

CLARK COUNTY
DEPARTMENT OF AIR QUALITY AND
ENVIRONMENTAL MANAGEMENT
500 South Grand Central Parkway, Box 555210, Las Vegas, Nevada 89155
Part 70 Operating Permit
Source: 4
Issued in accordance with the
Clark County Air Quality Regulations (AQR)

ISSUED TO: **CertainTeed Gypsum Manufacturing, Inc.**

SOURCE LOCATION:

13500 Blue Diamond Highway
Las Vegas, NV 89004
T22S, R59E, Sections 4, 5, 8, and 9
Hydrographic Basin Number: 212

COMPANY ADDRESS:

HRC 89003, Box 2900
Las Vegas, NV 89161

NATURE OF BUSINESS:

SIC Code 3275: Gypsum Products
NAICS Code 327420: Gypsum Products Manufacturing

RESPONSIBLE OFFICIAL:

Name: Doug Doyle
Title: Mill Manager
Phone: (702) 875-4111
Fax Number: (702) 875-4213

Permit Issuance: **November 3, 2009**
Minor Revision Issuance: **November 30, 2011**

Expiration Date: **November 2, 2014**

ISSUED BY: CLARK COUNTY DEPARTMENT OF AIR QUALITY AND ENVIRONMENTAL MANAGEMENT



Tina Gingras
Control Officer, Clark County DAQEM

EXECUTIVE SUMMARY

CertainTeed Gypsum Manufacturing, Inc. (CGM) is a major source for CO and NO_x, synthetic minor for PM₁₀; and a minor source for SO_x, VOC, and HAP. The CGM is located one mile east of Blue Diamond, Nevada, in the Las Vegas Valley airshed, hydrographic basin number 212. Hydrographic basin 212 is nonattainment for CO, PM₁₀, and ozone, and PSD for all other regulated air pollutants. The CGM processes gypsum ore and manufactures wallboard. All manufacturing and support processes at the site are grouped under the Standard Industrial Classification (SIC) Code 3275: Gypsum Products (NAICS Code 327420: Gypsum Products Manufacturing). The emission units at the source include rock crushing and screening, transport of raw rock, mill operations, plaster operations, wallboard manufacturing, and gasoline dispensing facility. This significant revision of the Part 70 Operating Permit (OP) is issued based on the Title V revision application submitted on March 15, 2011.

The following table summarizes the source PTE (tons per year) for each regulated air pollutant for all emission units addressed by this Part 70 OP:

PM₁₀	PM_{2.5}	NO_x	CO	SO_x	VOC	HAP
57.43	57.43	90.49	121.11	0.87	42.68	2.64

Pursuant to AQR 12.5, all terms and conditions in Sections I through IV and the Attachments in this permit are federally enforceable unless explicitly denoted otherwise.

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I. ACRONYMS

Table I-1: List of Acronyms

Acronym	Term
AQR	Clark County Air Quality Regulations
AST	Aboveground Storage Tank
ATC	Authority to Construct
ATC/OP	Authority to Construct/Operating Permit
Bhp	Brake Horsepower
BCC	Clark County Board of County Commissioners
CAO	Field Corrective Action Order
CARB	California Air Resources Board
CE	Control Efficiency
CEM	Continuous Emissions Monitoring System
CF	Control Factor
CFR	United States Code of Federal Regulations
CO	Carbon Monoxide
CPI	Urban Consumer Price Index
DAQEM	Clark County Department of Air Quality & Environmental Management
DEM	Digital Elevation Model
EF	Emission Factor
EO	Executive Order
EPA	United States Environmental Protection Agency
EU	Emission Unit
EVR	Enhanced Vapor Recovery
GDO	Gasoline Dispensing Operation
HAP	Hazardous Air Pollutant
HP	Horse Power
MMBtu	Millions of British Thermal Units
NAC	Nevada Administrative Code
NEI	Net Emission Increase
NO _x	Nitrogen Oxides
NOV	Notice of Violation
NRS	Nevada Revised Statutes
NSPS	New Source Performance Standards
NSR	New Source Review
OP	Operating Permit
PM ₁₀	Particulate Matter less than 10 microns
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RVP	Reid Vapor Pressure
scf	Standard Cubic Feet
SIP	State Implementation Plan
SO _x	Sulfur Oxides
TCS	Toxic Chemical Substance
TSD	Technical Support Document
UST	Underground Storage Tank
USGS	United States Geological Survey
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound
VOL	Volatile Organic Liquid

II. GENERAL CONDITIONS

A. General Requirements

1. The Permittee must comply with all conditions of the Part 70 Operating Permit. Any permit noncompliance may constitute a violation of the AQRs, Nevada law, and the Act, and is grounds for any of the following: enforcement action; permit termination; revocation and re-issuance; revision; or denial of a permit renewal application. *[AQR 12.5.2.6(g)(1)]*
2. If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall not be affected and shall remain valid. *[AQR 12.5.2.6(f)]*
3. The Permittee shall pay all permit fees pursuant to AQR Section 18. *[AQR 12.5.2.6(h)]*
4. The permit does not convey any property rights of any sort, or any exclusive privilege. *[AQR 12.5.2.6(g)(4)]*
5. The Permittee shall not hinder, obstruct, delay, resist, interfere with, or attempt to interfere with the Control Officer, or any individual to whom authority has been duly delegated for the performance of any duty by the AQR. *[AQR 5.1.1]*
6. The Permittee shall allow the Control officer, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to enter the Permittee's premises where a Part 70 source is located or emissions related activity is conducted and to: *[AQR 12.5.2.8(b)]*
 - a. Have access to and copy any records that must be kept under the conditions of the permit;
 - b. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
 - c. Sample or monitor substances or parameters for the purpose of assuring compliance with the permit or applicable requirements; and
 - d. Document alleged violations using devices such as cameras or video equipment.
7. The Permittee owning, operating, or in control of any equipment or property who shall cause, permit, or participate in, any violation of the AQR shall be individually and collectively liable to any penalty or punishment imposed by and under the AQR. *[AQR 8.1]*
8. Any Permittee who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. *[AQR 12.5.2.2]*

B. Modification, Revision, Renewal Requirements

1. No person shall begin actual construction of a New Part 70 source, or modify or reconstruct an existing Part 70 source that falls within the preconstruction review applicability criteria, without first obtaining an Authority to Construct Permit from the Control Officer *[AQR 12.4.1.1(a)]*
2. The permit may be revised, revoked, reopened and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *[AQR 12.5.2.6(g)(3)]*
3. A permit, permit revision, or renewal may be approved only if all of the following conditions have been met: *[AQR 12.5.2.10(a)]*

- a. The Control Officer has received a complete application for a permit, permit revision, or permit renewal, except that a complete application need not be received before a Part 70 general permit is issued pursuant to Section 12.5.2.20;
 - b. Except for revisions qualifying as administrative or minor permit revisions under Section 12.5.2.13 or paragraphs (a) and (b) of Section 12.5.2.14, the Control Officer has complied with the applicable requirements for public participation in Section 12.5.2.17;
 - c. The Control Officer has complied with the requirements for notifying and responding to EPA and affected states under paragraph (b) of Section 12.5.2.18;
 - d. The conditions of the permit provide for compliance with all applicable requirements and the requirements of Section 12.5; and
 - e. EPA has received a copy of the proposed permit or permit revision and any notices required under paragraphs (a) and (b) of Section 12.5.2.18, and has not objected to issuance of the permit under paragraph (c) of Section 12.5.2.18 within the time period specified therein.
4. No permit revisions 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 the permit. *[AQR 12.5.2.6(i)]*
 5. Permit expiration terminates the Permittee's right to operate unless a timely and complete renewal application has been submitted. *[AQR 12.5.2.11(b)]*
 6. For purposes of permit renewal, a timely application is a complete application that is submitted at least six (6) months and not greater than eighteen (18) months prior to the date of permit expiration. If a source submits a timely application under this provision, it may continue operating under its current Part 70 Operating Permit until final action is taken on its application for a renewed Part 70 Operating Permit. *[AQR 12.5.2.1(a)(2)]*

