

# TECHNICAL SUPPORT DOCUMENT

TECHNICAL INFORMATION PRESENTED IN REVIEW OF AN  
APPLICATION FOR A PART 70 OPERATING PERMIT

SUBMITTED BY

**CERTAINTEED CORPORATION**

for

**CERTAINTEED GYPSUM MANUFACTURING, INC.**

**Part 70 Operating Permit Number: 4  
(Renewal)**

SIC Code - 3275: Gypsum Manufacturing



Clark County  
Department of Air Quality and Environmental Management  
Permitting Section

**November, 2009**

## EXECUTIVE SUMMARY

CertainTeed Gypsum Manufacturing, Inc. (CGM), owned by CertainTeed Corporation, 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, PM<sub>10</sub>, and ozone, and PSD for all other regulated air pollutants.

CertainTeed Gypsum Manufacturing, Inc. operates a gypsum wallboard manufacturing facility. All manufacturing and support processes at the site are grouped under the Standard Industrial Classification 3275 – Gypsum Products (NAICS: 327420 – Gypsum Products Manufacturing). The CGM processes gypsum ore and manufactures wallboard. The emission units at the source include rock crushing and screening, transport of raw rock, mill operations, plaster operations, and wallboard manufacturing. The potential emissions for the source are shown in the table below.

**Table 1: Source-wide PTE (tons per year)**

<b>PM<sub>10</sub></b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>x</sub></b>	<b>VOC</b>	<b>HAP</b>
<b>54.23</b>	<b>89.31</b>	<b>120.90</b>	<b>0.81</b>	<b>42.60</b>	<b>2.24</b>

Clark County Department of Air Quality and Environmental Management (DAQEM) has delegated authority to implement the requirement of the Part 70 operating permit program. The CertainTeed Gypsum Manufacturing, Inc. facility was a major source for PM<sub>10</sub>, NO<sub>x</sub> and CO. The modification to the NSR permit (ATC/OP Modification 5, Revision 0, issued on July 23, 2007) lowered the PM<sub>10</sub> PTE below the major source threshold. The source remains a major for NO<sub>x</sub> and CO.

Initial Part 70 Operating Permit was issued on July 12, 2001; and NSR ATC/OP Modification 5, Revision 0, was issued on July 23, 2007. DAQEM received the renewal Title V application on January 12, 2005. Based on the information submitted by the applicant and a technical review performed by the DAQEM staff, the DAQEM proposes the renewal of a Part 70 Operating Permit to CertainTeed Gypsum Manufacturing, Inc.

*This Technical Support Document (TSD) accompanies the proposed Part 70 Operating Permit for CertainTeed Gypsum Manufacturing, Inc.*

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## I. ACRONYMS

**Table I-1: List of Acronyms**

<b>Acronym</b>	<b>Term</b>
AQR	Clark County Air Quality Regulations
ATC	Authority to Construct
ATC/OP	Authority to Construct/Operating Permit
BCC	Clark County Board of County Commissioners
BHP	Brake Horse Power
CAO	Field Corrective Action Order
CE	Control Efficiency
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
EF	Emission Factor
EPA	United States Environmental Protection Agency
EU	Emission Unit
HAP	Hazardous Air Pollutant
HP	Horse Power
NAC	Nevada Administrative Code
NAICS	North American Industry Classification System
NEI	Net Emission Increase
NO <sub>x</sub>	Nitrogen Oxides
NOV	Notice of Violation
NRS	Nevada Revised Statutes
NSPS	New Source Performance Standards
NSR	New Source Review
OP	Operating Permit
PEP	Potential to Emit Particulate
PM <sub>2.5</sub>	Particulate Matter less than 2.5 microns
PM <sub>10</sub>	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 <sub>x</sub>	Sulfur Oxides
TCS	Toxic Chemical Substance
TSD	Technical Support Document
VOC	Volatile Organic Compound

## II. SOURCE INFORMATION

### A. General

Permittee	CertainTeed Gypsum Manufacturing, Inc.
Mailing Address	HCR 89033, Box 2900, Las Vegas, NV 89214
Contacts	Doug Doyle, Mill Manager
Phone Number	(702) 875-4111 X 116
Fax Number	(702) 875-4155
Source Location	One mile east of Blue Diamond, Nevada
Hydrographic Area	212
Township, Range, Section	T22S, R59E, Sections 4, 5, 8, 9
SIC Code	3275 – Gypsum Products
NAICS Code	NAICS 327420 – Gypsum Products Manufacturing

### B. Description of Process

CertainTeed Gypsum Manufacturing, Inc. operates a gypsum wallboard manufacturing facility in Las Vegas, Nevada. The manufacturing process pulverizes and dries gypsum rock ( $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ ) to produce landplaster. The landplaster is calcinated to remove most of the chemically bound water to produce stucco ( $\text{CaSO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$ ), the principal component in gypsum wallboard. The major parts of the process include: truck unloading station, discharge terminal, CP Mill, Roller Mills, plaster kettles, plaster operations, stucco bins, wallboard manufacturing, accelerator process, and wallboard recycling.

#### Truck Unloading and Discharge Terminal

The truck unloading station receives gypsum rock and recycled wallboard. The delivered material is stored at the stockpile area near the plant. The rock material is conveyed to the discharge terminal. The rock material from the discharge terminal is transported via conveyor belts to rock bins in the Raymond Mill building and rock silos in the CP Mill building. The  $\text{PM}_{10}$  emissions at transfer points are controlled by water sprays to achieve 82 percent efficiency.

#### CP Mill

The single Claudius Peters, Inc. gypsum system (CP Mill) combines grinding, drying, and calcining operations into one single unit. The material from the discharge terminal is conveyed to a 1,200-ton Board Rock Bin. The gypsum rock is then transferred to the CP Mill by a rock elevator. The CP Mill pulverizes the rock and contacts it with the combustion gases of the flash calciner. The calciner burns at the rate of 50 MMBtu/hr and converts the pulverized gypsum rock into stucco. The gases carry the calcinated stucco to the CP Mill baghouses. The baghouse separates the stucco from the gas stream and controls particulate emissions related to the transfer of the stucco from the CP Mill to the conveyance system. The stucco is transported to stucco storage bins and used for wallboard manufacturing. The major pollutant associated with this process is  $\text{PM}_{10}$ . Pollutants associated with the CP Mill fuel combustion include  $\text{PM}_{10}$ ,  $\text{NO}_x$ , CO, VOC, and  $\text{SO}_x$ . The  $\text{PM}_{10}$  emissions at the transfer points are controlled by water spraying to achieve 82 percent efficiency. Inside the building, transfer points are sealed and controlled by baghouses with 99.5 percent control efficiency.

### Roller Mills

The Roller Mills pulverize and dry the gypsum rock to produce landplaster. There are five roller mills equipped with flash dryers, cyclones, and baghouses. The material from the discharge terminal is stored in the five rock bins and gravity fed to the roller mills, where the rock size is reduced 92 percent. The gypsum ore from the rock storage bins is delivered to the mills at the rate up to 20 tons per hour. The mills grind the gypsum rock into a fine powder, which is dried by hot air blown from its flash dryer. The hot air carries the dust from the mill to a high efficiency cyclone, which separates most of the pulverized landplaster from the air stream. The associated Raymond Mill baghouse captures the small amount of landplaster not collected by the cyclone. A collection screw collects all the landplaster captured by the cyclones and baghouses and conveys the material to one of seven landplaster storage bins at the rate of 100 tons per hour. The major pollutant associated with this process is PM<sub>10</sub>. Pollutants associated with the flash dryer's fuel combustion include PM<sub>10</sub>, NO<sub>x</sub>, CO, VOC, and SO<sub>x</sub>. The flash dryers use only pipeline quality natural gas. The control efficiency of the baghouse is 99.5 percent.

### Plaster Kettles

The landplaster is converted into stucco in the continuous kettle calciners. Crushed gypsum from the Roller Mills is either conveyed from the collection and distribution screws into 400-ton landplaster bin or conveyed directly to the Kettle LP bins. The emissions from the ground gypsum that is conveyed to the bins are controlled by baghouses. The landplaster is delivered at the rate of up to 10 tons per hour from the storage bin into kettle calciners, where it is heated and calcined to form stucco.

The calcining principle is identical for all kettles. Each calciner, using individual 13.6 MMBtu/hr natural gas burners, indirectly heats and removes most of the chemically bound water in landplaster and converts it to stucco. The calciner exhausts the combustion gases through a stack into the atmosphere. The calcined stucco from the kettle is gravity fed into a hot pit, where it cools. The discharge into a hot pit causes particulate emissions that are controlled by a baghouse. The stucco from the hot pits passes into a collection screw that transports it to bucket elevators. One pound of gypsum will form 0.85 pounds of stucco.

A maximum of 2,000 tons per year of crushed gypsum from the 400-ton bin goes to the accelerator system. Additional 50,000 tons per year of ground gypsum goes to a packer via a screw conveyor to produce agricultural gypsum. The agricultural gypsum packer fills paper bags with gypsum. The bags are placed on the fill spout manually. The full bags are automatically ejected from the machine and fall to a small belt conveyor, which carries them to an area where they are stacked on pallets. The major pollutant associated with this process is PM<sub>10</sub>. Pollutants associated with the kettle fuel combustion include PM<sub>10</sub>, NO<sub>x</sub>, CO, VOC, and SO<sub>x</sub>. The kettles use only pipeline quality natural gas. The control efficiency of the baghouse is 99.5 percent.

### Plaster Operations

The plaster operations involve processes that prepare, store, and package gypsum/plaster products sold off-site, such as hardwall and casting plaster.

Stucco produced in the roller mills and kettles is used in the plaster operations. Stucco from the bucket elevator is dropped into a screw conveyor, which transports it to multiple storage bins, which emissions are controlled by a baghouse. Approximately 20 tons per hour of stucco for hardwall production flows through a ball mill. The hardwall plaster is then transported by a bucket elevator to a screw conveyor to the three bins. A portion of the stucco from the roller

mills bypasses the ball mill and is fed to the entoletter and then directly to the three hardwall finish bins by two screw conveyors and another bucket elevator. The hardwall plaster is finally sent through mixers and sackers. The hardwall plaster is loaded through the loading system, which contains a 100 pounds sacker and a 2,000 pounds supersacker. The bulk loading operation consists of pneumatically transferring gypsum plaster into a silo and then gravity feeding into a bulk truck. The bulk loading bin is equipped with a baghouse to control dust emissions.

Stucco and reground wallboard are sent to the 100-ton regrind bin by screw conveyor. The water is then fed to the three 80-ton casting finish bins by three screw conveyors and a bucket elevator. The casting plaster uses cement as an additive. The cement is delivered by truck to the 28-ton cement bin. The cement is unloaded pneumatically through the pipe, using a blower on the truck. The mixture of casting plaster and cement is sent to a 100 pound sacker. The major pollutant associated with this process is PM<sub>10</sub> controlled by a baghouse.

#### Stucco Bins – Board Plant

The stucco produced in the CP Mill is consumed in the board plant. Stucco is transported at a maximum rate of 55 tons per hour to six 100-ton stucco bins by five screw conveyors and two bucket elevators. The stucco storage bins are vented to a single baghouse to control particulate emissions. The stucco from the stucco storage bins is fed into the surge bin, incline screw, metering screw and to the pin mixer. Some of the stucco flowing from the surge bin (approximately 1-2 tons per hour) is recirculated at the incline screw back to the stucco storage bins. The major pollutant associated with this process is PM<sub>10</sub>. The control efficiency of the baghouse is 99.5 percent.

#### Wallboard Manufacturing

The manufacturing of wallboard uses a mixture of stucco, solid and liquid additives, and hot process water. Stucco flowing from the stucco storage bins is mixed with pulp, water, foam, accelerator and other liquid additives in the pin mixer. The facility manufactures standard and fire-rated wallboard. Consequently, the composition of the slurry varies according to the desired physical characteristics.

The pin mixer deposits the slurry between two continuous sheets of paper that pass through a wallboard forming element. The paper and slurry composite are placed on a forming conveyor belt, where the slurry is allowed to set. A small portion of wet stucco is fed to the edge mixer. From the pin mixer and edge mixer the wet stucco is delivered onto a roller paper, which moves along a roller conveyor. The composite forms a continuous wet wallboard. At the end of the conveyor the rotating knife cuts the wallboard in to individual pieces of varying length, which are then dried while conveyed through the 130 MMBtu/hr AKI board dryer.

The AKI dryer has two main exhaust stacks and a wet end seal exhaust stack. The main stacks are the primary air pollutants emission points. The wet end seal exhaust stack is the exhaust point for an air curtain that draws just enough dryer air to prevent cool ambient air from entering the front of the dryer. At the exit of the AKI dryer, each long board is divided into two boards with radial center saws and then trimmed with two pairs of end saws, and an end tape is applied. The end saws are vented to a single baghouse to control dust emissions. The major pollutant associated with this process is PM<sub>10</sub>. Pollutants associated with the AKI dryer include PM<sub>10</sub>, NO<sub>x</sub>, CO, VOC, and SO<sub>x</sub>. The AKI dryer use only pipeline quality natural gas. The control efficiency of the baghouse is 99.5 percent.

### Accelerator System

The accelerator consists of landplaster that is further ground in small ball mills and mixed with a sugar additive. The accelerator is composed of approximately 80 percent of landplaster and 20 percent of starch. The mixture accelerates the drying process. The landplaster from the Raymond Roller Mills is conveyed by a screw conveyor to the landplaster bin over to the 8 ball mills. The material discharged from the ball mills is conveyed by screw conveyor to the board plant and discharged from the accelerator storage bin. A baghouse with 99.5 percent control efficiency controls emissions from these processes.

### Wallboard Recycling System

The Wallboard Recycling System chops and pulverizes reject wallboard for reuse in the board plant. The reject wallboard is loaded in a feed bin by a front-end loader and then is fed to a chopper and pulverizer where the wallboard is ground into fine material. The ground material containing some shredded paper is then moved to a stockpile by haul trucks. From the stockpile the material is fed into the feed hopper of the foldbelt going to the discharge terminal. A 400 hp diesel engine provides the power for the system. A maximum of 85,000 tons per year of recycled wallboard is processed. The major pollutant associated with this process is PM<sub>10</sub>. Pollutants associated with the diesel generator include PM<sub>10</sub>, NO<sub>x</sub>, CO, VOC, and SO<sub>x</sub>. The particulate emissions from crushing and screening are controlled with water sprays to achieve 82 percent control efficiency. The diesel generator emissions are uncontrolled.

### Alternate Wallboard Recycling System

The recycling operation consists of a package recycle system manufactured by New West Gypsum Recycling. The package unit is powered by grid power. The package recycling system is a full-scale pilot system and was proposed as an alternative operation for the primary recycle system. A maximum of 85,000 tons per year of recycled wallboard is processed. The pollutant associated with this process is PM<sub>10</sub>. The particulate emissions from crushing and screening are controlled by a baghouse with 99.5 percent control efficiency. The water sprays control emissions from transfer points to achieve 82 percent control efficiency.

## **C. Permitting History**

The CertainTeed Gypsum Manufacturing, Inc. is regulated by Clark County Department of Air Quality and Environmental Management (DAQEM), and has a Title V permit. The facility is a major source for NO<sub>x</sub> and CO. Initial Part 70 Operating Permit was issued July 12, 2001; and subsequent NSR permit modifications were: ATC/OP Modification 4, issued on August 25, 2005; ATC/OP Modification 4, Amendment 1, issued on May 5, 2006; ATC/OP Modification 5, Revision 0, issued on July 23, 2007; and ATC Modification 6, Revision 0, issued on May 29, 2008. DAQEM received the renewal Title V application on January 12, 2005. On May 20, 2008, DAQEM also received an amendment to the renewal application to revise the title V permit for incorporation of the changes involved with NSR Modifications 4, 5 and 6.

