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Revised: 1/20/10	QA Initials Date

## TECHNICAL SUPPORT DOCUMENT

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

SUBMITTED BY

Georgia-Pacific Gypsum Corporation
Las Vegas Wallboard Plant

Las Vegas, Nevada

for a Gypsum Facility

operation located at

11401 US Highway 91 North Las Vegas, Nevada 89124

Part 70 Operating Permit Number: A00593 SIC Code - 3275: Nonmetallic Mineral Processing



Clark County Health District Air Pollution Control Division August, 1998

### NOTICE OF PROPOSED ACTION

NOTICE IS HEREBY GIVEN that the Air Pollution Control Division of the Clark County Health District is requesting public comment on the proposed issuance of a Part 70 Operating Permit to Georgia-Pacific (G-P) Gypsum Corporation. G-P operates a gypsum wallboard production facility which is located about 20 miles northeast of Las Vegas near Apex at 11401 U.S. Highways 91 & 93, North Las Vegas, Nevada 89124. G-P's correspondence address is: P. O. Box 30006, North Las Vegas, Nevada 89036. The major activities at the facility include truck unloading of gypsum ore, rock crushing and grinding, gypsum calcining and mixing and wallboard manufacturing. This Notice is issued pursuant to Nevada Revised Statute 445 and Section 19 of the Clark County Air Pollution Control Regulations.

The facility is a major Part 70 source for carbon monoxide (CO), volatile organic compounds (VOC), and formaldehyde. The facility's potentials to emit are listed in the following table.

Georgia-Pacific (G-P) Gypsum Corporation		
Pollutant	Potential to Emit [tons/year]	
Particulate Matter ≤ 10μm (PM <sub>10</sub> )	76	
Carbon monoxide (CO)	231	
Volatile Organic Compounds (VOC)	77	
Nitrogen Oxides (NO <sub>x</sub> )	71	
Sulfur Dioxide (SO <sub>x</sub> )	2.3	
Hazardous Air Pollutant		
Formaldehyde	25	
Acetaldehyde	2.5	

This Notice together with a Technical Support Document is being sent to the Indian Tribes in Clark County, the EPA, neighboring states, and federal land managers.

The Technical Support Document is available for public inspection at the Clark County Health District, Air Pollution Control Division, 625 Shadow Lane, Las Vegas NV 89106, telephone 702-383-1276. It contains the review of the application and the draft permit. The document will be mailed to interested persons, upon request.

Additional information may be obtained from David C. Lee at the above-mentioned address and telephone number.

G-P Gypsum Corporation.
Part 70 Technical Support Document
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Written comments may be submitted to the Air Pollution Control Division at the address given below within a period of thirty (30) days of the date of this Notice. The comments will be retained and considered prior to the final determination by the Control Officer to issue the permit.

The Air Pollution Control Division will hold a public hearing on the proposal if a written request is received within thirty (30) days of the date of this Notice. Written requests for public hearings must include the requester's name, mailing address and a telephone number at which the requester can be reached during normal business hours. Grounds for requesting a public hearing should be limited to issues relevant to Title 40, Code of Federal Regulations, Part 70, and Clark County Air Pollution Control Regulations.

No permit will be issued if the EPA Administrator objects to its issuance in writing within 45 days of receipt of the proposed permit and all necessary supporting information.

If the EPA Administrator does not object in writing, any person may petition the Administrator within sixty (60) days after the expiration of Administrator's forty-five (45) day review period to make such objection. Any such petition shall be based only on objections to the Part 70 permit that were raised with reasonable specificity during the public comment period provided, unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period.

If the EPA objects to the permit as a result of petition, the Control Officer shall not issue the permit until EPA's objection has been resolved.

Dated this 9th day of August, 1998.

Donald Kwalick, MD, MPH Air Pollution Control Officer

Michael H. Naylor Director Air Pollution Control Division Clark County Health District PO Box 3902 Las Vegas, NV 89127

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#### I. EXECUTIVE SUMMARY

Georgia-Pacific Gypsum Corporation, which is referenced as G-P Gypsum, owns and operates a gypsum wallboard facility at a location approximately 20 miles northeast of Las Vegas near Apex, Nevada. This facility is a stationary emission source of carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), Particulate Matter equal to or less than 10 micrometers (PM<sub>10</sub>), Volatile Organic Compounds (VOCs), sulfur dioxide (SO<sub>2</sub>) and Hazardous Air Pollutants (HAPs). The facility is located in the Prevention of Significant Deterioration (PSD) area and the potential to emit for carbon monoxide and HAPs exceeds the threshold for major Part 70 source (i.e., CO > 100 tpy and combined HAPs  $\geq$  25 tpy). In addition, the facility is subject to the requirements of 40 CFR Part 60, New Source Performance Standards (NSPS) — Subparts A, OOO, UUU and Section 112 of the Clean Air Act. The aforementioned criteria (major ,NSPS and HAPs) subjects G-P to Title V of the Act and the Part 70 Operating Permit Program set forth in Section 19 of the District Board of Health of Clark County Air - Pollution Control Regulations (APCR).

G-P Gypsum was issued several permits with conditions for operation of the facilities pursuant to Air Pollution Control Division Regulations Section 12 and Section 16. The following Authority to Construct (ATC) certificates, Agreement To Permit or Operating Permits (OP) were issued to G-P:

Authority to Construct	11/17/86
Section 16 Permit	02/05/88
Authority to Construct	07/13/92
Section 16 Permit	09/18/92
Authority to Construct Modification #1	11/19/93
Section 16 Permit	11/19/93
Section 16 Permit	12/07/94
Section 16 Permit	09/21/95
Authority to Construct Modification #2	09/27/96
Section 16 Permit Modification #2	02/14/97

The facility is located in an area that is in attainment for all regulated air pollutants. Best Available Control Technology (BACT) is applicable to criteria pollutant emissions from this stationary source. The issuance of ATCs would indicate that the regulations in force at the time were complied with.

APCD has reviewed G-P Gypsum's compliance certification and has deemed it acceptable. G-P Gypsum has stated that the facility will continue to comply with all the applicable requirements. G-P Gypsum has also stated that for applicable requirements that become effective during the permit term, the facility will meet such requirements in a timely manner. G-P Gypsum is considered by APCD to be in compliance with the applicable requirements.

G-P Gypsum Corporation.
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This document was prepared in accordance with the latest interpretation of District guidelines, policies, supervisory and managerial instructions, verbal and/or written, issued before August 5, 1998.

Based on information submitted by the applicant and a technical review performed by APCD staff, the District proposes the issuance of a Part 70 Operating Permit to G-P Gypsum Corporation's Las Vegas, Nevada, Gypsum Plant.

### II. LIST OF ABBREVIATIONS

Act Clean Air Act of 1990 and Amendments

APC Air Pollution Control

APCD Air Pollution Control Division

APCR Air Pollution Control Regulations of the District Board of Health of Clark County

ASTM American Society of Testing and Materials

ATC Authority to Construct

BACT Best Available Control Technology

BTU British thermal unit

CCHD Clark County Health District

CEMS Continuous Emission Monitoring System

CFR Code of Federal Regulations
CMS Continuous Monitoring System

CO Carbon monoxide

CTG Combustion turbine generator

DBHCC District Board of Health of Clark County

dscf Dry standard cubic foot

E.U. Emissions unit-EF Emission factor

EPA Environmental Protection Agency

ESP Electrostatic precipitator

EU Emissions unit
FBR Free Board Ratio
FCAA Federal Clean Air Act
GE General Electric

gr/dscf Grain per dry standard cubic foot

HAP Hazardous Air Pollutant as defined by CCHD-APCD Regulation 0.69.

HCFC Hydro-chloro-fluoro-carbons

hr. Hour

1&M Inspection and maintenance

ID Identification number

lb. Pound

MMBtu Million British thermal units myac Motor vehicle air conditioner

MW Megawatt
NG Natural Gas
NO<sub>x</sub> Oxides of nitrogen
NRS Nevada Revised Statutes

NSPS New Source Performance Standard from 40 CFR Part 60

NSR Permit New Source Review Permit, often referred to as the Authority to Construct

O&M Operation and maintenance

O<sub>2</sub> Oxygen

°F Degree Fahrenheit

Pb Lead

PCD Pollution control device PM Particulate matter

PM<sub>10</sub> Particulate matter less than 10 microns in size

PSD Prevention of Significant Deterioration

# G-P Gypsum Corporation. Part 70 Technical Support Document Source Identification No. A00593

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PTE Potential To Emit ppm Part per million

ppmv Part per million by volume
ppmvd Parts per million by volume, dry
Plant Site Emission Limit

PSEL Plant Site Emission Limit

Rev. Revised

SCC Source Classification Code

scf Standard cubic foot

SERP Source Emission Reduction Plan SIC Standard Industrial Classification

SIP State Implementation Plan (for Clark County, Nevada)

SO<sub>2</sub> Sulfur dioxide ST Source test

TSD Technical Support Document

VE Visible emissions

VOC Volatile organic compound

#### III. INTRODUCTION

#### General

## **Company/Corporation Address**

G-P Gypsum Corporation 133 Peachtree Street NE (30303) PO Box 105605 Atlanta, Georgia 30348-5605 Telephone - 404/652-4000

### **Facility Location**

G-P Gypsum Corporation 11401 US Highway 91 N. Las Vegas, NV 89124

## **Facility Address**

G-P Gypsum Corporation PO Box 30006 N. Las Vegas, Nevada 89036 Telephone - 702/643-8100

### **Area Description**

The facility is located approximately 20 miles northeast of Las Vegas near Apex, Nevada. The area is an attainment area for all regulated air pollutants. The legal description of the property location is: the N1/2 NE1/4, the S1/2 NE ½, the N1/2 SE1/4 of Section 34 and the W½ NW1/4 of Section 35, Township 18 South, Range 63 East. In general, it is located on the west side of the U.S. Highway 93 approximately 2 miles south of Apex.

## **Description of Process**

G-P Gypsum Corporation owns and operates a gypsum wallboard facility at the above location which was built in 1987.

The major raw material for gypsum wallboard production is gypsum rock. The rock is mined at a location 30 miles north and trucked to the plant where it is stored in a stockpile prior to being loaded into a feed hopper. A belt conveyor carries the material from this hopper to the primary crusher. The crushed rock is then fed into the 200 ton rock bin. Material from the rock bin is then transferred to the secondary crusher.

From the secondary crusher, material is fed directly to five impact (IMP) mills that grind, dry and calcine the gypsum rock into a stucco powder. The stucco is blended and transferred to a storage bin. Stucco from the storage bin is blended a second time and transferred to the pin mixer. At the pin mixer, additives, such as water, clay, and foaming agents, are mixed with the stucco forming a slurry. The combination and amounts of each additive vary with the type of board being produced.

This slurry is poured between a board facing and backing in a continuous process. The slurry, now sandwiched between the board facing and backing, under goes an exothermic reaction and solidifies while moving down the forming line. At the end of the forming line, the board is cut to length and the free water in the board is evaporated in a three-zone board dryer.

Two methods are used for supplying heat energy to the calciners (IMP mills) and board dryers. Under the primary scenario (Mode #1), the heat for the board dryer is supplied by turbine exhaust gas from Nevada Cogeneration Associates #1 (NCA #1) and heat for the calciners is supplied by a combination of NCA #1 turbine exhaust gas and natural gas combustion. Under the alternative scenario (Mode #2), the heat for the dryers and calciners is supplied by natural gas combustion. Upon exiting the dryer, the board is trimmed and packaged for subsequent transport and sale.

## **Permitting History**

G-P Gypsum Corporation has been issued several permits for its operations by the Air Pollution Control Division - Clark County Health District (Appendix A). A list of the issued Authority to Construct (ATCs) and Section 16 Operating Permits, with dates, follows:

NSR Permit Issued	Issuance Date
Authority to Construct	11/17/86
Section 16 Permit	02/05/88
Authority to Construct	07/13/92
Section 16 Permit	09/18/92
Authority to Construct Modification #1	11/19/93
Section 16 Permit	11/19/93
Section 16 Permit	12/07/94
Section 16 Permit	09/21/95
Authority to Construct Modification #2	09/27/96
Section 16 Permit Modification. #2	02/14/97

A historical background follows:

1. Authority To Construct (ATC) Issued on 11/17/86

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....

The Clark County Health District received an application for Authority To Construct a Gypsum Wallboard Plant and mining operation from G-P Gypsum Corporation on 9/4/86. After submission of all necessary information, the proposed ATC was published as a Notice of Proposed Action on 11/14/86. No written comments were received from the public or governmental agencies. On 11/17/86, CCHD issued an ATC for a wallboard plant at Apex, NV and the mining operation (Weiser Quarry) which is located some 25 miles NE of Apex near the Valley of Fire State Park.

## 2. Section 16 Operating Permit Issued on 2/5/88

The Section 16 Operating Permit was issued on 11/17/86 and contained basically the same conditions as the issued ATC.

#### 3. ATC Modification Issued on 7/13/92

An application for an ATC modification was submitted to CCHD which proposed increasing the production capacity, adding new emission units, using turbine exhaust gases from an adjacent facility (NCA #1) and separating the mining operation from the existing ATC. A Notice of Proposed Action was published on June 1, 1992. Only one general response was received from the public. EPA commented on the draft ATC suggesting some changes. The applicant and NCA #1 made suggestions for minor changes to the ATC.

The magnitude of the change and the resulting net emission increases were: -

Pollutant	PTE Before Change	PTE After Change	Net Increase
	tpy	tpy	tpy
PM <sub>10</sub>	25.4	35.2	9.8
NO <sub>x</sub>	49.9	63.9	14.0
$SO_2$	0.3	1.5	1.2
CO	11.8	227.1	215.3
VOC	1.4	8.0	6.6

BACT was applied to the applicable emission units for all criteria air pollutants.

## 4. Section 16 Operating Permit Issued on 9/18/92

This Section 16 Operating Permit was issued on 9/18/92 and contained the same permit conditions listed in the issued modified ATC.

#### 5. ATC Modification #1 Issued on 11/19/93

This modification to the previous ATC was based on source emission test data which indicated a higher level of emissions. The modification involved an increase in carbon monoxide emissions from the IMP mills. The CO emissions from the IMP mills listed in the issued ATC were found to be to low. A Technical Support Document (TSD) was prepared for this modification and Best Available Control Technology (BACT) was applied to the IMP mills. The carbon monoxide emission limit in the ATC Condition #3 showed an increase from 227 to 242 tpy. In condition #4, under Mode #1 operation, the CO emissions increased from 3.35 to 4.03 lbs./hr. and in Mode #2 operation, the CO emissions increased from 0.05 to 2.10 lbs./hr.

## 6. Section 16 Operating Permit Issued on 11/19/93

The Section 16 Operating Permit issued was a duplicate of the Modified ATC issued 11/19/93.

## 7. Section 16 Operating Permit Issued on 12/07/94

The permit issued superseded the previously issued Section 16 Operating Permit. It included the CO emission limits permitted in the ATC modification issued on 11/19/93. The conditions presented in previously issued ATC's and Section 16 Operating Permits basically remained unchanged.

## 8. Section 16 Operating Permit Issued on 9/21/95

The Section 16 Operating Permit issued reflected the corrected total controlled emissions from the stationary source. The conditions were essentially those previously noted.

#### 9. ATC Modification #2 Issued on 9/27/96

G-P Gypsum had applied for a major modification to a major stationary source. The modification was to increase the production capacity of the facility. The amount of gypsum processed increased from 864 to 1,037 tpd and from 315,360 to 378,432 tpy. This was a production increase of 173 tpd and 63,072 tpy. The regulated emissions limits in the ATC reflect these changes.

A TSD was prepared for an ATC Modification in April, 1996 and the ATC was public noticed on July 14, 1996. The TSD considered only the maximum emissions potentials regardless of operating scenario. The application lists the primary and alternate scenario PTE emissions for comparison purposes.

The permit limitation on production in units per thousand square feet of board was eliminated. G-P Gypsum produces several different thickness of wallboard, each of which requires a different amount of processing time to pass through the board dryer. The previous production limits of board processed had no constant value in terms of tons of material processed. Production limits were based on the tons per year of wallboard produced.

The PTE figures listed as Actual Allowable Emissions in the issued ATC (Condition B-1), are slightly different than those listed in the supporting TSD (page 6) for this ATC.

## 10. Section 16 Operating Permit Issued on 2/14/97

The permit conditions are basically the same as those listed in the ATC.

## **Operating Scenario**

The ATC issued on 09/27/96 established a consolidated PTE based on the worst case scenario between the primary operating scenario (i.e., NCA heat) and alternate operating scenario (i.e., natural gas heat).

## **Proposed Exemptions**

G-P Gypsum had proposed de minimus exemptions based on the CCHD regulations. Some proposed emission unit exemptions will be included in the Part 70 permit as the emissions are part of the facility's allowable emissions. G-P Gypsum did not propose any major exemptions.

#### **Definitions**

## APCR SECTION 0 - Definitions[ Rev., 04/23/98]:

The District has included the more relevant portions of this Section for convenience, please reference pages 0-1 through 0-42 for a complete copy of definitions.

- 0.16 "Applicable Requirement" means, all of the following as they apply to emissions units in a Part 70 source:
  - (1) Any standard or requirement included in an applicable State Implementation Plan (SIP) approved by EPA or Federal Implementation Plan (FIP) promulgated by EPA under title I of the Act, including any revisions to an Implementation Plan promulgated in 40 CFR part 52.

