a sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

- (B) The results of all emissions tests shall be forwarded to the Department, in writing, within fifteen (15) working days of completion of testing, unless an extension of time is specifically approved by the Department. [COHRAR §§ 1.9.1, 1.9.2]

5. Record Keeping Requirements

- (A) The five-(5) year records retention requirement specified in I.B.4 of this Permit notwithstanding, the results of the most recent testing performed at each emission point shall be kept on file, and shall be available to the Department for inspection at all reasonable times. [COHRAR § 1.9.1]
- (B) Records of material throughput shall be maintained for use in quantifying emissions of particulate matter, and to demonstrate compliance with the process throughput limitations specified in III.C.2 of this Permit. As a minimum, such records shall include the type and quantity of each raw material and product fed to each raw materials handling and mixing operation during each calendar quarter. These records shall be used to support semi-annual emissions reporting pursuant to I.B.6 of this Permit, and calculation of the required annual emissions fee payment pursuant to I.C.1 of this Permit. [COHRAR §§ 1.9.1, 1.9.2]

6. Control Device and Capture Equipment Operation and Maintenance

- (A) Each materials unloading area, conveyor, mixer, and storage tank shall be enclosed, hooded, or otherwise equipped such that dust emissions are captured and vented to a control device. [COHRAR § 6.2.2]
- (B) Each baghouse and capture system shall be operated and maintained at all times in a manner so as to minimize the emission of air contaminants. Procedures for ensuring proper operation and maintenance of the capture and control equipment shall conform to the requirements of III.F. of this Permit. [COHRAR § 1.12]

III.D. Natural Gas-Fired Abrasive, Refractory, and Ceramic Product Manufacturing Rotary Calciner with Fabric Filter

1. Emissions Limitations

Emissions of particulate matter from the rotary calciner in Building 91 shall not exceed 3.0 pounds per hour. [COHRAR § 6.4.1]

2. Monitoring Requirements

- (A) The Department may require emissions testing to verify compliance with the emission limitations specified in III.D.1 of this Permit. Any such emissions tests shall be conducted at the maximum rated capacity of the calciner and shall be performed in accordance with EPA Reference Method 5, as described in Appendix A of 40 CFR Part 60. [COHRAR §§ 1.9.1, 1.10.2, 3.3.4]
- (B) Each emission point shall be equipped with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed pursuant to III.D.2(A) of this Permit. Access to adequate utilities for operation of sampling and testing equipment shall also be provided. [COHRAR §§ 3.1.3, 3.3.3]

3. Reporting Requirements

- (A) The Department must be notified in writing at least ten (10) working days in advance of all emissions testing to be conducted and submitted as demonstration of compliance with this Permit. The following information shall be provided with the notification: [COHRAR § 3.3.4]
 - (1) the date the test crew is expected to arrive, the date and time of the anticipated start of the first run, how many and which emission points are to be tested, and the names of the person and/or testing company that will conduct the tests;
 - (2) a complete description of each sampling train to be used, including type of media used in determining gas stream composition, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning);
 - (3) a description of the process(es) to be tested, including the feed_rate, any operating parameter used to control or influence the operations, and the rated capacity; and
 - (4) a sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-

case basis.

- (B) The results of all emissions tests shall be forwarded to the Department, in writing, within fifteen (15) working days of completion of testing, unless an extension of time is specifically approved by the Department. [COHRAR §§ 1.9.1, 1.9.2]