The wallboard plant was constructed in the early 1940's and has changed ownership several times. The facility was initially permitted by the Air Pollution Control Division (APCD) in 1977. The facility was then owned by Flintcote.

In 1987, the facility was purchased by James Hardie Gypsum (JHG). The operating permits were transferred to the new owner and the issued permits did not have any attached conditions. At that time, an aerial tramway was used to transport gypsum rock down from the cliff on which quarry is located. The tram included open ore carts subject to winds along the cliff face. Due to

tramways age and small capacity, the facility operating needs were supplemented by using six (6) mile haul road to transport rock. In 1990, tramway was irretrievably damaged. In December 1991, JHG applied for an “Authority to Construct” (ATC) permit to modify the gypsum quarrying portion of the facility. The old tram was replaced with a new enclosed conveyor belt system and the crusher and screen were replaced by a mobile crushing and screening plant.

In 2002, the company name James Hardie Gypsum was changed to BPB Gypsum, Inc. (BPB).

In January 2005, BPB submitted an application for the renewal of Part 70 OP. In April 2005, the gypsum mine was no longer leased to BPB Gypsum, Inc. and the facility proposed an alternate source of gypsum rock. The BPB applied for authorization to construct a truck unloading station to import gypsum rock by truck. The application also included the installation of a new wallboard recycling system to reintroduce reject or scrap wallboard into the manufacturing process. Finally, all emission units associated with mining and rock handling sources were removed from the permit (ATC/OP Modification 4, issued on August 24, 2005).

In 2007, the BPB Gypsum, Inc. was acquired by CertainTeed Corporation and the facility name was changed to CertainTeed Gypsum Manufacturing, Inc. (CGM). In June 2007, CGM applied for inclusion of the recycled wallboard from the construction sites as a process feed material, the addition of VOC emissions from fuel dispensing, change of the ERC language for mine closure, and addition of new emission units (ATC/OP Modification 5, Revision 0, issued on July 23, 2007). In 2008, CGM applied for addition of an alternate wallboard recycling system to process 85,000 tons per year of recycle wallboard material (ATC Modification 6, Revision 0, issued on May 29, 2008).

The source has been issued several permits by the Clark County Health District – Air Quality Division (CCHD – AQD) and later by DAQEM.

**Table II-C-1: NSR Permits Issued to CertainTeed Gypsum Manufacturing, Inc.**

<b>Date Issued</b>	<b>Permit Number</b>	<b>Description</b>
5/29/2008	ATC Modification 6, Revision 0	Authority to Construct - The addition of an alternate wallboard recycling system to process 85,000 tpy of material.
07/23/2007	ATC/OP Modification 5, Revision 0	Authority to Construct/Operating Permit - The addition of VOC emissions from fuel dispensing, use of recycled wallboard from construction sites, change of ERC language for mine closure, updates of performance frequency and addition of new emission units.
05/05/2006	ATC/OP Modification 4, Amendment 1	Authority to Construct/Operating Permit - The minor updates of the PTE Tables.
08/24/2005	ATC/OP Modification 4	Authority to Construct/Operating Permit – The removal of mining operations, construction of a new gypsum truck unloading station; update emission rate for the baghouse, and construction of new wallboard recycling equipment.

## D. Operating Scenario

CertainTeed Gypsum Manufacturing, Inc. is a producer of gypsum wallboard. The manufacturing process pulverizes and dries gypsum rock ( $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ ) to produce landplaster. The landplaster is calcinated to remove most of the chemically bound water to produce stucco ( $\text{CaSO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$ ) the principal component in gypsum wallboard.

## III. EMISSIONS INFORMATION

### A. Source-wide Potential to Emit

CertainTeed Gypsum Manufacturing, Inc. is a major source for  $\text{NO}_x$  and CO; and a minor source for  $\text{PM}_{10}$ ,  $\text{SO}_x$ , VOC, and HAP:

**Table III-A-1: Source-wide PTE (tons per year)**

Pollutant	$\text{PM}_{10}$	$\text{NO}_x$	CO	$\text{SO}_x$	VOC	HAP
<b>PTE Totals</b>	<b>54.23</b>	<b>89.31</b>	<b>120.90</b>	<b>0.81</b>	<b>42.60</b>	<b>2.24</b>
<b>Major Source Thresholds</b>	<b>70</b>	<b>50</b>	<b>70</b>	<b>70</b>	<b>50</b>	<b>25<sup>2</sup></b>

<sup>1</sup>The total PTE for the source includes the worst-case emissions between the primary and alternative operating scenarios.

<sup>2</sup>25 tons for combination of all HAPs (no single HAP exceeds 10 tons).

### B. Control Technology

The results of the Best Available Control Technologies (BACT) analysis for Truck Unloading Station, Wallboard Recycling System, and Alternate Wallboard Recycling System are presented below. The BACT determinations for these processes apply to other gypsum processes at the facility.

**Table III-B-1: BACT Determinations for Truck Unloading Station and Recycle Systems**

EU	Description	BACT Technology	BACT Limit
C.16	Paved Gypsum Haul Road	Sweeping	Maximum 20% opacity.
C.17, C.19 - C.23	Truck Unloading Station (unloading cycle)	Baghouse, 99.5% control efficiency	Baghouse shall not exhibit visible emissions greater than 7% opacity, or discharge into the atmosphere emissions in excess of 0.05 g/dscm of $\text{PM}_{10}$
C.18, C.24, C.25	Truck Unloading Station (conveying cycle)	Water Sprays/chemical stabilizer	Minimum 0.5% moisture by weight in materials less than 0.125 inch in diameter
L.1 – L.18	Wallboard Recycling System (conveying)	Water Sprays/chemical stabilizer	Minimum 0.5% moisture by weight in materials less than 0.125 inch in diameter
L.19 – L.21	Wallboard Recycling System	Baghouse, 99.5% control efficiency	Baghouse shall not exhibit visible emissions greater than 7% opacity, or discharge into the atmosphere emissions in excess of 0.05 g/dscm of $\text{PM}_{10}$

EU	Description	BACT Technology	BACT Limit
M.1 – M.4 and M.7 – M.16	Alternate Wallboard Recycling System (conveying)	Water Sprays/Chemical Stabilizer	Minimum 0.5% moisture by weight in materials less than 0.125 inch in diameter.
M.5 and M.7	Alternate Wallboard Recycling System (grinder and screen)	Baghouse, 99.5% control efficiency	Baghouse shall not exhibit visible emissions greater than 7% opacity, or discharge into the atmosphere emissions in excess of 0.05 g/dscm of PM <sub>10</sub>
M.17, L.13, L.16	Unpaved Haul Road	Water Sprays/Dust Suppressant	Maximum 20% opacity and 6% silt content.

The NSR ATC Modification 6, Revision 0, issued on May 29, 2008, involved the addition of the alternate system for recycling waste wallboard material. The alternate recycling system consists of a package recycle plant powered by grid power. The PM<sub>10</sub> emissions from the grinder and the screen are controlled with a baghouse with 99.5 percent efficiency. Other PM<sub>10</sub> emissions are controlled with 0.5 percent moisture.

The NSR ATC/OP Modification 5, issued on July 27, 2007, included addition of VOC emissions from fuel dispensing and of new emissions units: unload screen (EU: L7.1), rotary screen (EU: L.7.2), unload to conveyor (EU: L.7.3), and fire pump (EU: P.01). The PM<sub>10</sub> emissions are controlled with 0.5 percent moisture. The control used for the emergency fire pump diesel engine (EU: P.01) include turbocharging with after coolers, fuel injection timing retardation (FITR), usage of low sulfur fuel, and the limitation of operational hours 0.5 hours per week for maintenance.

The NSR ATC/OP Modification 4, issued on August 24, 2005, included ceasing of the mining operations and removal of all mining sources as well as addition of the truck unloading station, and the wallboard recycling system. The Truck Unloading Station operations generate PM<sub>10</sub> during the unloading and the conveying cycles. For the unloading cycle, the best technology available selected is a baghouse with 99.5 percent control efficiency. For the conveying portion, the most effective technology selected is 0.5 percent moisture. The recycle system emissions are controlled with 0.5 percent moisture.

### C. Emission Units and PTE

Tables III-C-1 through III-C-16 summarize the PTE for each emission unit. Actual and allowable annual emissions shall not exceed the calculated PTE for each emission unit.

**Table III-C-1: Group 3A Truck Unloading Station PTE**

EU	Description	SCC	Tons/ Hour	Tons/ Day	Tons/ Year	EF	CF <sup>1</sup>	Control Method	Lbs/ Hour <sup>5</sup>	Lbs/ Day <sup>5</sup>	Tons/ Year	Type <sup>2</sup>
C.16	Paved Gypsum Import Haul Road (2.5 miles) <sup>3</sup>	30502504	4.96 VMT	119.11 VMT	43,478.26 VMT	0.44	0.50	Sweeping	1.09	26.19	4.78	H1
C.17	Gypsum Rock Unloading	30502031	91.32	2,191.68	800,000	0.01	0.005	BH01	0.01	0.11	0.02	---
C.18	Useable Gypsum Rock Pile <sup>4</sup>	30502507	0.52 acres			1.66	0.18	Moisture	0.01	0.16	0.03	DM
C.19	Dust Collector Reclaim to C-10 Belt	30502006	0.003	0.07	50.00	0.01	0.005	BH01	0.01	0.01	0.01	---
C.20	Hopper #1 to Discharge Belt #1	30502006	45.66	1,095.84	400,000	0.01	0.005	BH01	0.01	0.05	0.01	---
C.21	Hopper #2 to Discharge Belt #2	30502006	45.66	1,095.84	400,000	0.01	0.005	BH01	0.01	0.05	0.01	---
C.22	Discharge Belt #1 to C-10 Belt	30502006	45.66	1,095.84	400,000	0.01	0.005	BH01	0.01	0.05	0.01	---
C.23	Discharge Belt #2 to C-10 Belt	30502006	45.66	1,095.84	400,000	0.01	0.005	BH01	0.01	0.05	0.01	---
C.24	C-10 Belt to C-11 Belt	30502006	91.32	2,191.68	800,000	0.01	0.18	Moisture	0.16	3.95	0.72	P1
C.25	C-11 Belt to Diverter	30502006	91.32	2,191.68	800,000	0.01	0.18	Moisture	0.16	3.95	0.72	P1
<b>PM<sub>10</sub> Subtotals</b>									<b>1.48</b>	<b>34.57</b>	<b>6.32</b>	

<sup>1</sup> Control factor values: 0.18 is equivalent to 0.5 percent moisture, 0.50 is equivalent to 50 percent control from haul road sweeping, and 0.005 is equivalent to 99.5 percent control from a baghouse.

<sup>2</sup> Type is a designation for emission unit billing purposes; P1 = process equipment, and H1 = haul road. Fees are listed in Section 18 of the AQR.

<sup>3</sup> Emission factor is in units of pounds/VMT.

<sup>4</sup> Emission factor is in units of pounds/acre/day.

<sup>5</sup> Hourly and daily PTE and production rates listed are for informational purposes only and are not an enforceable limits.

**Table III-C-2: Group 5 Discharge Terminal and CP Mill Potential to Emit**

EU	Description	SCC	Tons/ Hour	Tons/ Day	Tons/ Year	EF	CF <sup>1</sup>	Control /Pollutant	Lbs/ Hour <sup>4</sup>	Lbs/ Day <sup>4</sup>	Tons/ Year	Type <sup>2</sup>
E.1.1	Front End Loader (rock pile)	30501504	81.62	1,958.90	715,000	0.023	0.18	Moisture	0.34	8.11	1.48	P1
E.1.2	Rock Batch Drop	30501504	81.62	1,958.90	715,000	0.023	0.18	Moisture	0.34	8.11	1.48	P1
E.1.3	Front End Loader (recycle)	30501504	9.70	232.88	85,000	0.023	0.18	Moisture	0.04	0.96	0.18	P1
E.1.4	Recycle Batch Drop	30501504	9.70	232.88	85,000	0.023	0.18	Moisture	0.04	0.96	0.18	P1
E.2	Conveyor Transfer From Fold Belt	30501504	91.32	2,191.78	800,000	0.023	0.18	Moisture	0.38	9.07	1.66	P1
E.3	Unload to Conveyor	30501504	91.32	2,191.78	800,000	0.023	0.18	Moisture	0.38	9.07	1.66	P1

EU	Description	SCC	Tons/ Hour	Tons/ Day	Tons/ Year	EF	CF <sup>1</sup>	Control /Pollutant	Lbs/ Hour <sup>4</sup>	Lbs/ Day <sup>4</sup>	Tons/ Year	Type <sup>2</sup>
E.5	Crossover Belt to Conveyor	30501504	91.32	2,191.78	800,000	0.023	0.18	Moisture	0.38	9.07	1.66	P1
E.6	Conveyor Drop (to rock bins)	30501504	26.73	641.54	234,163	0.023	0.18	Moisture	0.11	2.66	0.46	P1
E.7	Conveyor Drop (to rock silos)	30501504	64.55	1,549.26	565,480	0.023	0.18	Moisture	0.27	6.41	1.17	P1
E.8	Conveyor Drop (to rock silos)	30501504	64.55	1,549.26	565,480	0.023	0.18	Moisture	0.27	6.41	1.17	P1
E.9	Batch Drop to Conveyor	30501503	64.55	1,549.26	565,480	0.023	0.18	Moisturer <sup>5</sup>	0.27	6.41	1.17	P1
E.9.1	End Saw Dust Drop to Conveyor	30501503	0.49	11.84	4,320	0.023	0.005	BV03	0.01	0.01	0.01	---
E.10	Batch Drop to CP Mill	30501504	64.55	1,549.26	565,480	0.023	0.005	BV03	0.01	0.18	0.03	---
E.11	CP Mill	30501513	0.00873 grains/dscf; 26,000 dscfm flowrate 45 MMBtu/hr; 24 hr/day; 8,760 hr/yr					PM <sub>10</sub>	1.95	46.80	8.54	P1
NO <sub>x</sub>								4.03	96.72	17.65		
CO								0.23	5.52	1.01		
SO <sub>2</sub>								0.03	0.72	0.13		
VOC								0.13	3.12	0.57		
HAP								0.08	1.92	0.35		
E.12	Drop to Stucco Cooler	30501504	64.55	1,549.26	565,480	0.023	0.005	BH02	0.01	0.18	0.03	P1
<b>PM<sub>10</sub> Subtotals</b>									<b>4.80</b>	<b>114.41</b>	<b>20.88</b>	

<sup>1</sup> Control Factor values: 0.18 is equivalent to 0.5 percent moisture and 0.005 is equivalent to 99.5 percent control from a baghouse.

<sup>2</sup> Type is a designation for emission unit billing purposes; P1 = process equipment. Fees are listed in Section 18 of the AQR.

<sup>3</sup> PM<sub>10</sub> emissions based on baghouse outlet grain loading.

<sup>4</sup> Hourly and daily PTE and production rates listed are for informational purposes only and are not an enforceable limits.