- (2) Any term or condition of any preconstruction permit.
- (3) Any requirement under Section 111 (New Source Performance Standards) of the Act.
- (4) Any requirement under Section 112 (Hazardous Air Pollutants) of the Act.
- (5) Any Standard or requirement of the regulations promulgated pursuant to title IV (Acid Rain) of the Act.
- (6) Any requirements established pursuant to Section 504(b) or Section 114(a)(3) (Monitoring, Analysis and Compliance) of the Act.
- (7) Any requirement relating to solid waste incineration, under Section 129 (Solid Waste Combustion) of the Act.
- (8) Any requirement for consumer or commercial products under Section 183(e) (Ozone) of the Act.
- (9) Any requirement for tank vessels under Section 183(f) (Tank Vessel Standards) of the Act.
- (10) Any standard or requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the Act, unless the EPA determines that any such requirement need not be contained in a Part 70 permit.
- (11) Any national ambient air quality standard or increment or visibility requirement under part C of title 1 of the Act, but only as it would apply to temporary sources permitted pursuant to section 504(e) (Temporary Sources) of the Act.
- "Best Available Control Technology" means, an Emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under the Clean Air Act which would be emitted from any proposed major stationary source or major modification which the Control Officer, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which

would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60 and 61. If the Control Officer determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

- 0.33 "Confidential Information" means information or records which:
  - (1) Relate to dollar amounts of production or sales;
  - (2) Relate to processes or production unique to the owner or operator; or
  - (3) If disclosed, would tend to affect adversely the competitive position of the owner or operator.
- 0.36 "Control Officer" means, that individual designated by the District Board of Health, Clark County, Nevada, to administer the Air Pollution Control Program within Clark County, Nevada, and to enforce the Air Pollution Control Regulations.
- 0.48 "Emissions Unit" means, any part of a STATIONARY SOURCE that Emits or has the POTENTIAL TO EMIT any REGULATED AIR POLLUTANT or any pollutant listed under Section 112(b) of the Act.
  - (a) Examples of Emissions Units include but are not limited to the following: any process which can be assigned to a Source Classification Code (SCC), such as crushers, screens, conveyer belt systems, storage silos, stockpiles, boilers, heaters, mining operation, combustion turbines, kilns, haul roads within a permitted facility, and stationary engines with rating of at least 35 h.p. or 26 kilowatts.
  - (b) Each of the following EMISSIONS UNITS shall be subject to a fee pursuant to Section 18:

	EMISSIONS UNIT	Limitations
1.	asphalt kettle or heated storage tank	
2.	combustion turbine	
3.	sand & gravel or hard rock crusher	-
4.	EMERGENCY STANDBY GENERATOR	brake horsepower rating ≥ 500 hp or 373 kW

5.	FUEL BURNING EQUIPMENT (i.e. Boilers)	max heat input aggregating ≥ 10 MMbtu
6.	haul roads	
7.	gasoline storage tank	equipped with Stage I and II vapor recovery equipment at any GASOLINE DISPENSING FACILITY
8.	kiln	
9.	mechanical screen	
10.	mining operation	
11.	process equipment	
12.	STATIONARY INTERNAL COMBUSTION ENGINE	brake horsepower rating ≥ 35 hp, or 26 kW, except EMERGENCY STANDBY GENERATORS
13.	stationary tank, reservoir, or other container	> 40,000 gallons containing petroleum product with vapor pressure ≥ 1.5 psia @STP
14.	storage silo	

- 0.55 "Federally Enforceable" means all limitations and conditions which are enforceable by the EPA, including those requirements developed pursuant to 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR part 51, subpart I, including operating permits issued under title 40 CFR, part 70.
- 0.56 **"Final Permit"** means, the version of a Part 70 permit issued by the Control Officer that has completed all review procedures required by Subsections 19.5 and 19.6.
- 0.70 **Hazardous Air Pollutant"** means, any air pollutant listed pursuant to Section 112(b) of the Act including the following list:

CAS Number	Chemical Name
75070	Acetaldehyde
60355	Acetamide
75058	Acetonitrile
98862	Acetophenone
53963	2-Acetylaminofluorene
107028	Acrolein
79061	Acrylamide
79107	Acrylic acid
107131	Acrylonitrile
107051	Allyl chloride
92671	4-Aminobiphenyl
62533	Aniline
90040	o-Anisidine
1332214	Asbestos
71432	Benzene (including Benzene from gasoline)
92875	Benzidine

CAS Number	Chemical Name
98077	Benzotrichloride
100447	Benzyl chloride
92524	Biphenyl
117817	Bis(2-ethylhexyl)phthalate(DEHP)
542881	Bis(chloromethyl)ether
75252	Bromoform
106990	1,3-Butadiene
156627	Calcium cyanamide
105602	Caprolactam
133062	Captan
63252	Carbaryl
75150	Carbon disulfide
56235	Carbon tetrachloride
463581	Carbonyl sulfide
120809	Catechol
133904	Chloramben
57749	Chlordane
7782505	Chlorine
79118	Chloroacetic acid
532274	2-Chloroacetophenone
108907	Chlorobenzene
510156	Chlorobenzilate
67663	Chloroform
107302	Chloromethyl methyl ether
126998	Chloroprene
1319773	Cresols/Cresylicacid (isomers and mixture)
95487	o-Cresol
108394	m-Cresol
106445	p-Cresol
98828	Cumene
94757	2,4-D, salts and esters
3547044	DDE
334883	Diazomethane
132649	Dibenzofurans
96128	1.2-Dibromo-3-chloropropane
84742	Dibutylphthalate
106467	1,4-Dichlorobenzene(p)
91941	3,3-Dichlorobenzidene
111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)
5427 <b>56</b>	1,3-Dichloropropene
62737	Dichloryos
111422	Diethanolamine
121697	N,N-Diethyl aniline (N,N-Diethylaniline)
64675	Diethyl sulfate
119904	3,3-Dimethoxybenzidine
60117	Dimethyl aminoazobenzene
119937	3,3-Dimethyl benzidine
79447	Dimethyl carbamoyl chloride
68122	Dimethyl formamide
57147	1,1-Dimethyl hydrazine
37 (4)	i, i-bingulythydiazine

CAS Number	Chemical Name
131113	Dimethyl phthalate
77781	Dimethyl sulfate
534521	4,6-Dinitro-o-cresol,and salts
51285	2,4-Dinitrophenol
121142	2,4-Dinitrotoluene
123911	1,4-Dioxane (1,4-Diethyleneoxide)
122667	1,2-Diphenylhydrazine
106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane)
106887	1,2-Epoxybutane
140885	Ethyl acrylate
100414	Ethyl benzene
51796	Ethyl carbamate (Urethane)
75003	Ethyl chloride (Chloroethane)
106934	Ethylene dibromide (Dibromoethane)
107062	Ethylene dichloride (1,2-Dichloroethane)
107211	Ethylene glycol
151564	Ethylene imine (Aziridine)
75218	Ethylene oxide
96457	Ethylene thiourea
75343	Ethylidene dichloride (1,1-Dichloroethane)
50000	Formaldehyde
76448	Heptachlor
118741	Hexachlorobenzene
87683	Hexachlorobutadiene
77474	Hexachlorocyclopentadiene
67721	Hexachloroethane
822060	Hexamethylene-1,6-diisocyanate
680319	Hexamethylphosphoramide
110543	Hexane
302012	Hydrazine
7647010	Hydrochloricacid
7664393	Hydrogen fluoride (Hydrofluoricacid)
7783064	Hydrogen sulfide
123319	Hydroquinone
78591	Isophorone
58899	Lindane (all isomers)
108316	Maleic anhydride
67561	Methanol
72435	Methoxychlor
74839	Methyl bromide (Bromomethane)
74873	Methyl chloride (Chloromethane)
71556	Methyl chloroform (1,1,1-Trichloroethane)
78933	Methyl ethyl ketone (2-Butanone)
60344	Methyl hydrazine
74884	Methyl iodide (lodomethane)
108101	Methyl isobutyl ketone (Hexone)
	• • •
624839	Methyl isocyanate  Methyl methogolate
80626	Methyl methacrylate
1634044	Methyl tert butyl ether
101144	4,4-Methylene bis(2-chloroaniline)

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CAS Number	Chemical Name
75092	Methylene chloride (Dichloromethane)
101688	Methylene diphenyl diisocyanate (MDI)
101779	4,4-Methylenedianiline
91203	Naphthalene
98953	Nitrobenzene
92933	4-Nitrobiphenyl
100027	4-Nitrophenol
79469	2-Nitropropane
684935	N-Nitroso-N-methylurea
62759	N-Nitrosodimethylamine
59892	N-Nitrosomorpholine
56382	Parathion
82688	Pentachloronitrobenzene(Quintobenzene)
87865	Pentachlorophenol
108952	Phenol
106503	p-Phenylenediamine
75445	Phosgene
7803512	Phosphine
7723140	Phosphorus
85449	Phthalic anhydride
1336363	Polychlorinated biphenyls (Aroclors)
1120714	1,3-Propane sultone
57578	beta-Propiolactone
123386	Propionaldehyde
114261	Propoxur (Baygon)
	Propylene dichloride (1,2-Dichloropropane)
78875	· ·
75569	Propylene oxide
75558	1,2-Propylenimine(2-Methylaziridine)
91225	Quinoline
106514	Quinone
100425	Styrene Objects a suide
96093	Styrene oxide
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin
79345	1,1,2,2-Tetrachloroethane
127184	Tetrachloroethylene(Perchloroethylene)
7550450	Titanium tetrachloride
108883	Toluene
95807	2,4-Toluene diamine
584849	2,4-Toluene diisocyanate
95534 <sup>-</sup>	o-Toluidine
8001352	Toxaphene (chlorinated camphene)
120821	1,2,4-Trichlorobenzene
79005	1,1,2-Trichloroethane
79016	Trichloroethylene
95954	2,4,5-Trichlorophenol
88062	2,4,6-Trichlorophenol
121448	Triethylamine
1582098	Trifturalin
540841	2,2,4-Trimethylpentane

CAS Number	Chemical Name
593602	Vinyl bromide
75014	Vinyl chloride
75354	Vinylidene chloride (1,1-Dichloroethylene)
1330207	Xylenes (isomers and mixture)
95476	o-Xylenes
108383	m-Xylenes
106423	p-Xylenes
0	Antimony Compounds
0	Arsenic Compounds (inorganic including arsine)
0	Beryllium Compounds
0	Cadmium Compounds
0	Chromium Compounds
0	Colbalt Compounds
0	Coke Oven Emissions
0	Cyanide Compounds
0	Glycol ethers
0	Lead Compounds
0	Manganese Compounds
0	Mercury Compounds
0	Fine mineral fibers
0	Nickel Compounds
0	Polycylic Organic Matter
0	Radionuclides (including radon)
0	Selenium Compounds

- "MAJOR PART 70 SOURCE" means, any stationary source or any group of stationary sources that are located on one or more contiguous or adjacent properties, and are under common control of the same person (or persons under common control) that emits or has the potential to emit:
  - (a) Any regulated air pollutant equal to or exceeding the following:

Air Pollutant	Non-Attainmentor Management Area Emission Rate (Controlled) [tons per year]	PSD Area Emission Rate (Controlled) [tons per year]
PM <sub>10</sub>	70	100
co	70	100
NO <sub>x</sub>	50	100
VOC	50	100
SO <sub>2</sub>	not applicable	100
Lead	not applicable	0.6

(b) Or, except for radionuclides, ten (10) tons per year of any hazardous air pollutant listed pursuant to section 112(b) of the Clean Air Act or any combination of hazardous air pollutants exceeding twenty-five (25) tons per

year or such lesser quantities as may be determined by the EPA. For radionuclides, "major source" shall have the meaning specified by the Administrator by rule.

For Stationary Sources subject to 40 CFR part 60.670 (Subpart OOO-Standards of Performance for Nonmetallic Mineral Processing Plants), effective July 1, 1997, Fugitive Emissions, not considered to be a Hazardous Air Pollutant, shall be included for purposes of determining whether a source is major.

For all other Stationary Source categories, Fugitive Emissions shall be included for the purposes of determining whether a source is major.

**DISCUSSION**: G-P Gypsum triggers Major Part 70 Source for Carbon Monoxide, Formaldehyde and total HAP emissions.

- 0.91 "Modification" means, any physical change in or change in the method of operation of an existing Stationary Source that would result in a Net Emissions Increase for any Regulated Air Pollutant at such Stationary Source, or would result in the Emission of any Regulated Air Pollutant into the atmosphere not previously emitted.
- (a) A physical change or change in the method of operation shall not include:
  - (1) Routine maintenance, repair and replacement, except reconstruction.
  - (2) The use of an alternative fuel or raw material by reason of an order in effect under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (15 U.S.C. Title 16, Chapter 12), or by reason of any other forced curtailment of lack of supply of natural gas if such Stationary Source can furnish to the Control Officer a certified copy of the finding of a state federal governmental body having jurisdiction over such source that attests to the existence of a force curtailment or lack of supply of natural gas.
  - (3) The use of an alternative fuel by reason of an order or rule under Section 125 of the Act.
  - (4) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.
  - (5) Use of an alternative fuel or raw material by the Stationary Source which:
    - (i) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any Federally

- Enforceable permit condition which was established after January 6, 1975 pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or 40 CFR 51.166; or,
- (ii) The source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CAFAR 51.166.
- (6) An increase in the hours of operation or in the production rate, unless such change would be prohibited under any Federally Enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21, or under regulations approved pursuant to 40 CFR subpart I or 40 CAFR 51.166.
- 0.92 "Modified Emissions Unit" means, any Emissions Unit undergoes, as part of a Modification at a Stationary Source, a physical change or change in method of operation that would result in an increase in Emissions from such Emissions Unit above the DeMinmus Threshold.

#### 0.98 "Net Emissions Increase"

- (a) "Net Emissions Increase" means the amount by which the sum of the following exceeds zero:
  - Any increase in Actual Emissions from a particular physical change or change in method of operation at a Stationary Source; and
  - (2) Any other increases and decreases in Actual Emissions at a source that are contemporaneous with particular change and are otherwise creditable.
- (b) An increase or decrease in Actual Emissions is contemporaneous with the increase from the particular change only if it occurs between:
  - (1) The date five years before construction on the particular change commences; and
  - (2) The date that the increase or decrease from the particular change occurs.
- (c) An increase or decrease in Actual Emissions is creditable only if the Administrator has not relied on it issuing a permit for the source under this section, which permit is in effect when the increase in Actual Emissions from the particular change occurs.

(d) An increase or decrease in Actual Emissions of sulfur dioxide, PM<sub>10</sub> or nitrogen oxides which occurs before the applicable minor source baseline.

0.113 "Part 70 Source" means, any source subject to the permitting requirements of Title 40 CFR, Part 70, or any source subject to federal performance Standards including the following list:

- (31) Any **Nonmetallic Mineral Processing Plant** commencing construction, modification, or reconstruction after August 31, 1983 [40 CFR §60 Subpart OOO].
- (34) Any Mineral Processing Plant Utilizing Calciners and Dryers [40 CFR §60 Subpart UUU].

**DISCUSSION**: G-P Gypsum triggers 40 CFR §60 Subpart OOO and 40 CFR §60 Subpart UUU.

- 0.120 "POTENTIAL TO EMIT" means, the maximum capacity of an EMISSIONS UNIT to Emit any REGULATED AIR POLLUTANT under its physical and operational design. Any physical or operational limitation on the capacity of the EMISSIONS UNIT to Emit any REGULATED AIR POLLUTANT, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on EMISSIONS is FEDERALLY ENFORCEABLE.
- 0.127 "REGULATED AIR POLLUTANT" means, any pollutant subject to:
  - (a) A standard under section 111 of the Act,
  - (b) or any pollutant subject to a standard promulgated under section 112 of the Act, including any pollutant emitted in major amounts by a source subject to 112(j) and any pollutant that is regulated under section 112(g),
  - (c) or any Class I and Class II substances subject to a standard promulgated under or established by title VI of the Act,
  - (d) and any of the following substances that are regulated pursuant to Section 12:
    - (1) Ammonia
    - (2) Ammonium Particles
    - (3) Asbestos
    - (4) Beryllium and compounds

(5)	Bromine
• •	Carbon monoxide (CO)
(6)	Chlorine
(7)	Chlorine dioxide
(8)	Fluorides
(9)	
(10)	Germanium tetrahydride
(11)	Hydrogen bromide
(12)	Hydrogen chloride
(13)	Hydrogen cyanide
(14)	Hydrogen selenide
(15)	Hypochlorous acid
(16)	Hypochlorite particles
(17)	Lead (Pb)
(18)	Mercury
(1 <del>9</del> )	Nitrate particles
(20)	Nitric acid
(21)	Nitrogen oxides (NOx)
(22)	Osmium tetroxide
(23)	Ozone
(24)	Particulate Matter
(25)	Particulate Matter-10 (PM-10)
(26)	Perchloryl fluoride
(27)	Reduced Sulfur Compounds
(28)	Silicon tetrahydride
(29)	Sulfuric Acid Mist
(30)	Sulfur dioxide (SO <sub>2</sub> )
(31)	Sulfur trioxide or vapor phase sulfuric acid
(32)	Suifuryl fluoride
(33)	Total Reduced Sulfur (including H <sub>2</sub> S)
(34)	Tellurium compounds
(35)	Vinyl Chloride
(36)	Volatile Organic Compounds (VOC)
· ·	

- 0.131 "Section 502(b)(10) Changes" means, changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
- 0.138 "Stationary Source" means, any building, structure, facility, equipment, engine, or installation, except Construction Activity which Emits or has the Potential to Emit any Regulated Air Pollutant and all pollutants listed pursuant to section 112(b) of the Act. A Stationary Source is composed of all of the Emission Units located on one or more contiguous or adjacent properties under control of the same person (or persons under common control), that comprise one, or more of the following categories:
  - (a) Source Specific Stationary Source:

- (1) Gasoline Dispensing Facilities (Type of Air Pollutant: VOC)
- (2) Drycleaners (Type of Air Pollutant: Perchloroethylene)
- (3) Non-Metallic Mineral Processing Facilities (Type of Air Pollutant: PM<sub>10</sub>)
- (4) Fuel Burning Equipment that aggregates to a maximum heat input rate equal to or exceeding ten (10) million (MM) Btu per hour.
- (5) Commercial Surface Coating Operations including spray paint booths
  (Type of Air Pollutant: VOC)
- (6) Hard and Decorative Chromium Electroplating and Chromium Anodizing Operations (Type of Air Pollutant: Chromium)
- (7) Industrial Process Cooling Towers, subject to subsection 20.1.10 (which limits chromium emissions)
  (Type of Air Pollutant: Chromium & PM<sub>10</sub>)
- (8) Sterilization Facilities
  (Type of Air Pollutant: Ethylene Oxide)
- (9) Synthetic Organic Chemical Manufacturing Facilities (Type of Air Pollutant: Organic Hazardous Air Pollutants)
- (10) Facilities utilizing Halogenated Solvents for Cleaning
- (11) Stationary Internal Combustion Engine that has a brake horsepower rating equal to or exceeding 35 horsepower, or 26 kilowatts, except for EMERGENCY STANDBY GENERATORS.
- (12) EMERGENCY STANDBY GENERATOR that has a brake horsepower rating equal to or exceeding 500 horsepower, or 373 kilowatts.
- (b) Major Stationary Source:

(1) Any Stationary Source is considered Major if it EMITS or has a total POTENTIAL TO EMIT, including any NET EMISSIONS INCREASE due to MODIFICATION, for any REGULATED AIR POLLUTANT equal to or exceeding the following amounts:

Air Pollutant	Non-Attainmentor Management Area Emission Rate (Controlled) [tons per year]	PSD Area Emission Rate (Controlled) [tons per year]
PM <sub>10</sub>	70	100
CO	70	100
VOC	50	100
NO <sub>x</sub>	50	100
SO <sub>2</sub>		100
Lead (Pb)		0.6
Hazardous Air Pollutant (HAP)		10 each or 25 combined
Toxic Chemical Substance (TCS)		1.0

For purposes of determining whether a source is major, FUGITIVE EMISSIONS shall be included if the Stationary Source belongs to one of the following categories:

***			4 241.	41	
(i)	Coal clea	ining plants	s (With	thermalary	/ersi:

- (ii) Kraft pulp mills; Portland cement plants;
- (iii) Primary zinc smelters;
- (iv) Iron and steel mills;
- (v) Primary aluminum ore reduction plants;
- (vi) Primary copper smelters:
- (vii) Municipal incinerators capable of charging more than 250 tons of refuse per day;
- (viii) Hydrofluoric, sulfuric, or nitric acid plants;
- (ix) Petroleum refineries:
- (x) Lime plants;
- (xi) Phosphate rock processing plants;
- (xii) Coke oven batteries;
- (xiii) Sulfur recovery plants;
- (xiv) Carbon black plants (furnace process);
- (xv) Primary lead smelters;
- (xvi) Fuel conversion plants;
- (xvii) Sintering plants;
- (xviii) Secondary metal production plants;
- (xix) Chemical process plants;
- (xx) Fossil-fuel boilers (or combination thereof) totaling more than 250
  - million British thermal units per hour heat input;
- (xxi) Petroleum storage and transfer units with a total storage capacity

	exceeding 300,000 barrels;
(xxii)	Taconite ore processing plants;
(xxiii)	Glass fiber processing plants;
(xxiv)	Charcoal production plants;
(xxv)	Fossil fuel-fired steam electric plants of more than 250 million British
	thermal units per hour heat input; and
(xxvi)	Any other stationary source category regulated under sections 111 or
	112 of the Act

or, at such time that a particular source or Modification becomes a Major Stationary Source or Major Modification solely by virtue of a relaxation in any enforcement limitation which was established after August 7, 1980, on the capacity of the source or Modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of regulations approved pursuant to this shall apply to the source or Modification as though Construction had not yet Commenced on the source or Modification.