4. Record Keeping Requirements

- (A) The five-(5)-year records retention requirement specified in I.B.4. of this Permit notwithstanding, the results of the most recent testing performed at each emission point shall be kept on file, and shall be available to the Department for inspection at all reasonable times. [COHRAR § 1.9.1]
- (B) Records of material throughput shall be maintained for use in quantifying emissions of particulate matter. As a minimum, such records shall include the type and quantity of each material fed to the calciner during each calendar quarter. These records shall be used to support semi-annual emissions reporting pursuant to I.B.6 of this Permit, and calculation of the required annual emissions fee payment pursuant to I.C.1. of this Permit. [COHRAR §§ 1.9.1, 1.9.2]
- (C) Records of natural gas usage shall be maintained for use in quantifying combustion emissions. As a minimum, such records shall include the volume of natural gas used to fuel the calciner during each calendar quarter. Billing records provided by the fuel supplier may be used to satisfy this requirement provided that such records clearly show the volume of natural gas supplied. These records shall be used to support semi-annual emissions reporting pursuant to I.B.6 of this Permit, and calculation of the required emissions fees pursuant to I.C.1 of this Permit. [COHRAR §§ 1.9.1, 1.9.2.]

5. Control Device and Capture Equipment Operation and Maintenance

- (A) The rotary calciner shall be enclosed, hooded, or otherwise equipped such that dust emissions are captured and vented to a control device. [COHRAR § 6.2.2]
- (B) The rotary calciner baghouse and capture system shall be operated and maintained at all times in a manner so as to minimize the emission of air contaminants. Procedures for ensuring proper operation and maintenance of the capture and control equipment shall conform to the requirements of III.F of this Permit. [COHRAR § 1.12]

III.E. Liquefied Petroleum Gas-Fired Abrasive, Refractory, and Ceramic Product Manufacturing Rotary Dryers with Wet Scrubbers

1. Emissions Limitations

Emissions of particulate matter from the rotary dryers in Building 50 shall not exceed the following emission limitations:

- (A) 5.5 lb/hr for Rotary Dryer # 1 (4000 lb/hr max. capacity); and [COHRAR § 6.4.1]
- (B) 5.5 lb/hr for Rotary Dryer # 2 (6000 lb/hr max. capacity). [COHRAR § 3.5.1]

2. Monitoring Requirements

- (A) The Department may require emissions testing to verify compliance with the emission limitations specified in III.E.1 of this Permit. Any such emissions tests shall be conducted at the maximum rated capacity of the calciner and shall be performed in accordance with EPA Reference Method 5, as described in Appendix A of 40 CFR Part 60. [COHRAR §§ 1.9.1, 1.10.2, 3.3.4]
- (B) Each emission point shall be equipped with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed pursuant to III.E.2(A) of this Permit. Access to adequate utilities for operation of sampling and testing equipment shall also be provided. [COHRAR §§ 3.1.3, 3.3.3]

3. Reporting Requirements

- (A) The Department must be notified in writing at least ten (10) working days in advance of all emissions testing to be conducted and submitted as demonstration of compliance with this Permit. The following information shall be provided with the notification: [COHRAR § 3.3.4]
 - (1) the date the test crew is expected to arrive, the date and time of the anticipated start of the first run, how many and which emission points are to be tested, and the names of the person and/or testing company that will conduct the tests;
 - (2) a complete description of each sampling train to be used, including type of media used in determining gas stream composition, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning);
 - (3) a description of the process(es) to be tested, including the feed_rate, any operating parameter used to control or influence the operations, and the rated capacity; and
 - (4) a sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

- (B) The results of all emissions tests shall be forwarded to the Department, in writing, within fifteen (15) working days of completion of testing, unless an extension of time is specifically approved by the Department. [COHRAR §§ 1.9.1, 1.9.2]

4. Record Keeping Requirements

- (A) The five-(5)-year records retention requirement specified in I.B.4. of this Permit notwithstanding, the results of the most recent testing performed at each emission point shall be kept on file, and shall be available to the Department for inspection at all reasonable times. [COHRAR § 1.9.1]
- (B) Records of material throughput shall be maintained for use in quantifying emissions of particulate matter. As a minimum, such records shall include the type and quantity of each material fed to the dryers during each calendar quarter. These records shall be used to support semi-annual emissions reporting pursuant to I.B.6 of this Permit, and calculation of the required annual emissions fee payment pursuant to I.C.1. of this Permit. [COHRAR §§ 1.9.1, 1.9.2]
- (C) Records of liquefied petroleum gas usage shall be maintained for use in quantifying combustion emissions. As a minimum, such records shall include the volume of LP gas used to fuel the dryers during each calendar quarter. Billing records provided by the fuel supplier may be used to satisfy this requirement provided that such records clearly show the volume of LP gas supplied. These records shall be used to support semi-annual emissions reporting pursuant to I.B.6 of this Permit, and calculation of the required emissions fees pursuant to I.C.1 of this Permit. [COHRAR §§ 1.9.1, 1.9.2.]

