

CLARK COUNTY
DEPARTMENT OF AIR QUALITY
4701 W Russell Road, Suite 200, Las Vegas, Nevada 89118
Part 70 Operating Permit
Source: 593
Issued in accordance with the
Clark County Air Quality Regulations (AQR)

ISSUED TO: Georgia-Pacific Gypsum LLC

SOURCE LOCATION:
11401 US Highway 91
Apex, Nevada
T18S, R63E, Sections 34 & 35
Hydrographic Basin Number: 216

COMPANY ADDRESS:
P.O. Box 337350
Las Vegas, NV 89033

NATURE OF BUSINESS:
SIC Code 3275: Gypsum Products
NAICS Code 327420 Gypsum Products Manufacturing

RESPONSIBLE OFFICIAL:
Name: Craig Corey
Title: Plant Manager
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Permit Issuance Date: December 31, 2015
Permit Revision: October 10, 2016

Expiration Date: December 30, 2020

ISSUED BY: CLARK COUNTY DEPARTMENT OF AIR QUALITY



Richard D Beckstead,
Permitting Manager, Clark County Department of Air Quality

EXECUTIVE SUMMARY

Georgia-Pacific Gypsum LLC is a gypsum wallboard and plaster manufacturing operation located twenty miles north of the City of Las Vegas, Nevada, along U.S. Highway 91, in Apex, Nevada, Hydrographic Area 216 (Apex Valley – Garnet Valley). Apex Valley (Garnet Valley) is designated as attainment area for PM₁₀, PM_{2.5}, CO, Ozone, and SO_x. The source is a major Part 70 source for CO and NO_x. Regulated air pollutants PM₁₀, PM_{2.5}, SO_x, and VOC are below the major source thresholds.

The source operates crushers, screens, calciners, aggregate dryers, impeller mills, mixers, storage bins, conveyors, and a board dryer to manufacture wallboard and two grades of plaster, designated as alpha and beta. All manufacturing and support processes at the site are grouped under the SIC Code 3275: Gypsum Products and NAICS Code 327420: Gypsum Products Manufacturing.

The source is subject to 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants, 40 CFR 60, Subpart UUU – Standards of Performance for Calciners and Dryers in Mineral Industries, and 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

The following table summarizes the source potential to emit (PTE) for each regulated air pollutant from all emission units addressed by this Part 70 OP. The source-wide PTE is not an emission limitation:

Source-Wide PTE (tons per year)

PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP	GHG
68.04	38.21	100.52	245.50	2.52	29.33	9.12	93,393.80

Pursuant to AQR 12.5, all terms and conditions in Sections I through IV and Attachments 1 and 2 in this permit are federally enforceable unless explicitly denoted otherwise.

TABLE OF CONTENTS

I. ACRONYMS..... 4

II. GENERAL CONDITIONS..... 5

A. General Requirements 5

B. Modification, Revision, Renewal Requirements 6

C. Reporting/Notifications/Providing Information Requirements 6

D. Compliance Requirements 7

E. Performance Testing Requirements..... 9

III. EMISSION UNITS AND APPLICABLE REQUIREMENTS 10

A. Emission Units 10

B. Emission Limitations and Standards 13

 1. Emission Limits 13

 2. Production Limits 15

 3. Emission Controls 16

C. Monitoring 18

D. Testing 21

E. Record Keeping 22

F. Reporting 24

IV. OTHER REQUIREMENTS 25

ATTACHMENT 1 – APPLICABLE REGULATIONS..... 25

ATTACHMENT 2 – EMISSION UNITS CONTROLLED BY BAGHOUSES..... 26

I. ACRONYMS

Table I-1: Acronyms and Abbreviations

Acronym	Term
Air Quality	Clark County Department of Air Quality
AQR	Clark County Air Quality Regulations
ATC	Authority to Construct
BCC	Clark County Board of County Commissioners
CAO	Field Corrective Action Order
CAM	Compliance Assurance Monitoring
CE	Control Efficiency
CF	Control Factor
CFR	United States Code of Federal Regulations
CO	Carbon Monoxide
EF	Emission Factor
EPA	United States Environmental Protection Agency
EU	Emission Unit
g/dscm	Grams/dry standard cubic meter
gr/dscf	Grains/dry standard cubic foot
GHG	Greenhouse Gases
HAP	Hazardous Air Pollutant
HP	Horse Power
MMcf	Million cubic feet
msf	Thousand square feet
NAC	Nevada Administrative Code
NAICS	North American Industry Classification System
NCA #1	Nevada Cogeneration Associates #1
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 _{2.5}	Particulate Matter less than 2.5 microns
PM ₁₀	Particulate Matter less than 10 microns
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
scf	Standard Cubic Feet
SCC	Source Classification Codes
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO _x	Sulfur Oxides
TPH	Tons Per Hour
TSD	Technical Support Document
VE	Visible Emissions
VOC	Volatile Organic Compound
VMT	Vehicle Miles Traveled
Δp	Pressure Differential

II. GENERAL CONDITIONS

A. General Requirements

1. The Permittee shall comply with all conditions of the Part 70 Operating Permit. Any permit noncompliance may constitute a violation of the Clark County Air Quality Regulations, Nevada law, and the Clean Air 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 agrees to allow inspection of the premises, to which this permit relates, by the Control Officer at any time during the Permittee's hours of operation without prior notice. The Permittee shall not obstruct, hamper or interfere with any such inspection. *[AQR 4.3.3; AQR 4.9; AQR 5.1.1; AQR 12.5.2.8(b)]*
6. The Permittee shall allow the Control officer, upon presentation of credentials to: *[AQR 4.3; 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. 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. In addition, the Permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit. A responsible official shall certify the additional information consistent with the requirements of AQR Section 12.5.2.4. *[AQR 12.5.2.2]*
8. 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)]*

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 ATC 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 Permittee has submitted to the Control Officer 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; and
 - b. The conditions of the permit provide for compliance with all applicable requirements and the requirements of Section 12.5
4. The Permittee shall not build, erect, install or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere reduces or conceals an emission, which would otherwise constitute a violation of an applicable requirement. *[AQR 80.1 and 40 CFR 60.12]*
5. 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)]*
6. 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)]*
7. 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 EPA and to the Control Officer. *[AQR 12.5.2.8(e)(4)]*
2. Any application form, report, or compliance certification submitted to the Control Officer 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 Air Quality 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.