## (c) Non-Major Stationary Source:

(1) Unless specifically exempted under (a), any Stationary Source is considered Non-Major if it has a total POTENTIAL TO EMIT, including any NET EMISSIONS INCREASE due to MODIFICATION, for all REGULATED AIR POLLUTANTS less than the emission rates listed in (b)(1):

## (d) Exempt Stationary Source:

(1) A Stationary Source is considered Exempt if the EMISSIONS, calculated without the application of air pollution control technology or limits on the hours of operation, are less than all of the following enumerated limits for all non specified source categories:

Type of Air Pollutant	Uncontrolled Emissions [tons per year]
PM <sub>10</sub>	1.0
CO	2.0
VOC	2.0
NO <sub>x</sub>	2.0
SO <sub>2</sub>	1.0
Lead (Pb)	0.3
Hazardous Air Pollutant (HAP)	1.0
Toxic Chemical Substance (TCS)	1.0

- 0.152 "VOLATILE ORGANIC COMPOUND (VOC)" means, any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions.
  - (a) This includes any such organic compound, other than the following, which have been determined to have negligible photochemical reactivity:
    - (1) Methane
    - (2) Ethane
    - (3) Methylene Chloride (dichloromethane)
    - (4) 1,1,1-Trichloroethane(Methyl Chloroform)
    - (5) 1,1,1-Trichloro-1,2,2-trifluoroethane(CFC-113)
    - (6) Trichlorofluoromethane(CFC-11)
    - (7) Dichlorodifluoromethane(CFC-12)
    - (8) Chlorodifluoromethane(HCFC-22)
    - (9) Trifluoromethane(HFC-23)
    - (10) 1,2-Dichloro-1,1,2,2-tetrafluoroethane(CFC-114)
    - (11) Chloropentafluoroethane(CFC-115)
    - (12) 1,1,1-Trifluoro2,2-Dichlorotrifluoroethane(HCFC-123)
    - (13) 1,1,1,2-Tetrafluoroethane(HFC-134a)
    - (14) 1,1-Dichloro-1-fluoroethane(HCFC-141b)
    - (15) 1-Chloro-1,1-difluoroethane(HCFC-142b)
    - (16) 2-Chloro-1,1,1,2-tetrafluoroethane(HCFC-124)
    - (17) Pentafluoroethane(HFC-125)
    - (18) 1,1,2,2-Tetrafluoroethane(HFC-134)
    - (19) 1,1,1-Trifluoroethane(HFC-143a)
    - (20) 1,1-difluoroethane(HFC-152a)
    - (21) Parachlorobenzotrifluoride(PCBTF)
    - (22) Cyclic, branched, or linear completely methylated siloxanes
    - (23) Acetone
    - (24) and Perfluorocarbon compounds which fall into these classes:
      - (i) Cyclic, branched, or linear, completely fluorinated alkanes;
      - (ii) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
      - (iii) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
      - (iv) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.
  - (b) Any HAZARDOUS AIR POLLUTANT (HAP), considered to be a VOLATILE ORGANIC COMPOUND (VOC), shall be subject to the more stringent requirements in the Regulations.

#### IV. EMISSIONS INFORMATION

The regulated facility emission levels identified in the Part 70 application reflect the emissions noted in the ATC permit issued by CCHD-APC and listed in the Part 70 Permit Application.

Table I: Summary of Facility Total Potential to Emit							
Pollutant Maximum Controlled Maximum Uncontrolled							
	lbs./hr	tpy	lbs./hr	tpy			
PM-10	17	76	727	2,677			
СО	53	231	53	231			
VOC	17	77	17	77			
NO <sub>x</sub>	16	71	16	71			
SO <sub>2</sub>	0.53	2.3	0.53	2.3			
Pb	n/a	n/a	n/a	n/a			
HAP's							
Acetaldehyde	0.56	2.5	0.56	2.5			
Formaldehyde	5.6	25	5.6	25			
Ethylene Glycol	0.0031	0.013	0.0031	0.013			

## **VOC Emissions**

The VOC emissions are primarily due to the addition of an organic based surfactant solution to the gypsum slurry in the processing operation. The purpose of the solution is to make the product lighter. The surfactant solution contains up to 15 percent alcohol (isopropyl alcohol) to keep the material from "gelling" at low temperatures. The VOC is released in the drying process.

#### **HAP Emissions**

Based on the issued ATC (9/27/96), the following HAPs are emitted during the processing of gypsum wallboard:

- 1. Acetaldehyde
- 2. Formaldehyde
- 3. Ethylene Glycol

In the processing of wallboard where additional strength and moisture resistance is required, a patented process using fiberglass mat, instead of paper facing and backing, is employed. Potential acetaldehyde and formaldehyde emissions are based on emission factors developed from stack tests conducted at a wallboard plant which manufactured the fiberglass-mat based product. The fiberglass mat is held together with a resin consisting of urea-formaldehyde. It is expected that formaldehyde and acetaldehyde are released when G-P Gypsum manufactures the fiberglass mat based

product. Potential emissions of ethylene glycol are based on the assumption that all components of a particular ink applied to the wallboard product are volatilized.

G-P Gypsum has acknowledged in the ATC modifications and in the Part 70 application that the facility is a major HAP source for formaldehyde. Based on §§ 12.2.18, G-P Gypsum will be required to apply for an ATC if the potential emissions from any HAP (other than formaldehyde) either individually or in combination trigger the major HAP source threshold. In the situation of formaldehyde, G-P Gypsum will be required to apply for an ATC if these potential emissions increase above the HAP major modification threshold.

Additionally, there is no HAP MACT standard (i.e., pursuant to Section 112 of the Act or Section 20 of APCR) applicable to this source at this time.

#### V. EMISSION UNITS

#### LIST OF EMISSIONS UNITS

Table II: Summary of NSR Permitted Units and PTE

EU ID#	G-P ID	Description	Manufacturer &.	SCC		PTE
		•	Serial No.		lb/hr	tpy
A01	FEP1	Plant Vehicle Traffic (PM <sub>10</sub> )		30501599	1.5	6.4
A02	FEP2	Plant Material Piles (PM <sub>10</sub> )		30501508	0.063	0.27
A03	FEP3	Rock Feeder (PM <sub>10</sub> )	Syntron - S53363	30501509	0.11	0.48
B01	FEP4	Crushing Area Conveyor (PM <sub>10</sub> )	Pettibon Universal – H87-80	30501504	0.0084	0.037
B02	EP10	Primary Crusher (PM <sub>10</sub> )	Universal Crusher – 306X526	30501505	0.076	0.33
B03	EP11	200 Ton Rock Bin (PM <sub>10</sub> )	Georgia-Pacific – None	30501509	0.00092	0.004
B04	EP12	Secondary Crusher (PM <sub>10</sub> )	CEMCO – AEV-1194- 135	30501506	0.076	0.33
C01	EP13	Impact Mill #1 (PM <sub>10</sub> )	DELTA - 2525-1	30501513	1.0	4. 5
		Impact Mill #1 (CO)			3.5	15
		Impact Mill #1 (VOC)			0.068	0.30
		Impact Mill #1 (NO <sub>x</sub> )			0.95	4.2
		Impact Mill #1 (SO <sub>2</sub> )			0.019	0.084
C02	EP14	Impact Mill #2 (PM <sub>10</sub> )	DELTA - 2525-2	30501513	1.0	4.5
		Impact Mill #2 (CO)			3.5	15
		Impact Mill #2 (VOC)			0.068	0.30
		Impact Mill #2 (NO <sub>x</sub> )			0.95	4.2
		Impact Mill #2 (SO <sub>2</sub> )			0.019	0.084
C03	EP15	Impact Mill #3 (PM <sub>10</sub> )	DELTA - 2525-3	30501513	1.0	4.5
		Impact Mill #3 (CO)			3.5	15
		Impact Mill #3 (VOC)			0.068	0.30
		Impact Mill #3 (NO <sub>x</sub> )			0.95	4.2

EU ID # G-P ID		Description	Manufacturer &.	SCC	PTE	
			Serial No.		lb/hr	tpy
	-	Impact Mill #3 (SO <sub>2</sub> )			0.019	0.084
C04	EP16	Impact Mill #4 (PM <sub>10</sub> )	DELTA – 2525-4	30501513	1.0	4.5
		Impact Mill #4 (CO)			3.5	15
		Impact Mill #4 (VOC)	· -	12	0.068	0.30
		Impact Mill #4 (NO <sub>x</sub> )			0.95	4.2
		Impact Mill #4 (SO <sub>2</sub> )			0.019	0.084
C05	EP17	Impact Mill #5 (PM <sub>10</sub> )	Georgia-Pacific – None	30501513	1.0	4.5
		Impact Mill #5 (CO)		•	3.5	15
		Impact Mill #5 (VOC)			0.068	0.30
		Impact Mill #5 (NO <sub>x</sub> )			0.95	4.2
		Impact Mill #5 (SO <sub>2</sub> )			0.019	0.084
D01	EP18	Stucco Area Conveyors (PM <sub>10</sub> )  Stucco Recirculation Elevator	FMC – E591463EL, E591464EL, E591465EL Buck El – CA4515	30501518	0.12	0.53
D02	EP19	Stucco Blender #1 (PM <sub>10</sub> )	Jacobson – Unknown	30501518	0.040	0.18
D03	EP21	North Storage Bin (PM <sub>10</sub> )	Georgia-Pacific – None	30501514		0.025
D04	EP22	South Storage Bin (PM <sub>10</sub> )	Georgia-Pacific - None	30501514		0.025
D05	FEP20	Stucco Area Hopper (PM <sub>10</sub> )		30501514		0.0012
D06	FEP23	Stucco Blender #2 (PM <sub>10</sub> )	Jacobson – Unknown	30501518		0.13
D07	FEP24	Pin Mixer (PM <sub>10</sub> )		30501516		0.13
D08	FEP25	Vermiculite Bin (PM <sub>10</sub> )	Georgia-Pacific – None	30501599	6.4E-06	2.8E-05
D09	FEP26	Landplaster Bin #1 (PM <sub>10</sub> )	Georgia-Pacific - None		3.4E-06	1.5E-05
D10	FEP27	Landplaster Bin #2 (PM <sub>10</sub> )	Georgia-Pacific - None		3.4E-06	1.5E-05
D11	FEP28	Ball Mill #1 (PM <sub>10</sub> )	Georgia-Pacific – None	30501515	2.5E-05	1.1E-04
D12	FEP29	Ball Mill #2 (PM <sub>10</sub> )	Georgia-Pacific – None		2.5E-05	1.1E-04
D13	FEP30	Interior Baghouse Area Conveyors (PM <sub>10</sub> )	Georgia-Pacific – None		0.00071	0.0031
D14	FEP31	Interior Baghouse Hopper (PM <sub>10</sub> )		30501514	0.00029	0.0013
D15	FEP32	Fiberglass Feed Hopper (PM <sub>10</sub> )		30501599		0.022
D16	FEP35	Concrete Basin (VOC)		30501599	WITH BOARD DRYER)	(INCLUDED WITH BOARD DRYER)
D17	EP9	Milling Area Conveyors (PM <sub>10</sub> ) (Rock Supply Elevator)	FMC – E594161EL and E591462EL	30501518	0.0065	0.028
E01	FEP33	Paper Heaters (PM <sub>10</sub> )		30501599	0.0021	0.009
		Paper Heaters (CO)			0.036	0.16
		Paper Heaters (VOC)		···	0.0091	0.040
		Paper Heaters (NO <sub>x</sub> )	<del></del>	-	0.17	0.75
		Paper Heaters (SO <sub>2</sub> )			0.0010	0.0045
E02	FEP34	Forming Line (VOC)		30501519	(INCLUDED	(INCLUDED
1		]	1	_	WITH	WITH

EU ID #G-P ID		Description	Manufacturer &.	SCC	PTE	
j			Serial No.		ib/hr	tpy
					BOARD DRYER)	BOARD DRYER)
E03	EP36	Board Dryer (PM <sub>10</sub> )	Coe – None	30501520	9.9	44
		Board Dryer (CO)			35	154
		Board Dryer (VOC)			17	75
		Board Dryer (NO <sub>x</sub> )			11	49
		Board Dryer (SO <sub>2</sub> )	-		0.43	1.9
ļ		Board Dryer (Acetaldehyde)			0.56	2.5
		Board Dryer (Formaldehyde)			5.6	25.0
		Board Dryer (Ethylene Glycol)			0.003	0.013
F01	EP37	End Trim/Bundler (PM <sub>10</sub> )		30501521	0.089	1.1
F02	EP38	Re-Cut Machine (PM <sub>10</sub> )		30501521	0.003	0.003
F03	EP39	Riser Machine (PM <sub>10</sub> )	Georgia-Pacific - None	30501521	0.22	0.32
F04	FEP40	Riser Saw Cyclone Hopper (PM <sub>10</sub> )		30501514	0.001	0.0007
G01	FEP41	Parts Washer (VOC)		30501599	0.075	0.33

Table II-1: Method of Calculation for Actual Emissions

EU ID#	Emission Unit	Limit of PTE (tpy)	Maximum Throughput Permitted (tpy)	1995 Throughput (tpy)	Actual Emissions (tpy)
Non	Fugitive Emission Units	s/Points	···	<del></del>	
B02	Primary Crusher (PM <sub>10</sub> )	0.33	368,800	274,030	0.25
B04	Secondary Crusher (PM <sub>10</sub> )	0.33	368,800	274,030	0.25
C01	Impact Mill #1 (PM <sub>10</sub> )	4.5	73,760	54,806	3.3
	(CO)	15.0	<del></del>		11.0
	(VOC)	0.30			0.22
	(NO <sub>x</sub> )	4.2			3.1
	(SO <sub>2</sub> )	0.084			0.059
C02	Impact Mill #2 (PM <sub>10</sub> )	4.5	73,760	54,806	3.3
	(CO)	15.0			11.0
	(VOC)	0.30			0.22
	(NO <sub>x</sub> )	4.2			3.1
	(SO <sub>2</sub> )	0.084			0.059
C03	Impact Mill #3 (PM <sub>10</sub> )	4.5	73,760	54,806	3.3
	(CO)	15.0			11.0
	(VOC)	0.30	_ · · ·		0.22
•	(NO <sub>x</sub> )	4.2			3.1
•	(SO <sub>2</sub> )	0.084	· ·		0.059
C04	Impact Mill #4 (PM <sub>10</sub> )	4.5	73,760	54,806	3.3
	(CO)	15.0	•		11.0
	(VOC)	0.30	· · ·		0.22
	(NO,)	4.2			3.1
	(SO <sub>2</sub> )	0.084	<u>''</u>		0.059
C05	Impact Mill #5 (PM <sub>10</sub> )	4.5	73,760	54,806	3.3
	(CO)	15.0			11.0
	(VOC)	0.30	-	<del></del>	0.22

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EU ID#	Emission Unit	Limit of PTE (tpy)	Maximum Throughput Permitted (tpy)	1995 Throughput (tpy)	Actual Emissions (tpy)
	(NO <sub>x</sub> )	4.2		<u> </u>	3.1
	(SO <sub>2</sub> )	0.084			0.059
D01	Stucco Area Conveyors	0.53	368,800	232,229	0.33
D02	Stucco Blender #1	0.18	368,800	232,229	0.11
E03	Board Dryer (PM <sub>10</sub> )	44.0	378,432	232,229	27.0
	(CO)	154.0			81.0
	(VOC)	75.0			19.0
	(NO <sub>x</sub> )	49.0			17.0
	(SO <sub>2</sub> )	1.9			0.59
	(Acetaldehyde)	2.5			1.5
	(Formaldehyde)	25.0			15.0
	(Ethylene Glycol)	0.013			0.0075
F01	End Trim/Bundler	1.1	399,456 MSF/yr Max.	237,212 MSF/yr	0.65
F03	Riser Machine	0.32	2,996 MSF/yr Max.	1,844 MSF/yr	0.2

Fugitive Emission Units/Points							
A01	Plant Vehicle Traffic	6.4	368,800	246,647	4.3		
A02	Plant Materials Piles	0.27	4.0 Acres inactive	1.3 acres active	0.09		
A03	Rock Feeder	Ū.48	368,800	246,627	0.32		
D06	Stucco Blender #2	0.13	368,800	232,229	0.08		

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Table II-2: Emission Unit Specific Emission Limit and Standards

EU ID	G-P ID	Description 🐲	Applicable Subpart Title	Applicable Subsection Title	Requirements	Compliance Monitoring
A01	FEP1	Plant Vehicle	APCD - ATC 9/27/96	Condition(s) II-A, III-D-1,	- PM₁₀ 1.5 lbs/hr. 6.4 tpy.	<ul> <li>Demonstrated through routine</li> </ul>
		Traffic		III-D. 1, 2, 12, 13, 14, 16.	<ul><li>– Opacity ≤ 20% (Fugitive).</li></ul>	monthly inspections.
		1			<ul> <li>Paved roads swept and/or rinsed as</li> </ul>	<ul> <li>Maintenance, which includes the</li> </ul>
	Ī				necessary.	sprinkler system, will be performed
	1				- Unpaved roads treated with chemical dust	
	1				suppressant and/or watered as-necessary.	- Record Monthly opacity
	1				- Reasonable precautions.	readings.
			<u>_</u>		- Method 9 for opacity.	11
			APCR Section 41 Fugitive Dust	APCR Subsection 41.1.1.	- Reasonable precautions.	Use of appropriate fugitive dust control methods
		<u> </u>		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	D14 0 000 15-45- 0 074	
A02	FEP2	Plant Material	APCD - ATC 9/27/96	Condition(s) II-A, III-D. 5,	- PM <sub>10</sub> 0.063 lbs/hr, 0.27 tpy.	<ul> <li>Record Monthly opacity readings.</li> </ul>
		Piles		9, 10, 11, 12, 13, 14.	<ul><li>Opacity ≤ 20% (Fugitive).</li><li>Moisture content .&gt;0.5%.</li></ul>	- Record bi-weekly moisture
					- Reasonable precautions.	sampling
					- Method 9 for opacity.	- Demonstrated through routine
	1			1	- Michiga o for opeasty.	monthly insp.
	1				- Water will be applied on an as-needed	- Maintenance, which includes the
					basis to control PM-10 emissions so as not	sprinkler system, will be performed
					to exhibit opacity greater than 20% at any	as required and recorded in a log.
					time.	
A03	FEP3	Rock Feeder	APCD - ATC 9/27/96	Condition(s) II-A,	PM <sub>10</sub> 0.11 lbs/hr., 0.48 tpy.	Periodic inspection.
B01	FEP4	Crushing	APCD - ATC 9/27/96	Condition(s) II-A, III-D-6,	– PM₁₀ 0.008, lbs/hr., 0.037 tpy.	- Record Monthly opacity
•	1	Area		9,10, 11, 12, 13, 14.	– Opacity ≤10% (fugitive).	readings.
	4	conveyor		1	1	- Record-bi-weekly moisture
			NSPS Subpart A	EPA 40 CFR § 60.11 (d)	Good air pollution control practice.	sampling
			Subpart OO() - Standards of	EPA 40 CFR § 60.672(b)	– Opacity ≤ 10% (fugitive).	
	ł		Performance for Nonmetallic	EPA 40 CFR § 60.675	- Method 9 for Opacity.	- Maintenance will be performed
	1		Mineral Processing Plants	EPA 40 CFR 60.676	- Reporting and recordkeeping.	as required and recorded in a
	1			<u> </u>		log.
D17	EP9	Milling Area	APCD - ATC 9/27/96	Condition(s) II-A, III-D-6, 8,	- PM <sub>10</sub> 0.0065 lb/hr., 0.0280 ton/yr.	- Compliance with the opacity,
	1	Conveyors		14, 15, 19.	- Opacity ≤ 7% (stack).	PM, and PM-10 emission timits
	1				- Opacity ≤ 10% (fugitive).	will be demonstrated through
	1		l		- Method 9 for Opacity.	routine monthly insp., incl. insp.
i			NSPS Subpart A	EPA 40 CFR § 60.11 (d)	- Good air pollution control practice.	of baghouse exhaust.
		1	Subpart OOO - Standards of	EPA 40 CFR 60.672(a)(1)	- PM < 0.05 g/dscm (stack).	- Maintenance will be performed
	1		Performance for Nonmetallic	EPA 40 CFR 60.672(a)(2)	<ul><li>– Opacity ≤7% (stack).</li></ul>	as required and recorded in a