5. Control Device and Capture Equipment Operation and Maintenance

- (A) The rotary dryers shall be enclosed, hooded, or otherwise equipped such that dust emissions are captured and vented to a control device. [COHRAR § 6.2.2]
- (B) The rotary dryer wet scrubbers and capture system shall be operated and maintained at all times in a manner so as to minimize the emission of air contaminants. Procedures for ensuring proper operation and maintenance of the capture and control equipment shall conform to the requirements of III.F of this Permit. [COHRAR § 1.12]

III.F. OPERATION AND MAINTENANCE OF PARTICULATE MATTER CAPTURE EQUIPMENT AND EMISSION CONTROL DEVICES

1. Operation and Maintenance

All dust collection capture and control equipment (baghouses and wet scrubbers) shall be operated and maintained so as to minimize the emission of particulate matter. [COHRAR § 1.12]

2. Preventative Maintenance Program

A dust collector operations and maintenance plan (preventive maintenance program) shall be developed and implemented which, as a minimum, satisfies the following criteria: [COHRAR §§ 6.4.1, 3.9.5(a), 3.9.5(c)]

- (A) identifies each control device;
- (B) identifies inspection frequency for each control device;
- (C) includes a checklist for each piece of equipment which describes the scope of operational and preventive maintenance inspections;
- (D) identifies important operational parameters (e.g. pressure drop, air velocity, temperature, liquid flow rate, etc.), indicates their normal operating range, and provides for measuring these parameters, as appropriate, during operational and preventive maintenance inspections. Pressure drop across each baghouse shall be measured continuously, and readings shall be recorded pursuant to subparagraph (F) below. Temperature measurements of the exhaust from each furnace and from the rotary calciner shall be taken at a point upstream of the baghouse and shall be recorded pursuant to the requirements of subparagraph (F) below. Normal operating ranges for pressure drop and temperature shall be established by either of the following methods:
 - (1) by conducting stack tests which demonstrate compliance with particulate matter emissions limitations while the baghouse is operating over a pressure drop and temperature range; or
 - (2) using information provided by the manufacturer;
- (E) identifies corrective action to be initiated in the event problems are identified during the course of operational and preventive maintenance inspections; and
- (F) provides for documenting the results of operational and preventive maintenance inspections for future reference (identify recurrent problems, gradual changes in operating parameters, etc.).

3. Program Revision Requirements

- (A) The particulate emissions control device operations and maintenance plan (preventive maintenance program) is subject to approval by the Department. The plan may be revised without revision of this Permit, provided that the Department concurs with any such revision. [COHRAR §§1.9.1, 1.12]
- (B) The Department may require that the particulate emissions control device operations and maintenance plan (preventive maintenance program) be revised to ensure that the COHRAR are not violated. [COHRAR 6.4.1, 3.9.5(p), 3.9.5(a)]

4. Record-Keeping Requirements

The particulate emissions control device operations and maintenance plan (preventive maintenance program), and all records documenting implementation of the plan, shall be available for inspection by the Department at all reasonable times. [COHRAR § 1.9.1]