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 Air Quality 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; NRS 445B.640]*
3. Any person aggrieved by an order issued pursuant to AQR Section 9.1 is entitled to review as provided in Chapter 233B of NRS. *[AQR 9.12]*
4. 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)]*

5. The Permittee shall certify compliance with terms and conditions contained in the Part 70 Operating Permit, including emission limitations, standards, work practices, and the means for monitoring such compliance. [AQR 12.5.2.8(e)]
6. The Permittee shall submit compliance certifications annually in writing to the Control Officer (4701 W Russell Road, Ste 200, Las Vegas, NV 89118) and the Administrator at USEPA Region IX (Director, Air and Toxics Divisions, 75 Hawthorne St., San Francisco, CA 94105). A compliance certification for each calendar year will be due on January 30th of the following year and shall include the following: [AQR 12.5.2.8(e)]
 - a. The identification of each term or condition of the permit that is the basis of the certification;
 - b. The identification of the methods or other means used by the Permittee for determining the compliance status with each term and condition during the certification period. The methods and means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements described in 40 CFR 70.6(a)(3). If necessary, the Permittee shall also identify any other material information that must be included in the certification to comply with Section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information; and
 - c. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means designated in subsection II.D.6(b). The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify, as possible exceptions to compliance, any periods during which compliance is required and in which an excursion or exceedance, as defined under 40 CFR Part 64, occurred.
7. The Permittee shall report to the Control Officer (4701 West Russell Road, Suite – 200, Las Vegas, NV 89118) any startup, shutdown, , 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: airquality@clarkcountynv.gov; and
 - 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 with the semi-annual monitoring report all deviations from permit conditions that do not result in excess emissions, including those attributable to malfunction, startup, or shutdown. Reports shall identify the probable cause of each deviation and any corrective actions or preventative measures taken. [AQR 12.5.2.6(d)(4)(B)]

9. The owner or operator of any source required to obtain a permit under Section 12 shall report to the Control Officer emissions that are in excess of an applicable requirement or emission limit that pose a potential imminent and substantial danger to public health, safety or the environment as soon as possible, but in no case later than twelve (12) hours after the deviation is discovered, with a written report submitted within two (2) days of the occurrence. *[AQR 25.6.2]*

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 (4701 West Russell Road, Suite 200, Las Vegas, NV 89118) not less than 45 nor more than 90 days prior to the anticipated date of the performance test unless otherwise specified in Section III-D. *[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, to demonstrate compliance with a requirement under 40 CFR Part 60. *[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

The stationary source covered by this Part 70 OP consists of the emission units and associated appurtenances summarized in Tables III-A-1 through 4. [AQR 12.5.2.3(c)(2)]

Table III-A-1: List of Emission Units - Wallboard Plant

EU	Throughput/Rating	Description	Make
A03	5 TPH	Rock/Recycle Feeder System	
B01	80 TPH	Crushing Area Conveyor	
	50 TPH	Bucket Elevator - Cemco Feed	
	50 TPH	Bucket Elevator - Rock Tank	
	50 TPH	Bucket Elevator -Rock Supply	
B02	80 TPH	Primary Crusher	Universal
B03	80 TPH	200 Ton Rock Bin	
F01	80 TPH (Rating) 60 TPH (Throughput)	End Trim/Bundler	N/A
F03	5 TPH	Riser Machine	N/A
B04	80 TPH	Secondary Crusher	Cemco
C01	10 TPH	Imp Mill #1 - Gypsum Processing	Delta
	7.5 MMBtu/hr	Imp Mill #1 - Heated by exhaust gas (NCA #1)	
C02	10 TPH	Imp Mill #2 - Gypsum Processing	Delta
	7.5 MMBtu/hr	Imp Mill #2 - Heated by exhaust gas (NCA #1)	
C03	10 TPH	Imp Mill #3 - Gypsum Processing	Delta
	7.5 MMBtu/hr	Imp Mill #3 - Heated by exhaust gas (NCA #1)	
C04	10 TPH	Imp Mill #4 - Gypsum Processing	Delta
	7.5 MMBtu/hr	Imp Mill #4 - Heated by exhaust gas (NCA #1)	
C05	10 TPH	Imp Mill #5 - Gypsum Processing	Delta
	7.5 MMBtu/hr	Imp Mill #5 - Heated by exhaust gas (NCA #1)	
D01a	50 TPH	Stucco Area Conveyor System	
D01b	50 TPH	Stucco Area Conveyor System	
D01c	50 TPH	Stucco Area Conveyor System	
	50 TPH	Bucket Elevator - Stucco Transfer	
D01d	50 TPH	Stucco Area Conveyor System	
D01e	50 TPH	Stucco Area Conveyor System	
	50 TPH	Bucket Elevator - Stucco Tank	
	50 TPH	Bucket Elevator - Stucco Supply	
	50 TPH	Bucket Elevator - Stucco Recirculating	
D06	50 TPH	Stucco Blender #2	
D03	50 TPH	North Stucco Storage Bin	
D04	50 TPH	South Stucco Storage Bin	
D07	50 TPH	Pin Mixer	
D08	2 TPH	Vermiculite Bin	
	2 TPH	Bucket Elevator - Vermiculite	
D09	2 TPH	Landplaster Bin #1	
	2 TPH	Landplaster Bin #2	
	2 TPH	Bucket Elevator - Land Plaster	
D11	5 TPH	Ball Mill #1	
D12	5 TPH	Ball Mill #2	

EU	Throughput/Rating	Description	Make
D13	50 TPH	Interior Baghouse Conveyors System	
D17	50 TPH	Milling Area Conveyors System	
D19	50 TPH	Stucco Sifter	Alloy Industrial Contractors, Inc.
E02		Forming Line	
E03	Zone 1: 30.0 MMBtu/hr Zone 2: 30.0 MMBtu/hr Zone 3: 15.0 MMBtu/hr	Board Dryer: Natural Gas Heaters and/or Heat supplied by NCA #1: (includes emissions from EU: E02)	COE