C. Reporting/Notifications/Providing Information Requirements

1. The Permittee shall submit all compliance certifications to the Control Officer. *[AQR 12.5.2.8(e)(4)]*
2. Any application form, report, or compliance certification submitted pursuant to the permit or AQRs shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under AQR 12.5 shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *[AQR 12.5.2.6(l)]*
3. The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by the permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the Administrator along with a claim of confidentiality. *[AQR 12.5.2.6(g)(5)]*
4. Upon request of the Control Officer, the Permittee shall provide such information or analyses as will disclose the nature, extent, quantity or degree of air contaminants which are or may be discharged by such source, and type or nature of control equipment in use, and the Control Officer may require such disclosures be certified by a professional engineer registered in the state. In addition to such report, the Control Officer may designate an authorized agent to make an independent study and report as to the nature, extent, quantity or degree of any air contaminants which are or may be discharged from the source. An authorized agent so designated is authorized to inspect any article,

machine, equipment, or other contrivance necessary to make the inspection and report. [AQR 4.4]

5. The Permittee shall submit annual emissions inventory reports based on the following: [AQR 18.6.1]
 - a. The annual emissions inventory must be submitted to DAQEM by March 31 of each calendar year; and
 - b. The report shall include the emission factors and calculations used to determine the emissions from each permitted emission unit, even when an emission unit is not operated.
6. The Permittee shall make all production, emission and monitoring calculations available to the Control Officer for inspection within 30 days from the end of each month. [AQR12.5.2.8]
7. The Permittee who has been issued a permit under Section 12.5 shall post such permit in a location which is clearly visible and accessible to the facility's employees and representatives of the department. [AQR 12.5.2.6(m)]

D. Compliance Requirements

1. The Permittee shall not use as a defense 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. [AQR 12.5.2.6(g)(2)]
2. Any person who violates any provision of AQR, including, but not limited to, any application requirement; any permit condition; any fee or filing requirement; any duty to allow or carry out inspection, entry or monitoring activities or any requirements by DAQEM is guilty of a civil offense and shall pay civil penalty levied by the Air Pollution Control Hearing Board and/or the Hearing Officer of not more than \$10,000. Each day of violation constitutes a separate offense. [AQR 9.1]
3. Any person aggrieved by an order issued pursuant to AQR Section 9 is entitled to review as provided in Chapter 233B of NRS. [AQR 9.12]
4. The Permittee of any stationary source or emission unit that fails to demonstrate compliance with the emissions standards or limitations shall submit a compliance plan to the Control Officer pursuant to AQR Section 10. [AQR 10.1]
5. The Permittee shall comply with the requirements of 40 CFR 61, Subpart M, of the National Emission Standard for Asbestos for all demolition and renovation projects. [AQR 13.1(b)(8)]
6. Permittee shall submit compliance certification with terms and conditions contained in the Operating Permit, including emission limitations, standards, or work practices, as follows: [AQR 12.5.2.8(e)]
 - a. the Permittee shall submit compliance certifications annually in writing to the Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) and the Administrator at USEPA Region IX (Director, Air and Toxics Divisions, 75 Hawthorne St., San Francisco, CA 94105). A compliance certification for each year will be due on January 30th of the following year;
 - b. annual submission of compliance certification, or more frequently if specified in the applicable requirement or by the Control Officer;
 - c. a means for monitoring the compliance of the source with its emission limitations, standards, and work practices;
 - d. compliance certification shall include all of the following:
 - i. the identification of each term or condition of the permit that is the basis of the certification;

- ii. the identification of the methods or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period;
 - iii. 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;
 - iv. such other facts as the Control Officer may require to determine the compliance status of the source.
7. The Permittee shall report to the Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) any upset, breakdown, malfunction, emergency or deviation which cause emissions of regulated air pollutants in excess of any limits set by regulation or by this permit. The report shall be in two parts as specified below: [AQR 12.5.2.6(d)(4)(B) and AQR 25.6.1]
- a. within twenty-four (24) hours of the time the Permittee learns of the event, the report shall be communicated by phone (702) 455-5942, fax (702) 383-9994, or email.
 - b. within seventy-two (72) hours of the notification required by paragraph (a) above, the detailed written report containing the information required by AQR Section 25.6.3 shall be submitted.
8. The Permittee shall report to the Control Officer deviations that do not result in excess emissions, with the semi-annual reports. Such reports shall include the probable cause of deviations and any corrective actions or preventative measures taken. [AQR 12.5.2.6(d)(4)(B)]
9. Records and data required by this Operating Permit to be maintained by Permittee may, at the Permittee's expense, be audited at any time by a third party selected by the Control Officer. [AQR 4.4 and AQR 12.5.2.6]
10. All records and logs, or a copy thereof, shall be kept on-site for a minimum of five (5) years from the date the measurement was taken or data was entered and shall be made available to DAQEM upon request. [AQR 12.5.2.6(d)]
11. The Control Officer reserves the right to require additional reports and reporting to verify compliance with permit conditions, permit requirements, and requirements of applicable federal regulations. [AQR 4.4 and AQR 12.5.2.6(d)]

Table II-D-1: Summary of Required Submission Dates for Various Reports

Required Report	Applicable Period	Due Date ¹
Semi-annual Report for 1st Six-Month Period	January, February, March, April, May, June	July 30 each year
Semi-annual Report for 2 nd Six-Month Period, Any additional annual records required.	July, August, September, October, November, December	January 30 each year
Annual Compliance Certification Report	Calendar Year	January 30 each year
Annual Emission Inventory Report	Calendar Year	March 31 each year
Notification of Malfunctions, Startup, Shutdowns or Deviations with Excess Emissions	As Required	Within 24 hours of the Permittee learns of the event

Required Report	Applicable Period	Due Date ¹
Report of Malfunctions, Startup, Shutdowns or Deviations with Excess Emissions	As Required	Within 72 hours of the notification
Deviation Report without Excess Emissions	As Required	Along with semi-annual reports
Performance Testing	As Required	Within 60 days from the end of the test.

¹ If the due date falls on a Saturday, Sunday or a Federal or Nevada holiday, then the submittal is due on the next regularly scheduled business day.

E. Performance Testing Requirements

1. Upon request of the Control Officer, the Permittee shall test or have tests performed to determine the emissions of air contaminants from any source whenever the Control Officer has reason to believe that an emission in excess of that allowed by the DAQEM regulations is occurring. The Control Officer may specify testing methods to be used in accordance with good professional practice. The Control Officer may observe the testing. All tests shall be conducted by reputable, qualified personnel. *[AQR 4.5]*
2. Upon request of the Control Officer, the Permittee shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants. *[AQR 4.6]*
3. The Permittee shall submit for approval a performance testing protocol which contains testing, reporting, and notification schedules, test protocols, and anticipated test dates to the Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) not less than 45 nor more than 90 days prior to the anticipated date of the performance test. *[AQR 12.5.2.8]*
4. The Permittee shall submit to EPA for approval any alternative test methods that are not already approved by EPA. *[40 CFR 60.8(b)]*
5. The Permittee shall submit a report describing the results of each performance test to the Control Officer within 60 days from the end of the performance test. *[AQR 12.5.2.8]*

III. EMISSION UNITS AND APPLICABLE REQUIREMENTS

A. Emission Units and PTE

- The stationary source covered by this Part 70 Operating Permit (OP) consists of the emission units and associated appurtenances summarized in Table III-A-1 through Table III-A-16. [AQR 12.5.2.3]

Table III-A-1: Group 3A Truck Unloading Station PTE (tons/year)

EU	Description	Throughput	Control Method	PM ₁₀
C.16	Paved Gypsum Import Haul Road (2.5 miles)	43,478.26 VMT	Sweeping	4.78
C.17	Gypsum Rock Unloading	800,000	BH01	0.02
C.18	Useable Gypsum Rock Pile	0.52 acres	None	0.16
C.19	Dust Collector Reclaim to C-10 Belt	50.00	BH01	0.01
C.20	Hopper #1 to Discharge Belt #1	400,000	BH01	0.01
C.21	Hopper #2 to Discharge Belt #2	400,000	BH01	0.01
C.22	Discharge Belt #1 to C-10 Belt	400,000	BH01	0.01
C.23	Discharge Belt #2 to C-10 Belt	400,000	BH01	0.01
C.24	C-10 Belt to C-11 Belt	800,000	Moisture	0.72
C.25	C-11 Belt to Diverter	800,000	Moisture	0.72