EU ID	G-P ID	Description	Applicable Subpart Title	Applicable Subsection Title	Requirements	Compliance Monitoring
			Mineral Processing Plants	EPA 40 CFR 60.675 EPA 40 CFR 60.676	- Method 9 for Opacity.  - Method 5 or 17 for PM.  - Depoting and recordly a price.	log.
B02	EP10	Primary Crusher	APCD - ATC 9/27/96	Condition(s) II-A, III-D-6, 7, 8,14, 15, 19.	<ul> <li>Reporting and recordkeeping.</li> <li>PM₁₀ 0.076 lbs/hr., 0.330 tpy.</li> <li>Opacity ≤ 7%(stack)</li> <li>Opacity ≤ 10% (fugitive)</li> <li>Method 9 for Opacity</li> </ul>	- Compliance with the opacity, PM, and PM-10 emission limits will be demonstrated through routine monthly insp., incl. insp. of baghouse exhaust.  - Maintenance will be performed as required and recorded in a log - Record monthly opacity readings
			NSPS Subpart A Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants	EPA 40 CFR § 60.11 (d)  EPA 40 CFR 60.672(a)(1)  EPA 40 CFR 60.672(a)(2)  EPA 40 CFR 60.672(b)  EPA 40 CFR § 60.675  EPA 40 CFR 60.676	- Good air pollution control practice  - 0.05 g/dscm.  - Opacity ≤ 7%(stack).  - Opacity ≤ 10%(fugitive).  - Method 9 for Opacity.  - Method 5 or 17 for PM.  - Reporting and recordkeeping.	- Compliance with the opacity, PM, and PM-10 emission limits will be demonstrated through routine monthly insp., incl. insp. of baghouse exhaust.  - Maintenance will be performed as required and recorded in a log.
B03	EP11	200 Ton Rock Bin	APCD - ATC 9/27/96	Condition(s) II-A, III-D-6, 8, 14, 15, 19.	<ul> <li>PM₁₀ 0.001 ib/hr., 0.004 tpy.</li> <li>PM &lt;0.05 g/dscm (stack).</li> <li>Opacity ≤ 7% (stack).</li> <li>Opacity ≤ 10% (fugitive).</li> <li>Method 9 for Opacity.</li> </ul>	Compliance with the opacity, PM and PM-10 emission limits will be demonstrated through routine monthly insp.
			APCR Section 34-New Source Performance Std. For Nonmetallic Mineral Mining and Processing	APCRs Subsection 34.2.3	– Opacity <u>&lt;</u> 7%.	- Record monthly opacity readings
			NSPS Subpart A Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants	EPA 40 CFR § 60.11 (d) EPA 40 CFR 60.672(a)(1) EPA 40 CFR 60.672(a)(2) EPA 40 CFR 60.672(b) EPA 40 CFR § 60.675	Good air pollution control practice.     0.05 g/dscm.     Opacity ≤ 7%(stack).     Opacity ≤ 10%(fugitive).     Method 9 for Opacity.     Method 5 or 17 for PM.	- Compliance with the opacity, PM, and PM-10 emission limits will be demonstrated through routine monthly insp., incl. insp. of baghouse exhaust.
				EPA 40 CFR 60.676	Reporting and recordkeeping.	Maintenance will be performed as required and recorded in a log.
B04	EP12	Secondary Crusher	APCD - ATC 9/27/96	Condition(s) II-A and III-D-6, 8, 14, 15, 19.	<ul> <li>PM<sub>10</sub> 0.076 lbs/hr., 0.330 tpy.</li> <li>Compact of the compact of the compac</li></ul>	Compliance with the opacity,     PM, and PM-10 emission limits

EU ID	G-P ID	Description	Applicable Subpart Title	Applicable Subsection Title	Requirements	Compliance Monitoring
			APCR Section 34-New Source Performance Std. For Nonmetallic Mineral Mining and Processing	APCRs Subsection 34.2.3	<ul> <li>Opacity ≤ 10% (fugitive).</li> <li>Method 9 for Opacity.</li> <li>Opacity ≤ 7%.</li> </ul>	will be demonstrated through routine monthly insp., incl. insp., of baghouse exhaust.  – Maintenance will be performed as required and recorded in a log.  – Record monthly opacity readings.
			NSPS Subpart A	EPA 40 CFR § 60.11 (d)	<ul> <li>Good air pollution control practice.</li> </ul>	
			Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants	EPA 40 CFR 60.672(a)(1) EPA 40 CFR 60.672(a)(2) EPA 40 CFR 60.672(b) EPA 40 CFR 60.675	<ul> <li>- 0.05 g/dscm.</li> <li>- Opacity ≤ 7%(stack).</li> <li>- Opacity ≤ 10%(fugitive).</li> <li>- Method 9 for Opacity.</li> <li>- Method 5 or 17 for PM.</li> </ul>	<ul> <li>Compliance with the opacity,</li> <li>PM, and PM-10 emission limits</li> <li>will be demonstrated through</li> <li>routine monthly insp., incl. insp.</li> <li>of baghouse exhaust.</li> </ul>
				EPA 40 CFR 60.676	- Reporting and recordkeeping.	Maintenance will be performed as required and recorded in a log.
C01- C04	EP13- EP16	Impact Mills #'s 1-4	APCD - ATC 9/27/96	Condition II-A and III-D-8, 14, 15, 19.	<ul> <li>PM<sub>10</sub> 1.0 lb/hr., 4.5 tpy.</li> <li>CO 3.5 lb/hr., 15.0 tpy.</li> <li>NO<sub>x</sub> 0.95 lb/hr., 4.2 tpy.</li> <li>SO<sub>2</sub> 0.019 lbs/hr., 0.084 tpy.</li> <li>VOC 0.068 lbs/hr., 0.30 tpy.</li> <li>Opacity ≤ 7%(stack).</li> <li>Opacity ≤ 10% (fugitive).</li> <li>Method 9 for Opacity.</li> </ul>	- Compliance with the opacity and PM emission will be demonstrated through routine monthly insp., incl. insp. of baghouse exhaust. Air lock inspections of cyclones will be conducted once per year.
			APCR Section 34-New Source Performance Std. For Nonmetallic Mineral Mining and Processing	APCRs Subsection 34.2.3	PM ≤ 14.25 lb/hr per mill.	
			NSPS	Subparts OOO and UUU are not applicable	adoption of the federal requirements (Aug. 31, 1983) thus are not subject to the NSPS.	
C05	EP17	Impact Mill #5	APCD - ATC 9/27/96	Condition(s) II-A, III-D-8, 14, 15, 19.	- PM <sub>10</sub> 1.0 lb/hr., 4.5 tpy. CO 3.5 lb/hr., 15.0 tpy. NO <sub>x</sub> 0.95 lb/hr., 4.2 tpy. SO <sub>2</sub> 0.019 lbs/hr., 0.084 tpy. VOC 0.068 lbs/hr., 0.30 tpy Opacity ≤ 7%(stack) Opacity ≤ 10% (fugitive) Method 9 for Opacity Opacity ≤ 7%(stack).	- Compliance with the opacity and PM emission will be demonstrated through routine monthly insp., incl. insp. of baghouse exhaust. Air lock inspections of cyclones will be conducted once per year.

EU ID	G-P ID	Description	Applicable Subpart Title	Applicable Subsection Title	Requirements	Compliance Monitoring
	1	1 '	APCR Section 34-New Source	APCRs Subsection 34.2.3	- Opacity < 7%(stack).	
			Performance Std. For Nonmetallic		, <u>-</u>	
			Subpart UUU - Standards of	EPA 40 CFR 60.732(a)	- PM = 0.092 g/dscm for calciners &	- EPA Method 5 for Particulate
			Performance for Calciners &		calciners and dryers .	Matter concentration. Test-
i			Dryers in Mineral Industries	EPA 40 CFR 60.732(b)	- Opacity ≤ 10%(fugitive).	performed every fifth year.
				EPA 40 CFR 60.735	- Reporting and recordkeeping.	- Method 9 for Opacity from stack
				EPA 40 CFR 60.736(b)(1)	- Method 5 or 17 for PM.	emissions. Test performed
				EPA 40 CFR 60.736(b)(2)	- Method 9 for opacity.	monthly.
D01	EP18	Stucco Area	APCD - ATC 9/27/96	Condition(s) II-A, III-D-6, 8,	- PM <sub>10</sub> 0.12 lbs/hr.,0.53 tpy.	- Compliance with the opacity,
	1	Conveyors		14, 15, 19.	- PM ≤ 0.05 g/dscm (stack).	PM, and PM-10 emission limits
					<ul><li>Opacity ≤ 7%(stack).</li></ul>	will be demonstrated through
	İ	<u> </u>			<ul> <li>Opacity ≤ 10%(fugitive).</li> </ul>	routine monthly insp., incl. insp.
					- Method 9 for Opacity.	of baghouse exhaust.
		<b>\</b>			<ul><li>– Opacity ≤ 7%.</li></ul>	- Maintenance will be performed
						as required and recorded in a log.
			NSPS Subpart A	EPA 40 CFR 60.11 (d)	- Good air pollution control practice.	
			Subpart OOO - Standards of	EPA 40 CFR 60.672(a)(1)	- 0.05g/dscm.	<ul> <li>Compliance with the opacity,</li> </ul>
	-	<b>!</b>	Performance for Nonmetallic	EPA 40 CFR 60.672(a)(2)	<ul><li>– Opacity ≤ 7%(stack).</li></ul>	PM, and PM-10 emission limits
		i	Mineral Processing Plants	EPA 40 CFR 60.672(b)	<ul><li>– Opacity ≤ 10%(fugitive).</li></ul>	will be demonstrated through
			•	EPA 40 CFR § 60.675	- Method 9 for Opacity.	routine monthly insp., incl. insp.
		1			- Method 5 or 17 for PM.	of baghouse exhaust.
		]		EPA 40 CFR 60.676	- Reporting and recordkeeping.	- Maintenance will be performed
	•	]				as required and recorded in a
		<u> </u>				log.
D02	EP19	Stucco	APCD - ATC 9/27/96	Condition II-A, III-D-8.	- PNI <sub>10</sub> 0.04 lbs/hr., 0.18 tpy.	- Compliance with the opacity
ł	4	Blender #1			<ul><li>Opacity ≤ 7%(stack).</li></ul>	emission limits will be
}	)				- Method 9 for Opacity.	demonstrated through routine
) '	<u>'</u> }				- Method 5 or 17 for PM.	monthly insp., incl. insp. of
1						baghouse exhaust.
				-		- Maintenance will be performed
<u> </u>	- FD24	North Chara	ADOD ATO 0/07/00	Condition II A and III C C	ON 0 0444 (b = 6 = 0.05 4= ::	as required and recorded in a log.
D03	EP21	North Storage	APCD - ATC 9/27/96	Condition II-A and III-D-8,	- PM <sub>10</sub> 0.0114 lbs/hr., 0.05 tpy.	-Compliance with the opacity
and D04	and EP22	Bin and South	i	14, 15, 19.	- PM <0.05 g/dscm (stack).	and PM emission limits will be
DU4	CP 22	Storage Bin	į		- Opacity ≤ 7%(stack).	demonstrated through routine
}			1	1	<ul> <li>Opacity ≤ 10%(fugitive).</li> <li>Method 9 for Opacity.</li> </ul>	monthly insp., incl. insp. of baghouse exhaust.
]			APCR Section 34-New Source	APCRs Subsection 34.2.3	- Opacity < 7%(stack).	- Maintenance will be performed
			Performance Std. For Nonmetallic	711 Orta Gudaectiçii 94.2.3	- Opening - 1 70(Stack).	as required and recorded in a log.
			Mineral Mining and Processing	l		as required and recorded in a log.
			NSPS Subpart A	EPA 40 CFR 60.11 (d)	- Good air pollution control practice.	
ı	I	ı	Tion o outputts	1 2.7. 70 0111 00.17 (0)	1 Cood an ponation control pidelice.	<u>L</u>

EU ID	G-P ID	Description	Applicable Subpart Title	Applicable Subsection Title	Requirements	Compliance Monitoring
		1	Subpart OOO - Standards of	EPA 40 CFR 60.672(a)(1)	- 0.05 g/dscm.	- Compliance with the opacity,
			Performance for Nonmetallic	EPA 40 CFR 60.672(a)(2)	<ul><li>Opacity ≤ 7%.</li></ul>	PM, and PM-10 emission limits
			Mineral Processing Plants	EPA 40 CFR § 60.672(b)	– Opacity ≤ 10%.	will be demonstrated through
			_	EPA 40 CFR § 60.675	- Method 9 for Opacity.	routine monthly insp., incl. insp.
		1			- Method 5 or 17 for PM .	of baghouse exhaust.
				EPA 40 CFR 60.676	- Reporting and recordkeeping.	<ul> <li>Maintenance will be performed</li> </ul>
	L	1				as required and recorded in a log.
D05	FEP20	Stucco Area Hopper	APCD - ATC 9/27/96	Condition II-A,. III-D-8	+PM <sub>10</sub> 0.00028 lbs/hr., 0.0012 tpy.	- Periodic inspections.
D06	FEP23	Stucco	APCD - ATC 9/27/96	Condition II-A and III-D-8	- PM <sub>10</sub> 0.029 lbs/hr., 0.13 tpy	- Compliance with the opacity
1		Blender #2			<ul><li>Opacity ≤ 7%(stack).</li></ul>	emission limits will be
		]				demonstrated through routine
		1			- Method 9 for Opacity.	monthly insp., incl. insp. Of
			1		- Method 5 or 17 for PM.	baghouse exhaust.
			1			- Maintenance will be performed
		<b>↓</b>				as required and recorded in a log.
D07	FEP24	Pin Mixer	APCD - ATC 9/27/96	Condition II-A and III-D-8	- PM <sub>10</sub> 0.029 lbs/hr., 0.13 tpy.	- Compliance with the opacity
	ļ			l		emission limits will be
			APCR Section 34-New Source	APCRs Subsection 34.2.3	<ul><li>– Opacity ≤7%(stack).</li></ul>	demonstrated through routine
			Performance Std. For Nonmetallic		l	monthly insp., incl. insp. Of
}			Mineral Mining and Processing		- Method 9 for Opacity.	baghouse exhaust.
1	1				- Method 5 or 17 for PM.	- Maintenance will be performed
500	FFDDS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4505 470 207/00	0	DM 0.45 00 th - /h - 0.05 05 4	as required and recorded in a log.
D08	FEP25	Vermiculite Bin	APCD - ATC 9/27/96	Condition II-A	PM <sub>10</sub> 6.4E-06 lbs/hr., 2.8E-05 tpy.	- Periodic inspections.
		İ	NSPS Subpart A	EPA 40 CFR 60.11 (d)	<ul> <li>Good air pollution control practice.</li> </ul>	
			Subpart OOC - Standards of	EPA 40 CFR 60.672(a)(1)	- 0.05 g/dscm.	- Compliance with the opacity
	,		Performance for Nonmetallic	EPA 40 CFR 60.672(a)(2)	<ul><li>– Opacity ≤ 7%(stack).</li></ul>	emission limit will be demonstrated
			Mineral Processing Plants	EPA 40 CFR 60.672(b)	<ul><li>– Opacity ≤ 10%(fugitive).</li></ul>	through routine monthly insp.
				EPA 40 CFR 60.675	- Method 9 for Opacity.	- Maintenance will be performed
				EPA 40 CFR 60.676	<ul> <li>Reporting and recordkeeping.</li> </ul>	as required and recorded in a log.
D09	FEP26	Landplaster	APCD - ATC 9/27/96	Condition II-A	- PM <sub>10</sub> 6.8E-06 lbs/hr., 3.0E-05 tpy.	- Periodic inspections.
and	and	Bin #1 and		ļ		
D10	FEP27	Landplaster			}	
		Bin #2				
	1		NSPS Subpart A	EPA 40 CFR 60.11 (d)	- Good air pollution control practice.	
			Subpart OOC - Standards of	EPA 40 CFR 60.672(a)(1)	- 0.05 g/dscm.	- Compliance with the opacity
			Performance for Nonmetallic	EPA 40 CFR 60.672(a)(2)	<ul><li>Opacity ≤ 7%(stack).</li></ul>	emission limit will be demonstrated
	į		Mineral Processing Plants	EPA 40 CFR 60.672(b)	<ul><li>– Opacity ≤ 10%(fugitive).</li></ul>	through routine monthly insp.
	]	<u> </u>		EPA 40 CFR 60.675	– Method 9 for Opacity.	- Maintenance will be performed