**Table III-C-3: Group 6 Rolling Mills for Plaster Production PTE**

EU	Description	SCC	Tons/ Hour	Tons/ Day	Tons/ Year	EF	CF <sup>1</sup>	Control/ Pollutant	Lbs/ Hour <sup>3</sup>	Lbs/ Day <sup>3</sup>	Tons/ Year	Type <sup>2</sup>
F.1	Unload to Rolling Mill	30501504	91.32	2191.78	800,000	0.023	0.005	BH04-08	0.01	0.25	0.05	---
F.1.1	Flash Dryer #1	30501502	1.8 MMBtu/hr; 8,760 hr/yr					PM <sub>10</sub>	0.01	0.01	0.01	F1
								NO <sub>x</sub>	0.18	4.32	0.79	
								CO	0.04	0.91	0.17	
								SO <sub>2</sub>	0.01	0.03	0.01	
								VOC	0.01	0.23	0.04	
								HAP	0.01	0.08	0.01	
F.1.2	Flash Dryer #2	30501502	1.8 MMBtu/hr; 8,760 hr/yr					PM <sub>10</sub>	0.01	0.01	0.01	F1
								NO <sub>x</sub>	0.18	4.32	0.79	
								CO	0.04	0.91	0.17	

EU	Description	SCC	Tons/ Hour	Tons/ Day	Tons/ Year	EF	CF <sup>1</sup>	Control/ Pollutant	Lbs/ Hour <sup>3</sup>	Lbs/ Day <sup>3</sup>	Tons/ Year	Type <sup>2</sup>
								SO <sub>2</sub>	0.01	0.03	0.01	
								VOC	0.01	0.23	0.04	
								HAP	0.01	0.08	0.01	
F.1.3	Flash Dryer #3	30501502	1.8 MMBtu/hr; 8,760 hr/yr					PM <sub>10</sub>	0.01	0.01	0.01	F1
								NO <sub>x</sub>	0.18	4.32	0.79	
								CO	0.04	0.91	0.17	
								SO <sub>2</sub>	0.01	0.03	0.01	
								VOC	0.01	0.23	0.04	
								HAP	0.01	0.08	0.01	
F.1.4	Flash Dryer #4	30501502	1.8 MMBtu/hr; 8,760 hr/yr					PM <sub>10</sub>	0.01	0.01	0.01	F1
								NO <sub>x</sub>	0.18	4.32	0.79	
								CO	0.04	0.91	0.17	
								SO <sub>2</sub>	0.01	0.03	0.01	
								VOC	0.01	0.23	0.04	
								HAP	0.01	0.08	0.01	
F.1.5	Flash Dryer #5	30501502	1.8 MMBtu/hr; 8,760 hr/yr					PM <sub>10</sub>	0.01	0.01	0.01	F1
								NO <sub>x</sub>	0.18	4.32	0.79	
								CO	0.04	0.91	0.17	
								SO <sub>2</sub>	0.01	0.03	0.01	
								VOC	0.01	0.23	0.04	
								HAP	0.01	0.08	0.01	
F.2	Rolling Mill	30501502	91.32	2191.78	800,000	1.23	0.005	BH04-08	0.56	13.48	2.46	P1
F.3	Cyclones	30501528	Emissions included in Rolling Mill									---
F.4	Recycle to Rolling Mill	30501504	Emissions included in Rolling Mill									P1
F.5.1	Unload to Collection Screw	30501504	91.32	---	800,000	0.023	0.005	BH04	0.01	0.25	0.05	---
F.5.2	Baghouse Hopper Unload	30501504	0.57	---	5,000	0.023	0.005	BH04	0.01	0.01	0.01	---
F.6.1	Unload to 3 LP Bins	30501504	34.25	---	300,000	0.023	0.005	BH04	0.01	0.09	0.02	---
F.6.3	Unload to 400-ton LP Bin	30501510	57.08	---	500,000	0.023	0.005	BH04	0.01	0.16	0.03	---
<b>PM<sub>10</sub> Subtotals</b>									<b>0.66</b>	<b>14.29</b>	<b>2.67</b>	
<b>NO<sub>x</sub> Subtotals</b>									<b>0.90</b>	<b>21.60</b>	<b>3.95</b>	
<b>CO Subtotals</b>									<b>0.20</b>	<b>4.55</b>	<b>0.85</b>	
<b>SO<sub>2</sub> Subtotals</b>									<b>0.05</b>	<b>0.15</b>	<b>0.05</b>	
<b>VOC Subtotals</b>									<b>0.05</b>	<b>1.15</b>	<b>0.20</b>	

EU	Description	SCC	Tons/ Hour	Tons/ Day	Tons/ Year	EF	CF <sup>1</sup>	Control/ Pollutant	Lbs/ Hour <sup>3</sup>	Lbs/ Day <sup>3</sup>	Tons/ Year	Type <sup>2</sup>
<b>HAP Subtotals</b>									<b>0.05</b>	<b>0.40</b>	<b>0.05</b>	

<sup>1</sup> Control Factor values: 0.005 is equivalent to 99.5 percent control from a baghouse.

<sup>2</sup> Type is a designation for emission unit billing purposes; F1 = fuel burning equipment, and P1 = process equipment. Fees are listed in Section 18 of the AQR.

<sup>3</sup> Hourly and daily PTE and production rates listed are for informational purposes only and are not an enforceable limits.

**Table III-C-4: Group 7 Kettles for Plaster Production PTE**

EU	Description	SCC	Tons/ Hour	Tons/ Day	Tons/ Year	EF	CF <sup>1</sup>	Control/ Pollutant	Lbs/ Hour <sup>3</sup>	Lbs/ Day <sup>3</sup>	Tons/ Year	Type <sup>2</sup>
G.1	Unload to Bucket Elevator	30501504	68.49	1643.8 4	600,00 0	0.023	0.005	BH10-16	0.01	0.19	0.03	---
G.1.1	Kettle Calciner #1	30501511		12 MMBtu/hr; 8,760 hr/yr				PM <sub>10</sub>	0.14	3.46	0.63	F1
								NO <sub>x</sub>	1.20	28.80	5.26	
								CO	0.25	6.05	1.10	
								SO <sub>2</sub>	0.01	0.17	0.03	
								VOC	0.06	1.52	0.28	
								HAP	0.02	0.52	0.09	
G.1.2	Kettle Calciner #2	30501511		12 MMBtu/hr; 8,760 hr/yr				PM <sub>10</sub>	0.14	3.46	0.63	F1
								NO <sub>x</sub>	1.20	28.80	5.26	
								CO	0.25	6.05	1.10	
								SO <sub>2</sub>	0.01	0.17	0.03	
								VOC	0.06	1.52	0.28	
								HAP	0.02	0.52	0.09	
G.1.3	Kettle Calciner #3	30501511		12 MMBtu/hr; 8,760 hr/yr				PM <sub>10</sub>	0.14	3.46	0.63	F1
								NO <sub>x</sub>	1.20	28.80	5.26	
								CO	0.25	6.05	1.10	
								SO <sub>2</sub>	0.01	0.17	0.03	
								VOC	0.06	1.52	0.28	
								HAP	0.02	0.52	0.09	
G.1.4	Kettle Calciner #4	30501511		12 MMBtu/hr; 8,760 hr/yr				PM <sub>10</sub>	0.14	3.46	0.63	F1
								NO <sub>x</sub>	1.20	28.80	5.26	
								CO	0.25	6.05	1.10	
								SO <sub>2</sub>	0.01	0.17	0.03	
								VOC	0.06	1.52	0.28	
								HAP	0.02	0.52	0.09	
G.1.5	Kettle Calciner #5	30501511		12 MMBtu/hr; 8,760 hr/yr				PM <sub>10</sub>	0.14	3.46	0.63	F1
								NO <sub>x</sub>	1.20	28.80	5.26	

EU	Description	SCC	Tons/ Hour	Tons/ Day	Tons/ Year	EF	CF <sup>1</sup>	Control/ Pollutant	Lbs/ Hour <sup>3</sup>	Lbs/ Day <sup>3</sup>	Tons/ Year	Type <sup>2</sup>
								CO	0.25	6.05	1.10	
								SO <sub>2</sub>	0.01	0.17	0.03	
								VOC	0.06	1.52	0.28	
								HAP	0.02	0.52	0.09	
G.1.6	Kettle Calciner #6	30501511	12 MMBtu/hr; 8,760 hr/yr					PM10	0.14	3.46	0.63	F1
								NOX	1.20	28.80	5.26	
								CO	0.25	6.05	1.10	
								SO <sub>2</sub>	0.01	0.17	0.03	
								VOC	0.06	1.52	0.28	
								HAP	0.02	0.52	0.09	
G.1.7	Kettle Calciner #7	30501511	12 MMBtu/hr; 8,760 hr/yr					PM10	0.14	3.46	0.63	F1
								NOX	1.20	28.80	5.26	
								CO	0.25	6.05	1.10	
								SO <sub>2</sub>	0.01	0.17	0.03	
								VOC	0.06	1.52	0.28	
								HAP	0.02	0.52	0.09	
G.2	Unload to Dist. Screw	30501504	68.49	1643.8 4	600,00 0	0.023	0.005	BH10-16	0.01	0.19	0.03	---
G.3.1	Unload to Board LP Bins	30501504	56.25	1350.0 0	492,75 0	0.023	0.005	BH10-16	0.01	0.16	0.03	---
G.3.2	Unload to Plaster LP Bins	30501504	12.24	293.84	107,25 0	0.023	0.005	BH10-16	0.01	0.03	0.01	---
G.3.3	Unload to Conveyor	30501504	1.14	27.42	10,010	0.023	0.005	BH10-16	0.01	0.01	0.01	---
G.3.4	Unload to Sacker	30501517	1.14	27.42	10,010	0.023	0.005	BH10-16	0.01	0.01	0.01	---
G.4	Unload Screw – Old Lath Pit	30501504	0.29	6.86	2,503	0.023	0.005	BH10-16	0.01	0.01	0.01	---
G.5	Unload to Kettles – Board	30501510	56.25	1350.0 0	492,75 0	0.023	0.005	BH10-16	0.01	0.16	0.03	---
G.6	Unload to Kettles – Plaster	30501510	13.39	321.26	117,26 0	0.023	0.005	BH10-16	0.01	0.04	0.01	---
G.7	4 Kettles – Board Stucco	30501511	56.25	1350.0 0	492,75 0	0.0038	1.00	BH10-16	0.21	5.10	0.94	P1
G.8	3 Kettles – Plaster Stucco	30501511	13.39	321.26	117,26 0	0.0038	1.00	BH10-16	0.05	1.21	0.22	P1
G.9	Unload to Pits – Board	30501504	56.25	1350.0 0	492,75 0	0.023	0.005	BH10-16	0.01	0.16	0.03	---

EU	Description	SCC	Tons/ Hour	Tons/ Day	Tons/ Year	EF	CF <sup>1</sup>	Control/ Pollutant	Lbs/ Hour <sup>3</sup>	Lbs/ Day <sup>3</sup>	Tons/ Year	Type <sup>2</sup>
G.10	Unload to Pits – Stucco	30501504	13.39	321.26	117,260	0.023	0.005	BH10-16	0.01	0.04	0.01	---
G.11	Unload to Screw – Board	30501504	56.25	1350.00	492,750	0.023	0.005	BH10-16	0.01	0.16	0.03	P1
G.12	Unload to Screw – Stucco	30501504	13.39	321.26	117,260	0.023	0.005	BH10-16	0.01	0.04	0.01	---
G.13	Unload to Screw	30501504	11.38	273.07	99,671	0.023	0.005	BH10-16	0.01	0.03	0.01	---
G.14	Unload to Bucket Elevator	30501504	11.38	273.07	99,671	0.023	0.005	BH10-16	0.01	0.03	0.01	---
G.15	Unload to Conveyor	30501504	1.14	27.42	10,010	0.023	0.005	BH10-16	0.01	0.01	0.01	---
G.16	Unload to Trucks	30501517	1.14	27.42	10,010	0.023	0.005	BH10-16	0.01	0.01	0.01	---
<b>PM<sub>10</sub> Subtotals</b>									<b>1.41</b>	<b>31.81</b>	<b>5.86</b>	
<b>NO<sub>x</sub> Subtotals</b>									<b>8.40</b>	<b>201.60</b>	<b>36.82</b>	
<b>CO Subtotals</b>									<b>1.75</b>	<b>42.35</b>	<b>7.70</b>	
<b>SO<sub>2</sub> Subtotals</b>									<b>0.07</b>	<b>1.19</b>	<b>0.21</b>	
<b>VOC Subtotals</b>									<b>0.42</b>	<b>10.64</b>	<b>1.96</b>	
<b>HAP Subtotals</b>									<b>0.14</b>	<b>3.64</b>	<b>0.63</b>	

<sup>1</sup> Control Factor values: 0.005 is equivalent to 99.5 percent control from a baghouse.

<sup>2</sup> Type is a designation for emission unit billing purposes; F1 = fuel burning equipment. Fees are listed in Section 18 of the AQR.

<sup>3</sup> Hourly and daily PTE and production rates listed are for informational purposes only and are not an enforceable limits.

<sup>4</sup> Emission includes bag filter control.

**Table III-C-5: Group 8 Plaster Operations PTE**

EU	Description	SCC	Tons/ Hour	Tons/ Day	Tons/ Year	EF	CF <sup>1</sup>	Control Method	Lbs/ Hour <sup>3</sup>	Lbs/ Day <sup>3</sup>	Tons/ Year	Type <sup>2</sup>
H.1	Unload to Screw	30501504	10.82	259.75	94,809	0.023	0.005	BH17	0.01	0.03	0.01	P1
H.2	Unload to Bin #1	30501504	7.58	181.83	66,366	0.023	0.005	BH17	0.01	0.02	0.01	---
H.3	Unload to Screw	30501510	7.58	181.83	66,366	0.023	0.005	BH17	0.01	0.02	0.01	---
H.4	Unload to Hopper	30501504	7.58	181.83	66,366	0.023	0.005	BH17	0.01	0.02	0.01	---
H.5	Unload to Ball Mill	30501504	7.58	181.83	66,366	0.023	0.005	BH17	0.01	0.02	0.01	---
H.6	Ball Mill	30501515	7.58	181.83	66,366	1.23	0.005	BH17	0.05	1.12	0.20	P1
H.7	Unload to Bucket Elevator	30501504	7.58	181.83	66,366	0.023	0.005	BH17	0.01	0.02	0.01	P1
H.8	Unload to Screw	30501504	7.58	181.83	66,366	0.023	0.005	BH17	0.01	0.02	0.01	---
H.9	Unload to Hardwall Bin	30501504	7.58	181.83	66,366	0.023	0.005	BH17	0.01	0.02	0.01	---
H.10	Unload to Screw	30501514	7.58	181.83	66,366	0.023	0.005	BH17	0.01	0.02	0.01	---