Table III-A-2-a: Group 5 Discharge Terminal PTE (tons/year)

EU	Description	Throughput	Control Method	PM ₁₀
E.1	Stacker Conveyor	800,000	Moisture	1.66
E.1.1	Front End Loader (rock pile)	715,000	Moisture	1.48
E.1.2	Rock Batch Drop	715,000	Moisture	1.48
E.1.3	Front End Loader (recycle)	85,000	Moisture	0.18
E.1.4	Recycle Batch Drop	85,000	Moisture	0.18
E.2	Conveyor Transfer From Fold Belt	800,000	Moisture	1.66
E.3	Unload to Conveyor	800,000	Moisture	1.66
E.5	Crossover Belt to Conveyor	800,000	Moisture	1.66
E.6	Conveyor Drop (to rock bins)	234,163	Moisture	0.46
E.7	Conveyor Drop (to rock silos)	565,480	Moisture	1.17
E.8	Conveyor Drop (to rock silos)	565,480	BV01, BV02	0.03
E.9	Batch Drop to Conveyor	565,480	Moisture	1.17
E.9.1	End Saw Dust Drop to Conveyor	4,320	None	0.05
E.9.2	End Trim Emergency Dump	4,320	None	0.05
E.10	Batch Drop to CP Mill	565,480	BV03	0.03
E.12	Drop to Stucco Cooler	565,480	BH02	0.03

Table III-A-2-b: Group 5 CP Mill PTE (tons/year)¹

EU	Description	Rating	PM ₁₀	NO _x	CO	SO _x	VOC	HAP
E.11	CP Mill	0.00873 grains/dscf; 26,000 dscfm flowrate; 45 MMBtu/hr; BH02	8.54	17.65	1.01	0.13	0.57	0.35

¹ PM₁₀ emissions based on baghouse outlet grain loading.

Table III-A-3-a: Group 6 Rolling Mills for Plaster Production PTE (tons/year)

EU	Description	Throughput	Control Method	PM ₁₀
F.1	Unload to Rolling Mill	300,000	BH04-08	0.02
F.2	Rolling Mill	270,442	BH04-08	0.83
F.3	Cyclones	Emissions included in Rolling Mill		
F.4	Recycle to Rolling Mill	Emissions included in Rolling Mill		
F.5.1	Unload to Collection Screw	270,442	BH09	0.02
F.5.2	Baghouse Hopper Unload	702	BH09	0.01
F.6.1	Unload to 3 LP Bins	100,000	BH09	0.01

EU	Description	Throughput	Control Method	PM ₁₀
F.6.3	Unload to 400-ton LP Bin	170,442	BH09	0.01

Table III-A-3-b: Group 6 Flash Dryers for Plaster Production PTE (tons/year)

EU	Description	Rating	PM ₁₀	NO _x	CO	SO _x	VOC	HAP
F.1.1	Flash Dryer #1	1.8 MMBtu/hr	0.01	0.79	0.17	0.01	0.04	0.01
F.1.2	Flash Dryer #2	1.8 MMBtu/hr	0.01	0.79	0.17	0.01	0.04	0.01
F.1.3	Flash Dryer #3	1.8 MMBtu/hr	0.01	0.79	0.17	0.01	0.04	0.01
F.1.4	Flash Dryer #4	1.8 MMBtu/hr	0.01	0.79	0.17	0.01	0.04	0.01
F.1.5	Flash Dryer #5	1.8 MMBtu/hr	0.01	0.79	0.17	0.01	0.04	0.01

Table III-A-4-a: Group 7 Plaster Production PTE (tons/year)

EU	Description	Throughput	Control Method	PM ₁₀
G.1	Unload to Bucket Elevator	600,000	BH09	0.03
G.2	Unload to Dist. Screw	600,000	BH09	0.03
G.3.1	Unload to Board LP Bins	492,750	BH09	0.03
G.3.2	Unload to Plaster LP Bins	107,250	BH09	0.01
G.3.3	Unload to Conveyor	10,010	BH09	0.01
G.3.4	Unload to Sacker	10,010	BH09	0.01
G.4	Unload Screw – Old Lath Pit	2,503	BH09	0.01
G.5	Unload to Kettles – Board	492,750	BH10-16	0.03
G.6	Unload to Kettles – Plaster	117,260	BH10-16	0.01
G.7	4 Kettles – Board Stucco	492,750	BH10-16	0.94
G.8	3 Kettles – Plaster Stucco	117,260	BH10-16	0.22
G.9	Unload to Pits – Board	492,750	BH10-16	0.03
G.10	Unload to Pits – Stucco	117,260	BH10-16	0.01
G.11	Unload to Screw – Board	492,750	BH17	0.03
G.12	Unload to Screw – Stucco	117,260	BH17	0.01
G.13	Unload to Screw	99,671	BH17	0.01
G.14	Unload to Bucket Elevator	99,671	BH17	0.01
G.15	Unload to Conveyor	10,010	BH17	0.01
G.16	Unload to Trucks	10,010	BH17	0.01

Table III-A-4-b: Group 7 Kettles for Plaster Production PTE (tons/year)

EU	Description	Rating	PM ₁₀	NO _x	CO	SO _x	VOC	HAP
G.1.1	Kettle Calciner #1	12 MMBtu/hr	0.63	5.26	1.10	0.03	0.28	0.09
G.1.2	Kettle Calciner #2	12 MMBtu/hr	0.63	5.26	1.10	0.03	0.28	0.09
G.1.3	Kettle Calciner #3	12 MMBtu/hr	0.63	5.26	1.10	0.03	0.28	0.09
G.1.4	Kettle Calciner #4	12 MMBtu/hr	0.63	5.26	1.10	0.03	0.28	0.09
G.1.5	Kettle Calciner #5	12 MMBtu/hr	0.63	5.26	1.10	0.03	0.28	0.09
G.1.6	Kettle Calciner #6	12 MMBtu/hr	0.63	5.26	1.10	0.03	0.28	0.09
G.1.7	Kettle Calciner #7	12 MMBtu/hr	0.63	5.26	1.10	0.03	0.28	0.09

Table III-A-5: Group 8 Plaster Operations PTE (tons/year)

EU	Description	Throughput	Control Method	PM ₁₀
H.1	Unload to Screw	94,809	BH17	0.01
H.2	Unload to Bin #1	66,366	BH17	0.01
H.3	Unload to Screw	66,366	BH17	0.01
H.4	Unload to Hopper	66,366	BH17	0.01
H.5	Unload to Ball Mill	66,366	BH17	0.01
H.6	Ball Mill	66,366	BH17	0.20
H.7	Unload to Bucket Elevator	66,366	BH17	0.01
H.8	Unload to Screw	66,366	BH17	0.01
H.9	Unload to Hardwall Bin	66,366	BH17	0.01
H.10	Unload to Screw	66,366	BH17	0.01

EU	Description	Throughput	Control Method	PM ₁₀
H.10.1	Unload to Bin #2	28,443	BH17	0.01
H.10.2	Unload to Surge Bin	28,443	BH17	0.01
H.10.3	Unload to Entoleter	28,443	BH17	0.01
H.10.4	Entoleter	28,443	BH17	0.09
H.10.5	Unload to Screw	28,443	BH17	0.01
H.10.6	Unload to Elevator	28,443	BH17	0.01
H.10.7	Unload to Screw	28,443	BH17	0.01
H.11	Unload to Bin #2	28,443	BH17	0.01
H.12	Unload to Screw	28,443	BH17	0.01
H.13.1	Unload to Air Classifier	12,799	BH17	0.01
H.14.1	Unload to Screw	12,799	BH17	0.01
H.14.2	Air Classifier Bypass	15,643	BH17	0.01
H.15	Unload to Elevator	28,443	BH17	0.01
H.16	Unload to Screw	28,443	BH17	0.01
H.17	Unload to Casting Bin	28,443	BH17	0.01
H.18	Unload to Screw	28,443	BH17	0.01
H.19.1	Mixer	28,443	BH17	0.01
H.19.2	Mixer	65,039	BH20	0.01
H.19.3	Mixer	1,327	BH19	0.01
H.20.1	Mixer Loading	29,960	BH18	0.01
H.20.2	Mixer Loading	32,519	BH19	0.01
H.20.3	Trucking Loading	400,000	BH21	0.61
H.20.4	Supersacker	32,519	BH20	0.01
H.21	Pneumatic Transfer	1,327	BH21	0.01
H.22	Cement Unloading	1,517	BV04	0.01
H.23	Unload to Screw	1,517	BH18	0.01
H.24	Unload to Mixer	1,517	BH18	0.01