Table III-A-2: List of Emission Units - Plaster Plant

EU	Throughput/Rating	Description	Make	Model No.	Serial No.
E101	50 TPH	Roll Crusher	Williams		20047
E102	100 TPH	Rock Conveyor System			
E164	50 TPH	Alpha Rock Screen	Simplicity		238-NUZ6S-SS13
E174	50 TPH	North Beta Rock Grizzly Feed Screen			
E175	50 TPH	South Beta Rock Grizzly Feed Screen			
E103	50 TPH	West Beta Rock Bin			
E104	50 TPH	East Beta Rock Bin			
E108	25 TPH	West LP Bin			
E109	25 TPH	East LP Bin			
E105	25 TPH	West Roller Mill - Gypsum Processing	Williams		20030
	5.7 MMBtu/hr	West Roller Mill - Combustion			
E106	25 TPH	East Roller Mill - Gypsum Processing	Williams		20023
	5.7 MMBtu/hr	East Roller Mill - Combustion			
E110	15 TPH	West Kettle - Gypsum Processing	ABB Alstom		
	20.0 MMBtu/hr	West Kettle - Combustion			
E111	15 TPH	East Kettle - Gypsum Processing	ABB Alstom		
	20.0 MMBtu/hr	East Kettle - Combustion			
E142	50 TPH	Alpha Rock Conveyors			
	20TPH	Bucket Elevator - Alpha Basket			
E143	50 TPH	South Alpha Rock Bin			
E144	50 TPH	North Alpha Rock Bin			
E176	50 TPH	South Alpha Rock Bin Grizzly Feed Screen			
E177	50 TPH	North Alpha Rock Bin Grizzly Feed Screen			
E178	50 TPH	Alpha Rock Elevator Screen			
E149	2 TPH	Pan Dryer #1			
E150	2 TPH	Pan Dryer #2			
E151	2 TPH	Pan Dryer #3			
E179	1 TPH (per unit)	Autoclave System #1 through #9	Melco Steel, Inc.		4065-1 4065-2
E152	6 TPH	Alpha Air Separator	Raymond		
	6 TPH	Bucket Elevator - Alpha Reheater Feed			
	6 TPH	Bucket Elevator - Alpha Reheater Disch.			
E162	6 TPH	Alpha Crusher #2	Cemco		
E160	6 TPH	Alpha Hammermill	Jeffery	30ABF	10034404
E154	6 TPH	Alpha Hummer Screen	Tycan		
E157	6 TPH	South Alpha Storage Bin			
E158	6 TPH	North Alpha Storage Bin			

EU	Throughput/ Rating	Description	Make	Model No.	Serial No.
G11	6 TPH	Alpha Surge Bin			
G25	6 TPH	Bucket Elevator - Alpha Surge Bin			
G28	6 TPH	Bucket Elevator - Alpha Storage Bin			
E156	6 TPH	Alpha Reject Screens	Sweeco		
E107	30 TPH	LP Bulk Loadout Bin w/ Enclosed Screw Conveyor			
	16 TPH	LP Bulk Loadout			
	20TPH	Ag Gyp Packer			
E173	30 TPH	LP Bin Airvey System			
G13	12 TPH	LP Bulk Bagging			
E113	20 TPH	Reject Bin			
E166	20 TPH	Stucco Sweeco Screen	Sweeco		
E114	25 TPH	Stucco Bulk Loadout Bin			
	25 TPH	Stucco Bulk Loadout			
E115	25 TPH	West Hummer Screen	Tycan	4X15	17577
E117	25 TPH	West Stucco Bin			
	15 TPH	West Air Separator			
E119	10 TPH	West Beta IMPACT Mill #1	Entoleter	533	
G14	10 TPH	West Beta IMPACT Mill #2	Entoleter	533	
	20 TPH	Bucket Elevator - East Finish Stucco			
E118	25 TPH	East Stucco Bin			
E116	25 TPH	East Hummer Screen	Tycan	4X15	17576
E120	10 TPH	East Beta IMPACT Mill #1	Entoleter	533	N/A
G16	10 TPH	East Beta IMPACT Mill #2	Entoleter	533	N/A
	20 TPH	Bucket Elevator - West Finish Stucco			
E122	10 TPH	Split Finish Bin #1 South			
E123	10 TPH	Split Finish Bin #1 North			
E124	10 TPH	Split Finish Bin #2 South			
E125	10 TPH	Split Finish Bin #2 North			
E126	10 TPH	Split Finish Bin #3 South			
E127	10 TPH	Split Finish Bin #3 North			
E128	20 TPH	South Alpha Bin			
E130	20 TPH	Cement Bin			
E129	20 TPH	North Alpha Bin			
E172	50 TPH	HiVAC Vacuum System			
E140	12 TPH	MP Bulk Bagging			
	30 TPH	MP Bulk Load Out Bin			
E139	30 TPH	FP Bulk Load Out Bin			
E168	12 TPH	FP Bulk Bagging			
E112	50 TPH	Stucco Conveyors System			
	50 TPH	Bucket Elevator - West Hot Pit			
	50 TPH	Bucket Elevator - East Hot Pit			
G15	15 TPH	West Beta IMPACT Mill #3	Entoleter		
G17	15 TPH	East Beta IMPACT Mill #3	Entoleter		
E133	30 TPH	South Bag Packer			
	30 TPH	South Weigh Hopper			
	30 TPH	South Additive Feeder Belt			
	30 TPH	South Mixer	Scott	STPPDG96 9SS	1019
	30 TPH	South MP Bulk Loadout			
	30 TPH	South Bag Packer Feed Hopper			
E134	30 TPH	North Bag Packer			

EU	Throughput/ Rating	Description	Make	Model No.	Serial No.
	30 TPH	North Weigh Hopper			
	30 TPH	North Additive Feeder Belt			
	30 TPH	North Mixer	Scott	STPPDG96 9SS	1018
	30 TPH	North MP Bulk Loadout			
	30 TPH	North Bag Packer Feed Hopper			
	30 TPH	Bucket Elevator - Mixed Product			
G18	30 TPH	Hamilton Surge Bin			
G19	30 TPH	Hamilton Bulk Loadout Bin			
G21	30 TPH	Hamilton Bulk Loadout			
	30 TPH	Hamilton Rotary Screens	Kemtec		
E145	12.0 MMBtu/hr	Alpha Boiler	Cleaver Brooks	CB1700500 150	OL099776
E146	1.2 MMBtu/hr	Boiler #1	Paratherm	FT-0120-C	3103-C
E147	1.2 MMBtu/hr	Boiler #2	Paratherm	FT-0120-C	3105-C
E148	1.2 MMBtu/hr	Boiler #3	Paratherm	FT-0120-C	3104-C
E153	1.2 MMBtu/hr	Alpha Multiscrew Heater			
E159	1.0 MMBtu/hr	Alpha Duct Burner			
E188	30 TPH	Microsizer			
E189	20 TPH	Screw Conveyor			
E190	20 TPH	Screw Conveyor			
G32		Plaster Mill Ink			

Table III-A-3: List of Emission Units - Emergency IC Engines

EU	Rate	Description	Make	Model No.	Serial No.
G33	59 hp	Emergency Generator	Perkins	9182454	26434001 T
G34	660 hp	Fire Pump	Caterpillar	3412	28S20760