EU	Description	SCC	Tons/ Hour	Tons/ Day	Tons/ Year	EF	CF <sup>1</sup>	Control Method	Lbs/ Hour <sup>3</sup>	Lbs/ Day <sup>3</sup>	Tons/ Year	Type <sup>2</sup>
H.10.1	Unload to Bin #2	30501504	3.25	77.93	28,443	0.023	0.005	BH17	0.01	0.01	0.01	---
H.10.2	Unload to Surge Bin	30501504	3.25	77.93	28,443	0.023	0.005	BH17	0.01	0.01	0.01	---
H.10.3	Unload to Entoleter	30501504	3.25	77.93	28,443	0.023	0.005	BH17	0.01	0.01	0.01	---
H.10.4	Entoleter	30501504	3.25	77.93	28,443	1.23	0.005	BH17	0.02	0.48	0.09	---
H.10.5	Unload to Screw	30501504	3.25	77.93	28,443	0.023	0.005	BH17	0.01	0.01	0.01	---
H.10.6	Unload to Elevator	30501504	3.25	77.93	28,443	0.023	0.005	BH17	0.01	0.01	0.01	---
H.10.7	Unload to Screw	30501504	3.25	77.93	28,443	0.023	0.005	BH17	0.01	0.01	0.01	---
H.11	Unload to Bin #2	30501504	3.25	77.93	28,443	0.023	0.005	BH17	0.01	0.01	0.01	---
H.12	Unload to Screw	30501510	3.25	77.93	28,443	0.023	0.005	BH17	0.01	0.01	0.01	---
H.13.1	Unload to Air Classifier	30501504	1.46	35.07	12,799	0.023	0.005	BH17	0.01	0.01	0.01	---
H.14.1	Unload to Screw	30501504	1.46	35.07	12,799	0.023	0.005	BH17	0.01	0.01	0.01	P1
H.14.2	Air Classifier Bypass	30501504	1.79	42.86	15,643	0.023	0.005	BH17	0.01	0.01	0.01	---
H.15	Unload to Elevator	30501504	3.25	77.93	28,443	0.023	0.005	BH17	0.01	0.01	0.01	---
H.16	Unload to Screw	30501504	3.25	77.93	28,443	0.023	0.005	BH17	0.01	0.01	0.01	---
H.17	Unload to Casting Bin	30501504	3.25	77.93	28,443	0.023	0.005	BH17	0.01	0.01	0.01	---
H.18	Unload to Screw	30501514	3.25	77.93	28,443	0.023	0.005	BH17	0.01	0.01	0.01	---
H.19.1	Mixer	30501516	3.25	77.93	28,443	0.023	0.005	BH17	0.01	0.01	0.01	---
H.19.2	Mixer	30501516	7.42	178.19	65,039	0.023	0.005	BH20	0.01	0.02	0.01	---
H.19.3	Mixer	30501516	0.15	3.64	1,327	0.023	0.005	BH19	0.01	0.01	0.01	---
H.20.1	Mixer Loading	30501517	3.42	82.08	29,960	0.04	0.005	BH18	0.01	0.02	0.01	---
H.20.2	Mixer Loading	30501517	3.71	89.09	32,519	0.04	0.005	BH19	0.01	0.02	0.01	---
H.20.3	Trucking Loading	30501504	45.66	1095.89	400,000	0.61	0.005	BH21	0.14	3.34	0.61	P1
H.20.4	Supersacker	30501505	3.71	89.09	32,519	0.04	0.005	BH20	0.01	0.02	0.01	---
H.21	Pneumatic Transfer	30501510	0.15	3.64	1,327	0.27	0.005	BH21	0.01	0.01	0.01	---
H.22	Cement Unloading	30501511	0.17	4.16	1,517	0.023	0.005	BV04	0.01	0.01	0.01	---
H.23	Unload to Screw	30501512	0.17	4.16	1,517	0.023	0.005	BH18	0.01	0.01	0.01	---
H.24	Unload to Mixer	30501513	0.17	4.16	1,517	0.023	0.005	BH18	0.01	0.01	0.01	---
<b>PM<sub>10</sub> Subtotals</b>									<b>0.55</b>	<b>5.42</b>	<b>1.24</b>	

<sup>1</sup> Control Factor values: 0.005 is equivalent to 99.5 percent control from a baghouse.

<sup>2</sup> Type is a designation for emission unit billing purposes: P1 = process equipment. Fees are listed in Section 18 of the AQR.

<sup>3</sup> Hourly and daily PTE and production rates listed are for informational purposes only and are not an enforceable limits.

**Table III-C-6: Group 9 Stucco Storage Bins at Board Plant PTE**

EU	Description	SCC	Tons/ Hour	Tons/ Day	Tons/ Year	EF	CF <sup>1</sup>	Control Method	Lbs/ Hour <sup>3</sup>	Lbs/ Day <sup>3</sup>	Tons/ Year	Type <sup>2</sup>
I.1	Unload Bucket Elevator	30501504	66.77	1602.43	584,887	0.023	0.005	BH17	0.01	0.18	0.03	P1

EU	Description	SCC	Tons/ Hour	Tons/ Day	Tons/ Year	EF	CF <sup>1</sup>	Control Method	Lbs/ Hour <sup>3</sup>	Lbs/ Day <sup>3</sup>	Tons/ Year	Type <sup>2</sup>
I.2	Unload to Cooling Bins	30501504	50.08	1201.82	438,665	0.023	0.005	BH17	0.01	0.14	0.03	---
I.3	Unload to Screw	30501504	50.08	1201.82	438,665	0.023	0.005	BH17	0.01	0.14	0.03	---
I.5	Unload to Screw	30501504	66.77	1602.43	584,887	0.023	0.005	BH17	0.01	0.18	0.03	---
I.6	Unload to 100-ton Bins	30501504	80.12	1922.92	701,865	0.023	0.005	BH17	0.01	0.22	0.04	---
I.7	Unload to Screw	30501504	80.12	1922.92	701,865	0.023	0.005	BH17	0.01	0.22	0.04	---
I.8	Unload to Surge Bin	30501518	80.12	1922.92	701,865	0.023	0.005	BH17	0.01	0.22	0.04	---
I.9	Unload to Screw	30501518	80.12	1922.92	701,865	0.023	0.005	BH17	0.01	0.22	0.04	---
I.10	Unload to Metering Screw	30501518	66.77	1602.43	584,887	0.023	0.005	BH17	0.01	0.18	0.03	---
I.11	Unload to Recirculation Elevator	30501518	13.35	320.49	116,977	0.023	0.005	BH17	0.01	0.04	0.01	---
I.12	Unload to 100-ton Bins	30501518	13.35	320.49	116,977	0.023	0.005	BH17	0.01	0.04	0.01	---
I.13	Unload to Mixing Screw	30501518	66.77	1602.43	584,887	0.023	0.005	BH17	0.01	0.18	0.03	---
<b>PM<sub>10</sub> Subtotals</b>									<b>0.12</b>	<b>1.96</b>	<b>0.36</b>	

<sup>1</sup> Control Factor values: 0.005 is equivalent to 99.5 percent control from a baghouse.

<sup>2</sup> Type is a designation for emission unit billing purposes; P1 = process equipment. Fees are listed in Section 18 of the AQR.

<sup>3</sup> Hourly and daily PTE and production rates listed are for informational purposes only and are not an enforceable limits.

**Table III-C-7: Group 10 Board Plant PTE**

EU	Description	SCC	Tons/ Hour	Tons/ Day	Tons/ Year	EF	CF <sup>1</sup>	Control/ Pollutant	Lbs/ Hour <sup>4</sup>	Lbs/ Day <sup>4</sup>	Tons/ Year	Type <sup>2</sup>		
J.1.1	Unload to Pin Mixer	30501518	66.77	1602.43	584,887	0.023	0.005	BH23	0.01	0.18	0.03	P1		
J.1.2	Unload to Edge Mixer	30501518	Emissions included in pin mixer									---		
J.1.3	Wet Drop	30501518	Emissions included in pin mixer									---		
J.2.1	Paper Heater #1	30901599	1.2 MMBtu/hr; 8,760 hr/yr							PM <sub>10</sub>	0.01	0.34	0.06	F1
								NO <sub>x</sub>	0.12	2.88	0.53			
								CO	0.02	0.48	0.09			
								SO <sub>2</sub>	0.01	0.03	0.01			
								VOC	0.01	0.25	0.05			
J.2.2	Paper Heater #2	30901599	1.2 MMBtu/hr; 8,760 hr/yr							HAP	0.01	0.09	0.02	F1
								PM <sub>10</sub>	0.01	0.34	0.06			
								NO <sub>x</sub>	0.12	2.88	0.53			
								CO	0.02	0.48	0.09			
								SO <sub>2</sub>	0.01	0.03	0.01			
								VOC	0.01	0.25	0.05			
								HAP	0.01	0.09	0.02			

EU	Description	SCC	Tons/ Hour	Tons/ Day	Tons/ Year	EF	CF <sup>1</sup>	Control/ Pollutant	Lbs/ Hour <sup>4</sup>	Lbs/ Day <sup>4</sup>	Tons/ Year	Type <sup>2</sup>		
J.3	AKI Board Dryer	30501520	135 MMBtu/hr; 8,760 hr/yr							PM <sub>10</sub>	1.85	44.39	8.10	F1
										NO <sub>x</sub>	6.26	150.34	27.44	
										CO	25.26	606.20	110.63	
										SO <sub>2</sub>	0.08	1.94	0.35	
										VOC	0.38	9.01	1.64	
										HAP	0.25	5.98	1.09	
J.3.1	Wallboard Raw Materials <sup>3</sup>	30501503	N/A						VOC	8.61	206.74	37.73	---	
J.4	Radial Center Saw <sup>5</sup>	30501521 30501522	0.089	2.140	780.0	2.85	1.00	BH24	0.25	6.09	1.11	P1		
J.5	4 End Saws <sup>5</sup>	30501521 30501522	0.089	2.140	780.0	5.7	1.00	BH24	0.51	12.18	2.22	P1		
J.6	Slutter Machine <sup>5</sup>	30501503	0.00091	0.022	8.00	34.2	1.00	BH24	0.03	0.75	0.14	---		
<b>PM<sub>10</sub> Subtotals</b>									<b>2.67</b>	<b>64.27</b>	<b>11.72</b>			
<b>NO<sub>x</sub> Subtotals</b>									<b>6.50</b>	<b>156.10</b>	<b>28.50</b>			
<b>CO Subtotals</b>									<b>25.30</b>	<b>607.16</b>	<b>110.81</b>			
<b>SO<sub>2</sub> Subtotals</b>									<b>0.10</b>	<b>2.00</b>	<b>0.37</b>			
<b>VOC Subtotals</b>									<b>9.01</b>	<b>216.25</b>	<b>39.47</b>			
<b>HAP Subtotals</b>									<b>0.27</b>	<b>6.16</b>	<b>1.13</b>			

<sup>1</sup> Control Factor values: 0.005 is equivalent to 99.5 percent control from a baghouse.

<sup>2</sup> Type is a designation for emission unit billing purposes; P1 = process equipment and F1 = fuel burning equipment. Fees are listed in Section 18 of the AQR.

<sup>3</sup> The wallboard raw materials only include the surfactant, the dust control agent, wallboard ink and wallboard ink cleaner.

<sup>4</sup> Hourly and daily PTE and production rates listed are for informational purposes only and are not an enforceable limits.

<sup>5</sup> Throughput for this emission unit is in million square feet of wallboard. The emission factor has units of pounds PM<sub>10</sub> per million square foot of wallboard and includes bag filter control.

**Table III-C-8: Group 11 Accelerator System PTE**

EU	Description	SCC	Tons/ Hour	Tons/ Day	Tons/ Year	EF	CF <sup>1</sup>	Control Method	Lbs/ Hour <sup>3</sup>	Lbs/ Day <sup>3</sup>	Tons/ Year	Type <sup>2</sup>
K.1	Unload to LP Bin	30501510	0.3	7.2	2,649	0.023	0.00	BV06	0.00	0.00	0.00	P1
K.2	Unload to Elevators	30501504	0.3	7.2	2,649	0.023	0.00	BH22	0.00	0.00	0.00	---
K.3	Unload to Screw	30501504	0.3	7.2	2,649	0.023	0.00	BH22	0.00	0.00	0.00	---
K.4	Unload to Screw	30501504	0.3	7.2	2,649	0.023	0.00	BH22	0.00	0.00	0.00	---
K.5	Unload to Elevators	30501504	0.3	7.2	2,649	0.023	0.00	BH22	0.00	0.00	0.00	---
K.6	Unload to Ball Mills	30501504	0.3	7.2	2,649	0.023	0.00	BH22	0.00	0.00	0.00	---
K.7	Unload to Screw	30501504	0.3	7.2	2,649	0.023	0.00	BH22	0.00	0.00	0.00	---

EU	Description	SCC	Tons/ Hour	Tons/ Day	Tons/ Year	EF	CF <sup>1</sup>	Control Method	Lbs/ Hour <sup>3</sup>	Lbs/ Day <sup>3</sup>	Tons/ Year	Type <sup>2</sup>
K.8	Unload to Hopper	30501504	0.3	7.2	2,649	0.023	0.00	BH22	0.00	0.00	0.00	---
K.9	Unload to 3" Conv. Tubing	30501504	0.3	7.2	2,649	0.023	0.005	BH22	0.01	0.01	0.01	---
K.10	Unload to Mill Rec.	30501504	0.3	7.2	2,649	0.023	0.005	BH22	0.01	0.01	0.01	---
K.11	Unload to Screw	30501504	0.3	7.2	2,649	0.023	0.005	BH22	0.01	0.01	0.01	---
K.12	Unload to Accelerator Bin	30501504	0.3	7.2	2,649	0.023	0.005	BH23	0.01	0.01	0.01	---
K.13	Unload to Stucco Mix Screw	30501504	0.3	7.2	2,649	0.023	0.005	BH23	0.01	0.01	0.01	---
K.14	Unload to Pin Mixer	30501504	0.3	7.2	2,649	0.023	0.005	BH23	0.01	0.01	0.01	---
K.15	Ball Mills	30501515	0.3	7.2	2,649	1.23	0.005	BH22	0.01	0.04	0.01	---
<b>PM<sub>10</sub> Subtotals</b>									<b>0.07</b>	<b>0.10</b>	<b>0.07</b>	

<sup>1</sup> Control Factor values: 0.005 is equivalent to 99.5 percent control from a baghouse.

<sup>2</sup> Type is a designation for emission unit billing purposes; P1 = process equipment. Fees are listed in Section 18 of the AQR.

<sup>3</sup> Hourly and daily PTE and production rates listed are for informational purposes only and are not an enforceable limits.