Table III-A-6: Group 9 Stucco Storage Bins at Board Plant PTE (tons/year)

EU	Description	Throughput	Control Method	PM ₁₀
I.1	Unload Bucket Elevator	584,887	BH23	0.03
I.2	Unload to Cooling Bins	438,665	BH23	0.03
I.3	Unload to Screw	438,665	BH23	0.03
I.5	Unload to Screw	584,887	BH23	0.03
I.6	Unload to 100-ton Bins	701,865	BH23	0.04
I.7	Unload to Screw	701,865	BH23	0.04
I.8	Unload to Surge Bin	701,865	BH23	0.04
I.9	Unload to Screw	701,865	BH23	0.04
I.10	Unload to Metering Screw	584,887	BH23	0.03
I.11	Unload to Recirculation Elevator	116,977	BH23	0.01
I.12	Unload to 100-ton Bins	116,977	BH23	0.01
I.13	Unload to Mixing Screw	584,887	BH23	0.03

Table III-A-7-a: Group 10 Board Plant PTE (tons/year)

EU	Description	Throughput	Control Method	PM ₁₀
J.1.1	Unload to Pin Mixer	584,887	BH23	0.03
J.1.2	Unload to Edge Mixer	Emissions included in pin mixer		
J.1.3	Wet Drop	Emissions included in pin mixer		
J.4	4 Radial Center Saws ¹	780	BH24	1.11
J.5	4 End Saws ¹	780	BH24	2.22
J.6	Slutter Machine ¹	8.0	BH24	0.14

¹ Throughput for this emission unit is in million square feet of wallboard. The emission factor has units of pounds PM₁₀ per million square feet of wallboard and includes bag filter control.

Table III-A-7-b: Group 10 Board Plant Heaters, Dryer, and Raw Materials PTE (tons/year)¹

EU	Description	Rating	PM ₁₀	NO _x	CO	SO _x	VOC	HAP
J.2.1	Paper Heater #1	1.2 MMBtu/hr	0.06	0.53	0.09	0.01	0.05	0.02
J.2.2	Paper Heater #2	1.2 MMBtu/hr	0.06	0.53	0.09	0.01	0.05	0.02
J.3	AKI Board Dryer	135 MMBtu/hr	8.10	27.44	110.63	0.35	1.64	1.09
J.3.1	Wallboard Raw Materials ¹	N/A	0.00	0.00	0.00	0.00	37.73	0.00

¹The wallboard raw materials only include the surfactant, the dust control agent, wallboard ink and wallboard ink cleaner.

Table III-A-8: Group 11 Accelerator System PTE (tons/year)

EU	Description	Throughput	Control Method	PM ₁₀
K.1	Unload to LP Bin	2,649	BV06	0.01
K.2	Unload to Elevators	2,649	BH22	0.01
K.3	Unload to Screw	2,649	BH22	0.01
K.4	Unload to Screw	2,649	BH22	0.01
K.5	Unload to Elevators	2,649	BH22	0.01
K.6	Unload to Ball Mills	2,649	BH22	0.01
K.7	Unload to Screw	2,649	BH22	0.01
K.8	Unload to Hopper	2,649	BH22	0.01
K.9	Unload to 3" Conv. Tubing	2,649	BH22	0.01
K.10	Unload to Mill Rec.	2,649	BH22	0.01
K.11	Unload to Screw	2,649	BH22	0.01
K.12	Unload to Accelerator Bin	2,649	BH23	0.01
K.13	Unload to Stucco Mix Screw	2,649	BH23	0.01
K.14	Unload to Pin Mixer	2,649	BH23	0.01
K.15	Ball Mills	2,649	BH22	0.01

Table III-A-9-a: Group 12 Wallboard Recycling System PTE (tons/year)

EU	Description	Throughput	Control Method	PM ₁₀
L.1	Recycle Stockpile	8.0 acres	None	2.41
L.2	Unload to Feeder	85,000	Moisture	0.08
L.3	Chopper	85,000	Moisture	1.00
L.4	Unload to Conveyor	85,000	Moisture	0.08
L.5	Unload to Pulverizer	85,000	Moisture	0.08
L.6	Pulverizer	85,000	Moisture	1.00
L.7	Unload to Conveyor	85,000	Moisture	0.08
L.7.1	Unload to Screen	85,000	Moisture	0.08
L.7.2	Rotary Screen	85,000	Moisture	0.61
L.7.3	Unload to Conveyor	85,000	Moisture	0.08
L.7.4	Unload to Conveyor	1,000	Moisture	0.01
L.7.5	Unload to Pile	1,000	Moisture	0.01
L.8	Unload to Conveyor	85,000	Moisture	0.08
L.9	Stacker to Product Pile	85,000	Moisture	0.31
L.10	Finished Product Pile	0.05 acres	None	0.02
L.13	Unpaved Haul Road (0.46 miles)	494.94 VMT	Moisture	0.19
L.14	Unload to Stockpile	85,000	Moisture	0.08
L.15	Recycle Stockpile	0.21 acres	Moisture	0.08
L.16	Unpaved Front End Loader Roads (reclaim) (0.08 miles)	1,383 VMT	Moisture	0.52
L.17	Front End Loading (reclaim)	85,000	Moisture	0.08
L.18	Bucket Elevator to Silos	85,000	BV01, BV02	0.01
L.19	Screw Conveyor to Hopper	4,320	None	0.05

Table III-A-10-b: Group 12 Wallboard Recycling System Diesel Generator PTE (tons/year)

EU	Description	Rating	PM ₁₀	NO _x	CO	SO _x	VOC	HAP
L.3.1	Diesel Power Generator	400 hp	0.17	2.35	0.51	0.04	0.19	0.05

Table III-A-11: Emergency Fire Pump Engine (tons/year)

EU	Description	Rating	PM ₁₀	NO _x	CO	SO _x	VOC	HAP
P.01	Diesel Fire Pump	144 hp	0.08	1.12	0.24	0.07	0.09	0.01

Table III-A-12: PTE from Storage Tanks and Fuel Dispensing Activities (tons/year)

EU	Description	Gallons/Year	VOC	HAP
T.1	Board Plant Gasoline Storage Tank – 1,000 gallons	16,000	0.08	0.01
T.2	Gasoline Dispensing	16,000	0.09	0.01
T.3	Gasoline Spillage	16,000	0.01	0.01
T.4	Diesel Dispensing	36,000	0.02	0.01

B. Emission Limitations and Standards

[Authority for all values, limits, and conditions in this section: NSR ATC/OP 4, Modification 5, Revision 0, (07/23/07) and NSR ATC 4, Modification 6, Revision 0, (05/29/08)]