Table III-A-4: List of Emission Units - Fugitive Emissions

EU	Rate	Description
A01	7,621 VMT/yr	Wallboard Trucks
FE100	964 VMT/yr	Rock Trucks (weighted)
	6,220 VMT/yr	Rock Trucks (South Route)
	2,891 VMT/yr	Bulk Plaster Trucks (Plaster Loop)
	3,592 VMT/yr	Bulk Plaster Trucks (North Road)
	7,446 VMT/yr	Plaster Trucks (Flatbed)
	2,803 VMT/yr	Rock Trucks (Unpaved Road)
FE200	1,840 VMT/yr	Loaders
FE300	262,800 tons/yr	Batch Dumping Beta Rock
FE141	63,875 tons/yr	Batch Dumping Alpha Rock
FE200a	689,850 tons/yr	Truck Dumping
FE200b	438,000 tons/yr	Batch Dumping Board Rock
A02	5.0 acres	Stockpile Area

B. Emission Limitations and Standards

1. Emission Limits

- a. The Permittee shall not allow actual emissions from the board dryer (E03) to exceed the emission limits listed in Table III-B-1 [NSR ATC (12/24/2013); AQR 12.5.2.6(a)]

Table III-B-1: Emissions Limits for Board Dryer (E03)

PM ₁₀	NO _x	CO
6.41 lbs/hour	11.18 lbs/hour	32.50 lbs/hour

- b. The Permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes. *[AQR 26.1.1]*
- c. The Permittee shall not allow visible emissions from the exhaust stacks from the Impeller Mills (EUs: C01 through C05), Board Dryer (EU: E03), Roller Mills (EUs: E105, E106), Kettle Calciners (EUs: E110, E111), the Boilers (EUs: E145, E146 through E148), Alpha Multiscrew Heater (EU: E153), and Alpha Duct Burner (EU: E159) to exceed 20 percent opacity for a period of more than six (6) consecutive minutes. *[AQR 26.1.1]*
- d. The Permittee shall not allow the baghouses in the Wallboard Plant (BH-W01 through BH-W06, BH-W13) and the baghouses in the Plaster Plant (BH-01 through BH-05, BH-13 through BH-16, BH-28, BH-30, BH-31, BH-34) to exhibit visible emissions greater than seven (7) percent opacity. *[40 CFR 60.672(a)(2)]*
- e. The Permittee shall not allow the baghouses in the Wallboard Plant (BH-W01 through BH-W06, BH-W13) and the baghouses in the Plaster Plant (BH-01 through BH-05, BH-13 through BH-16, BH-28, BH-30, BH-31, BH-34) to 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(a)(1)]*
- f. The Permittee shall not allow the baghouses in the Wallboard Plant (BH-W07 through BH-W12, BH-W14) and the baghouses in the Plaster Plant (BH-06, BH-07, BH-10 through BH-12, BH-17 through BH-25, BH29, BH-32, BH-33) that are enclosed in buildings, to exhibit any visible fugitive emissions or discharge into the atmosphere from any opening from the building, except from a vent as defined in 40 CFR 60.671. *[40 CFR 60.672(e)(1) & (2)]*
- g. The Permittee shall not allow the baghouses in the Plaster Plant (BH-08, BH-09, BH-35, BH-36, BH-37) to exhibit visible emissions greater than 10 percent. *[40 CFR 60.732(b)]*
- h. The Permittee shall not allow the baghouses in the Plaster Plant (BH-08, BH-09, BH-35, BH-36, BH-37) to discharge into the atmosphere emissions from any stack that contains particulate matter in excess of 0.092 g/dscm (0.040 gr/dscf). *[40 CFR 60.732(a)]*
- i. The Permittee shall not allow the autoclave calciners (EU: E179) to exhibit any visible emissions. *[NSR ATC, Condition IV-B(1)(b) (07/13/2009)]*

2. Production Limits

- a. The Permittee shall limit processing of gypsum rock at the Wallboard Plant to 438,000 tons during any consecutive 12-months. *[NSR ATC Modification 6, Revision 0, Condition III-A-4 (10/13/06)]*
- b. The Permittee shall limit the consumption of each VOC containing materials for the Wallboard Plant to: *[AQR 12.5.2.6(a)]*
 - i. 1,344,824 pounds of “Other VOC Board Additives” during any consecutive 12-months.
 - ii. 300,000 pounds of “Edge Adhesive (TR)” during any consecutive 12-months.
 - iii. 300,000 pounds of “Edge Adhesive (DAP/DGG)” during any consecutive 12-months.
 - iv. 460,000 pounds of “Silicone” during any consecutive 12-months.
 - v. 10,000 pounds of “Gold Paint” during any consecutive 12-months.
 - vi. 10,000 pounds of “Wallboard Plant Ink” during any consecutive 12-months.
- c. The Permittee shall limit the maximum production of the Plaster Plant to 438,000 tons during any consecutive 12-months. *[AQR 12.5.2.6(a)]*
- d. The Permittee shall limit the use of NCA #1 turbine exhaust gas to 400,000 pounds per hour and 1,752,000 tons per any consecutive 12-month period. *[AQR 12.5.2.6(a)]*
- e. The Permittee shall limit the operation of the emergency generator and fire pump (EUs: G33 and G34) for testing and maintenance purposes to 100 hours per year. The Permittee may operate the emergency generator up to 50 hours per year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. The 50 hours per year for nonemergency situations cannot be used for peak shavings or demand response, except as provided in 40 CFR 63.6640(f)(4). *[40 CFR 63.6640]*
- f. The Permittee shall limit the total stockpile area to 5 acres. *[AQR 12.5.2.6(a)]*
- g. The Permittee shall limit the VMT on paved haul roads to 28,733 miles per any consecutive 12-month period. *[AQR 12.5.2.6(a)]*
- h. The Permittee shall limit the VMT on unpaved haul roads to 4,643 miles per any consecutive 12-month period. *[AQR 12.5.2.6(a)]*
- i. The Permittee shall limit the truck and batch dumping of materials to each of the following, during any consecutive 12-month period: *[AQR 12.5.2.6(a)]*
 - i. 262,000 tons of Batch Dumping Beta Rock;
 - ii. 63,875 tons of Batch Dumping Alpha Rock;
 - iii. 689,850 tons of Truck Dumping;
 - iv. 438,000 tons of Batch Dumping Board Rock.