**Table III-C-9: Group 12 Wallboard Recycling System PTE**

EU	Description	SCC	Tons/ Hour <sup>5</sup>	Tons/ Day <sup>5</sup>	Tons/ Year <sup>5</sup>	EF	CF <sup>1</sup>	Control/ Pollutant	Lbs/ Hour <sup>5</sup>	Lbs/ Day <sup>5</sup>	Tons/ Year	Type <sup>2</sup>		
L.1	Front End Loading	30501504	100	1,000	85,000	0.01	0.18	Moisture	0.18	1.8	0.08	---		
L.2	Unload to Feeder	30501504	100	1,000	85,000	0.01	0.18	Moisture	0.18	1.8	0.08	---		
L.3	Chopper	30501504	100	1,000	85,000	0.13	0.18	Moisture	2.34	23.4	1.00	P1		
L.3.1	Electromagnetic Diesel Generator	20200102	400 hp; 5 gal/hr; 8 hr/day; 2,000 hr/yr							PM <sub>10</sub>	0.17	1.34	0.17	CE2
										NO <sub>x</sub>	2.35	18.76	2.35	
										CO	0.51	4.08	0.51	
										SO <sub>2</sub>	0.04	0.28	0.04	
										VOC	0.19	1.50	0.19	
HAP	0.05	0.38	0.05											
L.4	Unload to Conveyor	30501504	100	1,000	85,000	0.01	0.18	Moisture	0.18	1.8	0.08	---		
L.5	Unload to Pulverizer	30501506	100	1,000	85,000	0.01	0.18	Moisture	0.18	1.8	0.08	---		
L.6	Pulverizer	30501504	100	1,000	85,000	0.13	0.18	Moisture	2.34	23.4	1.00	P1		
L.7	Unload to Conveyor	30501504	100	1,000	85,000	0.01	0.18	Moisture	0.18	1.8	0.08	---		
L.7.1	Unload to Screen	30501504	100	1,000	85,000	0.01	0.18	Moisture	0.18	1.8	0.08	---		
L.7.2	Rotary Screen	30501504	100	1,000	85,000	0.08	0.18	Moisture	1.44	14.4	0.61	P1		
L.7.3	Unload to Conveyor	30501507	100	1,000	85,000	0.01	0.18	Moisture	0.18	1.8	0.08	---		
L.8	Unload to Conveyor	30501504	9.7	232.8	85,000	0.01	0.18	Moisture	0.02	0.42	0.08	---		

EU	Description	SCC	Tons/ Hour <sup>5</sup>	Tons/ Day <sup>5</sup>	Tons/ Year <sup>5</sup>	EF	CF <sup>1</sup>	Control/ Pollutant	Lbs/ Hour <sup>5</sup>	Lbs/ Day <sup>5</sup>	Tons/ Year	Type <sup>2</sup>
L.9	Stacker to Product Pile	30501504	9.7	232.8	85,000	0.04	0.18	Moisture	0.07	1.68	0.31	P1
L.10	Finished Product Pile <sup>3</sup>	30501508	0.21 acres			1.66	0.18	Moisture	0.02	0.41	0.08	---
L.11	Front End Loading	30501504	9.7	232.8	85,000	0.01	0.18	Moisture	0.02	---	0.08	---
L.12	Unload to Trucks	30501504	9.7	232.8	85,000	0.01	0.18	Moisture	0.02	---	0.08	---
L.13	Unpaved Haul Road (0.46 miles) <sup>4</sup>	3050250 4	0.06 VMT	1.36 VMT	494.94 VMT	7.57	0.10	Moisture	0.05	1.03	0.19	H1
L.14	Unload to Stockpile	30501504	9.7	232.8	85,000	0.01	0.18	Moisture	0.02	0.42	0.08	---
L.15	Stockpile <sup>3</sup>	30501508	0.21 acres			1.66	0.18	Moisture	0.02	0.41	0.08	S1
L.16	Unpaved Front End Loader Roads (reclaim) (0.08 miles) <sup>4</sup>	3050250 4	0.16 VMT	3.84 VMT	1,383 VMT	7.57	0.10	Moisture	0.12	2.91	0.52	H1
L.17	Front End Loading (reclaim)	30501504	9.7	232.8	85,000	0.01	0.18	Moisture	0.02	0.42	0.08	---
L.18	Front End Loader to Silos	30501504	9.7	232.8	85,000	0.01	0.18	Moisture	0.02	0.42	0.08	---
L.19	Silo #1 to Belt Conveyor	30501504	4.85	116.4	42,500	0.023	0.005	BV01	0.01	0.01	0.01	---
L.20	Silo #2 to Belt Conveyor	30501504	4.85	116.4	42,500	0.023	0.005	BV02	0.01	0.01	0.01	---
L.21	Trim Waste to Belt Conveyor	30501504	2.85	68.4	25,000	0.023	0.005	BV01-02	0.01	0.01	0.01	---
<b>PM<sub>10</sub> Subtotals</b>									<b>7.98</b>	<b>84.13</b>	<b>5.03</b>	

<sup>1</sup> Control Factor values: 0.18 is equivalent to 0.5 percent moisture, 0.10 is equivalent to 90 percent control from haul road watering, and 0.005 is equivalent to 99.5 percent control from a baghouse.

<sup>2</sup> Type is a designation for emission unit billing purposes; P1 = process equipment, and CE2 = Stationary IC engine 351-800 hp. Fees are listed in Section 18 of the AQR.

<sup>3</sup> Emission factor is in units of pounds/acre/day.

<sup>4</sup> Emission factor is in units of pounds/VMT.

<sup>5</sup> Hourly and daily PTE and production rates listed are for informational purposes only and are not an enforceable limits.

**Table III-C-10: Group 13 - Alternate Wallboard Recycling System PTE**

EU	Description	SCC	Tons/ Hour <sup>3</sup>	Tons/ Day <sup>3</sup>	Tons/ Year <sup>3</sup>	EF	CF <sup>1</sup>	Control Method	Lbs/ Hour <sup>3</sup>	Lbs/ Day <sup>3</sup>	Tons/ Year	Type <sup>2</sup>
M.1	Front End Loading	30501503	25	600	85,000	0.01	0.18	Moisture	0.05	1.08	0.08	P1
M.2	Unload to Feeder	30501503	25	600	85,000	0.01	0.18	Moisture	0.05	1.08	0.08	P1
M.3	Unload to Conveyer	30501503	25	600	85,000	0.01	0.18	Moisture	0.05	1.08	0.08	P1
M.4	Unload to Conveyor	30501503	25	600	85,000	0.01	0.18	Moisture	0.05	1.08	0.08	P1
M.5	Grinder	30501510	25	600	85,000	0.13	0.005	BH25	0.02	0.39	0.03	---
M.6	Screen	30502511	25	600	85,000	0.08	0.005	BH25	0.01	0.24	0.02	---
M.7	Unload to Conveyor	30501503	0.5	12	1,700	0.01	0.18	Moisture	0.01	0.02	0.01	---
M.8	Unload to Ovesize Pile	30501503	0.5	12	1,700	0.01	0.18	Moisture	0.01	0.02	0.01	---
M.9	Unload to Conveyor	30501503	1.5	36	5,100	0.01	0.18	Moisture	0.01	0.06	0.01	---
M.10	Unload to Paper Pile	30501503	1.5	36	5,100	0.01	0.18	Moisture	0.01	0.06	0.01	---

EU	Description	SCC	Tons/ Hour <sup>3</sup>	Tons/ Day <sup>3</sup>	Tons/ Year <sup>3</sup>	EF	CF <sup>1</sup>	Control Method	Lbs/ Hour <sup>3</sup>	Lbs/ Day <sup>3</sup>	Tons/ Year	Type <sup>2</sup>
M.11	Unload to Conveyor	30501503	23.5	564	85,000	0.01	0.18	Moisture	0.04	1.02	0.08	P1
M.12	Unload to Conveyor	30501503	9.7	232.8	85,000	0.01	0.18	Moisture	0.02	0.42	0.08	P1
M.13	Stacker to Product Pile	30501506	9.7	232.8	85,000	0.01	0.18	Moisture	0.02	0.42	0.08	P1
M.14	Front End Loading	30501503	9.7	232.8	85,000	0.01	0.18	Moisture	0.02	0.42	0.08	P1
M.15	Unload to Trucks	30501503	9.7	232.8	85,000	0.01	0.18	Moisture	0.02	0.42	0.08	P1
M.16	Unload to Stockpile	30501503	9.7	232.8	85,000	0.01	0.18	Moisture	0.02	0.42	0.08	P1
M.17	Unpaved Haul Road (0.46 miles)	30502504	0.06 VMT/ hr	1.36 VMT/da y	494.94 VMT/y r	7.57 lbs/VMT	0.10	Moisture	0.05	1.03	0.19	H1
<b>PM<sub>10</sub> Subtotals</b>									<b>0.46</b>	<b>9.26</b>	<b>1.08</b>	

<sup>1</sup> Control Factor values: 0.18 is equivalent to 0.5 percent moisture, 0.10 is equivalent to 90 percent control from haul road watering, and 0.005 is equivalent to 99.5 percent control from a baghouse.

<sup>2</sup> Type is a designation for emission unit billing purposes; P1 = process equipment, and CE2 = Stationary IC engine 351-800 hp. Annual fees vary depending upon urban Consumer Price Index (CPI).

<sup>3</sup> Hourly and daily PTE and production rates listed are for informational purposes only and are not an enforceable limits.

**Table III-C-11: Emergency Fire Pump Engine PTE**

EU	Description	SCC	hp	Gal/ Hour	Hour/ Day	Hour/ Year	Pollutant	Lbs/ Hour	Lbs/ Day	Tons/ Year	Type <sup>1</sup>
P.01	Emergency Fire Pump Engine	20200102	144	10.20	0.50	30.0	PM <sub>10</sub>	0.19	0.19	0.01	---
							NO <sub>x</sub>	2.47	2.47	0.04	
							CO	1.17	1.17	0.02	
							SO <sub>2</sub>	0.07	0.07	0.01	
							VOC	0.36	0.36	0.01	
							HAP	0.01	0.01	0.01	

<sup>1</sup> Type is a designation for emission unit billing purposes.

**Table III-C-12: Storage Tanks PTE**

EU	Description	SCC	Gal/ Hour <sup>2</sup>	Gal/ Day <sup>2</sup>	Gal/ Year	VOC Emissions			HAP Emissions			Type <sup>1</sup>
						Lb/hr <sup>2</sup>	Lb/day <sup>2</sup>	Ton/yr <sup>2</sup>	Lb/hr <sup>2</sup>	Lb/day <sup>2</sup>	Ton/yr <sup>2</sup>	
T.1	Board Plant Gasoline Storage Tank – 1,000 gallons	40400311	1.83	43.92	16,000	0.02	0.42	0.08	0.01	0.01	0.01	T2
<b>Subtotals</b>						<b>0.02</b>	<b>0.42</b>	<b>0.08</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	

<sup>1</sup> Type is a designation for emission unit billing purposes; T2 = gasoline storage tank. Fees are listed in Section 18 of the AQR.

<sup>2</sup> Hourly and daily PTE and production rates listed are for informational purposes only and are not an enforceable limits.

**Table III-C-13: VOC PTE from Fuel Dispensing Activities**

EU	Description	Gallons/year	Gallons/day	EF lb/gal	Lb/hr	Lb/day	Ton/yr
T.2	Gasoline Dispensing	16,000	45	0.011 <sup>1</sup>	0.50	0.50	0.09
T.3	Gasoline Spillage	16,000	45	0.0007 <sup>1</sup>	0.03	0.03	0.01
T.4	Diesel Dispensing	36,000	100	0.000919 <sup>2</sup>	0.09	0.09	0.02
<b>TOTAL</b>					<b>0.62</b>	<b>0.62</b>	<b>0.12</b>

<sup>1</sup> Gasoline Emission Factors were obtained from Table 5.2-7, AP42, Guidance Document January 1995.

<sup>2</sup> Diesel Emission Factors were provided by Department of Defense Air force.

**Table III-C-14: Emission Units Categorically Exempt from NSR**

Description	Gallons/Year
Board Plant Diesel Storage Tank – 1,500 gallons	13,500

## D. Performance Testing and Emissions Monitoring

The Part 70 OP issued in July 2001 includes performance testing requirements. Performance testing for the wallboard production operation shall be conducted annually and within 60 days of the anniversary date of the previous performance test. The performance testing is subject to DAQEM's "Guideline on Performance Testing" (Revised 09/05/03). The required performance testing will be performed using the following methods:

**Table III-D-1: Performance Testing Protocol Requirements**

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/ Section 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/ Section 34	7 percent opacity	Method 9	Annual
C.25	C11 Belt	OOO/ Section 34	7 percent opacity	Method 9	Annual
E.1.2	Rock Feed Hopper	OOO	7 percent opacity	Method 9	Annual
E.1.3	Reclaim Feed Hopper	OOO	7 percent opacity	Method 9	Annual
E.2	C3 Foldbelt	OOO	7 percent opacity	Method 9	Annual
E.6	Conveyor Drop to Rock Bin	OOO	7 percent opacity	Method 9	Annual
E.7	Rock Storage Silos #1 and #2 Feedbelt	OOO	7 percent opacity	Method 9	Annual
E.8	Rock Storage Silos #1 and #2	OOO	7 percent opacity	Method 9	Annual
E.9	Rock Storage Silos #1 and #2 Discharge Belt	OOO	7 percent opacity	Method 9	Annual
E.10	Bin Vent: BV03 CP Mill Feed Silo	OOO	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	Section 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	Section 34	7 percent opacity	Method 9	Annual
G.5, G.7, G.9	Baghouses: BH10 – BH 16 Kettle Calciners	Section 34	7 percent opacity	Method 9	Annual
H.1 – H.10, H.10.1 – H.10.7, H.11 – H.18	Baghouse: BH17 Finish Bin	OOO	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	Section 34	7 percent opacity	Method 9	Annual
H.19.3, H.20.2	Baghouse: BH19 Mixer #5	Section 34	7 percent opacity	Method 9	Annual
H.19.2, H.20.4	Baghouse: BH20 Mixer #6	OOO	7 percent opacity	Method 9	Annual
H.20.3, H.21	Baghouse: HB21 Bulk Plaster Loading	OOO	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	Section 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	Section 34	7 percent opacity	Method 9	Annual
K.1	Bin Vent: BV06 LP Bin (Accelerator)	Section 34	7 percent opacity	Method 9	Annual
K.2 – K.11, K.15	Baghouse: BH22 Accelerator Ball Mill	OOO	7 percent opacity	Method 9	Annual
			0.05g/dscm (0.022gr/dscf)	Method 5 or Method 17	Every 5 years
L.3, L.4, L.5, L.6, L.7, L.8, L.17, L.18	Gypsum Wallboard Recycling	OOO	7 percent opacity	Method 9	Annual
L.19, L.20, L.21	Bin Vents: BV01 and BV02 Gypsum Wallboard Recycling	OOO	7 percent opacity	Method 9	Annual
			0.05g/dscm (0.022gr/dscf)	Method 5	Every 5 years
M.3, M.4, M.7, M.8, M.8, M.9, M.10, M.12, M.13	Alternate Recycle System	OOO	7 percent opacity	Method 9	Annual

M.5, M.6	Baghouse: BH25 Alternate Recycle System	OOO	7 percent opacity	Method 9	Annual
			0.05g/dscm (0.022gr/dscf)	Method 5	Every 5 years

## E. Emissions Monitoring

Compliance Assurance Monitoring (CAM) is intended to provide for monitoring to assess compliance with emission limitations. CAM requirements apply only to those emission units that have some type of emission limitation, use a control device to comply with the limitation, and have a pre-control potential emission that exceeds the major source threshold for the particular pollutant controlled. Certain specific exemptions may apply for emission units subject to other regulatory programs. In some cases, a device used as a control device for some processes may in fact be integral to another process in other cases and exempt for that reason as well. CAM requirements include the development of a monitoring program for a selection of parameters indicative of control device operability and performance and, therefore, compliance with an applicable emission limitation.

The control devices at the source include the various baghouses used to control PM<sub>10</sub> emissions. Since the pollutant of concern is PM<sub>10</sub>, only those emission units with pre-control emissions exceeding 70 tons per year are subject to the CAM rule. Table III-E-1 lists the emission units at the source that are subject to the CAM rule.

**Table III-E-1: Emission Units Subject to CAM**

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

The CP Mill baghouse does not qualify for CAM analysis since the baghouse is inherent to the process. Unlike roller mills or IMP mills which use a combination high efficiency cyclone for product collection and a baghouse for final exhaust gas cleaning, the CP Mill (E.11) baghouse serves as the main product collection device. There are also baghouses for general dust control for the various conveyors and storage bins however the individual emission units controlled have uncontrolled emission rates less than 5.0 tons per year. Daily measurements of pressure differential ( $\Delta p$ ) for PM<sub>10</sub> and visible emissions for opacity were selected as CAM indicators. The  $\Delta p$  between inlet and outlet of the baghouse is an accepted standard indicator of satisfactory baghouse performance. For opacity readings, the absence of visible emissions demonstrates compliance. The key elements of the monitoring approach are presented in Table III-E-2:

**Table III-E-2: Monitoring Approach**

CAM Element	Indicator 1	Indicator 2
Indicator	Pressure differential ( $\Delta p$ ) for PM <sub>10</sub> .	Visible emissions for opacity.
Measurement Approach	The $\Delta p$ will be measured daily; the time of reading and the $\Delta p$ will be recorded.	Daily visual observations 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 $\Delta p$ is 3-8 inches of water for EUs: H.6, H.10.3, H.10.4. An excursion is defined as any measured $\Delta p$ outside the range of 3 and 8 inches of water. The indicator range for $\Delta p$ is 1-5 inches of water for EUs: H.20.3, J.4, J.5, J.6. An excursion is defined as any measured $\Delta p$ outside the range of 1 and 5 inches of water. The proposed QIP threshold is three (3) excursions in each quarterly reporting period.	For opacity, the indicator is no visible emissions. Excursions trigger an investigation, corrective actions and a reporting requirement. The proposed 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 $\Delta p$ gauge will be installed, calibrated, and operated per manufacturer recommendations.	Not applicable.
QA/QC Practices and Criteria	The $\Delta p$ gauge will be calibrated annually.	The visible opacity observations will be made by a certified observer.
Monitoring Frequency	Daily records of $\Delta p$ will be made.	Daily visual observations will be made.
Data Collection Procedures	Differential pressure ( $\Delta p$ ) 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.