III.G. COMPLIANCE ASSURING MONITORING REQUIREMENTS

1. Applicability [COHRAR §§ 6.4.1, 3.9.5(p)]

- (A) The provisions of III.G. of this Permit, which address the requirements for Compliance Assurance Monitoring, apply to the following emission points: the baghouse serving the Unit A Furnaces (emission point 50-1), the baghouse serving the Unit A crushing operations (emission point 50-2), the baghouse serving the Unit A Mixing System (emission point 50-3), the baghouse serving the Unit A Unloading Operations (emission point 50-4), the baghouse serving the Unit D Furnace (emission point 50-5), the baghouse serving the Unit C Furnace (emission point 70-1), the baghouse serving the jaw crusher in Building 70 (emission point 70-2), the baghouse serving Building 70 raw material unloading operations (emission point 70-4), the baghouse serving Building 70 ziconia unloading operations (emission point 70-5), the baghouse serving the Building 70 mixing system (emission point 70-6), the baghouse serving the Building 70 tank unloading system (emission point 70-7), the baghouse serving the Building 70 furnace feed tanks (emission point 70-8), the baghouse serving the Building 70 screening operations (emission point 70-9), the baghouse serving the Building 70 rail material unloading operations (emission point 70-10), the baghouse serving the Building 80 crushing operations (emission point 80-1), the baghouse serving the Building 80 screening operations (emission point 80-2), the baghouse serving the Unit B Furnace (emission point 90-2), the baghouse serving the Building 90 crushing operations (emission point 90-3), the baghouse serving the Unit B raw material unloading operations (emission point 90-4), the baghouse serving material handling operations in Building 91 (emission point 91-1), the baghouse serving the rotary calciner (emission point 91-2), the baghouse serving the UP Mill and Air Classifier in Building 91 (emission point 91-3), the baghouse serving the Building 91 batch mixer (emission point 91-4), and the baghouse serving the Building 91 crushing operations (emission point 91-6).

- (B) Each of the dust collectors identified in III.G.1.(A) above is also subject to the requirements of III.F.2. of this Permit (the dust collector preventive maintenance program).
- (C) The permittee may conduct tests to determine the dust loading to any of the dust collectors identified in III.G.1.(A) above. Any such tests shall be conducted at the maximum rated capacity of the process equipment and shall consist of at least one (1) one-(1)-hour run using EPA Reference Method 5, as described in Appendix A of 40 CFR Part 60. Sampling shall be done at the inlet to the dust collector. In the event the measured dust loading to a particular dust collector is less than 22.8 pounds per hour, then that particular dust collector shall not be subject to the Compliance Assurance Monitoring requirements found in III.G of this Permit. Any such dust collector shall continue to be subject to the requirements of III.F.2 of this Permit (the dust collector preventive maintenance program).

2. Monitoring Requirements

In addition to those parameters identified in III.F.2. of this Permit, each emission point subject to the Compliance Assurance Monitoring requirements, i.e. those emission points identified in III.G.1 above, are subject to the following monitoring requirements: as a minimum, on each day that the process equipment served by a particular dust collector is operating, observations will be made of the exhaust stack of each dust collector by a person familiar with EPA Reference Method 9 and/or EPA Reference Method 22 (40 CFR Part 60, Appendix A) for a period of three (3) minutes each. The procedures of Method 22 shall be employed (although this Method is actually applicable to fugitive emission sources) in the observations of each dust collector stack exhaust. Thus, for each exhaust stack, a total of twelve (12) observations shall be performed at fifteen-(15)-second intervals on each day that the process equipment is operating. The presence or absence of visible emissions shall be recorded for each observation. In addition, the date and time of the observations, and the person performing the observations shall be recorded. [COHRAR §§ 1.9.1, 3.3.4, 3.9.5(c), 3.9.5(p)]

3. Inspection Requirements

In addition to preventive maintenance inspections performed pursuant to the schedule established under III.F.2.(B) of this Permit, an unscheduled maintenance inspection shall be conducted of a dust collector within four (4) hours of the time that the presence of visible emissions is observed during the performance of the daily visible emissions observations required by III.G.2. above. [COHRAR §§ 1.12.1, 3.1.2(g)]

4. Corrective Action Requirements [COHRAR §§ 1.12.1, 3.1.2(g)]

- (A) Corrective action shall be completed within twenty-four (24) hours from the time that visible emissions are first observed. Corrective action is here defined as either:
 - (1) the completion of repairs that eliminate the visible emissions, or

- (2) the shut-down of the emissions source.
- (B) The provisions of III.G.4.(A) above notwithstanding, in the event repairs can not be completed within twenty-four (24) hours because necessary replacement parts cannot be obtained from a local supplier, then such replacement parts shall be ordered within twenty-four (24) hours from the time that visible emissions are first observed, and corrective action shall be completed within seventy-two (72) hours from the time that visible emissions are first observed.