3. Emission Controls

Process Equipment

- a. The Permittee shall combust only natural gas when using the Board Dryer (EU: E03) and the Imp Mills (EUs: C01 through C05) when exhaust gas from NCA #1 is not being used as the heat source. *[NSR ATC/OP Modification 5, Revision 0, Condition III-A-6 and III-B-23 (5/16/2006)]*
- b. The Permittee shall only combust natural gas in the Roller Mills, Kettles, Alpha boiler, Paratherm boilers, Alpha Multiscrew Heater, and Alpha Duct Burner (EUs: E105, E106, E110, E111, E145 through E148, E153, and E159). *[NSR ATC/OP Modification 5, Revision 0, Condition III-B-23 (5/16/2006)]*
- c. The Permittee shall maintain and operate the Alpha boiler (EU: E145) with burners that have a manufacturer's maximum emission rate of no more than 30 ppm NO_x, corrected to 3 percent oxygen. *[AQR 12.5.2.6]*
- d. The Permittee shall maintain and operate the Alpha boiler (EU: E145) with burners that have a manufacturer's maximum emission rate of no more than 100 ppm CO, corrected to 3 percent oxygen. *[AQR 12.5.2.6]*
- e. The Permittee shall operate the baghouse on all gypsum handling equipment, Imp Mills, Pin Mixer, Hammermill, Ball Mills, Roller Mills, Kettles, and Pan Dryers at all times processing equipment is operating (EUs: C01 through C05, D07, D11, D12, E105, E106, E110, E111, E149, E150, and E151). *[40 CFR 60, Subpart 000 and 40 CFR 60, Subpart UUU]*
- f. The Permittee shall operate the baghouses on the Imp Mills (EUs: C01 through C05) and Kettles (EUs: E110 and E111) to maintain a total particulate control efficiency of at least 99.9 percent on each baghouse. *[AQR 12.5.2.6]*
- g. The Permittee shall operate the baghouses on the Roller Mills (EUs: E105 and E106) to maintain a total particulate control efficiency of at least 99.5 percent on each baghouse. *[AQR 12.5.2.6]*
- h. The Permittee shall operate the baghouses and filter drum on all remaining gypsum handling equipment to maintain a total particulate control efficiency of at least 99.0 percent on each baghouse. *[AQR 12.5.2.6]*
- i. The Permittee shall insure the pressure drop across each baghouse is maintained within the limits specified by the manufacturer. A copy of the manufacturer's specifications shall be kept on site. *[AQR 12.5.2.6]*
- j. The Permittee shall maintain a water spray system in good operating condition, as verified by a daily inspection on the days when the plant is operating. Water sprays shall be used as necessary to comply with the opacity standard during the processing of the material. This applies to transfer points and stacker drop points, but does not include washed product processing. *[AQR 12.5.2.6]*
- k. The Permittee shall investigate and correct any problems with the water spray system before resuming operations. The Control Officer at any time may require

additional water sprays at pertinent locations if an inspection indicates that the specified opacity limits are being exceeded. [AQR 12.5.2.6]

- l. The Permittee shall control fugitive dust emissions from conveyors, storage piles, transfer points, screens, and non-metallic mineral processing equipment not connected to baghouse controls shall be controlled by operational water sprays as needed to prevent exceeding opacity standards.. [AQR 12.5.2.6]
- m. The Permittee shall not cause, suffer or allow the discharge from any source whatsoever such quantities of air contaminants or other material which cause a nuisance. [AQR 40.1]

Emergency Generator / Water Pump

- n. The Permittee shall operate the Caterpillar fire pump with a turbocharger and aftercooler (EU: G34). [AQR 12.5.2.6]
- o. The Permittee shall operate and maintain each diesel emergency generator and fire pump in accordance with the manufacturer's specifications. [40 CFR 63.6625(e)]
- p. The Permittee shall maintain each emergency engine (EUs: G33 and G34) as follows: [40 CFR 63.6603]
 - i. Change oil and filter every 500 hours of operation or annually, whichever comes first;
 - ii. Inspect air cleaners every 1,000 hours of operation or annually, whichever comes first; and
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- q. The Permittee shall combust only low sulfur diesel fuel (0.05 percent or less sulfur by weight) in diesel engines (EUs: G33 and G34). [AQR 12.5.2.6]

Fugitive Dust

- r. The Permittee shall take continual measures to control fugitive dust (e.g. wet, chemical or organic suppression, or enclosures) from 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. [AQR 12.5.2.6]
- s. 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. [AQR 12.5.2.6]

Paved and Unpaved Roads

- t. The Permittee shall sweep and/or rinse as necessary paved roads accessing or located on the site to remove all observable deposits and so as not to exhibit opacity greater than 20 percent as determined for a period more than six consecutive minutes, or an instantaneous opacity greater than 50 percent. [AQR 12.5.2.6]
- u. The Permittee shall limit silt loading on unpaved or paved roads to 0.33 ounces per square foot regardless of the average number of vehicles per day. [AQR 12.5.2.6]
- v. 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 for a period of more than six minutes, or an instantaneous opacity greater than 50 percent. [AQR 12.5.2.6]
- w. The Permittee shall not track out onto a paved road mud or dirt that extends 50.0 feet or more in cumulative length from the point of origin or allow any trackout 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 0.25 inches in depth, shall be cleaned of all observable deposits and maintained to eliminate emissions of fugitive dust. [AQR 12.5.2.6]
- x. The Permittee shall ensure that all loaded trucks, regardless of ownership, shall be properly covered to prevent visible emissions. [AQR 12.5.2.6]
- y. The Permittee shall implement long-term stabilization of disturbed surfaces when the stationary source, or a portion thereof, is to be closed or idled for a period of 30 days or more, within 10 days following the cessation of active operations. Long-term stabilization includes, but is not limited to one or more of the following: applying water to form a crust, applying palliatives, applying gravel, paving, and denying unauthorized access, or other effective control measure to prevent fugitive dust from becoming airborne. [AQR 12.5.2.6]

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 ¼ 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 Permittee sees a plume that, on an instantaneous basis, appears to exceed the opacity standard, then the Permittee shall: *[AQR 12.5.2.6(d)]*
 - i. Take immediate action to correct causes of fugitive/stack emissions that appear to exceed allowable opacity limits; or
 - ii. If practical, have a certified VE observer take an EPA Method 9 observation of the plume and record the results, and take immediate action to correct causes of fugitive emissions in excess of allowable opacity limits in accordance with 40 CFR 60 Appendix A: Reference Method 9.
5. If Method 9 readings cannot 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 conduct daily monitoring of the pressure drop across each baghouse cell with the installation and operation of a pressure differential gauge per manufacturer's specifications. A copy of the manufacturer's specifications shall be kept on site. *[AQR 12.5.2.6(d)]*
7. 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)]*
8. The Permittee shall operate each emergency generator and fire pump (EUs: G33 and G34) with a non-resettable hour meter and monitor the duration of operation for testing and maintenance, and separately for emergencies. *[40 CFR 63.6625(f)]*

Compliance Assurance Monitoring (CAM):