## IV. REGULATORY REVIEW

### A. Local Regulatory Requirements

DAQEM has determined that the following public law, statutes and associated regulations are applicable:

1. Nevada Revised Statutes (NRS), Chapter 445; Sections 401 through 601;
2. Portions of the AQR included in the State Implementation Plan (SIP) for Clark County, Nevada. SIP requirements are federally enforceable. All requirements from Authority to Construct permits and Section 16 Operating Permits issued by DAQEM are federally enforceable because these permits were issued pursuant to SIP-included sections of the AQR; and
3. Portions of the AQR not included in the SIP. These locally applicable requirements are locally enforceable only.

The Nevada Revised Statutes (NRS) and the Clean Air Act Amendments (CAAA) are public laws that establish the general authority for the Regulations mentioned.

The DAQEM Part 70 (Title V) Program received Final Approval on November 30, 2001 with publication of that approval appearing in the Federal Register December 5, 2001 Vol. 66, No. 234. AQR Section 19 - Part 70 Operating Permits [Amended 07/01/04] details the Clark County Part 70 Operating Permit Program. These regulations may be accessed on the Internet at: [http://www.co.clark.nv.us/air\\_quality/Regs.htm](http://www.co.clark.nv.us/air_quality/Regs.htm)

Local regulations contain sections that are federally enforceable and sections that are locally enforceable only. Locally enforceable only rules have not been approved by EPA for inclusion into the State Implementation Plan (SIP). Requirements and conditions that appear in the Part 70 OP which are related only to non-SIP rules are notated as locally enforceable only.

**Table IV-A-1: AQR Section 12 and 55 Summary Table**

	PM <sub>10</sub>	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	HAP
<b>Source PTE (tpy)</b>	<b>55.24</b>	<b>89.31</b>	<b>120.90</b>	<b>0.81</b>	<b>42.84</b>	<b>2.24</b>
<b>Nonmajor Source</b>	< 70 tpy	< 50 tpy	< 70 tpy	≤ 100 tpy	< 50 tpy	≤ 25 tpy

**Discussion:** CertainTeed Gypsum Manufacturing, Inc. is a major source of NO<sub>x</sub> and CO.

**Table IV-A-2: DAQEM – Air Quality Regulations with Source Compliance or Requirement**

Applicable Section – Title	Applicable Subsection - Title	SIP	Affected Emission Unit
0. Definitions	applicable definitions	yes	entire source
1. Definitions	applicable definitions – “Affected Facility”, “Air Contaminant”, “Air Pollution Control Committee”, “Area Source”, “Atmosphere”, “Board”, “Commercial Off-Road Vehicle Racing”, “Dust”, “Existing Facility”, “Existing Gasoline CertainTeed”, “Fixed Capital Cost”, “Fumes”, “Health District”, “Hearing Board”, “Integrated Sampling”, “Minor Source”, “Mist”, “New Gasoline CertainTeed”, “New Source”, “NIC”, “Point Source”, “Shutdown”, “Significant”, “Single Source”, “Smoke”, “Source of Air Contaminant”, “Special Mobile Equipment”, “Standard Commercial Equipment”, “Standard Conditions”, “Start Up”, “Stop Order”, “Uncombined Water”, and “Vapor Disposal System”	yes	entire source
2. Air Pollution Control Board	all subsections	yes	entire source
4. Control Officer	all subsections	yes	entire source
5. Interference with Control Officer	all subsections	yes	entire source
6. Injunctive Relief	all subsections	yes	entire source
7. Hearing Board and Hearing Officer	all subsections	no	entire source
8. Persons Liable for Penalties - Punishment: Defense	all subsections	yes	entire source

Applicable Section – Title	Applicable Subsection - Title	SIP	Affected Emission Unit
9. Civil Penalties	all subsections	yes	entire source
10. Compliance Schedule	when applicable; applicable subsections	yes	entire source
11. Ambient Air Quality Standards	applicable subsections	yes	entire source
12. Preconstruction Review for New or Modified Stationary Sources	All subsections <u>except</u> the following: § 12.2.18 HAP Sources in Clark County. § 12.2.20 Additional Requirements for STATIONARY SOURCES with Beryllium, Mercury, Vinyl Chloride, or Asbestos EMISSIONS in Clark County	yes	entire source
13. Emission Standards for Hazardous Pollutants	Condition A-37 is the EPA-required standard condition concerning asbestos.	no	entire source
14. New Source Performance Standards	AQR Section 14.1.1: Subpart A - General Provisions AQR Section 14.1.38: Subpart OOO - Standards of Performance for Nonmetallic Minerals Processing Plants AQR Section 14.1.41: Subpart UUU - Standards of Performance for Calciners and Dryers in Mineral Industries	no	entire source
16. Operating Permits	all subsections	yes	entire source
18. Permit and Technical Service Fees	§ 18.1 Operating Permit Fees § 18.2 Annual Emission Unit Fees § 18.4 New Source Review Application Review Fee § 18.5 Part 70 Application Review Fee § 18.6 Annual Part 70 Emission Fee § 18.14 Billing Procedures	yes	entire source
19. Part 70 Operating Permit Federal Approval (11/25/01)	§ 19.2 Applicability § 19.3 Part 70 Permit Applications § 19.4 Part 70 Permit Content § 19.5 Permit Issuance, Renewal, Re-openings, and Revisions § 19.6 Permit Renewal by the EPA and Affected States § 19.7 Fee Determination and Certification	N/A	entire source
20. Emission Standards for Hazardous Air Pollutants for Source Categories	all subsections	no	No emission unit is subject to a federal MACT standard.
21. Acid Rain Permits	all subsections	no	An acid rain permit is not required.
22. Acid Rain Continuous Emissions Monitoring	all subsections	no	An acid rain permit is not required.
24. Sampling and Testing - Records and Reports	§ 24.1 Requirements for installation and maintenance of sampling and testing facilities § 24.2 Requirements for emissions record keeping § 24.3 Requirements for the record format § 24.4 Requirements for the retention of records by the emission sources	yes	entire source

<b>Applicable Section – Title</b>	<b>Applicable Subsection - Title</b>	<b>SIP</b>	<b>Affected Emission Unit</b>
25.1 Upset/Breakdown, Malfunctions	§ 25.1 Requirements for the excess emissions caused by upset/breakdown and malfunctions	no	entire source
25.2 Upset/Breakdown, Malfunctions	§ 25.2 Reporting and Consultation	yes	entire source
26. Emission of Visible Air Contaminants	§ 26.1 Limit on opacity ( $\leq$ 20 percent for 3 minutes in a 60-minute period)	yes	entire source
27. PM From Process Weight Rate	all subsections	yes	entire source
28. Fuel Burning Equipment	all subsections	yes	entire source
29. Sulfur Contents of Fuel Oil	all subsections	no	entire source
34. Performance Standards for Metallic and/or Nonmetallic Mineral Mining and Processing	all subsections	no	entire source
35. Diesel Engine Powered Electrical Generating Equipment	all subsections	no	entire source
40. Prohibitions of Nuisance Conditions	§ 40.1 Prohibitions	no	entire source
41. Fugitive Dust	§ 41.1 Prohibitions	yes	entire source
42. Open Burning	§ 42.1 Burning of Combustibles. § 42.4 Open Burning.	no	entire source
43. Odors In the Ambient Air	§ 43.1 Prohibitions coded as Section 29	no	entire source
45. Idling of Diesel Powered Motor Vehicles	§ 45.1 Diesel Powered Motor Vehicles Idling	no	Front-end loaders.
52. Gasoline Dispensing Facilities	§ 52.3 Registration and Permitting § 52.4 Specification of Vapor Control Systems § 52.7 Recordkeeping, Recording and Notifications § 52.10 Motor Vehicle Refueling	yes	Gasoline storage and dispensing facilities.
55. Preconstruction Review for New or Modified Stationary Sources in the 8-hour Ozone Nonattainment Area	all subsections	no	entire source
58. Emission Reduction Credits	all subsections	yes	entire source
59. Emission Offsets	all subsections	yes	entire source
70. Emergency Procedures	all subsections	yes	entire source
80. Circumvention	all subsections	yes	entire source
81. Provisions of Regulations Severable	all subsections	yes	entire source
90. Fugitive Dust from Open Areas and Vacant Lots	all subsections	no	entire source
91. Fugitive Dust from Unpaved Roads, Unpaved Alleys, and Unpaved Easement Roads	all subsections	no	entire source
92. Fugitive Dust from Unpaved Parking Lots	all subsections	no	entire source

AQR SECTION 11 - AMBIENT AIR QUALITY STANDARDS [Amended 07/01/04] (*in part*)

**Discussion:** According to AQR Sections 12.2.15.6 and 12.2.16.6, the Control Officer is required to maintain a record of increment consuming sources for all PSD areas in Clark County. DAQEM modeled the source using ISCST3 to track the increment consumption.

**Table IV-A-3: PSD Increment Consumption**

Pollutant	Averaging Period	PSD Increment Consumption by the Source ( $\mu\text{g}/\text{m}^3$ )	Location of Maximum Impact	
			UTM X (m)	UTM Y (m)
SO <sub>2</sub>	3-hour	3.474 <sup>1</sup>	643760	3994486
SO <sub>2</sub>	24-hour	1.202 <sup>1</sup>	643760	3994486
SO <sub>2</sub>	Annual	0.224	643760	3994486
NO <sub>x</sub>	Annual	4.964	645630	3991411

<sup>1</sup> Modeled 2nd High Concentration

Table IV-A-3 shows the location of the maximum impact and the potential PSD increment consumed by the source at that location. The impacts are below the PSD increment limits.

**B. Federally Applicable Regulations**

DAQEM has determined that the following federal regulations are applicable to the source:

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

**40 CFR PART 60-STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES:**

**Subpart A - General Provisions**

**40 CFR § 60.7-Notification and record keeping.**

**Discussion:** This regulation requires notification to DAQEM of modifications, opacity testing, records of malfunctions of process equipment and/or monitoring device, and performance test data. These requirements are found in the Part 70 OP DAQEM requires records to be maintained for five years, a more stringent requirement than the two (2) years required by § 60.7.

**40 CFR § 60.8 - Performance tests.**

**Discussion:** These requirements are found in the Part 70 OP. Notice of intent to test, the applicable test methods, acceptable test method operating conditions, and the requirement for three runs are outlined in this regulation. DAQEM requirements for initial performance testing are identical to § 60.8. DAQEM also requires periodic performance testing on emission units based upon throughput or usage. More discussion is in this document under the compliance section.

#### **40 CFR § 60.11 - Compliance with standards and maintenance requirements.**

**Discussion:** CertainTeed Gypsum Manufacturing, Inc. is subject to two NSPS standards: Subpart OOO- Standards of Performance for Nonmetallic Mineral Processing Plants and Subpart UUU- Standards of Performance for Calciners and Dryers in Mineral Industries. Compliance requirements for these standards are discussed in corresponding sections..

#### **40 CFR § 60.12 – Circumvention.**

**Discussion:** These requirements are found in the Part 70 OP. This is also SIP-approved local rule § 80.1.

#### **40 CFR § 60.13 - Monitoring requirements.**

**Discussion:** Part 70 OP contains the monitoring conditions. In addition, the CAM plan approved for the monitoring procedures follows the requirements outlined including span time and recording time.

### **Subpart OOO-Standards of Performance for Nonmetallic Mineral Processing Plants**

#### **40 CFR § 60.670 - Applicability and designation of affected facility.**

**Discussion:** The 40 CFR 60, Subpart OOO applies to this source.

#### **40 CFR § 60.672 – Standard for particulate matter.**

**Discussion:** The source is subject to the requirements of particulate matter standards and emission limits, including PM limit and opacity limits, as described in Tables 2 and 3 of the Subpart. These requirements are found in the Part 70 OP.

#### **40 CFR § 60.675 - Test methods and procedures.**

**Discussion:** The Permittee shall determine compliance with the PM standards using test methods described in this subsection. Opacity standards to be demonstrated using Method 9 and the PM emission standards are to be demonstrated using Method 5 or Method 17. These requirements are found in the Part 70 OP.

#### **40 CFR § 60.676 – Reporting and recordkeeping.**

**Discussion:** The permittee shall submit to the Administrator and to the Control Officer information required by this subsection. Specific record keeping and reporting requirements are identified in the Part 70 OP.

### **Subpart UUU-Standards of Performance for Mineral Processing Utilizing Calciners and Dryers**

**40 CFR § 60.730 - Applicability and designation of affected facility.**

**Discussion:** The 40 CFR 60, Subpart UUU applies to this source.

**40 CFR § 60.732 – Standard for particulate matter.**

**Discussion:** No emissions shall be discharged into the atmosphere from any affected facility that: (a) Contains particulate matter in excess of 0.092 gram per dry standard cubic meter (g/dscm) [0.040 grain per dry standard cubic foot (gr/dscf)] for calciners and for calciners and dryers installed in series and in excess of 0.057 g/dscm (0.025 gr/dscf) for dryers; and (b) Exhibits greater than 10 percent opacity, unless the emissions are discharged from an affected facility using a wet scrubbing control device. These requirements are identified in the Part 70 OP.

**40 CFR § 60.734 - Monitoring of operations.**

**Discussion:** Daily opacity observation is required as per this subpart. The requirement is found in the operating permit.

**40 CFR § 60.735 – Reporting and recordkeeping.**

**Discussion:** Record keeping of daily opacity observations is required. These requirements are found in the Part 70 OP.

**40 CFR § 60.736 - Test methods and procedures.**

**Discussion:** The Permittee shall determine compliance with the PM standards using test methods described in this subsection. Opacity standards to be demonstrated using Method 9 and the PM emission standards are to be demonstrated using Method 5. These requirements are found in the Part 70 OP.

**Subpart IIII -Standards of Performance for Stationary Compression Ignition Internal Combustion Engines**

**40 CFR § 60.4200 through 60.4219 - Applicability and designation of affected facility.**

**Discussion:** The 40 CFR 60, Subpart IIII applies to the emission units at the facility. The requirements are found in the Part 70 OP.

## **40 CFR PART 63, Subpart CCCCCC – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES**

**Discussion:** Subpart CCCCCC applies to CertainTeed Gypsum at this time as the source operates gasoline dispensing facility. CertainTeed gasoline dispensing operations are subject to the emission limitations of 40 CFR 63.11116, since monthly throughput is less than 10,000 gallons of gasoline. The source must apply with provisions of this standard by January 10, 2010. Applicable requirements and management practice have been included in the permit

## **40 CFR PART 64-COMPLIANCE ASSURANCE MONITORING**

### **40 CFR § 64.2 – Applicability.**

**Discussion:** CertainTeed Gypsum currently has several emission units that are subject to an emission limitation or standard that uses a control device to achieve compliance. Such emission units are processes with PM<sub>10</sub> emissions and none of the combustion emission units are required to have a control device. Therefore, only emission units with pre-control emissions exceeding 70 tons per year for PM<sub>10</sub> are subject to the CAM rule. Based on the applicability criteria outlined in 40 CFR 64.2(a), the CAM Rule is applicable to EUs: H.6, H.10.3, H.10.4, H.20.3, J.4, J.5 and J.6 which are controlled by baghouses and the pre-control emissions exceed the major source threshold. AKI Board Dryer has a PTE of more than 70 tons per year of CO. However, the board dryer has no control device associated with the emission limits and therefore, CAM is not applicable.