1. Emission Limits

- a. The Permittee shall allow neither the actual nor the allowable annual emissions to exceed the calculated PTE for each emission unit in Tables III-A-1 through III-A-12, on a rolling 12-month basis. *[AQR 12.5.2.3]*
- b. The Permittee shall not allow visible emissions from all gypsum handling equipment, CP Mill, flash dryers, and kettle calciners to exceed 20 percent opacity when viewed in accordance with EPA Method 9, unless otherwise specified in the permit conditions. *[AQR 26.1]*
- c. The Permittee shall not allow visible emissions from the baghouses and bin vents listed in Table III-A-1 (BH01) and Table III-A-2-a (BH02, BV01, BV02 and BV03), Table III-A-4-a (BH17), Table III-A-5 (BH17 and BH22), Table III-A-8 (BH22) and Table III-A-9-a (BV01 and BV02), in excess of 7 percent opacity, or discharge into the atmosphere emissions from any stack which contains particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf). *[40 CFR 60.672 and AQR 34]*
- d. The Permittee shall not allow visible emissions from the baghouses on the CP Mill (EU: E.11 and E.12) listed in Table III-A-2-a in excess of 10 percent opacity, or discharge into the atmosphere emissions from any stack which contain particulate matter in excess of 0.092 g/dscm (0.040 gr/dscf). *[40 CFR 60.732]*
- e. The Permittee shall not allow visible emissions from the baghouses on the kettle calciners (EUs: G.5, G.7, and G.9) listed in Table III-A-4-b in excess of 10 percent opacity, or discharge into the atmosphere emissions from any stack which contain particulate matter in excess of 0.092 g/dscm (0.040 gr/dscf). *[40 CFR 60.732]*
- f. The Permittee shall not allow visible emissions from any belt conveyor transfer point in excess of 7 percent opacity (EUs: C.24, C.25, E.1.2, E.1.3, E.2, E.6, E.7, E.9, L.4, L.5, L.7, L.7.1, and L.8). *[40 CFR 60.672 and AQR 34]*
- g. The Permittee shall not allow visible emissions from any crusher or grinding mill in excess of 15 percent opacity (EUs: L.3 and L.6). *[40 CFR 60.672]*
- h. The Permittee shall not allow emissions from the emergency fire pump (EU: P.01) in excess of the following for each pollutant: *[40 CFR 60, Subpart III]*
 - i. NMHC + NO_x – 7.8 grams/hp-hr
 - ii. CO – 3.7 grams/hp-hr
 - iii. PM – 0.60 grams/hp-hr

2. Production Limits

- a. The Permittee shall limit the amount of usable gypsum rock to be processed to 7,200 tons per day and 800,000 tons per year.
- b. The Permittee may process up to 85,000 tons of reject and/or recycled wallboard per year. The sum of the reject wallboard recycled and the usable gypsum rock processed shall be limited to 800,000 tons per year.
- c. The Permittee shall limit processing of gypsum rock at the truck unloading station to a total of 800,000 tons per year.
- d. The Permittee shall limit throughput of board plant gasoline storage tank (EU: T.1) to a maximum of 16,000 gallons per year.
- e. The Permittee shall limit gasoline fuel dispensing activities to 16,000 gallons per year.
- f. The Permittee shall limit diesel fuel dispensing activities to 36,000 gallons per year.
- g. The Permittee shall limit operation of the diesel power generator to 2,000 hours per year (EU: L.3.1).
- h. The Permittee shall limit the operation of the emergency fire pump (EU: P.01) for testing and maintenance purposes to 100 hours per year. The Permittee may operate the emergency fire pump up to 50 hours per year for non-emergency situations, but those hours count towards the 100 hours provided for testing and maintenance. The 50 hours per year for non-emergency situations cannot be used to generate income for the facility. *[40 CFR 60.4211(e)]*
- i. The Permittee may operate the wallboard recycling system to process up to a combined maximum total of 85,000 tons of waste/scrap wallboard per year.

3. Control Requirements

- a. The Permittee shall control fugitive dust emissions from conveyors, storage piles, transfer points, and nonmetallic mineral processing equipment not connected to baghouse controls or part of the wet process by operational water sprays as needed to prevent exceeding opacity standards.
- b. The Permittee shall operate the baghouses and bin vents on all gypsum handling equipment, CP Mill, flash dryers, and kettle calciners at all times the processing equipment is operating. *[40 CFR 60, Subpart OOO and 40 CFR 60, Subpart UUU]*
- c. The Permittee shall operate the baghouses and bin vents on all gypsum handling equipment, CP Mill, flash dryers, and kettle calciners to maintain a particulate control efficiency of at least 99.5 percent on each baghouse.
- d. The Permittee shall insure no fugitive emissions are generated from each baghouse and that the pressure drop across each baghouse is maintained within the limits specified by the manufacturer.
- e. The Permittee shall maintain a water spray system in good operating condition, as verified by a daily inspection, and be used at all times during the processing of the material. This shall include but not be limited to transfer points, drop points and stacker points excluding washed product processing. The Permittee shall investigate and correct any problems before resuming operations. The Control Officer at any time may require additional water sprays at pertinent locations if an inspection by the Control Officer indicates that the opacity limit is being exceeded.
- f. The Permittee shall control fugitive dust emissions from conveyors, the useable gypsum storage pile in Group 3A and the storage piles (EUs: L.10 and L.15), transfer points, and nonmetallic mineral processing equipment not connected to baghouse controls by water sprays at emission points and/or maintenance of at least 0.5 percent moisture by weight in materials less than 1/4 inch in diameter.

- g. The Permittee shall insure the water system is maintained in good operating condition by complying with the manufacturer's maintenance schedules to prevent the moisture content from falling below 0.5 percent. The DAQEM at any time may require additional watering systems if an inspection indicates that the opacity limits specified are being exceeded.
- h. The Permittee shall not discharge from any source whatsoever quantities of air contaminants or other material which cause a nuisance. *[AQR 40.1]*
- i. The Permittee shall use only diesel fuel with a maximum sulfur content of 15 ppm and either minimum cetane index of 40 or a maximum aromatics content of 35 percent by volume may be used in the engine on the emergency fire pump. *[40 CFR 60, Subpart IIII]*
- j. The emergency fire pump (EU: P.01) shall be turbocharged and aftercooled and shall be operated and maintained in accordance with the manufacturer's specification. A copy of the manufacturer's specification shall be kept on site.
- k. The Permittee shall operate the emergency fire pump (EU: P.01) according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer. *[40 CFR 60, Subpart IIII]*
- l. The Permittee shall prevent fugitive VOC emissions from fuel dispensing activities by using the best available equipment, good operating practices, dispensing spillage cleanup and mitigation practices. Minor fuel spillage shall not be allowed to accumulate during reparative fuel dispensing activities. The Permittee shall train their employees involved with fuel dispensing activities on techniques for minimizing fuel transfer spillage. *[40 CFR 63, Subpart CCCCCC]*
- m. The Permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following *[40 CFR 63.1116]*:
 - i. minimize gasoline spills;
 - ii. clean up spills as expeditiously as practicable;
 - iii. cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
 - iv. minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators; and
 - v. the Permittee shall have records documenting gasoline throughput within 24 hours of a request of the Control Officer.
- n. The Permittee shall burn only natural gas in CP Mill, flash dryers, paper heaters, and kettle calciners.
- o. The Permittee shall take continual measures to control fugitive dust (e.g. wet, chemical or organic suppression, enclosures) at all mining and aggregate processing operations, material transfer points, stockpiles, truck loading stations and haul roads throughout the source. The Control Officer may at any time require additional water sprays or other controls at pertinent locations if an inspection indicates that opacity limits are being exceeded.
- p. The Permittee shall not cause or allow fugitive dust to become airborne without taking reasonable precautions.
- q. The Permittee shall not cause or allow the discharge of fugitive dust in excess of 100 yards from the point of origin or beyond the lot line of the property on which the emissions originate whichever is less.
- r. Paved roads accessing or located on the site shall be swept and/or rinsed as necessary to remove all observable deposits and so as not to exhibit opacity greater than 20 percent as determined by observations based on EPA Method 9, or an instantaneous opacity greater than 50 percent. In addition, silt loading shall not exceed 0.33 ounces per square foot regardless of the average number of vehicles per day.

- s. The Permittee shall insure that all unpaved roads accessing or located on the site will be treated with chemical or organic dust suppressant and watered as necessary, or paved, or graveled, or have an alternate, Control Officer-approved control measure applied so as not to exhibit opacity greater than 20 percent or an instantaneous opacity greater than 50 percent. In addition, silt content shall not exceed six (6) percent or silt loading shall not exceed 0.33 ounces per square foot (depending on the control method chosen) regardless of the average number of vehicles per day.
- t. The Permittee shall not allow mud or dirt to be tracked out onto a paved road where such mud or dirt extends 50 feet or more in cumulative length from the point of origin, nor shall any trackout be allowed to accumulate to a depth greater than 0.25 inches. Notwithstanding the preceding, all accumulations of mud or dirt on curbs, gutters, sidewalks or paved roads including trackout less than 50 feet in length and/or less than 0.25 inches in depth shall be cleaned of all observable deposits and maintained to eliminate emissions of fugitive dust.
- u. The Permittee shall ensure that all loaded trucks, regardless of ownership, shall be properly covered to prevent visible emissions.