5. Notification Requirements

In the event corrective action will not be completed within twenty (24) hours from the time that visible emissions are first observed, the permittee shall notify the Department by telephone. Such telephone notification shall include the following information: [COHRAR § 1.12.3]

- (A) the date and time that visible emissions were first observed;
- (B) the cause of the excursion, i.e. observation of visible emissions from the dust collector exhaust;
- (C) the reason(s) that corrective action will not be completed within twenty-four (24) hours from the time that visible emissions were first observed; and
- (D) the projected time required to complete corrective action.

6. Record-Keeping Requirements

The following records shall be maintained at the facility: [COHRAR §§ 1.9.1, 3.9.5(c)]

- (A) the results of daily visible emission observations performed pursuant to III.G.2. above;
- (B) the date and time of each excursion, i.e. the observation of visible emissions from a dust collector subject to III.G. of this Permit;
- (C) the cause of each excursion;
- (D) the date and time of each unscheduled inspection conducted pursuant to III.G.3. above;
- (E) the date and time that replacement parts were ordered pursuant to III.G.4.(B) above;
- (F) the date and time that corrective action was completed pursuant to III.F.G.(A) or (B) above; and
- (G) the results of all testing conducted pursuant to III.G.1.(C) of this Permit. The five-(5)-year records retention requirement specified in I.B.4. of this Permit notwithstanding, the results

of all testing performed pursuant to III.G.1.(C) shall be kept on file permanently, and shall be available to the Department for inspection at all reasonable times. [COHRAR § 1.9.1]

7. Reporting Requirements

The semi-annual monitoring reports required by I.B.6. of this Permit shall include the following information for each of the dust collectors identified in III.G.1.(A) above: [COHRAR §§ 1.9.1, 3.9.5(e)]

- (A) the date and time of each excursion, i.e. the date and time that visible emissions were observed;
- (B) the cause of each excursion; and
- (C) the time elapsed between observing visible emissions and the time that corrective action was completed. The time that corrective action was completed shall be measured as either the time repairs were completed that eliminated the visible emissions, or the time that the emission source served by the dust collector was shut down, whichever came first.
- (D) Each failure to complete corrective action as required by III.G.4.(A) or (B) shall be clearly identified as a deviation from the requirements of this Permit.

III.H. Diesel-Fired Emergency Generators

1. Operational Limitations

- (A) All of the diesel-fired emergency generators are to be operated as emergency stationary RICE (Reciprocating Internal Combustion Engines) as defined in § 63.6675. [COHRAR § 3.1.2(g) and Part 13.2 Subpart III, §§ 60.4211(f), 60.4219; COHRAR Part 14.5 Subpart ZZZZ, §§ 63.6640(f), 63.6675]
- (B) In addition to operation in emergency situations, each diesel-fired emergency generator may be operated for necessary maintenance checks and readiness testing provided that such operation does not exceed one-hundred (100) hours per calendar year. The engines may also be operated for up to fifty (50) hours per calendar year in non-emergency situations. The fifty (50) hours per year of non-emergency operation are counted as part of the one-hundred (100) hours per calendar year for maintenance and readiness testing. Furthermore, the fifty (50) hours per calendar year of non-emergency operation cannot be used for peak shaving or non-emergency demand response or to generate income for a facility to the power grid or otherwise supply power as part of a financial arrangement with another entity. [COHRAR Part 13.2 Subpart III, § 60.4211(f); COHRAR Part 14.5 Subpart ZZZZ, § 63.6640(f)]
- (C) The engines manufactured after June 12, 2006, shall meet the applicable emission limitations in Table 4 of 40 CFR Part 60 Subpart III. Certification by the manufacturer(s)