Daily measurements of pressure differential between inlet and outlet of the baghouse ( $\Delta p$ ) for PM<sub>10</sub> 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 Section E of this TSD.

## **40 CFR PART 72-ACID RAIN PERMITS REGULATION**

### **Subpart A – Acid Rain Program General Provisions**

### **40 CFR § 72.6 – Applicability.**

**Discussion:** The provisions of this regulation do not apply to the source because the source no affected unit as per the applicability criteria listed in 40 CFR 72.6.

## **40 CFR PART 73 – ACID RAIN SULFUR DIOXIDE ALLOWANCE SYSTEM**

### **40 CFR § 73.2 – Applicability.**

**Discussion:** The provisions of this regulation do not apply based on 40 CFR Part 72.6.

## **40 CFR PART 75 - CONTINUOUS EMISSION MONITORING**

**Discussion:** CertainTeed is not subject to the Acid Rain emission limitations of 40 CFR Part 72; therefore, the facility is not subject to the monitoring requirements 40 CFR Part 75.

## V. COMPLIANCE

### A. Compliance Certification

19.3.3.9 Requirements for compliance certification:

(a) Regardless of the date of issuance of this Part 70 OP, the schedule for the submittal of reports to the DAQEM Compliance Reporting Supervisor shall be as follows:

**Table V-A-1: Reporting Schedule**

Quarter	Applicable Period	Due Date	Required Contents
1	January, February, March	April 30 each year	Quarterly Report for 1 <sup>st</sup> Calendar Quarter
2	April, May, June	July 30 each year	Quarterly Report for 2 <sup>nd</sup> Calendar Quarter
3	July, August, September	October 30 each year	Quarterly Report for 3 <sup>rd</sup> Calendar Quarter
4	October, November, December	January 30 each year	Quarterly Report for 4 <sup>th</sup> Calendar Quarter
4	Calendar Year	January 30 Each year	Annual Compliance Certification Report

- (b) A statement of methods used for determining compliance, including a description of monitoring, recordkeeping, and reporting requirements and test methods.
- (c) A schedule for submission of compliance certifications during the permit term.
- (d) A statement indicating the source's compliance status with any applicable enhanced monitoring and compliance certification requirements of the Act.

### B. Compliance Summary - Clark County Air Quality Regulations

Citation	Title	Applicability	Applicable Test Method	Compliance Status
CCAQR Section 0 [amended 10/7/04]	Definitions.	Applicable – CertainTeed will comply with all applicable definitions.	CertainTeed will meet all applicable test methods should new definitions apply.	CertainTeed complies with applicable requirements.
CCAQR Section 4	Control Officer.	Applicable – The Control Officer or his representative may enter into CertainTeed property, with or without prior notice, at any reasonable time for purpose of establishing compliance.	CertainTeed will allow Control Officer to enter the property as required.	CertainTeed complies with applicable requirements.
CCAQR Section 11	Ambient Air Quality Standards.	Applicable – CertainTeed is a source of air pollutants.	CertainTeed demonstrated compliance in the ATC permit application with air dispersion modeling.	CertainTeed complies with applicable requirements.

Citation	Title	Applicability	Applicable Test Method	Compliance Status
CCAQR Section 12.1	General application requirements for construction of new and modified sources of air pollution.	Applicable – CertainTeed applied for and the ATC certificate was issued before commencing construction.	CertainTeed received the ATC permit to construct.	CertainTeed complies with applicable requirements.
CCAQR Section 12.2.2	Requirements for specific air pollutants: PM <sub>10</sub> emission source located in the Serious Non-Attainment Area.	Applicable – CertainTeed has PM <sub>10</sub> PTE < 70 TPY.	All new or modified emission units at the CertainTeed will meet LAER requirement.	CertainTeed complies with applicable requirements.
CCAQR Section 12.2.7	Requirements for specific air pollutants: CO sources located in the Serious Non-Attainment Area.	Applicable – CertainTeed has CO PTE > 70 TPY.	All new or modified emission units at the CertainTeed will meet LAER requirement.	CertainTeed complies with applicable requirements.
CCAQR Section 12.2.12	Requirements for specific air pollutants: VOC sources located in the VOC Management Area.	Not Applicable – CertainTeed is located in Hydrographic Area 212.	Not Applicable.	Not Applicable.
CCAQR Section 12.2.14	Requirements for specific air pollutants: NO <sub>x</sub> sources located in the NO <sub>x</sub> Management Area.	Applicable – CertainTeed has NO <sub>x</sub> PTE > 50 TPY.	All new or modified emission units at the CertainTeed will meet BACT requirement.	CertainTeed complies with applicable requirements.
CCAQR Section 12.2.16	Requirements for specific air pollutants: SO <sub>2</sub> sources located in the PSD area.	Applicable – CertainTeed has SO <sub>2</sub> PTE < 40 TPY.	All new or modified emission units at the CertainTeed will meet BACT requirement.	CertainTeed complies with applicable requirements.
CCAQR Section 12.2.19	Requirements for specific air pollutants: TCS sources in Clark County	Not Applicable – CertainTeed does not have any TCS emissions.	Not Applicable.	Not Applicable.
CCAQR Section 12.5	Air Quality Models	Applicable – Dispersion modeling performed will be performed as required for any future major modifications.	As applicable, future dispersion modeling will be performed in ATC permit modifications will be in accordance with provisions of 40 CFR Part 51, Appendix W.	CertainTeed complies with applicable requirements.
CCAQR Section 12.7	Continuous Emission Monitoring (CEM) Systems	Applicable – The facility has emission units that are subject to CAM regulations.	Applicable - monitoring, recordkeeping and reporting requirements. Some emission units are subject to CAM.	CertainTeed complies with applicable requirements.

Citation	Title	Applicability	Applicable Test Method	Compliance Status
CCAQR Section 14.1.1 Subpart A	New Source Performance Standards (NSPS) General Provisions	Applicable – CertainTeed is an affected facility under the regulations. Section 14 is locally enforceable; however, the NSPS standards referenced are federally enforceable.	Applicable monitoring, recordkeeping and reporting requirements.	CertainTeed complies with applicable requirements.
CCAQR Section 14.1.94 Subpart OOO	New Source Performance Standards – Standards of Performance for Nonmetallic Mineral Processing Plants	Applicable – CertainTeed has emission units processing more than 25 tons per hour of the mineral material.	Applicable performance tests, opacity tests, monitoring, recordkeeping and reporting requirements.	CertainTeed complies with applicable requirements.
CCAQR Section 14.1.101 Subpart UUU	Standards of Performance for New Stationary Sources (NSPS) – Calciners and Dryers in Mineral Industries	Applicable – CertainTeed operates calciners and dryers.	Applicable performance tests, opacity tests, monitoring, recordkeeping and reporting requirements.	CertainTeed complies with applicable requirements.
CCAQR Section 18	Permit and Technical Service Fees	Applicable – CertainTeed will be required to pay all required/applicable permit and technical service fees.	CertainTeed is required to pay all required/applicable permit and technical service fees.	CertainTeed complies with applicable requirements.
CCAQR Section 19	40 CFR Part 70 Operating Permits	Applicable – CertainTeed is a major stationary source and under Part 70 the initial Title V permit application was submitted as required. Renewal applications are due between 6 and 18 months prior to expiration. Revision applications will be submitted within 12 months or commencing operation of any new emission unit. Section 19 is both federally and locally enforceable	CertainTeed reviewed the initial Part 70 permit dated July 12, 2001. This renewal application was submitted before January 12, 2005. Applications for new units will be submitted within 12 months of startup.	CertainTeed complies with applicable requirements.
CCAQR Section 25	Upset/Breakdown, Malfunctions	Applicable – Any upset, breakdown, emergency condition, or malfunction which causes emissions of regulated air pollutants in excess of any permit limits shall be reported to Control Officer. Section 25.1 is locally and federally enforceable.	Any upset, breakdown, emergency condition, or malfunction in which emissions exceed any permit limit shall be reported to the Control Officer within one (1) hour of onset of such event.	CertainTeed complies with applicable requirements.

Citation	Title	Applicability	Applicable Test Method	Compliance Status
CCAQR Section 26	Emissions of Visible Air Contaminants	Applicable – Opacity for the CertainTeed must not exceed 20 percent for more than three (3) minutes in any 60-minute period.	Compliance determined by EPA Method 9	CertainTeed complies with applicable requirements.
CCAQR Section 27	Particulate Matter from Process Weight Rate	Applicable - The PM <sub>10</sub> hourly emission rate for the process is below the rate established in Section 27 requirements.	Applicable, monitoring, recordkeeping and reporting requirements.	CertainTeed complies with applicable requirements.
CCAQR Section 28	Fuel Burning Equipment	Applicable – The PM emission rate for the fuel burning equipment is below those established based on Section 28 requirements.	Maximum allowable PM emission rate determined from equation in Section 28.	CertainTeed complies with applicable requirements.
CCAQR Section 29	Sulfur Content of Fuel Oil	Applicable – The diesel fuel that will be burned at the facility will require low sulfur fuel with sulfur content less than 0.05 percent by weight. Section 29 is locally enforceable only.	Fuel sulfur content verification obtained from fuel oil supplier.	CertainTeed complies with applicable requirements.
CCAQR Section 34	Performance Standards for Metallic and/or Nonmetallic Mineral Mining and Processing	Applicable – The fugitive emissions from storage piles shall not exceed 10 percent opacity and emissions from a control device shall not exceed 7 percent opacity respectively, for more than three (3) minutes in any 60-minute period.	Compliance determined by EPA Method 9.	CertainTeed complies with applicable requirements.
CCAQR Section 40	Prohibition of Nuisance Conditions	Applicable – No person shall cause, suffer or allow the discharge from any source whatsoever such quantities of air contaminants or other material which cause a nuisance. Section 40 is locally enforceable only.	CertainTeed air contaminant emissions controlled by pollution control devices or good combustion in order not to cause a nuisance.	CertainTeed complies with applicable requirements.
CCAQR Section 41	Fugitive Dust	Applicable – CertainTeed shall take necessary actions to abate fugitive dust from becoming airborne.	CertainTeed utilizes appropriate best practices to not allow airborne fugitive dust.	CertainTeed complies with applicable requirements.
CCAQR Section 42	Open Burning	Applicable – In event CertainTeed burns combustible material in any open areas, such burning activity will have been approved by Control Officer in advance. Section 42 is a locally enforceable rule only.	CertainTeed will contact the DAQEM and obtain approval in advance for applicable burning activities as identified in the rule.	CertainTeed complies with applicable requirements.

Citation	Title	Applicability	Applicable Test Method	Compliance Status
CCAQR Section 43	Odors in the Ambient Air	Applicable – An odor occurrence is a violation if the Control Officer is able to detect the odor twice within a period of an hour, if the odor causes a nuisance, and if the detection of odors is separated by at least fifteen minutes. Section 43 is a locally enforceable rule only.	CertainTeed will not operate its facility in a manner which will cause odors. CertainTeed is a mineral processing facility and is not expected to cause odors.	CertainTeed complies with applicable requirements.
CCAQR Section 49	Emission Standards for Boilers and Steam Generators Burning Fossil Fuels	Not Applicable – CertainTeed does not operate any boilers or steam generators.	Not Applicable.	Not Applicable.
CCAQR Section 52	Gasoline Dispensing Facilities	Applicable – CertainTeed operates gasoline storage tank more than 500gal.	Stage I controls testing requirements, recordkeeping, and reporting.	CertainTeed complies with applicable requirements.
CCAQR Section 55	Preconstruction review for New or Modified Stationary Sources in the 8-Hour Ozone Nonattainment Area	Applicable – CertainTeed is located in Las Vegas Valley airshed (hydrographic area 212) and will need to meet the applicable emission control requirements at times of future modifications.	In the event CertainTeed undertakes a major modification, the facility will have to apply BACT and LAER control requirements.	CertainTeed complies with applicable requirements.
CCAQR Section 70.4	Emergency Procedures	Applicable – CertainTeed submitted an emergency standby plan for reducing or eliminating air pollutant emissions in the Section 16 Operating Permit Application.	CertainTeed submitted an emergency standby plan and received the Section 16 Operating Permit.	CertainTeed complies with applicable requirements.

### C. Compliance Summary: Federal Air Quality Regulations

Citation	Title	Applicability	Applicable Test Method	Compliance Status
40 CFR Part 52.1470	SIP Rules	Applicable – CertainTeed is classified as a Title V source, and SIP rules apply.	Applicable monitoring and record keeping of emissions data.	CertainTeed is in compliance with applicable state SIP requirements including monitoring and record keeping of emissions data.
40 CFR Part 60, Subpart A	Standards of Performance for New Stationary Sources (NSPS) – General Provisions	Applicable – CertainTeed is an affected facility under the regulations.	Applicable monitoring, recordkeeping and reporting requirements.	CertainTeed complies with applicable requirements.

Citation	Title	Applicability	Applicable Test Method	Compliance Status
40 CFR Part 60, Subpart OOO	New Source Performance Standards – Standards of Performance for Nonmetallic Mineral Processing Plants	Applicable – CertainTeed is an affected facility under the regulations.	Applicable monitoring, recordkeeping and reporting requirements.	CertainTeed complies with applicable requirements.
40 CFR Part 60, Subpart UUU	Standards of Performance for New Stationary Sources (NSPS) – Calciners and Dryers in Mineral Industries	Applicable – CertainTeed is an affected facility under the regulations.	Applicable monitoring, recordkeeping and reporting requirements.	CertainTeed complies with applicable requirements.
40 CFR Part 60, Subpart IIII	Standards of Performance for New Stationary Sources (NSPS) – Stationary Compression Ignition (CI) Internal Combustion Engines (ICE)	Applicable – CertainTeed is an affected facility under the regulations.	Applicable monitoring, recordkeeping and reporting requirements.	CertainTeed complies with applicable requirements.
40 CFR Part 60	Appendix A, Method 9 or equivalent, (Opacity)	Applicable – Emissions from stacks are subject to opacity standards.	Opacity determined by EPA Method 9.	CertainTeed complies with applicable requirements.
40 CFR Part 63, Subpart CCCCC	National Emission Standards for Hazardous Air Pollutants for Source Categories: Gasoline Dispensing Facilities.	Applicable – CertainTeed operates gasoline dispensing facility.	Applicable monitoring, recordkeeping and reporting requirements.	CertainTeed complies with applicable requirements.
40 CFR Part 64	Compliance Assurance Monitoring	Applicable – The facility has PM <sub>10</sub> emissions that have an emissions standard and use an active control device.	CertainTeed monitors pressure differential and opacity to demonstrate compliance with PM <sub>10</sub> emission limitations.	CertainTeed complies with applicable requirements.
40 CFR Part 68	Chemical Accident Prevention Provisions	Not Applicable – CertainTeed does not store or handles any chemicals that are subject to 40 CFR Part 68	CertainTeed adheres to source management programs.	CertainTeed complies with applicable requirements.