C. Monitoring

- 1. The Permittee shall demonstrate compliance with the minimum moisture content (0.5 percent for screens, crushers, conveyors, storage piles, transfer points, and nonmetallic mineral processing equipment not connected to baghouse controls or part of the wet process) by conducting moisture testing and recording the results at least once each week on materials less than 0.25 inches in diameter in accordance with ASTM Standard C 566-97: Standard Test Method for Total Moisture Content of Aggregate by Drying. [AQR 12.5.2.6(d)]
- 2. On-site personnel familiar with EPA Method 9 shall perform visible emissions checks on all operations at least once per day, or more if meteorological conditions warrant it. [AQR 12.5.2.6(d)]
- 3. If the observer, during the visible emissions check, does not see any plume that, on an instantaneous basis, appears to exceed the opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation. [AQR 12.5.2.6(d)]
- 4. If the observer sees a plume that, on an instantaneous basis, appears to exceed the opacity standard, then the Permittee shall have a certified VE observer take an EPA Method 9 observation of the plume and record the results. [AQR 12.5.2.6(d)]
- 5. If Method 9 readings can not be obtained, the observer shall also indicate in the log: a) the reason why a Method 9 could not be performed, b) the color of the emissions, c) whether the emissions were light or heavy, d) the cause of the abnormal emissions, and e) any corrective action taken. [AQR 12.5.2.6(d)]
- 6. The Permittee shall investigate any occurrence of visible fugitive dust. Corrective actions shall be immediately taken to correct causes of fugitive dust in excess of allowable opacity limits. [AQR 12.5.2.6(d)]
- 7. The Permittee shall conduct daily monitoring of the pressure drop across each baghouse cell with the installation and operation of a pressure differential (Magnehelic) gauge, or equivalent device, per manufacturer's specifications. [AQR 12.5.2.6(d)]
- 8. The Permittee shall make annual visual inspections of the baghouse interior for air leaks. Defective baghouse compartments shall be sealed off and repairs completed within five (5) working days of the discovery of the malfunction. Should the malfunction cause the baghouse to be ineffective in controlling particulate emissions, the processing of material shall cease until such repairs to the baghouse are completed. [AQR 12.5.2.6(d)]
- 9. The Permittee shall install a non-resettable hour meter on the EU: P01. [40 CFR 60, Subpart IIII]

10. Compliance Assurance Monitoring:

- a. Only emission units with pre-control emissions exceeding 70 tons per year of PM₁₀ are subject to the CAM rule. Table III-C-1 lists the emission units at the facility that are subject to the CAM rule. [AQR 12.5.2.6(d)]:

Table III-C-1: Emission Units Subject to CAM

EU	Description	Control Device	PM ₁₀ Pre-control Emissions (tpy)
H.6, H.10.3, H.10.4	Plaster Ball Mill and Entoleter	Baghouse (BH17)	156.2
H.20.3	Bulk Truck Loading	Baghouse (BH21)	133.6
J.4, J.5, J.6	Radial Center Saw, End Saws and Slutter Machine	Baghouse (BH24)	746.3

- b. Daily measurements of pressure differential between inlet and outlet of the baghouse (Δp) for PM₁₀ and visible emissions for opacity were selected as CAM indicators. For opacity readings, the absence of visible emissions demonstrates compliance. The key elements of the monitoring approach are presented in Table IV-C-2 [AQR 12.5.2.6(d)]:

Table III-C-2: Monitoring Approach

CAM Element	Indicator 1	Indicator 2
Indicator	Pressure differential (Δp) for PM ₁₀ .	Visible emissions for opacity.
Measurement Approach	The Δp will be measured daily; the time of reading and the Δp will be recorded.	Daily visual checks of baghouse stack discharges shall be made to verify that visible emissions are not present. If visible emissions are observed, a Method 9 opacity reading will be performed.
Indicator Range	The indicator range for Δp is 3-8 inches of water for EUs: H.6, H.10.3, and H.10.4. An excursion is defined as any measured Δp outside the range of 3 and 8 inches of water. The indicator range for Δp is 1-5 inches of water for EUs: H.20.3, J.4, J.5, and J.6. An excursion is defined as any measured Δp outside the range of 1 and 5 inches of water. The QIP threshold is three (3) excursions in each quarterly reporting period.	For opacity, the indicator is visible emissions. Excursions of opacity above 7% trigger an investigation, corrective actions and a reporting requirement. The QIP threshold is three (3) excursions in each quarterly reporting period.
Performance Criteria Data Representativeness	Measurements will be made at the emission point.	Measurements will be made at the emission point.
Verification of Operational Status	The Δp gauge will be installed, calibrated, and operated per manufacturer recommendations.	Not applicable.
QA/QC Practices and Criteria	If a magnehelic gauge is used, the Δp gauge will be calibrated annually.	The visible opacity observations will be made by a certified observer.
Monitoring Frequency	Daily records of Δp will be made.	Daily visual checks will be made.
Data Collection Procedures	Differential pressure (Δp) will be measured with a Magnehelic pressure gauge or equivalent device and recorded daily.	The visible opacity observations will be made by a certified observer.
Averaging Period	Not applicable.	Not applicable.

D. Testing

1. The Permittee shall demonstrate compliance with the opacity standards and particulate emission standards expressed in g/dscm or gr/dscf, as listed in Table III-D-1, by conducting performance test on emission units listed in Table III-D-1 in accordance with 40 CFR 60 Reference Method 9 (Standards for Opacity) and Reference Methods 5 or 17. [AQR 12.5.2.6(d)]
2. Regardless of the date of issuance of this permit, the Performance Testing Frequency shall be performed as delineated in Table III-D-1 [AQR 12.5.2.6(d)]:

Table III-D-1: Performance Testing Standards and Frequency for PM Emissions

EU	Description	NSPS/AQR Applicability	Compliance Standard	Performance Test	Frequency
C.17, C.19 – C.23	Baghouse: BH01 Gypsum Handling, Rock Unloading Hoppers #1 and #2, Rock Unloading Hopper Discharge Belts #1 and #2	OOO/AQR 34	7 percent opacity	Method 9	Annual
			0.05g/dscm (0.022gr/dscf)	Method 5 or Method 17	Every 5 years
C.24	C10 Belt	OOO/AQR 34	7 percent opacity	Method 9	Annual
C.25	C11 Belt	OOO/AQR 34	7 percent opacity	Method 9	Annual
E.1.2	Rock Feed Hopper	OOO/AQR 34	7 percent opacity	Method 9	Annual
E.1.3	Reclaim Feed Hopper	OOO/AQR 34	7 percent opacity	Method 9	Annual
E.2	C3 Foldbelt	OOO/AQR 34	7 percent opacity	Method 9	Annual
E.6	Conveyor Drop to Rock Bin	OOO/AQR 34	7 percent opacity	Method 9	Annual
E.7	Rock Storage Silos #1 and #2 Feedbelt	OOO/AQR 34	7 percent opacity	Method 9	Annual
E.8, L.18	Bin Vents: BV01 and BV02 Rock Storage Silos #1 and #2	OOO/AQR 34	7 percent opacity	Method 9	Annual
E.9	Rock Storage Silos #1 and #2 Discharge Belt	OOO/AQR 34	7 percent opacity	Method 9	Annual
E.10	Bin Vent: BV03 CP Mill Feed Silo	OOO/AQR 34	7 percent opacity	Method 9	Annual
E.11, E.12	Baghouse: BH02 CP Mill	UUU	10 percent opacity	Method 9	Annual
			0.092g/dscm (0.040gr/dscf)	Method 5 or Method 17	Every 5 years
F.1, F.2	Baghouses: BH04 – BH08 Roller Mills	AQR 34	7 percent opacity	Method 9	Annual
F.5.1, F.5.2, F.6.1, F.6.2, G.3.1, G.3.2	Baghouse: BH09 LP Bins/Cooling Bin Elevator	AQR 34	7 percent opacity	Method 9	Annual
G.5, G.7, G.9	Baghouses: BH10 – BH 16 Kettle Calciners	UUU	10 percent opacity	Method 9	Annual
			0.092g/dscm (0.040gr/dscf)	Method 5 or Method 17	Every 5 years