9. The Permittee is required to comply with CAM for the emission units with pre-control emission exceeding 100 tons per year of PM₁₀, depicted in Table III-C-1 below: *[40 CFR 64, AQR 12.5.2.6(d)]*

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

EU	Description	Control Device
A03, B01-B04 D17, F01 and F03	Rock/Recycle Feeder System, Crushing Area Conveyor, Primary Crushing, 200 Ton Rock Bin, End Trim/Bundler, Riser Machine, Milling Area Conveyors, Secondary Crusher, Bucket Elevator – Cemco Feed, Bucket Elevator – Rock Tank and Bucket Elevator – Rock Supply	Baghouse: BH-W01
C01	IMP Mill #1	Baghouse: BH-W02
C02	IMP Mill #2	Baghouse: BH-W03
C03	IMP Mill #3	Baghouse: BH-W04
C04	IMP Mill #4	Baghouse: BH-W05
C05	IMP Mill #5	Baghouse: BH-W06
E101, E102, E164, E174, E175	Roll Crusher, Rock Conveyors, Alpha Rock Screen, North Beta Rock Grizzly Feed Screen, and South Beta Rock Grizzly Feed Screen	Baghouse: BH-01
E105	West Roller Mill	Baghouse: BH-04

EU	Description	Control Device
E106	East Roller Mill	Baghouse: BH-05
E110	West Kettle (w/out combustion added)	Baghouse: BH-08
E111	East Kettle (w/out combustion added)	Baghouse: BH-09
E142-E144, E176-E178	Alpha Rock Conveyors, South Alpha Rock Bin, North Alpha Rock Bin, South Alpha Bin Grizzly Feed Screen, North Alpha Rock Bin Grizzly Feed Screen, Alpha Rock Elevator Screen, and Bucket Elevator – Alpha Basket	Baghouse: BH-13

10. The Permittee shall demonstrate compliance with CAM by adhering to the monitoring plan in Table III-C-2. The Permittee shall obtain daily measurements of the pressure differential between the inlet and outlet of the baghouse (Δp) for PM₁₀, and shall take daily observations of visible emissions for opacity (the absence of visible emissions demonstrate compliance). [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	Visual emissions for opacity
Measurement Approach	The Δp will be measured daily; the time of reading and the Δp will be recorded.	Visible emission (VE) from the baghouse exhaust will be monitored and documented on a daily basis during routine conditions.
Indicator Range: Excursion	An excursion is defined as a pressure drop less than ½ inches and greater than 6 inches of water for the baghouses connected to EUs: A03, B01-B04, C01-C05, D17, E101, E102, E105, E106, E110, E111, E142-E144, E164, E174-178, & F01-F03 Excursions trigger an inspection, correction action, and a reporting requirement.	An excursion is defined as the presence of visible emissions. Excursions trigger an inspection, corrective action, and a reporting requirement. In addition, if VE's are observed, the equipment will be shut down.
Action Threshold	The action threshold for Δp is between 0.5-1.0 and 5.0-6.0 inches of water. Action thresholds trigger an inspection and corrective action, or documentation that the system is operating normally.	Not applicable
QIP Thresholds	None selected	More than three (3) excursions within a semiannual reporting period.
Performance Criteria Data Representativeness	Pressure taps are located on the high pressure and low pressure sides of the bag filters. A differential pressure gauge measures and displays the Δp with a minimum accuracy of ± 0.25 inches of water column.	Observations are made at the baghouse exhaust.
Verification of Operational Status	Not applicable	Not applicable
QA/QC Practices and Criteria	The Δp gauge will be calibrated or replaced annually.	The VE observer will be familiar with baghouse operations and visible emissions.
Monitoring Frequency	Daily	Daily
Data Collection Procedures	Δp is recorded daily.	The VE observation is documented by the observer and recorded daily.
Averaging Period	Not applicable	Not applicable

D. Testing

1. Performance testing is subject to 40 CFR 60 (as amended), and Clark County Department of Air Quality Guideline for Source Testing. Performance testing shall be the instrument for determining compliance with emission limitations set forth in this permit. Performance testing requirements are listed in Tables III-D-1 through III-D-3. The Permittee shall conduct testing unless an equivalent method has been approved by the Control Officer in advance. [AQR 12.5.2.6(d)]

Table III-D-1: Performance Testing Protocol Requirements

EU	Description	Performance Test	Frequency
A03, B01, B02, B03, B04, D17, F01 and F03	Baghouse BH-W01	Method 5 or Method 17	Every 5 years
C01	Baghouse BH-W02	Method 5/202	Every 5 years
C02	Baghouse BH-W03	Method 5/202	Every 5 years
C03	Baghouse BH-W04	Method 5/202	Every 5 years
C04	Baghouse BH-W05	Method 5/202	Every 5 years
C05	Baghouse BH-W06	Method 5/202	Every 5 years
D01e, D06, D19	Baghouse BH-W13	Method 5 or Method 17	Every 5 years
E101, E102, E164, E174, E175	Baghouse BH-01	Method 5 or Method 17	Every 5 years
E103	Baghouse BH-02	Method 5 or Method 17	Every 5 years
E104	Baghouse BH-03	Method 5 or Method 17	Every 5 years
E105	Baghouse BH-04	Method 5/202	Every 5 years
E106	Baghouse BH-05	Method 5/202	Every 5 years
E110	Baghouse BH-08	Method 5/202	Every 5 years
E111	Baghouse BH-09	Method 5/202	Every 5 years
E142, E143, E144, E176, E177, and E178	Baghouse BH-13	Method 5 or Method 17	Every 5 years
E152, E154, E157, E158, E160, E162, G11, G25, and G28	Baghouse BH-14	Method 5 or Method 17	Every 5 years
E115, E117, E119, G14	Baghouse BH-15	Method 5 or Method 17	Every 5 years
E116, E118, E120, G16	Baghouse BH-16	Method 5 or Method 17	Every 5 years
E140	Baghouse BH-28	Method 5 or Method 17	Every 5 years
E112, E168, G15, G17	Baghouse BH-30	Method 5 or Method 17	Every 5 years
E133, E134	Baghouse BH-31	Method 5 or Method 17	Every 5 years
G18, G19, G21	Baghouse BH-34	Method 5 or Method 17	Every 5 years
E145	Alpha Boiler	Method 7E	Every 5 years
		Method 10	Every 5 years
		Methods 1, 2, 3A, & 4	Every 5 years
E149	BH-35	Method 5/202	Every 5 years
E150	BH-36	Method 5/202	Every 5 years
E151	BH-37	Method 5/202	Every 5 years

2. The Permittee shall test the NCA #1 exhaust gas for NO_x and CO to demonstrate compliance with the emission limitation in Table III-B-2, by testing NO_x, CO and flow as indicated in Table III-D-2, every five years. [AQR 12.5.6(a)]

3. The Permittee shall test each exhaust stack of the Board Dryer (EU: E03) for PM₁₀ to demonstrate compliance with the emission limitation in Table III-B-2, by testing PM₁₀, as indicated in Table III-D-2, every five years. [AQR 12.5.6(a)]
4. If the board dryer (EU: E03) is operated in burner mode for more than 30 consecutive days during the permit term, the Permittee shall test each exhaust stack for NO_x and CO, as indicated in Table III-D-2..