Citation	Title	Applicability	Applicable Test Method	Compliance Status
40 CFR Part 70	Federally Mandated Operating Permits	Applicable – CertainTeed is a major stationary source and under Part 70 the initial Title V permit application was submitted as required. Renewal applications are due between 6 and 18 months prior to expiration. Revision applications will be submitted within 12 months or commencing operation of any new emission unit.	CertainTeed reviewed the initial Part 70 permit dated January 15, 2003. This renewal application was submitted before June 15, 2007. Applications for new units will be submitted within 12 months of startup.	CertainTeed complies with applicable requirements.
40 CFR Part 72	Acid Rain Permits Regulation	Not Applicable.	Not Applicable.	Not Applicable.
40 CFR Part 73	Acid Rain Sulfur Dioxide Allowance System	Not Applicable.	Not Applicable.	Not Applicable.
40 CFR Part 75	Acid Rain CEMS	Not Applicable.	Not Applicable.	Not Applicable.

#### D. Summary of Monitoring for Compliance

EU	Process Description	Monitored Pollutants	Applicable Subsection Title	Requirements	Compliance Monitoring
C.16	Paved Gypsum Haul Road	PM <sub>10</sub>	Section 12, Section 93	Sweeping with certified PM <sub>10</sub> -efficient equipment.	Recording is required for compliance demonstration.
C.17, C.19-C.23	Truck Unloading Station	PM <sub>10</sub>	Section 12, Section 19, Section 34 40 CFR 60, Subpart 000	Baghouses shall have 99.5 percent control efficiency. Less than seven (7) percent opacity except for three (3) minutes in any 60-minute period. Stack emissions less than 0.05 g/dscm (0.022 gr/dscf).	Daily monitoring of pressure drop across baghouse with the pressure differential gauge. Daily visual observations (Method 22) of baghouse or stack discharged. Method 9 for opacity. Method 5 or Method 17 for particulate concentration. Weekly moisture testing with ASTM Method C 566-97. Recording is required for compliance demonstration.
C.18	Useable Gypsum Rock Pile	PM <sub>10</sub>	Section 12, Section 19, Section 34	Maintaining 0.5 percent moisture content (82 percent control efficiency). Less than seven (7) percent opacity except for three (3) minutes in any 60-minute period.	Weekly moisture testing with ASTM Method C 566-97. Recording is required for compliance demonstration. Method 9 for opacity.

EU	Process Description	Monitored Pollutants	Applicable Subsection Title	Requirements	Compliance Monitoring
C.24, C.25	Transfer Belts	PM <sub>10</sub>	Section 12, Section 19, Section 34  40 CFR 60, Subpart OOO	Maintaining 0.5 percent moisture content (82 percent control efficiency).  Less than seven (7) percent opacity except for three (3) minutes in any 60-minute period.	Weekly moisture testing with ASTM Method C 566-97.  Recording is required for compliance demonstration.  Method 9 for opacity.
E.1.1- E.1.4, & E.2- E.9	Discharge Terminal	PM <sub>10</sub>	Section 12, Section 19, Section 34  40 CFR 60, Subpart OOO	Maintaining 0.5 percent moisture content (82 percent control efficiency).  Less than seven (7) percent opacity except for three (3) minutes in any 60-minute period.	Weekly moisture testing with ASTM Method C 566-97.  Recording is required for compliance demonstration.  Method 9 for opacity.
E.9.1, E.10, E.12	End Saw, Batch Drop to CP Mill, Drop to Stucco Cooler	PM <sub>10</sub>	Section 12, Section 19, Section 34  40 CFR 60, Subpart OOO	Baghouses shall have 99.5 percent control efficiency.  Less than seven (7) percent opacity except for three (3) minutes in any 60-minute period.  Stack emissions less than 0.05 g/dscm (0.023 gr/dscf).	Daily monitoring of pressure drop across baghouse with the pressure differential gauge.  Daily visual observations (Method 22) of baghouse or stack discharged.  Method 9 for opacity.  Method 5 or Method 17 for particulate concentration.  Recording is required for compliance demonstration.
E.11	CP Mill	PM <sub>10</sub> , CO, NO <sub>x</sub> , SO <sub>2</sub> , VOC, HAPs	Section 12, Section 19, Section 34, Section 55  40 CFR 60, Subpart UUU	Baghouses shall have 99.5 percent control efficiency.  Less than ten (10) percent opacity except for three (3) minutes in any 60-minute period.  Stack emissions less than 0.092 g/dscm (0.040 gr/dscf).  Sole use of natural gas as fuel.	Daily monitoring of pressure drop across baghouse with the pressure differential gauge.  Daily visual observations (Method 22) of baghouse or stack discharged.  Method 9 for opacity.  Method 5 or Method 17 for particulate concentration.  Recording is required for compliance demonstration.

EU	Process Description	Monitored Pollutants	Applicable Subsection Title	Requirements	Compliance Monitoring
F.1- F.6.3	Rolling Mills and Plaster Production	PM <sub>10</sub>	Section 12, Section 19, Section 34  40 CFR 60, Subpart 000	Baghouses shall have 99.5 percent control efficiency.  Less than seven (7) percent opacity except for three (3) minutes in any 60-minute period.  Stack emissions less than 0.05 g/dscm (0.023 gr/dscf).	Daily monitoring of pressure drop across baghouse with the pressure differential gauge.  Daily visual observations (Method 22) of baghouse or stack discharged.  Method 9 for opacity.  Method 5 or Method 17 for particulate concentration.  Recording is required for compliance demonstration.
F.1.1- F.1.4	Flash Dryers	PM <sub>10</sub> , CO, NO <sub>x</sub> , SO <sub>2</sub> , VOC, HAPs	Section 12, Section 19, Section 34, Section 55  40 CFR 60, Subpart 000	Baghouses shall have 99.5 percent control efficiency.  Less than seven (7) percent opacity except for three (3) minutes in any 60-minute period.  Stack emissions less than 0.05 g/dscm (0.022gr/dscf).  Sole use of natural gas as fuel.	Daily monitoring of pressure drop across baghouse with the pressure differential gauge.  Daily visual observations (Method 22) of baghouse or stack discharged.  Method 9 for opacity.  Method 5 or Method 17 for particulate concentration.  Recording is required for compliance demonstration.
G.1 – G.16	Support operations for calciners (loading and unloading)	PM <sub>10</sub>	Section 12, Section 19, Section 34  40 CFR 60, Subpart 000	Baghouses shall have 99.5 percent control efficiency.  Less than seven (7) percent opacity except for three (3) minutes in any 60-minute period.  Stack emissions less than 0.05 g/dscm (0.022 gr/dscf).	Daily monitoring of pressure drop across baghouse with the pressure differential gauge.  Daily visual observations (Method 22) of baghouse or stack discharged.  Method 9 for opacity.  Method 5 or Method 17 for particulate concentration.  Recording is required for compliance demonstration.

EU	Process Description	Monitored Pollutants	Applicable Subsection Title	Requirements	Compliance Monitoring
G.1.1 – G.1.7	Kettle Calciners for Plaster Production	PM <sub>10</sub> , CO, NO <sub>x</sub> , SO <sub>2</sub> , VOC, HAPs	Section 12, Section 19, Section 34, Section 55  40 CFR 60, Subpart UUU	Baghouses shall have 99.5 percent control efficiency.  Less than ten (10) percent opacity except for three (3) minutes in any 60-minute period.  Stack emissions less than 0.092 g/dscm (0.040 gr/dscf).  Sole use of natural gas as fuel.	Daily monitoring of pressure drop across baghouse with the pressure differential gauge.  Daily visual observations (Method 22) of baghouse or stack discharged.  Method 9 for opacity.  Method 5 or Method 17 for particulate concentration.  Recording is required for compliance demonstration.
H.1 – H.24	Plaster Operation	PM <sub>10</sub>	Section 12, Section 19, Section 34  40 CFR 60, Subpart OOO	Baghouses shall have 99.5 percent control efficiency.  Less than seven (7) percent opacity except for three (3) minutes in any 60-minute period.  Stack emissions less than 0.05 g/dscm (0.023 gr/dscf).	Daily monitoring of pressure drop across baghouse with the pressure differential gauge.  Daily visual observations (Method 22) of baghouse or stack discharged.  Method 9 for opacity.  Method 5 or Method 17 for particulate concentration.  Recording is required for compliance demonstration.
I.1 – I.13	Stucco Storage	PM <sub>10</sub>	Section 12, Section 19, Section 34	Baghouses shall have 99.5 percent control efficiency.  Less than seven (7) percent opacity except for three (3) minutes in any 60-minute period.	Daily monitoring of pressure drop across baghouse with the pressure differential gauge.  Daily visual observations (Method 22) of baghouse or stack discharged.  Method 9 for opacity.  Recording is required for compliance demonstration.

EU	Process Description	Monitored Pollutants	Applicable Subsection Title	Requirements	Compliance Monitoring
J.1.1 – J.6	Board Plant	PM <sub>10</sub>	Section 12, Section 19, Section 34  40 CFR 60, Subpart OOO	Baghouses shall have 99.5 percent control efficiency.  Less than seven (7) percent opacity except for three (3) minutes in any 60-minute period.  Stack emissions less than 0.05 g/dscm (0.023 gr/dscf).	Daily monitoring of pressure drop across baghouse with the pressure differential gauge.  Daily visual observations (Method 22) of baghouse or stack discharged.  Method 9 for opacity.  Method 5 or Method 17 for particulate concentration.  Recording is required for compliance demonstration.
J.2.1, J.2.2, J.3	Paper Heaters and AKI Board Dryer	PM <sub>10</sub> , CO, NO <sub>x</sub> , SO <sub>2</sub> , VOC, HAPs	Section 12, Section 19, Section 34, Section 55  40 CFR 60, Subpart OOO	Baghouses shall have 99.5 percent control efficiency.  Less than seven (7) percent opacity except for three (3) minutes in any 60-minute period.  Stack emissions less than 0.05 g/dscm (0.022 gr/dscf).  Sole use of natural gas as fuel.	Daily monitoring of pressure drop across baghouse with the pressure differential gauge.  Daily visual observations (Method 22) of baghouse or stack discharged.  Method 9 for opacity.  Method 5 or Method 17 for particulate concentration.  Recording is required for compliance demonstration.
K.1 – K.15	Accelerator System	PM <sub>10</sub>	Section 12, Section 19, Section 34  40 CFR 60, Subpart OOO	Baghouses shall have 99.5 percent control efficiency.  Less than seven (7) percent opacity except for three (3) minutes in any 60-minute period.  Stack emissions less than 0.05 g/dscm (0.022 gr/dscf).	Daily monitoring of pressure drop across baghouse with the pressure differential gauge.  Daily visual observations (Method 22) of baghouse or stack discharged.  Method 9 for opacity.  Method 5 or Method 17 for particulate concentration.  Recording is required for compliance demonstration.

EU	Process Description	Monitored Pollutants	Applicable Subsection Title	Requirements	Compliance Monitoring
L.1 – L.18	Wallboard Recycling System	PM <sub>10</sub>	Section 12, Section 19, Section 34  40 CFR 60, Subpart OOO	Maintaining 0.5 percent moisture content (82 percent control efficiency).  Less than seven (7) percent opacity except for three (3) minutes in any 60-minute period.	Weekly moisture testing with ASTM Method C 566-97.  Recording is required for compliance demonstration.  Method 9 for opacity.
L.3.1	Diesel Engine	PM <sub>10</sub> , CO, NO <sub>x</sub> , SO <sub>2</sub> , VOC, HAPs	Section 35	Sole use of low-sulfur diesel fuel and emission factors.  Engine shall be turbocharged and aftercooled.	Recording is required for compliance demonstration.
L.19 – L.21	Recycle Wallboard Silos	PM <sub>10</sub>	Section 12, Section 19, Section 34  40 CFR 60, Subpart OOO	Baghouses shall have 99.5 percent control efficiency.  Less than seven (7) percent opacity except for three (3) minutes in any 60-minute period.  Stack emissions less than 0.05 g/dscm (0.022 gr/dscf).	Daily monitoring of pressure drop across baghouse with the pressure differential gauge.  Daily visual observations (Method 22) of baghouse or stack discharged.  Method 9 for opacity.  Method 5 or Method 17 for particulate concentration.  Recording is required for compliance demonstration.
M.1 – M.4 M.7 - M.17	Alternate Wallboard Recycling System	PM <sub>10</sub>	Section 12, Section 19, Section 34  40 CFR 60, Subpart OOO	Maintaining 0.5 percent moisture content (82 percent control efficiency).  Less than seven (7) percent opacity except for three (3) minutes in any 60-minute period.	Weekly moisture testing with ASTM Method C 566-97.  Recording is required for compliance demonstration.  Method 9 for opacity.

EU	Process Description	Monitored Pollutants	Applicable Subsection Title	Requirements	Compliance Monitoring
M.5, M.6	Grinder, Screen	PM <sub>10</sub>	Section 12, Section 19, Section 34  40 CFR 60, Subpart 000	Baghouses shall have 99.5 percent control efficiency.  Less than seven (7) percent opacity except for three (3) minutes in any 60-minute period.  Stack emissions less than 0.05 g/dscm (0.022 gr/dscf).	Daily monitoring of pressure drop across baghouse with the pressure differential gauge.  Daily visual observations (Method 22) of baghouse or stack discharged.  Method 9 for opacity.  Method 5 or Method 17 for particulate concentration.  Recording is required for compliance demonstration.
P.01	Emergency Fire Pump	PM <sub>10</sub> , CO, NO <sub>x</sub> , SO <sub>2</sub> , VOC, HAPs	40 CFR 60, Subpart IIII	Sole use of low-sulfur diesel fuel, 500 ppm, cetane index 40, or 35 percent aromatic content.  Maximum emissions NMHC + NO <sub>x</sub> – 7.8 g/hp-hr; CO – 3.7 /hp-hr; and PM – 0.60 /hp-hr.  Fire pump shall be turbocharged and aftercooled.	Recording is required for compliance demonstration.
T.1	Gasoline Storage Tank	VOC, HAPs	Section 52	Operating practices.	Recording is required for compliance demonstration.
T.2 – T.4	Gasoline Dispensing	VOC, HAPs	Section 52	Operating practices.	Recording is required for compliance demonstration.

## VI. EMISSION REDUCTION CREDITS (OFFSETS)

The source is subject to offset requirements in accordance with Section 59 of the Clark County Air Quality Regulations. Offset requirements and associated mitigation are pollutant-specific.

## VII. ADMINISTRATIVE REQUIREMENTS

Section 19 requires that DAQEM identify the original authority for each term or condition in the Part 70 Operating Permit. Such reference of origin or citation is denoted by [italic text in brackets] after each Part 70 Permit condition.

DAQEM proposes to issue the Part 70 Operating Permit conditions on the following basis:

Legal:

On December 5, 2001 in Federal Register Volume 66, Number 234 FR30097 the EPA fully approved the Title V Operating Permit Program submitted for the purpose of complying with the Title V requirements of the 1990 Clean Air Act Amendments and implementing Part 70 of Title 40 Code of Federal Regulations.

Factual:

CertainTeed Gypsum Manufacturing, Inc. has supplied all the necessary information for DAQEM to draft Part 70 Operating Permit conditions encompassing all applicable requirements and corresponding compliance.

**Conclusion:**

DAQEM has determined that CertainTeed Gypsum Manufacturing, Inc. will continue to determine compliance through the use of performance testing, quarterly reporting, and daily recordkeeping, coupled with annual certifications of compliance. DAQEM proceeds with the decision that a Part 70 Operating Permit should be issued as drafted to CertainTeed Gypsum Manufacturing, Inc. for a period not to exceed five (5) years.