EU ID	G-P ID	Description.	Applicable Subpart Title	Applicable Subsection Title	Requirements	Compliance Monitoring
		1 '		EPA 40 CFR 60.676	- Reporting and recordkeeping.	as required and recorded in a log.
D11 &	FEP28	Ball Mill #1	APCD - ATC 9/27/96	Condition II-A	PM <sub>10</sub> 5.0E-05 lbs/hr., 2.2E-04 tpy.	- Periodic inspections.
D12	&FEP29	&Ball Mill #2				
		[	NSPS Subpart A	EPA 40 CFR 60.11 (d)	<ul> <li>Good air pollution control practice.</li> </ul>	·
		<u> </u>	Subpart OOO - Standards of	EPA 40 CFR 60.672(a)(1)	- 0.05 g/dscm.	- Compliance with the opacity
			Performance for Nonmetallic	EPA 40 CFR 60.672(a)(2)	<ul><li>– Opacity ≤ 7%(stack).</li></ul>	emission timit will be demonstrated
ļ			Mineral Processing Plants	EPA 40 CFR 60.672(b)	— Opacity ≤ 10%(fugitive).	through routine monthly insp.
				EPA 40 CFR 60.675	- Method 9 for Opacity.	- Maintenance will be performed
					- Method 5 or 17 for PM.	as required and recorded in a log.
				EPA 40 CFR 60.676	- Reporting and recordkeeping.	
D13	FEP30	Interior	APCD - ATC 9/27/96	Condition II-A and III-D-6	- PM <sub>10</sub> 0.00071 lbs/hr., 0.0031 tpy.	- Compliance with the opacity
		Baghouse				emission limit will be demonstrated
		Conveyors	APCR Section 34-New Source	APCRs Subsection 34.2.1	– Opacity ≤ 10%.	through routine monthly insp.
			Performance Std. For Nonmetallic		İ	- Maintenance will be performed
			Mineral Mining and Processing			as required and recorded in a log.
			Subpart OOC - Standards of	EPA 40 CFR 60.672(a)(1)	- 0.05 g/dscm.	- Compliance with the opacity
			Performance for Nonmetallic	EPA 40 CFR 60.672(a)(2)	<ul><li>– Opacity ≤ 7%(stack).</li></ul>	emission limit will be demonstrated
			Mineral Processing Plants	EPA 40 CFR 60.672(b)	<ul><li>– Opacity ≤ 10%(fugitive).</li></ul>	through routine monthly insp.
				EPA 40 CFR 60.675	- Method 9 for Opacity.	- Maintenance will be performed
					- Method 5 or 17 for PM.	as required and recorded in a log.
		Ļ		EPA 40 CFR 60.676	- Reporting and recordkeeping.	
D14	FEP31	Interior	APCD - ATC 9/27/96	Condition II-A	– PM₁₀ 0.00029 lbs/hr., 0.0013 tpy.	- Compliance with the opacity
		Baghouse				emission limit will be demonstrated
		Hopper	APCR Section 34-New Source	APCRs Subsection 34.2.1	- Opacity ≤ 10%.	through routine monthly insp.
ľ			Performance Std. For Nonmetallic			- Maintenance will be performed
			Mineral Mining and Processing			as required and recorded in a log.
D15	FEP32	Fiberglass	APCD - ATC 9/27/96	Condition II-A	- PM <sub>10</sub> 0.0067 lbs/hr., 0.022 tpy.	- Compliance with the opacity
} '		Feed Hopper				emission limit will be demonstrated
ľ			APCR Section 34-New Source	APCRs Subsection 34.2.1	- Opacity ≤ 10%.	through routine monthly insp.
		1	Performance Std. For Nonmetallic			- Maintenance will be performed
	55505	1	Mineral Mining and Processing	Candidian II A	Finishing (VOC) in studed with the Good	as required and recorded in a log.
D16	FEP35	Concrete	APCD - ATC 9/27/96	Condition II-A.	Emissions(VOC) included with the Board	
F24	55000	Basin	APCD - ATC 9/27/96	Condition II-A	Dryer PM <sub>10</sub> 0.0021 lb/hr., 0.009 tpy.	- Compliance with the emissions
E01	FEP33	Paper	APCD - ATC 9/2//90	Condition II-A .	— РМ <sub>по</sub> 0.0021 lb/nr., 0.009 tpy.   — CO 0.036 lb/hr., 0.16 tpy.	limits will be demonstrated through
		Heaters			- CO 0.036 tb/fir., 0.16 tpy. - NO <sub>x</sub> 0.17 (b/hr., 0.75 tpy.	monthly production values.
					$-SO_2$ 0.001 lbs/hr., 0.0045 tpy.	Maintenance will be performed
					- VOC 0.0091 lbs/hr., 0.045 tpy.	as required and recorded in a log.
EO2	FEP34	Forming Line	APCD - ATC 9/27/96	Condition II-A.	Emissions included with Board dryer.	as required and recorded in a log.
EO3	EP36	Board Dryer	APCD - ATC 9/27/96	Condition II-A.	- PM <sub>10</sub> 9.9 lb/hr., 44.0 tpy.	- Compliance with the emissions
EUS	EP30	1 Dogra Dryet	TAPOD - ATO 3121130	Condition 11-74.	_ = ги: <sub>10</sub> - э.э юли., 44.0 гру.	1 - Compilance with the entissions

EU ID	G-P ID	Description	Applicable Subpart Title	Applicable Subsection Title	Requirements	Compliance Monitoring
					- CO 35.0 lb/hr., 154.0 tpy NO, 11.0 lb/hr., 49.0 ton/yr SO <sub>2</sub> 0.43 lbs/hr., 1.9 tpy VOC 17 lbs/hr., 75 tpy Acetaldehyde 0.56 lbs/hr., 2.5 tpy Formaldehyde 5.6 lbs/hr., 25.0 tpy Ethylene Glycol 0.0031 lbs/hr 0.013 tpy.	limits will be demonstrated through monthly production values.  - Maintenance will be performed as required and recorded in a log.
F01	EP37	End Trim/Bundler	APCD - ATC 9/27/96  APCR Section 34-New Source Performance Std. For Nonmetallic Mineral Mining and Processing	Conditions II-A and III-D-8.  APCRs Subsection 34.2.3	<ul> <li>-PM<sub>10</sub> 0.089 lb/hr., 1.1 tpy.</li> <li>- Opacity ≤ 7%(stack).</li> <li>- Opacity ≤ 7%(stack).</li> </ul>	Compliance with the opacity and PM-10 emission limits will be demonstrated through routine monthly insp., incl. insp. of baghouse exhaust.      Maintenance will be performed as required and recorded in a log.
F02	EP38	Re-Cut Machine	APCD - ATC 9/27/96  APCR Section 34-New Source Performance Std. For Nonmetallic Mineral Mining and Processing	Conditions II-A and III-D-8.  APCRs Subsection 34.2.3	<ul> <li>PM₁₀ 0.0026  bs/yr., 0.0027 tpy.</li> <li>Opacity ≤ 7% (stack).</li> <li>Opacity ≤ 7%(stack).</li> </ul>	- Compliance with the opacity, and PM-10 emission limits will be demonstrated through routine monthly insp., incl. insp. of baghouse exhaust.  - Maintenance will be performed as required and recorded in a log.
F03	EP39	Riser Machine	APCD - ATC 9/27/96  APCR Section 34-New Source Performance Std. For Nonmetallic Mineral Mining and Processing	Conditions II-A and III-D-8.  APCRs Subsection 34.2.3	- PM <sub>10</sub> 0.22 lbs./hr., 0.32 tpy. - Opacity ≤ 7% (stack). Opacity ≤ 7%(stack).	- Compliance with the opacity and PM-10 emission limits will be demonstrated through routine monthly insp., incl. insp. of baghouse exhaust.  - Maintenance will be performed as required and recorded in a log.
F04	FEP40	Riser Machine Cyclone Hopper	APCD - ATC 9/27/96  APCR Section NSPS for Nonmetallic Mineral Mining and Processing	Condition II-A  APCRs Subsection 34.2.1	<ul> <li>PM<sub>10</sub> 0.0013 lbs./hr., 0.013 tpy.</li> <li>Opacity ≤ 10%.</li> </ul>	- Compliance with the opacity and PM-10 emission limits will be demonstrated through routine monthly insp.  - Maintenance will be performed as required and recorded in a log.
G01	FEP41	Parts Washer	APCD - ATC 9/27/96	Condition III-A	VOC 0.075 lbs/hr., 0.33 tpy.	
Genera	·	N/A	APCD - ATC 9/27/96	Condition III-A; III-B.; III-C; III-D-4, 17, 18; III-G to N.	- PM₁₀ ≤ 17 lbs/hr., 76 tpy. CO ≤ 53 lbs/hr., 231 tpy. VOC ≤ 17 lbs/hr., 77 tpy.	Record daily gypsum     processed and NCA #1 turbine     exhaust gas usage.

EU ID	G-P ID	Description	Applicable Subpart Title	Applicable Subsection Title	Requirements	Compliance Monitoring
					- NO <sub>x</sub> ≤ 16 lbs/hr., 71 tpy SO <sub>2</sub> ≤ 0.53 lbs/hr., 203 tpy Formaldehyde ≤ 5.6 lbs/hr., 25 tpy Acetaldehyde ≤ 0.56 lbs/hr, 2.5 tpy Ethylene Glycol ≤ 0.56 lbs/hr, 0.013 tpy Gypsum processed ≤ 1,037 tpd., 378,432 tpy NCA #1 turbine exhaust gas ≤ 400,000 lbs/hr. 1,752,000 tpy Bi-weekly moisture sampling Fuel sulfur ≤ 0.05% PM <sub>10</sub> monitoring Test NCA #1 turbine exhaust gas Recordkeeping and Reporting.	- Maintain and report PM <sub>10</sub> monitoring program.  - Document fuel sulfur content.  - Test NCA #1 turbine exhaust gas every three years.  - Record monthly natural gas, diesel fuel and VOC containing raw material use.
		<del></del>	APCR Section 20	Section 20.1	- HAP's	NA NA
		<b>†</b>	APCR Section 25	Section 25.1 and 25.2	- Upsets and Malfunctions	- Report as required.
			APCR Section 26	Section 26.1 and 26.2	- Opacity ≤ 20 %	Record and report per specific emission unit plan.
			APCR Section 27	Section 27.1 to4	– PMi ≤ 40 lb/hr.	NA
		I	APCR Section 29	Section 29.1 and 29.3	- Fuel sulfur ≤ 0.05%	<ul> <li>Document fuel sulfur content.</li> </ul>
			APCR Section 40	Section 40.1	- Prohibition of nuisance conditions.	
			APCR Section 42	Section 42.1	- Prohibition of open burning.	
			APCR Section 43	Section 43.1	- Prohibition of nuisance odors.	
			APCR Section 45	Section 45.1	- Prohibition on excessive vehicle idling.	- Periodic inspection.
			APCR Section 60	Section 60.1	<ul> <li>Containment of evaporative sources.</li> </ul>	<ul> <li>Periodic inspection.</li> </ul>
			APCR Section 70	Section70.4 and 70.5	- Emergency reduction plan.	NA
			APCR Section 80	Section 80.1	- Prohibition on circumvention.	NA

			General Conditions		
PM-10 Monitoring	APCD - ATC 9/27/96	Condition III-G-1	<ul> <li>Ambient monitoring of PM-10 will be conducted using a minimum of 75% of the monitoring data per calendar quarter. Monitoring data will be submitted to the APCD within the first ten days of April and again within the first ten days of October.</li> </ul>		
Turbine Exhaust Gas	APCD - ATC 9/27/96	Conditions III-H-2, 4, 5, and 7.	<ul> <li>Tests will be performed on the turbine exhaust gas once every 36 months to determine the NO, CO, and O<sub>2</sub> content and flow rate. Reports of the test results and verification of limits will be submitted to APCD within 30 days of date the performance test is completed.</li> </ul>		
Natural Gas APCD - ATC Condition III-K-3-c - Plant-wide natural gas consumption will be recorded monthly and subm		Plant-wide natural gas consumption will be recorded monthly and submitted to the APCD in a report submitted during January of each year.			
Gypsum Processed	APCD - ATC 9/27/96	Condition III-C-2	<ul> <li>– Gypsum processed ≤ 1037 tons/ day and ≤ 378,432 tons/yr.</li> <li>– Daily records of gypsum processed in tons/day will be maintained. Daily and annual amount of gypsum</li> </ul>		

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		processed will be submitted to the APCD in a report during January of each year.
Test Methods	EPA Method 5 or	#ethod 17 for — Test performed every fifth year on stacks
	particulate matter	oncentrations.
	EPA Method 9 fo	opacity - Test performed to determine opacity.

Table II-3: Air Pollution Control Regulations - Clark County Air Pollution Control Regulations and State Implementation Plan

Applicable Section - Title	Applicable Subsection - Title	Affected	Compliance Method
		Emission Unit	
Definitions	Where applicable	Entire facility	Recordkeeping
4. Control Officer	All subsections	Entire facility	Recordkeeping
5. Interference with Control Officer	All subsections	Entire facility	Recordkeeping
Persons Liable for Penalties -     Punishment: Defense	All subsections	Entire facility	Recordkeeping
9. Civil Penalties	All subsections	Entire facility	Recordkeeping
10. Compliance Schedule	All subsections	Entire facility	Recordkeeping
11. Ambient Air Quality Standards	All subsections	Entire facility	Recordkeeping
12. Preconstruction Review for New or Modified Stationary Sources	§§ 12.1 General application Requirements for New and Modified Sources of Air Pollutants.  §§ 12.2.5 Requirements for PM <sub>10</sub> Sources in the PSD Area.  §§ 12.2.10 Requirements for CO Sources in the PSD Area.  §§ 12.2.13 Requirements for VOCs Sources in the PSD Area.  §§ 12.2.15 Requirements for Stationary NO <sub>x</sub> Sources in the PSD Area.  §§ 12.2.16 Requirements for SO <sub>2</sub> Sources in the PSD Area.  §§ 12.2.17 Pb Sources in the PSD Area.  §§ 12.3 Owner/Operator Notification, Application Processing Deadlines, Notice of Proposed Action Procedures, and Public Hearings.  §§ 12.4 Emission Reduction Credit Requirements.  §§ 12.5 Air Quality Models.  §§ 12.6 Post Construction Ambient Air Monitoring.  §§ 12.7 Continuous Emission Monitoring Systems.  §§ 12.8 Issuance of Authority to Construct Certificate with conditions.	Entire facility	Recordkeeping
14. New Source Performance Standards	§§ 14.1.1 Subpart A - General Provisions §§ 14.1.38 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants §§ 14.1.41 Subpart UUU - Standards of Performance for Calciners and Dryers in Mineral Industries	Entire Facilities Applicable Units	Performance tests, opacity tests and recordkeeping as required by the applicable standards.
18. Permit and Technical Service Fees	§§ 18.1 Operating Permit Fees. §§ 18.2 Annual Emission Unit Fees.	Entire Facility	Recordkeeping

Applicable Section - Title	Applicable Subsection - Title	Affected Emission Unit	Compliance Method
	§§ 18.3 Dust Control Permit Fee. §§ 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		
19. Part 70 Operating Permit	§§ 19.2 Applicability §§ 19.3 Part 70 Permit Applications §§ 19.4 Part 70 Permit Content §§ 19.5 Permit Issuance, Renewal, Reopening, and Revisions §§ 19.6 Permit Renewal by the EPA and Affected States	Entire Facility	Recordkeeping
24. Sampling and Testing - Records and Reports	§§ 24.1 Requirements for installation and maintenance of sampling and testing facilities. §§ 24.2 Requirements for emissions recordkeeping. §§ 24.3 Requirements for the record format. §§ 24.4 Requirements for the retention of records by the emission sources.	Entire facility	Recordkeeping
25. Upset/Breakdown, Malfunction	§§ 25.1 Requirements for the excess emissions caused by upset/breakdown and malfunctions. §§ 25.2 Reporting and Consultation.	Entire facility	Recordkeeping
26. Emission of Visible Air Contaminants	§§ 26 1 Limit on opacity	Entire facility	Recordkeeping
27. PM From Process Weight Rate	All Subsections	Entire facility	Recordkeeping
28. Fuel Burning Equipment	All Subsections	Entire facility	Recordkeeping
29. Sulfur Contents of Fuel Oil	All Subsections	Entire Facility	Recordkeeping
40. Prohibitions of Nuisance Conditions	§§ 40.1 Prohibitions	Entire Facility	Recordkeeping
41. Fugitive Dust	§§ 41.1 Prohibitions	Entire Facility	Recordkeeping
42. Open Burning	§§ 42.1 Burning of Combustibles §§ 42.4 Open burning	Entire Facility	Recordkeeping
43. Odors In the Ambient Air	§§ 43.1 Prohibitions	Entire Facility	Recordkeeping
45. Idling of Diesel Powered Motor Vehicles	§§ 45.1 Diesel Powered Motor Vehicle idling	Front-end Loaders, etc.	Recordkeeping
70. Emergency Procedures	All subsections	Entire Facility	Recordkeeping
80. Circumvention	All subsections	Entire Facility	Recordkeeping
81. Provisions of Regulations Severable	All subsections	Entire Facility	Recordkeeping

# **Periodic Monitoring For Compliance**

#### A. Basis of the Requirements

Section 504 (a) of the Clean Air Act states:

"Sec. 504. Permit Requirements and Conditions.

(a) CONDITIONS – Each permit issued under this title shall include enforceable emission limitations and standards, a schedule of compliance, a requirement that the permittee submit to the permitting authority, no less often than every 6 months, the results of any required monitoring, and such other conditions as are necessary to assure compliance with applicable requirements of this Act, including the requirements of the applicable implementation plan."

# B. Compliance with PM<sub>10</sub> Emission Limits

There are 34 emission units emitting  $PM_{10}$  at the facility. For those emission units which potentials to emit are small before application of a control technology, the monitoring method can be streamlined as their emissions can be calculated based on information of process throughput and emission factors. Recordkeeping of process throughput need not be individually maintained for the non-major emission units, because recordkeeping of process throughput for the major emission units is required. The process throughput for a non-major emission unit is either the same as that for the adjacent major emission unit through which the same materials flow, or available by estimation. Some approximation in the periodic monitoring for the non-major emission units may be necessary, however, it avoids the highly burdensome task of monitoring as many as 34 emission units individually. Emission estimate can always be made by multiplying the process throughput with the emission factor for these emission units. Equipment maintenance to insure proper function and visual inspection are a part of the periodic monitoring for the non-major  $PM_{10}$  emission units.

Those emission units that have a potential to emit, before control, of 10 tpy or greater are considered "major emission units" for the purpose of developing an effective and consistent method of periodic monitoring for compliance. G-P Gypsum proposed recordkeeping for inspection and maintenance activities and/or monthly production for compliance monitoring. G P Gypsum did not show specifically how actual emissions would be calculated for determining compliance for those major emission units.

To calculate daily PM<sub>10</sub> emissions, the permittee is to use the emission factor which is dependent on a few parameters, and the daily process throughput. Thus, the quarterly report should include the record of those operating parameters that must be used to evaluate the daily PM<sub>10</sub> emissions. These parameters are defined as follows. "Throughput" means the amount of materials moved through the unit process

equipment and is proportional to the emission factor for the operation. "Capture Efficiency" means the fraction of the total PM<sub>10</sub> emissions from the process unit that can be captured by the control device. "Control Efficiency" means the extent of emission reduction from multiplying the capture efficiency with the PM<sub>10</sub> retaining efficiency of the control device. In the case of a baghouse, control efficiency means the product of capture efficiency multiplied by the PM<sub>10</sub> filtration efficiency.

The District proposes the scope of recordkeeping to include information that G-P Gypsum would need to determine the emission factor for the emission unit. There are six major emission units which compliance status should be monitored by recordkeeping of the above defined parameters and emission calculations. They are: EP10, EP12, EP36, EP37, EP39, AND FEP1. Among these emission units, EP36, the board dryer, is of greatest significance.