EU	Description	NSPS/AQR Applicability	Compliance Standard	Performance Test	Frequency
H.1 – H.10, H.10.1 – H.10.7, H.11 – H.18	Baghouse: BH17 Finish Bin	OOO/AQR 34	7 percent opacity	Method 9	Annual
			0.05g/dscm (0.022gr/dscf)	Method 5 or Method 17	Every 5 years
H.20.1, H.23, H.24	Baghouse: BH18 Mixer #3	AQR 34	7 percent opacity	Method 9	Annual
H.19.3, H.20.2	Baghouse: BH19 Mixer #5	AQR 34	7 percent opacity	Method 9	Annual
H.19.2, H.20.4	Baghouse: BH20 Mixer #6	OOO/AQR 34	7 percent opacity	Method 9	Annual
H.20.3, H.21	Baghouse: HB21 Bulk Plaster Loading	OOO/AQR 34	7 percent opacity	Method 9	Annual
			0.05g/dscm (0.022gr/dscf)	Method 5 or Method 17	Every 5 years
I.1	Baghouse: BH03 Stucco Cooler/Transfer	AQR 34	7 percent opacity	Method 9	Annual
I.5 –I.13, J.1.1, J.1.2, K.12	Baghouse: BH23 Board Plant Stucco Bins	OOO	7 percent opacity	Method 9	Annual
			0.05g/dscm (0.022gr/dscf)	Method 5 or Method 17	Every 5 years
J.4, J.5, J.6	Baghouse: BH24 End Trim	AQR 34	7 percent opacity	Method 9	Annual
K.1	Bin Vent: BV06 LP Bin (Accelerator)	AQR 34	7 percent opacity	Method 9	Annual
K.2 – K.11, K.15	Baghouse: BH22 Accelerator Ball Mill	OOO/AQR 34	7 percent opacity	Method 9	Annual
			0.05g/dscm (0.022gr/dscf)	Method 5 or Method 17	Every 5 years
L.4, L.5, L.7, L.7.1, L.8	Gypsum Wallboard Recycling - conveyors	OOO/AQR 34	7 percent opacity	Method 9	Annual
L.7.2, L.7.3, L.7.4	Gypsum Wallboard Recycling - screen	OOO/AQR 34	7 percent opacity	Method 9	Annual
L.3, L.6	Gypsum Wallboard Recycling - crushers	OOO/AQR 34	15 percent opacity	Method 9	Annual

- Upon written request by the Control Officer, the Permittee may be required to conduct performance testing on the emergency fire pump (EU: P.01) to demonstrate compliance with the emission limits in 40 CFR 60, Subpart IIII. *[40 CFR 60, Subpart IIII]*

E. Record Keeping

- The Permittee shall maintain records on site that require semi-annual reporting and include, at minimum: *[AQR 12.5.2.6(d)]*:

Process Operations

- hours of operation of all process equipment;
- daily, monthly, and annual production (based on a 12-month rolling total) of gypsum processed via the truck unloading system;
- daily, monthly, and annual production (based on a 12-month rolling total) of recycled gypsum wallboard;
- monthly and semi-annual records of usage of all VOC-containing materials used in the manufacture of wallboard;

Diesel Power Generators and Fuel Burning Equipment

- e. hours of operation for each natural gas-fired emission unit;
- f. hours of operation and amount of diesel fuel used by each engine/generator in a weekly log with monthly summations;

Fugitive Emissions

- g. results of weekly moisture sampling;
 - h. annual throughput of the gasoline storage tank;
 - i. length of the on-site haul road(s); and
 - j. log of dust control measures applied to the paved haul roads, unpaved haul roads, and storage piles.
2. The Permittee shall maintain records on site that include, at minimum *[AQR 12.5.2.6(d)]*:
 - a. log of control device inspections, maintenance, and repair;
 - b. log of daily pressure drop across each baghouse cell;
 - c. results of daily visible emission observations of the operations;
 - d. results of daily visual observations of baghouses;
 - e. MSDS records of all VOC-containing materials used in the manufacture of wallboard;
 - f. sulfur content of diesel fuel; and
 - g. results of performance testing.
 3. The Permittee shall submit to the Administrator the following information about the existing facility being replaced and the replacement piece of equipment *[40 CFR 60.676]*:
 - a. For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or rail loading station: the rated capacity in tons per hour of the existing facility being replaced and the rated capacity in tons per hour of the replacement equipment;
 - b. For screening operation: the total surface area of the top screen of the existing screening operation being replaced and the total surface area of the top screen of the replacement operation;
 - c. For a conveyor belt: the width of the existing belt being replaced and the width of the replacement conveyor belt;
 - d. For a storage bin: the rated capacity in tons of the replacement storage bins.
 4. For all inspections, visible emission checks, and testing required under monitoring, logs, reports, and records shall include at least the date and time, the name of the person performing the action, the results or findings, and the type of corrective action taken (if required). *[AQR 12.5.2.6(d)]*
 5. All records and logs, or a copy thereof, shall be kept on-site for a minimum of five (5) years from the date the measurement or data was entered and shall be made available to DAQEM upon request. *[AQR 12.5.2.6(d)]*
 6. Records and data required by this Operating Permit shall be maintained by the Permittee and may, at the Permittee's expense, be audited at any time by a third party selected by the Control Officer. *[AQR 12.5.2.6(d)]*
 7. All records associated with acquisition of aggregate material used in the manufacturing process shall be kept by the Permittee and made available to the Control Officer for inspection upon request. *[AQR 12.5.2.6(d)]*
 8. The Permittee shall have a standard operating procedures (SOP) manual for baghouses and bin vents. The procedures specified in the manual for maintenance shall, at a minimum, include a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance. A copy of the maintenance schedule shall be kept on site. *[AQR 12.5.2.6(d)]*

9. The Permittee shall maintain records of any malfunction of the air pollution control equipment; or any periods during which a monitoring device is inoperative. *[40 CFR 60.7(b)]*
10. Sulfur content of diesel fuel shall be certified by the supplier with each fuel delivery. *[AQR 12.5.2.6(d)]*

F. Reporting

1. All report submissions shall be addressed to the attention of the Control Officer. *[AQR 14.3, AQR 21.4, and AQR 22.4]*
2. All reports shall contain the following: *[AQR 12.5.2.6(d)]*
 - a. a certification statement on the first page, i.e., "I certify that, based on information and belief formed after reasonable inquiry, the statements contained in this document are true, accurate and complete." (A sample form is available from DAQEM); and
 - b. a certification signature from a responsible official of the company and the date certification.
3. The Permittee shall submit semi-annual monitoring reports to DAQEM. *[AQR 12.5.2.6(d)]*
4. The following requirements apply to semi-annual reports: *[AQR 12.5.2.6(d)]*
 - a. The report shall include a semi-annual summary of each item listed in Section III-E-1.
 - b. The report shall be based on a calendar quarter, which includes partial calendar quarters.
 - c. The report shall include semi-annual summaries of any permit deviations, their probable cause, and corrective or preventative actions taken.
5. Each annual gasoline dispensing facility and vapor recovery equipment survey shall: *[AQR 12.5.2.6(d)]*
 - a. be submitted within 30 days of receipt of survey;
 - b. contain the description of Phase I vapor recovery equipment;
 - c. contain the number of aboveground storage tanks and hoses;
 - d. contain the name of owner or operator responsible for vapor recovery system operation;
 - e. the Permittee shall submit the report to DAQEM; and
 - f. be addressed to the attention of the Control Officer.
6. The Control Officer reserves the right to require additional reports and reporting to verify compliance with permit conditions, permit requirements, and requirements of applicable federal regulations. *[AQR 4.4]*