Table III-D-2: Performance Testing Protocol Requirements for Board Dryer Exhaust Stacks

Test Point	Pollutant/ Parameter	Method
All Exhaust Stacks from Board Dryer	PM ₁₀	EPA Method 5/202
All Exhaust Stacks from Board Dryer	NO _x	Chemiluminescence Analyzer (EPA Method 7E)
All Exhaust Stacks from Board Dryer	CO	EPA Method 10 analyzer
All Exhaust Stacks from Board Dryer	Stack Gas Parameters	EPA Methods 1, 2, 3 or 3a, 4

5. The Permittee shall conduct all exhaust gas performance test(s) while the emission unit (EU: E03) is operating between 80 percent and 100 percent of the design capacity; and
6. The Permittee shall conduct each subsequent exhaust gas performance test every five years, within 90 days of the anniversary date of the previous performance test.

E. Record Keeping

1. 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 actions taken (if required).
2. All records and logs (or a copy thereof) required by this permit shall be kept on-site for a minimum of five (5) years from the date the measurement or data was entered. [AQR 12.5.2.6(d)]
3. Records and data required by this 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)]
4. The Permittee shall maintain onsite the following records for reporting: [AQR 12.5.2.6(d)]:

Wallboard Plant

- a. daily, monthly and each monthly consecutive 12-month total production of gypsum processed for the Wallboard Plant;
- b. monthly and each monthly consecutive 12-month total of usage of all VOC-containing materials used in the manufacturing of wallboard;
- c. monthly and each monthly consecutive 12-month total hours of operation for each natural gas-fired emission units;
- d. monthly and each monthly consecutive 12-month total hours of operation for each emission unit that uses NCA #1 cogeneration exhaust gas;

- e. hourly and each monthly consecutive 12-month total pounds of NCA #1 cogeneration exhaust gas used by the Permittee;

Plaster Plant

- f. monthly and each monthly consecutive 12-month total production of industrial plaster in the Plaster Plant;
- g. monthly and each monthly consecutive 12-month total hours of operation for each natural gas-fired emission units;

Emergency Generator and Fire Pump

- h. date and duration of operation of emergency generator and fire pump for testing, maintenance, and non-emergency use (EU: G33 and G34) [40 CFR 63 Subpart ZZZZ]
- i. date and duration of operation of emergency generator and fire pump for emergency use, including documentation justifying use during the emergency (EU: G33 and G34); [40 CFR 63 Subpart ZZZZ]

Fugitive Emissions

- j. length of the on-site haul road(s);
5. The Permittee shall maintain onsite the following records: [AQR 12.5.2.6(d)]:
 - a. log of control device inspections, maintenance, and repairs;
 - b. log of daily pressure drop across each baghouse cell;
 - c. result of daily visible emission checks of the operations;
 - d. results of daily visual observations of baghouse;
 - e. results of boiler-tune ups for the Alpha boiler;
 - f. sulfur content of diesel fuel;
 - g. results of weekly moisture sampling;
 - h. MSDS records of all VOC-containing materials used in the manufacturing of wallboard;
 - i. log of dust control measures applied to the paved haul roads, unpaved haul roads, and storage piles; and
 - j. results of performance testing.
 6. The Permittee shall maintain records of any malfunction of the air pollution control equipment. [40 CFR 60.7(b)]
 7. The Permittee shall have a standard operating procedures (SOP) manual for baghouses. The procedures specified in the manual for maintenance shall, at a minimum, include a preventative maintenance schedule that is consistent with the baghouse 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)]
 8. 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, 21.4, and 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 Air Quality); and
 - b. a certification signature from a responsible official of the company and the date certification.
3. The Permittee is responsible for submitting semi-annual reports to Air Quality. [AQR 12.5.2.6(d)]
4. Each semi-annual report shall [AQR 12.5.2.6(d)]:
 - a. include semi-annual summaries of items listed in Conditions III-E-4 (a through j);
 - b. include semi-annual summaries of any permit deviations, their probable cause, and corrective or preventative actions taken; and
 - c. be submitted within 30 days after the due date.
5. Regardless of the date of issuance of this permit, the schedule for the submittal of reports to the Control Officer shall be as follows: [AQR 12.5.2.6(d)]

Table III-F-1: 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 ¹
Semi-annual Report for 2 nd Six-Month Period, Any additional annual records required.	July, August, September, October, November, December	January 30 each year ¹
Annual Compliance Certification Report	Calendar Year	January 30 each year ¹
Annual Emission Inventory Report	Calendar Year	March 31 each year ¹
Notification of Malfunctions, Startup, Shutdowns or Deviations with Excess Emission	As Required	Within 24 hours of the Permittee learns of the event
Report of Malfunctions, Startup, Shutdowns or Deviations with Excess Emission	As Required	Within 72 hours of the notification
Deviation Report without Excess Emissions	As Required	Along with semi-annual reports ¹
Performance Testing	As Required	Within 60 days from the end of the test ¹

¹If 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.

- When requested by the Control Officer, the Permittee may be required to submit additional reports to verify compliance with permit conditions, permit requirements and requirements of applicable regulations. [AQR 4.4]

IV. OTHER REQUIREMENTS

- 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 CFC or 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]

ATTACHMENT 1 – APPLICABLE REGULATIONS

REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE:

- NRS, Chapter 445B.
- Applicable AQR Sections:

Citation	Title
AQR Section 0	Definitions
AQR Section 4	Control Officer
AQR Section 11	Ambient Air Quality Standards
AQR Section 12.5	Part 70 Operating Permit Requirements
AQR Section 13.2(a)(1) Subpart A	National Emission Standards for Hazardous Air Pollutants General Provisions
AQR Section 13.2.85 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
AQR Section 14.1.1 Subpart A	New Source Performance Standards (NSPS) General Provisions
AQR Section 14.1.15 Subpart Dc	Standards of Performance for Small Industrial – Commercial - Institutional Steam Generating Units
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	Upset/Breakdown, Malfunctions
AQR Section 26	Emissions of Visible Air Contaminants
AQR Section 27	Particulate Matter from Process Weight Rate
AQR Section 28	Fuel Burning Equipment
AQR Section 40	Prohibition of Nuisance Conditions
AQR Section 41	Fugitive Dust
AQR Section 42	Open Burning
AQR Section 43	Odors in the Ambient Air
AQR Section 45	Idling of Diesel Powered Motor Vehicles
AQR Section 70	Emergency Procedures
AQR Section 80	Circumvention