As an emission unit, the board dryer has a potential to emit  $PM_{10}$  at 9.9 lb./hour and 44 tpy. The total potential to emit for  $PM_{10}$  for the entire stationary source is 76 tpy. As far as the plant-wide potential to emit for  $PM_{10}$ , the board dryer accounts for 58% of the total. Based on an on-site visual comparison among the  $PM_{10}$  emission units within the premises, the board dryer did not appear to have a capacity to emit 44 tpy.

Upon examining the calculation that G-P Gypsum presented in determining the potential to emit for the dryer, it appears that G-P Gypsum had used the maximum production capacity of 43 tons per hour in addition to summing the maximum stack emissions among the five exhaust stacks from five different productions.

PM<sub>10</sub> emissions rate for the drying operation depends on the operating condition and the type of boards much more than the process weight. The process weight of the gypsum boards being dried is basically proportional to the board thickness. The PM<sub>10</sub> emission rate is not linearly proportional to the board thickness, based on the emission data of the stack tests conducted in 1995. Thus, the assumption that PM<sub>10</sub> emission is proportional to process weight lacks empirical validation and the emission factor assumed to be proportional to the process weight is not valid. Besides, there is no production record that shows that the facility has ever reached 43 tons per hour of drying rate for "dense deck". Normal process rate seems to be below 30 tons per hour at this facility.

G-P Gypsum should use PM<sub>10</sub> emission at the maximum production capacity for "dense deck" per unit time as the emission factor. The emission factor, under the circumstance, is also the true potential to emit. For renewal of the Part 70 permit, the District will request G-P Gypsum to use the true potential to emit in future applications for renewal of the Part 70 permit. The potential to emit, in the current ATC, is quoted as 44 tpy.

There is a need to determine the true emission factor for  $PM_{10}$  for the board dryer by measuring  $PM_{10}$  emissions at the maximum emission capacity. The District proposes one permit condition that requires G-P Gypsum to conduct a performance test on the stacks of the board dryer to establish the true potential to emit for  $PM_{10}$ , based on the authorities quoted below.

APCR 4.5 The Control Officer may require any person responsible for emission of air contaminants to make or have made tests to determine the emission of air contaminants from any source, whenever the Control Officer has reason to believe that an emission in excess of that allowed by the Air Pollution Control Regulations is occurring. The Control Officer may specify testing methods to be used in accordance with good professional practice. The Control Officer may observe the testing. All tests shall be conducted by reputable, qualified personnel. The Control Officer shall be given a copy of the test results in writing and signed by the person responsible for the tests.

#### The Clean Air Act:

Sec. 504. Permit Requirements and Conditions.

(c)INSPECTION, ENTRY MONITORING, CERTIFICATION, AND REPORTING.—Each permit issued under this title shall set forth inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions. Such monitoring and reporting requirements shall conform to any applicable regulation under subsection (b). Any report required to be submitted by a permit issued to a corporation under this title shall be signed by a responsible corporate official, who shall certify its accuracy.

Once the true potential to emit for the board dryer is established, G-P Gypsum should use it for future renewal of the Part 70 permit.

# C. Compliance with the VOC Emission Limits

VOC emissions come from consumption of the VOC containing materials in the manufacturing process, combustion of natural gas, and turbine exhaust gas received by the plant. Again, recordkeeping is prescribed as the means to monitor compliance with the emission limits. The method for calculating VOC emissions is based on material balance, as illustrated in the following.

In the year of 1994, the plant operated 7971 hours and the amount of VOC containing materials processed are listed below.

Material	Consumption	VOC Content	VOC Emissions
		I	

		(Percent)	(tpy)
Silicone	45 tons	2	0.90
Foaming Agent	65 tons	15	9.75
Ink Conditioner	117 gallons	96	0.39
Inks	104 gallons	90	0.33
Total			11.37

For the year, VOC emissions from turbine exhaust gas are calculated below:

$$\frac{157,616 \ lb/hr \ x \ 0.0000026 \ lb/lb}{2000 \ lbs/ton} = 1.576 \ tpy$$

VOC emissions from combustion of natural gas are calculated below:

$$\frac{8421 \ Mcf \ / \ hr \ x \ 0.0053 \ lb \ / \ Mcf \ x \ 279 \ hr \ / \ yr}{2000 \ lbs \ / \ yr} = 6.226 \ tpy$$

For the year, the actual emission of VOC was;

$$11.37 \ tons + 1.576 \ tons + 6.226 \ tons = 19.17 \ tpy$$

The plant operated at 70% production capacity in 1994, and based on the reported 7,971 hours of total operating time in 1994, 70% appears to be a conservative estimate. The annual potential to emit VOCs for the facility appears to be closer to 27 tpy, instead of 75 tpy, based upon the above estimate.

For monitoring compliance with the emission limits for VOCs, G-P Gypsum should maintain a record of the amounts of those VOC containing materials that are processed during the month, and calculate quarterly and hourly emissions of VOC. Recordkeeping is the designated method of compliance monitoring for VOC.

# D. Compliance with the CO and NO<sub>x</sub> Emission Limits

CO and NO<sub>x</sub> emissions come from combustion of natural gas and turbine exhaust gas received by the plant. There are no other sources. Again, recordkeeping of the amount of natural gas consumed and the amount of turbine exhaust gas received for the month can be used to calculate actual emissions, and is prescribed as the monitoring method for compliance. Averaging over the quarter can be used to calculate emissions.

# E. Compliance with the Emission Limits of Hazardous Air Pollutants

The emission limit is 25 tpy for formaldehyde, and is 2.5 tpy for acetaldehyde. These limits were based on the emission factor which applicability to G-P Gypsum plant is uncertain. The emission factor was derived from a performance test on another gypsum board manufacturing plant owned operated by Georgia Pacific Corporation.

Acetaldehyde is of lesser significance because the potential to emit is less than the major-source threshold.

Since the facility is a major stationary source for formaldehyde, monitoring for compliance with the emission limits is required. Recordkeeping of consumption of formaldehyde containing materials is the most practical means for compliance monitoring, provided the emission factor is good and reliable. A performance test to establish a reliable emission factor for all future uses is warranted if the facility proves to be a "major" source by the tentative emission factor. Until the time that proof is available from compliance monitoring, performance testing of formaldehyde emissions is exempted. The source is required to ascertain emission status for formaldehyde within one year after the record indicates that actual emissions exceeds ten tons per year.

# VI. COMPLIANCE REVIEW

# A. Applicable Requirements

The Clark County Health District (District) has determined that the following public law, statutes and associated regulations, ordered by hierarchical authority, are applicable requirements:

- 1. Clean Air Act, as amended (CAAA), Authority:42 U.S.C. § 7401, et seq.;
- 2. Title 40, Chapter I of the Code of Federal Regulations (CFR);
- 3. Nevada Revised Statutes (NRS), Chapter 445, Sections 401 through 601;
- 4. All applicable Sections of the Clark County District Board of Health Air Pollution Control Regulations (APCR) that are included in the Implementation Plan (IP), also referred to as "State Implementation Plan" (SIP), for Clark County, Nevada, and;
- 5. any locally applicable Sections of the Clark County District Board of Health Air Pollution Control Regulations (APCR) that are <u>not</u> included in the Implementation Plan (IP) for Clark County, Nevada.

The applicable requirements will be discussed in the following order: (i) Local Applicable Requirements (i.e., requirements from the APC Regulations not in the IP), (ii) Implementation Plan Applicable Requirements (i.e., requirements from the APC Regulations that are included in the IP), and (iii) Federal Applicable Requirements (i.e., requirements from the 40 CFR Regulations). Please note that no discussion will be accorded to the Nevada Revised Statutes (NRS) or the Clean Air Act amendments

(CAAA) because these public laws establish the general authority for the Regulations mentioned.

#### **B.** SIP Requirements

# APCR SECTION 4 - CONTROL OFFICER [ Rev., 12/19/96]:

- 4.3 The Control Officer, or his representative, may enter into and inspect any property, premises or place on or at which an air contaminant source is located or is being constructed, installed or established at any reasonable time for the purpose of ascertaining the state of compliance with these Regulations.
- 4.3.1 No person shall:
- 4.3.2 Refuse entry or access to any authorized representative of the Board of Health who requests entry for purposes of inspection, as provided in this a section, and who presents appropriate credentials.
- 4.3.3 Obstruct, hamper or interfere with any such inspection.
- 4.3.4 If requested, the owner or operator of the premises shall receive a report setting forth all facts found which relate to compliance status.
- 4.4 The Control Officer at any time may require from any person such information or analyses as will disclose the nature, extent, quantity or degree of air contaminants which are or may be discharged by such source, and type or nature of control equipment in use, and may require that such disclosures be certified by a professional engineer registered in the State. In addition to such report, the Control Officer may designate an authorized agent to make an independent study and report as to the nature, extent, quantity or degree of any air contaminants which are or may be discharged from source. An authorized agent so designated is authorized to inspect any article, machine, equipment, or other contrivance necessary to make the inspection and report.
- 4.5 The Control Officer may require any person responsible for emission of air contaminants to make or have made tests to determine the emission of air contaminants from any source, whenever the Control Officer has reason to believe that an emission in excess of that allowed by the Air Pollution Control Regulations is occurring. The Control Officer may specify testing methods to be used in accordance with good professional practice. The Control Officer may observe the testing. All tests shall be conducted by

reputable, qualified personnel. The Control Officer shall be given a copy of the test results in writing and signed by the person responsible for the tests.

4.6 The Control Officer may conduct tests of emissions of air contaminants from any source. Upon request of the Control Officer, the person responsible for the source to be tested shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.

# APCR SECTION 5 - INTERFERENCE WITH CONTROL OFFICER [08/27/81]:

- 5.1 It is unlawful for any person:
- 5.1.1 To hinder, obstruct, delay, resist, interfere with, or attempt to interfere with, the Control Officer, or any individual to whom authority has been duly delegated for the performance of any duty by these Regulations.
- 5.1.2 To refuse to permit the Control Officer or any individual to whom such authority has been delegated, to administer or perform any function provided for herein, by refusing him at any reasonable time entrance to property or premises, except a private residence, containing equipment or open fire, discharging, or suspected and believed to be discharging, smoke, dust, gas, vapor, or odor into the open air.
- 5.1.3 To fail to disclose information when requested under oath or otherwise, to the Control Officer or any individual to whom such authority has been delegated.

# APCR SECTION 8 - PERSONS LIABLE FOR PENALTIES - PUNISHMENT: DEFENSE [Rev., 12/28/78]:

- 8.1 All persons owning, operating, or in control of any equipment or property who shall cause, permit, or participate in, any violation of these Regulations shall be individually and collectively liable to any penalty or punishment imposed by and under these Regulations.
- 8.2 It shall be a defense to any prosecution instituted against any employee or a person owning, operating, or conducting any business, industry, or operation that the acts complained of were done and performed pursuant to the orders and directions of such owner or operator, or his agent or representative, conducting such business, industry or operation.

# APCR SECTION 9 - CIVIL PENALTIES [Rev., 04/24/97]:

- 9.1 Any person who violates any provision of these Regulations, including, but not limited to, any application requirement; any permit condition; any fee or filing requirement; any duty to allow or carry out inspection, entry or monitoring activities or any requirements by the Health District is guilty of a civil offense and shall pay civil penalty levied by the Hearing Board of not more than \$10,000. Each day of violation constitutes a separate offense.
- 9.2 Any person aggrieved by an order issued pursuant to this section is entitled to review as provided in Chapter 233B of NRS.

# APCR SECTION 10 - COMPLIANCE SCHEDULES [Rev., 11/18/93]:

10.1 Any existing source not in compliance with emission limitations hereinafter adopted, or which is not operating under a compliance schedule approved by the Hearing Board, shall submit a compliance schedule to the Control Officer for review no later than 90 days after adoption of such emission limitations.

# APCR SECTION 12 - PRECONSTRUCTION REVIEW FOR NEW OR MODIFIED STATIONARY SOURCES [Rev., 01/22/98]:

This section has been used to review ATC applications. The ATC review was based on regulations in force at the time of application. Issuance of ATC's is deemed in compliance with this section.

# 12.2.5 PM<sub>10</sub> Sources in the PSD Area:

- 12.2.5.1 Subsection 12.2.5 shall apply to the following:
  - (a) Any new or MODIFIED STATIONARY SOURCE with PM<sub>10</sub> EMISSIONS in Clark County but outside the Las Vegas Valley, Boulder City, or Eldorado Valley.
- 12.2.5.2 Each new or Modified Emissions Unit shall incorporate emission controls which are designed for the BEST AVAILABLE CONTROL TECHNOLOGY (BACT).
- 12.2.5.3 Notice of Proposed Action (described in Subsection 12.3) is required for any new Stationary Source with a PM<sub>10</sub> Potential to Emit equal to or exceeding fifteen (15) tons per year or any Stationary Source proposing Modification that results in a PM<sub>10</sub> Net Emissions Increase from all Emission Units that is equal to or exceeding fifteen (15) tons per year.

**Discussion:** The ATC application showed that the net increase in PM<sub>10</sub> emissions was greater than the 20 tpy noted in the regulations in effect at the time (APCR Rev., 03/28/96) and above the 15 tpy noted in the present regulations. A *Notice of Proposed Action* was issued on July 14, 1996. A BACT analysis had been performed and suitable controls meeting the requirements of BACT have been selected. A full listing of the control technologies reviewed and cost breakdowns compiled is listed in the G-P Gypsum NSR Application for an ATC, Modification #2 (February 13, 1996).

# 12.2.5.4 Preapplication Requirements:

- (a) Any new Stationary Source with a PM<sub>10</sub> Potential to Emit equal to or exceeding one hundred (100) tons per year or any Stationary Source with a PM<sub>10</sub> Potential to Emit equal to or exceeding one hundred (100) tons per year proposing Modification that results in a PM<sub>10</sub> Net Emissions Increase equal to or exceeding fifteen (15) tons per year shall perform air quality modeling pursuant to Subsection 12.5 prior to submitting an application for Authority to Construct.
- (b) Preconstruction ambient air monitoring requirement
  - (1) Any new or modifying STATIONARY SOURCE that models (performed pursuant to Subsection 12.5) an air quality impact equal to or exceeding the significance concentration (listed in Subsection 12.5, Table 12-1) shall provide preconstruction monitoring for PM<sub>10</sub> pursuant to Subsection 12.6.
  - (2) If ambient air monitoring data which is representative of the STATIONARY SOURCE location is available, such data may be used in lieu of preconstruction onsite monitoring.
    - (i) If such data is not representative or unavailable, then the owner or operator of the STATIONARY SOURCE shall install and operate an Automated Particle Sampler, Equivalent Method pursuant to 40 CFR part 53, monitoring system at a site approved by the CONTROL OFFICER.

# 12.2.5.5 Post Construction Ambient Air Monitoring Requirements:

(a) Any new or modifying STATIONARY SOURCE that models (performed pursuant to Subsection 12.5) an air quality impact equal to or exceeding the significance concentration (listed in Subsection 12.5,

Table 12-1) shall perform post construction monitoring for PM<sub>10</sub> pursuant to Subsection 12.6.

- (b) The owner or operator of the STATIONARY SOURCE shall install and operate a continuous Automated Particle Sampler (i.e. Beta Attenuation, TEOM, or EPA approved equivalent), pursuant to 40 CFR part 53. Such Automated Particle Sampler shall be located at a site approved by the CONTROL OFFICER.
- (c) EXCEPTION: A STATIONARY SOURCE requesting Modification at such location that presently performs post construction ambient air monitoring for PM<sub>10</sub> shall not be subject to the requirements of 12.2.5.5.

**DISCUSSION:** The required preconstruction monitoring had been performed in accordance with the above requirements and is also available for review in the NSR Application for ATC, Modification #2 (February 13, 1996). G-P Gypsum performs ambient air monitoring of PM<sub>10</sub> according to the above requirements and shall continue to do. A requirement regarding continued monitoring will be included as a permit condition.

#### 12.2.10 CO Sources in the PSD Area

12.2.10.1 Subsection 12.2.10 shall apply to the following:

- (a) Any new or Modifying STATIONARY SOURCE with Carbon Monoxide (CO) Emissions in Clark County but outside the Las Vegas Valley, Boulder City or Eldorado Valley.
- 12.2.10.2 Each new or Modified Emissions Unit shall incorporate emission controls which are designed for the BEST AVAILABLE CONTROL TECHNOLOGY (BACT).

**DISCUSSION:** A BACT analysis was performed and controls meeting the requirements of BACT have been chosen. A full listing of the control technologies reviewed and cost breakdowns compiled is listed in the NSR Application for ATC, Modification #2 (February 13, 1996).

### 12.2.10.4 Preapplication Requirements:

(a) Any new Stationary Source with a CO Potential to Emit equal to or exceeding one hundred (100) tons per year or any Stationary Source with a CO Potential to Emit equal to or exceeding one hundred (100) tons per year proposing

MODIFICATION that results in a CO NET EMISSIONS INCREASE equal to or exceeding one hundred (100) tons per year shall perform air quality modeling pursuant to Subsection 12.5 prior to submitting an application for AUTHORITY TO CONSTRUCT.

- (b) Preconstruction ambient air monitoring requirement
  - (1) Any new or modifying STATIONARY SOURCE that models (performed pursuant to Subsection 12.5) an air quality impact equal to or exceeding the significance concentration (listed in Subsection 12.5, Table 12-1) shall perform preconstruction monitoring for CO pursuant to Subsection 12.6.

**DISCUSSION:** The required modeling was completed and has demonstrated that the Potential to Emit will not cause or result in ambient air concentrations exceeding the significance concentration. Results of the modeling is found in the NSR Application for ATC, Modification #2 (February 13, 1996).

#### 12.2.13 VOC Sources in PSD Area:

- 12.2.13.1 Subsection 12.2.13 shall apply to the following:
  - (a) Any new or Modified STATIONARY SOURCE with Volatile Organic Compounds (VOC) Emissions in Clark County but outside the Las Vegas Valley, Boulder City, Eldorado Valley, or Ivanpah Valley.
- 12.2.13.2 Each new or Modified Emissions Unit shall incorporate emission controls which are designed for the BEST AVAILABLE CONTROL TECHNOLOGY (BACT).

**DISCUSSION:** A BACT analysis was performed. A full listing of the control technologies reviewed and the cost breakdowns compiled are listed in the NSR Application for ATC, Modification #2 (February 13, 1996). Formaldehyde and acetaldehyde are VOCs. The total potential to emit of VOCs is 104.5 tpy. This exceeds the federal threshold for a major source of VOC.

12.2.13.3 Notice of Proposed Action (described in Subsection 12.3) is required for any new Stationary Source with a VOC POTENTIAL TO EMIT equal to or exceeding forty (40) tons per year or any Stationary Source proposing Modification that results in a VOC NET

EMISSIONS INCREASE from all EMISSIONS UNITS that is equal to or exceeding forty (40) tons per year.

**DISCUSSION:** The net increase in VOC emissions was greater than nine (9) tons per year (APCR Rev., 03/28/96), therefore, Public Notification was required and presented on July 14, 1996.