shall be used to demonstrate compliance with this requirement. However, such manufacturer certifications do not preclude the Director from requiring emissions testing pursuant to paragraph I.B.1 of this Permit. [COHRAR Part 13.2 Subpart IIII, §§ 60.4205(a) through (d); COHRAR Part 14.5 Subpart ZZZZ, § 63.6590(c)(1)]

2. Monitoring Requirements

Each diesel-fired emergency generator must be equipped with a non-resettable hour meter. [COHRAR Part 13.2 Subpart IIII, § 60.4209; COHRAR Part 14.5 Subpart ZZZZ, § 63.6625(f)]

3. Record-keeping Requirements

- (A) Records of all maintenance performed on each engine pursuant to the requirements of paragraph III.H.4. below shall be maintained in a form suitable for inspection. [COHRAR Part 13.2 Subpart IIII § 60.4214(a)(2)(ii); COHRAR Part 14.5 Subpart ZZZZ, § 63.6655(e)]
- (B) Records of the hours of operation of each engine must be maintained, which are recorded through the non-resettable hour meters required by paragraph III.H.2. above. These records shall include 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, including a description of the non-emergency operation sufficiently detailed to demonstrate that the restrictions on non-emergency operation included in subparagraph III.H.1.(B) above have not been violated. [COHRAR § 1.9.1 and Part 13.2 Subpart IIII, § 60.4214(b); COHRAR Part 14.5 Subpart ZZZZ § 63.6655(f)]

4. Work Practice Requirements

- (A) Each diesel-fired emergency generator must be operated and maintained in accordance with the manufacturers' recommendations. [COHRAR Part 13.2 Subpart IIII, § 60.4211(a)(1); COHRAR Part 14.5 Subpart ZZZZ, § 63.6625(e)]
- (B) For each diesel-fired emergency generator constructed prior to June 12, 2006, the following maintenance requirements apply, as a minimum [COHRAR Part 14.5 Subpart ZZZZ, § 63.6603(a), Table 2d.4]:
 - (1) Change the oil and filter every five-hundred (500) hours or annually, whichever comes first;
 - (2) Inspect the air cleaner every one-thousand (1,000) hours of operation or annually, whichever comes first, and replace as necessary; and
 - (3) Inspect all hoses and belts every five-hundred (500) hours of operation or annually, whichever comes first, and replace as necessary.

III.I. FEDERAL STRATOSPHERIC OZONE PROTECTION REQUIREMENTS

1. The permittee shall service, repair and maintain all appliances and refrigeration equipment, including air conditioning equipment, which use Class I or Class II ozone-depleting substances listed as refrigerants in 40 CFR Part 82, Subpart A, Appendices A and B, in accordance with the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Subpart F. [40 CFR Part 82, Subpart F; COHRAR § 3.9.5(a)]
2. No person under the direct or indirect control of the permittee shall knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing or maintenance or disposal of any such appliance or refrigeration equipment except as provided in 40 CFR Part 82, Subpart F. [40 CFR Part 82, Subpart F; COHRAR § 3.9.5(a)]
3. The permittee shall comply with all reporting and record-keeping requirements in 40 CFR § 82.166. [40 CFR § 82.166; COHRAR § 3.9.5(a)]

IV. PERMIT SHIELD PROVISIONS

Not Applicable

V. TRIVIAL & INSIGNIFICANT ACTIVITIES

Emissions from the Research Furnace in Building 40 are insignificant provided that the dust collection equipment is properly operated and maintained.

Emissions from the gasoline, diesel, and kerosene aboveground storage tanks are trivial.

VI. COMPLIANCE SCHEDULE

The permittee shall achieve compliance with the terms and conditions of this permit no later than:

Effective Date of Permit