- Nevada Revised Statutes (NRS), Chapter 445B
- Clean Air Act, as amended (CAAA), Authority: 42 U.S.C. § 7401, et seq

5. 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 Dc	Standards of Performance for Small Industrial-Commercial-institutional Steam Generating Units
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	Appendix A, Method 9 or equivalent, (Opacity)
40 CFR Part 63, Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 CFR Part 64	Compliance Assurance Monitoring
40 CFR Part 70	Federally Mandated Operating Permits
40 CFR Part 82	Protection of Stratospheric Ozone

ATTACHMENT 2 – EMISSION UNITS CONTROLLED BY BAGHOUSES

EU	Description	Pollutant	Control Technology
A03, B01-B04, D17, F01 and F03	Feeder System, Crushing Conveyor, Primary & Secondary Crusher, 200 Ton Rock Bin, Bucket Elevators, Milling Conveyor, End Trim/Bundler, Re-cut and Riser Machine	PM	Enclosed Process connected to Baghouse: BH-W01
C01, C02, C03, C04, C05	Imp Mill No.1 through Imp Mill No.5	PM	Enclosed Process connected to Baghouses: BH-W02, BH-W03, BH-W04, BH-05, BH-W06
D01a, D01b, D01d	Stucco Area Conveyors	PM	Enclosed Process connected to Baghouses: BH-W07, BH-W08, BH-W10, BH-W33
D01c	Stucco Area Conveyor and Bucket Elevator	PM	Enclosed Process connected to Baghouse: BH-W09
D01e, D06	Stucco Area conveyor, Bucket Elevators, Hammermill, Stucco Blenders #2	PM	Enclosed Process connected to Baghouse: BH-W13
D03, D04	North and South Stucco Storage Bin	PM	Enclosed Process connected to Baghouses: BH-W11, BH-W12
D07, D08, D09, D11, D12 and D13	Pin Mixer, Vermiculite Bin, Landplaster Bins #1 & #2, Ball Mills #1 & #2, Interior Baghouse Conveyors, Interior Baghouse Hopper, Fiberglass Feed Hopper, Concrete Basin, Bucket Elevators.	PM	Enclosed Process connected to Baghouse: BH-W14
E101, E102, E164, E174, & E175	Roll Crusher, Rock Conveyor, Alpha Rock Screen, North & South Beta Rock Grizzly Feed Screen	PM	Enclosed Process connected to Baghouse: BH-01
E103, E104	West & East Beta Rock Bin	PM	Enclosed Process

EU	Description	Pollutant	Control Technology
			connected to Baghouses: BH-02 BH-03
E105, E106	West & East Roller Mill	PM	Enclosed Process connected to Baghouses: BH-04 BH-05
E108, E109	West & East LP Bin	PM	Enclosed Process connected to Baghouses: BH-06 & BH-07
E110, E111	West & East Kettle	PM	Enclosed Process connected to Baghouses: BH-08 BH-09
E142-E144, E149-151, E176-E178	Alpha Rock Conveyors, South & North Rock Bins, South & North Rock Bin Grizzly Feed Screen, Alpha Rock Elevator Screen, Pan Dryers #1 through #3, & Bucket Elevator	PM	Enclosed Process connected to Baghouses: BH-13, BH-35, BH-36, BH- 37
E152, E154, E157, E158, E160-E162, G11, G25 and G28	Alpha Impact Mill #1, Alpha Crushers #1 & #2, Alpha Hammermill, Alpha Hummer Screen, Alpha Air Separator, South & North Alpha Storage Bin, Alpha Surge Bin, & Bucket Elevators	PM	Enclosed Process connected to Baghouse: BH-14
E107, E156, E173	Alpha Reject Screens, LP Bulk Loadout Bin, LP Bulk Loadout, Ag Gyp Packer, & LP bin Airvey System	PM	Enclosed Process connected to Baghouse: BH-10 BH-33
E113, G13	LP Bulk Bagging & Reject Bin	PM	Enclosed Process connected to Baghouse: BH-11
E114, E166	Stucco Sweeco Screen, Stucco Bulk Loadout Bin, & Stucco Bulk Loadout	PM	Enclosed Process connected to Baghouse: BH-12
E115, E117, E119, G14	West Hummer Screen, West Stucco Bin, West Air Separator, West Beta Impact Mills #1 & #2, & Bucket Elevator	PM	Enclosed Process connected to Baghouse: BH-15
E116, E118, E120, G16	East Stucco Bin, East Hummer Screen, East Beta Impact Mill #1 & #2, & Bucket Elevator	PM	Enclosed Process connected to Baghouse: BH-16
E122 through E127	North & South Split Finish Bins #1 through #3	PM	Enclosed Process connected to Baghouses: BH-17, BH-18, BH-19, BH-20, BH-21, BH- 22
E128, E129	North & South Alpha Bin	PM	Enclosed Process connected to Baghouses: BH23, BH-25
E130	Cement Bin	PM	Enclosed Process connected to Baghouse: BH-24
E172	HiVAC Vacuum System	PM	Enclosed Process connected to Baghouse: BH-32
E140	MP Bulk Bagging & MP Bulk Load Out Bin	PM	Enclosed Process connected to Baghouse: BH-28
E139	FP Bulk Load Out Bin	PM	Enclosed Process connected to Baghouse:

EU	Description	Pollutant	Control Technology
			BH-29
E112, E168, G15, G17	FP Bulk Bagging, Stucco conveyors, West & East Impact Mills #3, & Bucket Elevators – West & East Hot Pit	PM	Enclosed Process connected to Baghouse: BH-30
E133, E134	South & North Bag Packers, South & North Weigh Hoppers, South & North Mixers, South & North MP Bulk Loadouts, South & North Bag Packer Feed Hoppers, & Bucket Elevator	PM	Enclosed Process connected to Baghouse: BH-31
G18, G19, G21	Hamilton Surge Bin, Hamilton Bulk Loadout Bin, Hamilton Bulk Loadout, & Hamilton Rotary Screens	PM	Enclosed Process connected to Baghouse: BH-34
E179	Autoclaves System 1 through 8	PM	Enclosed Batch Process