# 12.2.15 NO, Sources in PSD Area

- 12.2.15.1 Subsection 12.2.15 shall apply to the following:
  - (a) Any new or Modified STATIONARY SOURCE located in Clark County but outside the Las Vegas Valley, Boulder City, Eldorado Valley, or Ivanpah Valley with Nitrogen Oxide (NO<sub>x</sub>) Emissions.
- 12.2.15.2 Each new or Modified EMISSIONS UNIT shall incorporate emission controls which are designed for the BEST AVAILABLE CONTROL TECHNOLOGY (BACT).

**DISCUSSION:** A BACT analysis was performed and control technologies meeting the requirements of BACT were chosen. A full listing of the control technologies reviewed and cost breakdowns compiled is listed in the NSR Application for ATC, Modification #2 (February 13, 1996).

# 12.2.16 SO<sub>2</sub> Sources in PSD Area:

- 12.2.16.1 Subsection 12.2.16 shall apply to the following:
  - (a) Any new or Modified STATIONARY SOURCE in Clark County with Sulfur Dioxide (SO<sub>2</sub>) Emissions.
- 12.2.16.2 Each new or Modified Emissions Unit shall incorporate emission controls which are designed for the BEST AVAILABLE CONTROL TECHNOLOGY (BACT).

**DISCUSSION:** A BACT analysis was been performed and control technologies meeting the requirements of BACT have been chosen. A full listing of the control technologies reviewed and cost breakdowns compiled is listed in NSR Application for ATC, Modification #2 (February 13, 1996).

The applicant has also certified compliance with all the applicable requirements set forth in ATCs (11/17/86, 07/13/92, 11/19/93, 09/27/96), and Section 16 permits (02/05/88, 09/18/92, 11/19/93, 12/07/94, 09/21/95, 02/14/97).

#### 12.2.18 HAP Sources in Clark County

- 12.2.18.1 The applicability of Subsection 12.2.18 shall be limited to any STATIONARY SOURCE subject to the requirements of Section 20 of the Regulations, or any STATIONARY SOURCE with EMISSIONS of HAZARDOUS AIR POLLUTANTS (HAPs) that are not subject to the PM<sub>10</sub>, VOC, or TCS requirements of the Regulations and shall apply to the following:
  - (a) Any new STATIONARY SOURCE located in Clark County which emits or has a POTENTIAL TO EMIT equal to or exceeding, ten (10) tons per year for any HAZARDOUS AIR POLLUTANT (HAP), or twenty-five (25) tons per year for any combination of HAPs, as defined in Section 0, or
  - (b) any MODIFIED HAP STATIONARY SOURCE located in Clark County which has a NET EMISSIONS INCREASE equal to or exceeding ten (10) tons per year for any HAZARDOUS AIR POLLUTANT (HAP), or twenty-five (25) tons per year for any combination of HAPs as defined in Section 0.

### 12.2.18.2 Emission Control Requirements:

- (a) For any STATIONARY SOURCE not subject to the requirements of Section 20 of the Air Pollution Control Regulations and/or National Emission Standards for Hazardous Air Pollutants promulgated under section 112 of the Federal Clean Air Act:
  - (1) Each new or Modified Emissions Unit that does not represent an imminent or substantial danger, as determined by the CONTROL OFFICER, may incorporate no control,
  - (2) or, for each new or Modified Emissions Unit that does represent an imminent or substantial danger, as determined by the CONTROL OFFICER, the emission controls shall be, at a minimum, designed for the BEST AVAILABLE CONTROL TECHNOLOGY.

- (b) For any STATIONARY SOURCE subject to the requirements of Section 20 of the Air Pollution Control Regulations:
  - (1) Each new or Modified Emissions Unit shall be subject to the applicable standard listed in Section 20.
- 12.2.18.3 Notice of Proposed Action (described in Subsection 12.3) is required for any new Stationary Source with a Potential to Emit equal to or exceeding ten (10) tons per year for all HAPs or any Stationary Source proposing Modification that results in a NET Emissions Increase from all Emissions Units that is equal to or exceeding ten (10) tons per year for all HAPs.

DISCUSSION: When G-P Gypsum was originally permitted in 1986 and modified in 1992 and 1993, there was no HAP requirement in the APC Regulations. When G-P Gypsum obtained its modification to the ATC (Appendix A-9) on September 27, 1996, the District concluded that there was no Net Emissions Increase at the facility. Therefore, this subsection would be applicable in the future if G-P Gypsum triggers the definition of modification. G-P Gypsum should be subject to the criteria set forth in subsection 0.138 of the APC Regulations that defines "Stationary Source" and "Exempt Stationary Source". The same criteria applies to modification. Any introduction of a new HAP in excess of the threshold for "Exempt Stationary Source" is treated as a modification requiring G-P Gypsum to apply for an ATC. When that happens, the facility needs to be recognized as a new source for that particular HAP. Likewise, any change of the status from non-major to major for any HAP is treated as a modification requiring G-P Gypsum to apply for an ATC. Currently G-P Gypsum is acknowledged as a major HAP source for formaldehyde.

The facility has the Potential To Emit equal to or exceeding ten (10) tons per year for any HAPs or twenty-five (25) tons per year for any combination of HAPs and thus is subject to the CCHD regulations. A Notice of Proposed Action was issued on July 14, 1996. G-P Gypsum is subject to HAP standards and will have to comply with MACT standards that are developed and adopted.

# APCR SECTION 14 - NEW SOURCE PERFORMANCE STANDARDS [Rev., 01/23/97]:

- 14.1.1 Subpart A General Provisions
- 14.1.38 Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants
- 14.1.41 Subpart UUU Standards of Performance for Calciners and Dryers in Mineral Industries.

14.1.200	Appendix A - Reference Methods (Testing Procedures)
14.1.201	Appendix B - Performance Specifications (Continuous Monitoring)
14.1.202	Appendix C - Determination of Emission Rate Change
14.1.203	Appendix D - Required Emission Inventory Information
14.1.204	Appendix F - Quality Assurance Procedures

- 14.2 Any person subject to this section must also comply with all other requirements of these Regulations. If there is inconsistency between standards or requirements, the most stringent standard or requirement shall apply, except that where a specific limitation for certain categories is set forth in Subsection 14.1, that limit shall take precedence over provisions of Section 27.
- 14.3 All requests, reports, applications, submittals, and other communications, pursuant to this section, shall be addressed to: Air Pollution Control Officer, Clark County Health District, 625 Shadow Lane, Las Vegas, Nevada 89127.

**DISCUSSION**: Applicable NSPS will be incorporated into the Part 70 permit under the federal designation in accordance with 40 CFR Part 60, Subparts A, OOO and UUU. The District has included the more relevant portions of this Section for convenience, please reference pages 4-1 through 4-4 for a complete copy.

# APCR SECTION 17 - DUST CONTROL PERMIT FOR CONSTRUCTION ACTIVITIES INCLUDING SURFACE GRINDING AND TRENCHING [Rev., 01/23/97]:

#### 17.1 Prohibitions:

17.1.1 No owner, lessee, occupant, operator, user, or any other person shall engage in construction activities, including disturbing the topsoil, grading, clearing and grubbing operations, trenching or excavate, or the addition or removal of dirt or fill for construction of a building or dwelling unit(s) on property in excess of a) an aggregate of one-quarter acre or more; b) or a trench at least 100 feet in length if the aggregate is less than one quarter acre of any property or contiguous properties within Clark County, Nevada or any incorporated city there in prior to the issuance of a Dust Control Permit for Construction Activities including Surface Grading and Trenching by the Control Officer and then only if said permit is current and valid;

- 17.1.2 No person shall engage in construction activities, including disturbing the topsoil, grading, clearing and grubbing operations, trenching or the addition or removal of dirt or fill in excess of an aggregate of a) one-quarter acre or more b) or a trench at least 100 feet in length if the aggregate is less than one quarter acre of any property or contiguous properties within Clark County, Nevada or any incorporated city therein at the request of or under contract to the owner, lessee, occupant, user or any other person until he has in his possession a copy of the Dust Control Permit required by Subsection 17.1.1;
- 17.1.3 No person shall engage in the destruction, demolition or removal of any structure, 1000 square feet or larger, located on any property within Clark County, Nevada or any incorporated city therein prior to the issuance of Dust Control permit by the Control Officer and then only if said permit is current and valid.

# APCR SECTION 18 - PERMIT AND TECHNICAL SERVICE FEES [Rev., 04/27/97]:

#### 18.2 Annual Emission Unit Fees:

These fees are assessed on each Emissions Unit with Emissions exceeding the de minimus Emissions Unit limits as defined in Section 0 of the Regulations.

18.2.1	Each Process Equipment, each Waste Incinerator and each Mining Operation.	\$160.00
18.2.2	Each Storage Silo.	\$80.00
18.2.6	Each Stationary Internal Combustion engine that meet the definition of a Stationary Source, except as required in subsection 18.2.7.	\$40.10
18.2.9*	Effective each January 20, all operating permits and emission unit fee rates shall be adjusted according to the relative percent change from the previous calendar year in the Urban Consumer Price Index (CPI-U), which is published by the U. S. Department of Labor, Bureau of Labor Statistics.	

### 18.6 Annual Part 70 Emission Fee:

18.6.1 In addition to the NSR Emissions Unit Fee, each Major Stationary Source and each Stationary Source subject to Federal Performance Standards, shall pay an Annual Part 70 Emission Fee.

- 18.6.2 The Annual Part 70 Emission Fee shall be based on the total number of tons of Actual Annual Emissions for all regulated air pollutants (rounded off to the nearest whole number.)
- 18.6.2.1 Actual Annual Emissions shall mean the following:
  - (a) Measured Emissions for any emissions monitored by a continuous emissions monitoring system (CEMS) over the previous calendar year, or
  - (b) Estimated Emissions for any emissions calculated based on annual facility production over the previous calendar year.
- 18.6.3 EFFECTIVE JANUARY 1, 1997 AND EACH JANUARY 1, THEREAFTER:
- 18.6.3.1 Annual Part 70 Emission Fee shall be determined on the number of tons of all Regulated Air Pollutants, except as provided in Subsection 18.6.3.2, multiplied by the following: \$35.00
- 18.6.3.2 For the Carbon Monoxide Emissions portion, the Annual Part
  70 Emission Fee shall be determined on the number of tons of
  Carbon Monoxide multiplied by the following: \$ 11.70
- 18.6.5 Effective each January 20, fees shall be adjusted according to the relative percent change from the previous calendar year in the Urban Consumer Price Index (CPI-U), which is published by the U.S. Department of Labor, Bureau of Labor Statistics.
- 18.14.1 Annual Billing Procedures:
  - (c) Permittees delinquent on the payment of any applicable fees beyond fortyfive (45) days shall be issued a notice of violation (NOV) which may impose additional penalties.
  - (d) Any permittee delinquent on the payment of any annual applicable fee(s) beyond ninety (90) days shall be subject to permit revocation proceedings.
- 18.14.2 Fee Billing Procedures for subsections 18.1, 18.4 and 18.5:
  - (a) Payment invoices shall be due within thirty (30) days of billing date.
  - (b) After forty-five (45) days from billing date, unpaid invoices shall be assessed a 10% late charge.

- (c) Permittees delinquent on the payment of any applicable fees beyond forty-five (45) days shall be issued a notice of violation (NOV) which may impose additional penalties.
- (d) Any permittee delinquent on the payment of any applicable fee(s) beyond ninety (90) days shall be subject to permit revocation proceedings.
- 18.14.3 Failure to pay any other applicable fee(s) shall result in enforcement action including permit revocation.

**DISCUSSION:** The annual Part 70 emissions fees are based on the total number of tons of actual annual emissions for all regulated air pollutants. Table II-1 shows an example of some of the kinds of information that must be collected in order that proper fees be assessed. Recordkeeping will be made part of the conditions of the permit.

# APCR SECTION 19 - PART 70 OPERATING PERMITS [Rev., 12/18/97]:

**Discussion:** Please reference pages 19-1 through 19-26 of the Clark County Health District Regulations. The applicable requirements of this section are incorporated into the conditions of the permit.

APCR SECTION 20 - EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES[Rev., 01/23/97]:

20.1 WHEREAS, the District Board of Health of Clark County, functioning as the Air Pollution Control Board, is responsible for control of pollutants discharged into the air; and

WHEREAS, Air Pollution Control Standards and Regulations have been adopted by said Board pursuant to NRS 445 for the purpose, among others, of limiting Air Contaminant emissions from new sources of air pollutants; and

WHEREAS, it is a public policy of Clark County and the purpose of the District's Regulations to review and approve proposed new sources of air pollution, only if emission standards can be met and air quality standards will not be violated; and

WHEREAS, the United States Environmental Protection Agency has adopted standards for certain hazardous air pollutants for source categories which are required throughout the nation; and

WHEREAS, it is the District's belief that review and approval of new sources are best managed at the local level;

NOW, THEREFORE, the provisions of Part 63, Chapter I, Title 40, Code of Federal Regulations, as indexed below, are hereby adopted by reference and made a part hereof as if fully set forth. Any final revisions to an existing subpart that are promulgated by the United States Environmental Protection Agency are hereby adopted by reference and made a part hereafter as if fully set forth. Any new subparts to Part 63 that are promulgated by the United States Environmental Protection Agency after the effective date of this Section shall be subject to review and adoption by the Clark County District Board of Health prior to becoming part of these Regulations. For the purposes, of this section, the word "Administrator" as used in Parts 60 and 61, Chapter I, Title 40, Code of Federal Regulations shall mean the Control Officer, except that the Control Officer shall not be empowered to approve alternate or equivalent test methods or alternative standards/work practices.

**DISCUSSION**: Applicable conditions related to HAP's will be referred to in the Part 70 Operating Permit.

# APCR SECTION 24 - SAMPLING AND TESTING - RECORDS AND REPORTS [Adopted circa 1967]

- 24.1 Any person operating any article, machine, equipment, or other contrivance for which registration is required by these Regulations, shall permit the Control Officer, or his agent to install and maintain sampling and testing facilities as are reasonable and necessary for measurement of emissions of air contaminants. Where existing facilities for sampling or testing are inadequate, the Control Officer may, in writing, require the Registrant to provide and maintain access to, such facilities as are reasonably necessary for sampling and testing purposes by the Control Officer, or his authorized agent, in order to secure information that will disclose the nature, extent, quantity, or degree of air contaminants discharged into the atmosphere from the article, machine, equipment, or other contrivance described in the Registration form or records.
- 24.2 The owner or operator of any point source as defined in Title 40 CFR, Part 51.1, Paragraph (k), published in the Federal Register on November 25, 1971, shall maintain records of the nature and amounts of emissions from such source and/or any other information as may be deemed necessary by the Control Officer to determine whether such source is in compliance with applicable emission limitations or other control measures.
- 24.3 The information recorded shall be summarized and reported to the Control Officer on forms furnished by the Control Officer and shall be submitted as part of the registration renewal requirements as provided in Subsection 15.5 of these Regulations.

- 24.4 Information recorded by the owner or operator and copies of the summarized reports submitted to the Control Officer shall be retained by the owner or operator for two years after the date on which the pertinent report is submitted.
- 24.5 Emission data obtained pursuant to these Regulations from owners or operators of stationary sources to which air quality standards shall apply shall be correlated with applicable emission limitations and other control measures and will be available to the public during normal business hours at the District Health Center, 625 Shadow Lane, Las Vegas, Nevada 89127.

**Discussion:** Part 70 requirements necessitate that records be kept for five years  $[Auth.: APCR \S\S 19.4.1.3(b)(5), (Rev., 12-18-97)]$ . Consequently, a two-year recordkeeping requirement would be a relaxation. Records will be kept for five years as required.

# APCR SECTION 25 - UPSET/BREAKDOWN, MALFUNCTIONS [Rev., 12/19/96]:

### 25.2 Reporting and Consultation:

- 25.2.1 UPSET/BREAKDOWNS or EMERGENCIES, as defined in Section 0 shall be reported to the Control Officer within one (1) hour of the onset of the UPSET/BREAKDOWN.
- 25.2.2 The Operator shall consult with the CONTROL OFFICER to devise actions designed to minimize the impact of excess EMISSIONS.

**Discussion:** The District has excluded subsection 25.1 because this subsection is not an approved part of the New Source Review Implementation Plan for Clark County. Subsection 25.1 is discussed under the Local Applicable Requirements of Section III-B of this TSD. Subsection 25.2 is part of the implementation plan.

#### APCR SECTION 26 - EMISSION OF VISIBLE AIR CONTAMINANTS [Rev., 07/08/85]:

- 26.1 A person shall not discharge into the atmosphere, from any single source whatsoever, any air contaminants for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period, which is:
- 26.1.1 Of such opacity to a degree equal to 20% obscuration or greater.
- Any existing source undergoing modification shall incorporate control devices and methods calculated, within the maximum control capability which is technically practicable at the time that the modification is begun, to eliminate all visible emission from the source involved.

26.1.2.6 Any new source shall incorporate control devices and methods calculated to produce zero (0) opacity, except for three (3) minutes in any sixty (60) minutes during which time a visible emission of 20% opacity shall be permitted.

# 26.2 Exception to Subsection 26.1

- 26.2.1 Notwithstanding the provisions of 26.1, supra, emissions resulting from the shutdown of air pollution control equipment for scheduled maintenance shall not constitute a violation of Section 26, subject to the following conditions:
  - a) The scheduled maintenance was reported to the Control Officer more than twenty-four (24) hours in advance of the shutdown;
  - b) The scheduled maintenance is performed at times specified by the Control Officer as being favorable for atmospheric ventilation; and
  - c) Emissions during the shutdown are minimized to the extent reasonably possible; and
  - d) Where possible, the shutdown is scheduled during periods of non-operation of the Emission Unit

# **APCR SECTION 27 - PARTICULATE MATTER FROM PROCESS WEIGHT RATE** [Rev., 09/03/81]:

- 27.1 For purposes of the Regulation, the total process weight from all similar process units at a plant or premises shall be used for determining the maximum allowable emission of particulate matter. The process weight rate shall be the equipment manufacturer's or designer's guaranteed maximum input, whichever is greater. Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this definition, the interpretation that results in the minimum value for allowable emission shall apply.
- 27.2 No person may discharge in any one hour, from any source with process weight in the following range, dust or fumes from a stack or stacks in total quantities in excess of the amount shown in the following table. (Table 27-1)
- 27.3 For the purpose of establishing allowable emission limits for approval of new or modified sources of particulate matter the values of Table 27-1 can be used in absence of more stringent emission limits.

27.4 Where the process weight per hour falls between figures in the left-hand column the exact weight of permitted discharge may be interpolated.