IV. OTHER REQUIREMENTS

1. The Permittee shall not use, sell, or offer for sale any fluid as a substitute material for any motor vehicle, residential, commercial, or industrial air conditioning system, refrigerator freezer unit, or other cooling or heating device designated to use a chlorofluorocarbon (CFC) or hydrochlorofluorocarbon (HCFC) compound as a working fluid, unless such fluid has been approved for sale in such use by the Administrator. The Permittee shall keep record of all paperwork relevant to the applicable requirements of 40 CFR 82 on site. *[40 CFR 82]*

ATTACHMENTS

1. APPLICABLE REGULATIONS

REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE:

1. Nevada Revised Statutes (NRS), Chapter 445B.
2. Clark County Air Quality Regulations (AQR) Applicable AQR Sections:

Citation	Title
AQR Section 0	Definitions
AQR Section 4	Control Officer
AQR Section 12.2	Permit Requirements For Major Sources in Attainment Areas
AQR Section 12.3	Permit Requirements For Major Sources in Nonattainment Areas
AQR Section 12.4	Authority to Construct Application and Permit Requirements for Part 70 Sources
AQR Section 12.5	Part 70 Operating Permit Requirements
AQR Section 13	National Emission Standards for Hazardous Pollutants
AQR Section 14.1.1 Subpart A	New Source Performance Standards (NSPS) General Provisions
AQR Section 14.1.94 Subpart OOO	New Source Performance Standards – Standards of Performance for Nonmetallic Mineral Processing Plants
AQR Section 14.1.101 Subpart UUU	Standards of Performance for New Stationary Sources (NSPS) – Calciners and Dryers in Mineral Industries
AQR Section 18	Permit and Technical Service Fees
AQR Section 25	Affirmative Defense for Excess Emissions due to Malfunctions, Startup, and Shutdown
AQR Section 26	Emissions of Visible Air Contaminants
AQR Section 34	Performance Standards for Metallic and/or Nonmetallic Mineral Mining and Processing
AQR Section 40	Prohibition of Nuisance Revision 0s
AQR Section 41	Fugitive Dust
AQR Section 42	Open Burning
AQR Section 43	Odors in the Ambient Air
AQR Section 70	Emergency Procedures
AQR Section 80	Circumvention

3. Clean Air Act, as amended (CAAA), Authority: 42 U.S.C. § 7401, et seq
4. Title 40 of the Code of Federal Regulations (40 CFR) Applicable 40 CFR Subsections:

Citation	Title
40 CFR Part 52.21	Prevention of Significant Deterioration (PSD)
40 CFR Part 52.1470	SIP Rules
40 CFR Part 60, Subpart A	Standards of Performance for New Stationary Sources (NSPS) – General Provisions
40 CFR Part 60, Subpart OOO	New Source Performance Standards – Standards of Performance for Nonmetallic Mineral Processing Plants
40 CFR Part 60, Subpart UUU	Standards of Performance for New Stationary Sources (NSPS) – Calciners and Dryers in Mineral Industries
40 CFR Part 60, Subpart IIII	Standards of Performance for New Stationary Sources (NSPS) – Stationary Compression Ignition (CI) Internal Combustion Engines (ICE)
40 CFR Part 60	Appendix A, Method 9 or equivalent, (Opacity)
40 CFR Part 63, Subpart CCCCC	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing facilities
40 CFR Part 64	Compliance Assurance Monitoring
40 CFR Part 70	Federally Mandated Operating Permits

Citation	Title
40 CFR Part 82	Protection of Stratospheric Ozone

2. EMISSION UNITS CONTROLLED BY BAGHOUSES

List of Baghouses with Controlled Emission Units

EU	Controlled Process	Baghouse Description	Air Flow (scfm)	Baghouse ID
C.17, C.19-23	Rock Unloading	Camcorp/14BH10x210; S/N: N/A	13,000	BH01
E.8, L.18	Rock Silo #1	Bin Vent; CP Environmental/ 58BF025IIG; S/N: 3376-1	500	BV01
E.8, L.18	Rock Silo #2	Bin Vent; CP Environmental/ 58BF025IIG; S/N: 3376-2	500	BV02
E.10	CP Mill Feed Silo	Bin Vent; CP Environmental/ 58BF025IIG; S/N: 3326	500	BV03
E.11, E.12	CP Mill	GMD/ BV705-10-6WI; S/N: 94SP70510WWI03	24,000	BH02
I.1	Stucco Cooler /Transfer	GMD/ BV690-10-6WI; S/N: 94SP69010WWI08	40,000	BH03
F.1, F.2	Roller Mill #1	Micro-D-Pulsaire/80F1; S/N: 71-H-1450	5,000	BH04
F.1, F.2	Roller Mill #2	Micro-D-Pulsaire/80F1; S/N: 71-H-1451	5,000	BH05
F.1, F.2	Roller Mill #3	Micro-D-Pulsaire/80F1; S/N: 71-H-1452	5,000	BH06
F.1, F.2	Roller Mill #4	Micro-D-Pulsaire/80F1; S/N: 71-H-1454	5,000	BH07
F.1, F.2	Roller Mill #5	Micro-D-Pulsaire/80F1; S/N: 71-H-1453	5,000	BH08
F.5.1, F.5.2, F.6.1, F.6.3, G.1 - 4	LP Bins/Cooling Bin Elevator	Micro-D-Pulsaire/unknown; S/N: 71-H-1943	5,000	BH09
G.5, G.7, G.9	Kettle #1	Micro-D-Pulsaire/1F2; S/N: 71-H-1465	7,000	BH10
G.5, G.7, G.9	Kettle #2	Micro-D-Pulsaire/1F2; S/N: 71-H-1464	7,000	BH11
G.5, G.7, G.9	Kettle #3	Micro-D-Pulsaire/1F2; S/N: 71-H-1462	7,000	BH12
G.5, G.7, G.9	Kettle #4	Micro-D-Pulsaire/1F2; S/N: 71-H-1461	7,000	BH13
G.5, G.7, G.9	Kettle #5	Micro-D-Pulsaire/1F2; S/N: 3474-6	7,000	BH14
G.5, G.7, G.9	Kettle #6	Micro-D-Pulsaire/1F2; S/N: 3474-5	7,000	BH15
G.5, G.7, G.9	Kettle #7	Micro-D-Pulsaire/1F2; S/N: 3474-3	7,000	BH16
G.11-16, H.1, H.2, H.3, H.4, H.5, H.6, H.7, H.8, H.9, H.10, H.10.1, H.10.2, H.10.3, H.10.4, H.10.5, H.10.6, H.10.7, H.11, H.12, H.13.1, H.14.1, H.14.2, H.15, H.16, H.17, H.18, I.1, I.3-4	Finish Bin	Micro-D-Pulsaire/1F2; S/N: 71-H-1944	6,700	BH17
H.22	Cement Unloading	Bin Vent; CP Environmental/ 58BF025IIG; S/N: 3419	500	BV04
H.24, H.23, H.20.1	Mixer #3	Micro-D-Pulsaire/N/A; S/N: N/A	1,000	BH18
H.19.3, H.20.2	Mixer #5	Micro-D-Pulsaire/N/A; S/N: N/A	1,000	BH19
H.19.2, H.20.4	Mixer #6	FlexKleen/unknown: S/N: W34460	500	BH20
H.21, H.20.3	Bulk Plaster Loading	FlexKleen/unknown: N/A	840	BH21
I.2	Stucco Cooling Bins	Micro-D-Pulsaire/100.S.8.20; S/N: 71-H-1945	300	BV23

EU	Controlled Process	Baghouse Description	Air Flow (scfm)	Baghouse ID
K.1	LP Bin (Accelerator)	Bin Vent; Pneu-Con/N/A; S/N: N/A	300	BV06
K.2 – K.11, K.15	Accelerator Ball Mills	CP Environmental/ 58BF025C; S/N: 3663-3	1,000	BH22
I.5-I.13, J.1.1, J.1.2, K.12-14	Board Plant Stucco Bins	Micro-D-Pulsaire/100.S.8.20; S/N: 71-H-1945	1,500	BH23
J.4, J.5, J.6	End Trim	Unknown/BXW-169-120-III; S/N: BXW3561	20,000	BH24