# **TABLE 27-1**

PROCESS WT/HR		MAXIMUM WEIGHT <u>DISCHARGE/HOUR</u>	
KG	(lbs)	KG	(lbs)
25	( 55)	0.12	(0.26)
50	( 110)	0.23	(0.51)
100	( 220)	0.43	(0.94)
150	( 330)	0.58	(1.27)
200	( 440)	0.73	(1.60)
250	( 550)	0.86	(1.89)
300	( 660)	0.97	(2.14)
350	( 770)	1.08	(2.38)
400	( 880)	1.17	(2.58)
450	( 990)	1.26	(2.78)
500	( 1100)	1.35	(2.97)
550	( 1210)	1.42	(3.13)
600	( 1320)	1.50	(3.29)
650	( 1430)	1.56	(3.44)
700	( 1540)	1.63	(3.59)
750	( 1650)	1.70	(3.73)
800	( 1760)	1.75	(3.86)
850	( 1870)	1.81	(3.99)
900	( 1980)	1.87	(4.12)
1000	( 2200)	1.97	(4.34)
1500	( 3300)	2.44	(5.36)
2000	( 4400)	2.83	(6.22)
3000	( 6600)	3.54	(7.78)
4000	( 8800)	4.20	(9.23)
5000	(11000)	4.83	(10.63)
6000	(13200)	5.46	(12.01)
7000	(15400)	6.08	(13.37)
8000	(17600)	6.70	(14.73)
9000	(19800)	7.30	(16.07)
10000	(22000)	8.10	(17.81)
20000	(44000)	13.95	(30.70)
27300	(60000) Or More	18.18	(40.00)

**Discussion:** Section 27 is not a SIP approved Rule. CFR 40 Part 52, Subpart DD, and Nevada, §§ 52.1476(c) and (c)(1) indicate that the submitted section is not approved. Specifically the notation referenced is:

- "(c) The following rules are disapproved because they relax the emission limitation on particulate matter.
  - (1) Clark County district Board of Health, Table 27.1, (Particulate Matter from Process Matter), submitted on July 24, 1979.

[37 FR 10877, May 31, 1972, as amended at 45 FR 8011, Feb. 6, 1980; 46 FR 43142, Aug, 27, 1981; 51 FR 40676, Nov. 7, 1986]"

# APCR SECTION 28 - FUEL BURNING EQUIPMENT [Rev., 04/23/87]:

#### 28.2 Emission Limitations

28.2.1 No person shall cause or permit the emission of particulate matter from any fuel-burning equipment in excess of the quantity set forth in the following table:

Heat input, millions of British thermal units per hour	Maximum allowable rate of emissions of particulate matter, pounds per million British thermal units of heat
10	0.600
50	0.412
100	0.352
500	0.242
1,000	0.207
4,000	0.150
8,000	0.102
10,000	0.0904
15,000	0.0717
20,000	0.0607
40,000	0.0409
50,000	0.0358

# APCR SECTION 29 - SULFUR CONTENTS OF FUEL OIL [Rev., 12/16/93]:

- 29.1 It is unlawful for any person to store, offer for sale, burn, or cause to be burned, within Clark County at any time, any Diesel Fuel Oil having a sulfur content in excess of 0.05 percent by weight.
- 29.1.1 The limitation for Diesel Fuel does not apply to fuel purchased and in storage prior to December 16, 1993.

**DISCUSSION:** The SIP limits the sulfur content in fuel oil to 1.0 percent by weight. The above regulation limits the sulfur content of diesel fuel oil to 0.05 percent by weight. The more stringent requirement will be incorporated as a permit condition.

# APCR SECTION 41 - FUGITIVE DUST [Rev., 06/25/921]

#### 41.1 Prohibitions:

- 41.1.1 Any person engaged in activities involving the dismantling or demolition of buildings, grubbing, grading, clearing of land, public or private construction, the operation of machines and equipment, the grading of roads, trenching operations, the operation and use of unpaved parking facilities, agricultural operations, use and operation of live stock arenas, horse arenas and feed lots, and operation and use of raceways for motor vehicles shall take all reasonable precautions to abate fugitive dust from becoming airborne from such activities. Reasonable precautions may include, but are not limited to the conditions agreed upon in the APCD permit for the project, sprinkling, compacting, enclosure, chemical, or asphalt sealing, cleaning up, sweeping, or such other measures as the Control Officer may specify to accomplish satisfactory results;
- 41.3.1 If loose sand, dust, or dust particles are found to exist in excess of acceptable limits, as determined by the Control Officer, the Control Officer shall notify the owner, lessee, occupant, operator, or user of said land that said situation is to be corrected within a specified period of time, dependent upon the scope and extent of the problem. The failure to correct said situation within the specified period of time shall be in violation of this section.
- 41.4.1 The Control Officer, his designated agent, or any other authorized representative of the Health Department, after due notice shall be further empowered to enter upon any said land where any sand or dust problem exists, and to take such remedial and corrective action as may be deemed appropriate to cope with and relieve, reduce, or remedy the existent sand and dust situation and condition, when the owner, occupant, operator, or any tenant, lessee, or holder of any possessory interest or right in the involved land fails to do so.

# APCR SECTION 42 - OPEN BURNING [Rev., 12/28/78]:

- 42.1 No person shall cause, suffer, allow, or permit the burning of any combustible material in any open fire except as provided in this section and then only when such burning has been approved in advance by the Control Officer. Such exceptions are as follows:
- 42.1.1 When in the judgment of the Control Officer, no other safe method for the disposal of combustible, explosive, or dangerous material exists or can reasonably be obtained;
- 42.4 Open burning shall be prohibited during air pollution episode conditions as defined in Section 6 of the Implementation Plan for the State of Nevada entitled, EMERGENCY EPISODE PLAN.

APCR SECTION 43 - ODORS IN THE AMBIENT AIR [Rev., 12/28/78]

43.1 An odor occurrence shall be deemed a violation when a complaint is received and substantiated within two hours by the Control Officer. The Control Officer shall deem the odor occurrence a violation if he is able to detect the odor twice within a period of one hour, if the odor is of such a nature as to cause a nuisance, and these detection's being separated by at least 15 minutes.

APCR SECTION 45 - IDLING OF DIESEL POWERED MOTOR VEHICLES [Rev., 09/26/91]:

### 45.1 Diesel Powered Motor Vehicle Idling

Except as otherwise provided in this subsection, a person shall not idle the engine of a diesel truck or a diesel bus for more than 15 consecutive minutes.

# APCR SECTION 60 - EVAPORATION AND LEAKAGE [Rev., 06/28/79]:

#### 60.1 General:

60.1.1 Materials such as, but not limited to, solvent, or other volatile compounds such as paints, acids, alkalies, pesticides, fertilizer, and manure shall be processed, stored, used and transported in such a manner and by such means that they will not evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution; and where control methods are available to reduce effectively the contribution to air pollution from evaporation, leakage, or discharge as determined by the Control Officer, the installation and use of such control methods, devices or equipment shall be mandatory.

# APCR SECTION 70 - EMERGENCY PROCEDURES [Rev., 01/28/73]:

- 70.4 The owner or operator of any stationary source which emits 100 short tons (90.7 metric tons) or more per year of any air contaminant shall prepare and submit to the Control Officer a standby plan for reducing or eliminating emissions of air pollutants during periods of an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency as defined in the EMERGENCY EPISODE PLAN.
- 70.5 Upon notification by the Control Officer that an Air Pollution Alert, Warning, or Emergency has been declared, the owner or operator of each source which has a standby plan approved by the Control Officer shall implement the emission reduction measures specified in such plan.

**DISCUSSION:** An emergency episode plan is on file with APCD:

### APCR SECTION 80 - CIRCUMVENTION [Rev., 12/28/78]:

80.1 A person shall not build, erect, install or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of these Regulations. This section shall not apply to cases in which the only violation involved is of Subsection 40.140 of the Nevada Revised Statutes or of Section 40 of these Regulations.

# APCR SECTION 81 - PROVISIONS OF REGULATIONS SEVERABLE [Rev., 12/28/78]:

81.1 If any provision of these Regulations or the application thereof to any person or circumstances is held invalid or unconstitutional, such invalidity or unconstitutionality shall not affect the other provisions or applications of these Regulations which can be given effect without the invalid provision or application, and to this end the provisions of these Regulations are declared to be severable.

### C. Federal Requirements

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

#### Subpart A - General Provisions

# § 60.1 Applicability.

- (a) Except as provided in subparts B and C, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
- (b) Any new or revised standard of performance promulgated pursuant to section 111(b) of the Act shall apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of such new or revised standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
- (c) In addition to complying with the provisions of this part, the owner or operator of an affected facility may be required to obtain an operating permit issued to stationary sources by an authorized State air pollution control agency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Title V of the Clean Air

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Act (Act) as amended November 15, 1990 (42 U.S.C. 7661). For more information about obtaining an operating permit see part 70 of this chapter.

I40 FR 53346, Nov. 17, 1975, as amended at 55 FR 51382, Dec. 13, 1990; 59 FR 12427, Mar. 16, 1994]

# § 60.7 Notification and recordkeeping.

- (a) Any owner or operator subject to the provisions of this part shall furnish the Administrator written notification as follows:
- (1) A notification of the date construction (or reconstruction as defined under §60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
- (2) A notification of the anticipated date of initial startup of an affected facility postmarked not more than 60 days nor less than 30 days prior to such date.
- (3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
- (4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in §§60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.
- (6) A notification of the anticipated date for conducting the opacity observations required by §§60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.
- (7) A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by §60.8 in lieu of Method 9 observation data as allowed by §§60.11(e)(5) of this part. This notification shall be postmarked not less than 30 days prior to the date of the performance test.

(b) Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

**Discussion:** G-P Gypsum Corporation is expected to maintain records of operation and any malfunctions that are an infraction of applicable regulations. The permit conditions will include the applicable requirements.

- (f) Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.
- (g) If notification substantially similar to that in paragraph (a) of this section is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of paragraph (a) of this section.

**Discussion:** A Technical Support Document and an Authority To Construct was prepared in April, 1996. A Notice of Proposed Action requesting public comment was published on July 14, 1996. EPA was provided with a copy of the TSD and ATC and was involved in review of its issuance.

(h) Individual subparts of this part may include specific provisions which clarify or make inapplicable the provisions set forth in this section.

[36 FR 24877, Dec. 28, 1971, as amended at 40 FR 46254, Oct. 6, 1975; 40 FR 58418, Dec. 16, 1975; 45 FR 5617, Jan. 23, 1980; 48 FR 48335, Oct. 18, 1983; 50 FR 53113, Dec. 27, 1985; 52 FR 9781, Mar. 26, 1987; 55 FR 51382, Dec. 13, 1990; 59 FR 12428, Mar. 16, 1994; 59 FR 47265, Sep. 15, 1994]

# § 60.8 Performance tests.

(a) Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

- (b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.
- (c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
- (d) The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present.
- (e) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:
- (1) Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
- (2) Safe sampling platform(s).
- (3) Safe access to sampling platform(s).
- (4) Utilities for sampling and testing equipment.

(f) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

[36 FR 24877, Dec. 23, 1971, as amended at 39 FR 9314, Mar. 8, 1974; 42 FR 57126, Nov. 1, 1977; 44 FR 33612, June 11, 1979; 54 FR 6662, Feb. 14, 1989; 54 FR 21344, May 17, 1989]

**Discussion**: A performance test was performed and completed on the applicable units in March of 1996. The emission limits were found to comply with the established standards. The issued ATC requires that a performance test be performed on the exhaust gas from NCA #1 every thirty-six months. Exhaust gas performance testing at G-P shall be performed every fifth year. This and other conditions relative to required performance testing will be incorporated into the permit conditions.

# § 60.11 Compliance with standards and maintenance requirements.

- (a) Compliance with standards in this part, other than opacity standards, shall be determined only by performance tests established by §60.8, unless otherwise specified in the applicable standard.
- (b) Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of this part, any alternative method that is approved by the Administrator, or as provided in paragraph (e)(5) of this section. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
- (c) The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.
- (d) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good

air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

### § 60.12 Circumvention.

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

# § 60.13 Monitoring requirements.

**DISCUSSION:** The source is not subject to continuous emission monitoring.

# Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants

Source: 62 FR 31351, June 9, 1997.

# § 60.670 Applicability and designation of affected facility.

- (a)(1) Except as provided in paragraphs (a)(2), (b), (c), and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of this subpart.
- (2) The provisions of this subpart do not apply to the following operations: All facilities located in underground mines; and stand-alone screening operations at plants without crushers or grinding mills.
- (b) An affected facility that is subject to the provisions of subpart F or I or that follows in the plant process any facility subject to the provisions of subparts F or I of this part is not subject to the provisions of this subpart.

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- (d)(1) When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in §60.671, having the same function as the existing facility, the new facility is exempt from the provisions of §§60.672, 60.674, and 60.675 except as provided for in paragraph (d)(3) of this section.
- (2) An owner or operator complying with paragraph (d)(1) of this section shall submit the information required in § 60.676(a).
- (3) An owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in paragraph (d)(1) of this section and must comply with the provisions of §§60.672, 60.674 and 60.675.
- (e) An affected facility under paragraph (a) of this section that commences construction, reconstruction, or modification after August 31, 1983 is subject to the requirements of this part.

#### § 60.672 Standard for particulate matter.

- (a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:
- (1) Contain particulate matter in excess of 0.05 g/dscm; or
- (2) Exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing control device. Facilities using a wet scrubber must comply with the reporting provisions of §60.676 (c), (d), and (e).
- (b) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 percent opacity, except as provided in paragraphs (c), (d) and (e) of this section.
- (c) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, no owner or operator shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 15 percent opacity.

- (d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.
- (e) If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in paragraphs (a), (b) and (c) of this section, or the building enclosing the affected facility or facilities must comply with the following emission limits:
- (1) No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent as defined in §60.671.
- (2) No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed the stack emissions limits in paragraph (a) of this section.

**DISCUSSION:** Fugitive emissions from the crusher are discharged through a baghouse filter. ATC Permit Condition III-D-7 (9/27/96), opacity limitation on the crusher does not apply in this situation as other permit conditions require that the fugitives use control technology. Part 70 Permit conditions will address the crusher fugitives.

## § 60.675 Test methods and procedures.

- (a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §§60.8(b). Acceptable alternative methods and procedures are given in paragraph (e) of this section.
- (b) The owner or operator shall determine compliance with the particulate matter standards in §§60.272(a) as follows:
- (1) Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.
- (2) Method 9 and the procedures in §60.11 shall be used to determine opacity.

- (c) In determining compliance with the particulate matter standards in §60.672 (b) and (c), the owner or operator shall use Method 9 and the procedures in §60.11, with the following additions:
- (1) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
- (2) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.
- (3) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.
- (d) In determining compliance with §§60.672(e), the owner or operator shall use Method 22 to determine fugitive emissions. The performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.
- (e) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:
- (1) For the method and procedure of paragraph (c) of this section, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:
- (i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.
- (ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.
- (f) To comply with §§60.676(d), the owner or operator shall record the measurements as required in §§60.676(c) using the monitoring devices in §60.674 (a) and (b) during each particulate matter run and shall determine the averages.

[54 FR 6680, Feb. 14, 1989]

# § 60.676 Reporting and recordkeeping.

- (a) Each owner or operator seeking to comply with §§60.670(d) shall submit to the Administrator the following information about the existing facility being replaced and the replacement piece of equipment.
- (1) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:
- (i) The rated capacity in tons per hour of the existing facility being replaced and
- (ii) The rated capacity in tons per hour of the replacement equipment.
- (2) For a screening operation:
- (i) The total surface area of the top screen of the existing screening operation being replaced and
- (ii) The total surface area of the top screen of the replacement screening operation.
- (3) For a conveyor belt:
- (i) The width of the existing belt being replaced and
- (ii) The width of the replacement conveyor belt.
- (4) For a storage bin:
- (i) The rated capacity in tons of the existing storage bin being replaced and
- (ii) The rated capacity in tons of replacement storage bins.
- (b) Each owner or operator seeking to comply with §§60.670(d) shall submit the following data to the Director of the Emission Standards and Engineering Division, (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711.
- (1) The information.described in §§60.676(a).
- (2) A description of the control device used to reduce particulate matter emissions from the existing facility and a list of all other pieces of equipment controlled by the same control device; and

- (3) The estimated age of the existing facility.
- (c) During the initial performance test of a wet scrubber, and daily thereafter, the owner or operator shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate.
- (d) After the initial performance test of a wet scrubber, the owner or operator shall submit semiannual reports to the Administrator of occurrences when the measurements of the scrubber pressure loss (or gain) and liquid flow rate differ by more than ±30 percent from the averaged determined during the most recent performance test.
- (e) The reports required under paragraph (d) shall be postmarked within 30 days following end of the second and fourth calendar quarters.
- (f) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §60.672, including reports of opacity observations made using Method 9 to demonstrate compliance with §60.672 (b) and (c) and reports of observations using Method 22 to demonstrate compliance with §§60.672(e).
- (g) The requirements of this paragraph remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected sources within the State will be relieved of the obligation to comply with paragraphs (a), (c), (d), (e), and (f) of this section, provided that they comply with requirements established by the State. Compliance with paragraph (b) of this section will still be required.

[51 FR 31337, Aug. 1, 1985, as amended at 54 FR 6680, Feb. 14, 1989]

DISCUSSION: G-P Gypsum is subject to Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants. These requirements were discussed in the TSD Part II. Applicable requirements are noted for the identified emission units. Testing methods, emission limits, recordkeeping and reporting are included as conditions in the operating permit. EPA testing Method 5 or 17 for particulate matter concentrations and Method 9 for Opacity will be required in the conditions of the Part 70 operating permit. NSPS requirements for the impact mills are referred to in the discussion of the following Subpart UUU.

Subpart UUU.-.Standards of Performance for Calciners and Dryers in Mineral Industries

Subpart UUU-Standards of Performance for Calciners and Dryers in Mineral Industries

Source: 57 FR 44503, Sept. 28, 1992, unless otherwise noted.

# § 60.730 Applicability and designation of affected facility.

- (a) The affected facility to which the provisions of this subpart apply is each calciner and dryer at a mineral processing plant. Feed and product conveyors are not considered part of the affected facility. For the brick and related clay products industry, only the calcining and drying of raw materials prior to firing of the brick are covered.
- (b) An affected facility that is subject to the provisions of subpart LL, Metallic Mineral Processing Plants, is not subject to the provisions of this subpart. Also, the following processes and process units used at mineral processing plants are not subject to the provisions of this subpart: vertical shaft kilns in the magnesium compounds industry; the chlorination-oxidation process in the titanium dioxide industry; coating kilns, mixers, and aerators in the roofing granules industry; and tunnel kilns, tunnel dryers, apron dryers, and grinding equipment that also dries the process material used in any of the 17 mineral industries (as defined in §60.731, "Mineral processing plant").
- (c) The owner or operator of any facility under paragraph (a) of this section that commences construction, modification, or reconstruction after April 23, 1986, is subject to the requirements of this subpart.

### § 60.731 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Calciner means the equipment used to remove combined (chemically bound) water and/or gases from mineral material through direct or indirect heating. This definition includes expansion furnaces and multiple hearth furnaces.

Control device means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more affected facilities.

Dryer means the equipment used to remove uncombined (free) water from mineral material through direct or indirect heating.

Installed in series means a calciner and dryer installed such that the exhaust gases from one flow through the other and then the combined exhaust gases are discharged to the atmosphere.

Mineral processing plant means any facility that processes or produces any of the following minerals, their concentrates or any mixture of which the majority (50 percent) is any of the following minerals or a combination of these minerals: alumina, ball clay, bentonite, diatomite, feldspar, fire clay, fuller's earth, gypsum, industrial sand, kaolin, lightweight aggregate, magnesium compounds, perlite, roofing granules, talc, titanium dioxide, and vermiculite.

# § 60.732 Standards for particulate matter.

Each owner or operator of any affected facility that is subject to the requirements of this subpart shall comply with the emission limitations set forth in this section on and after the date on which the initial performance test required by §60.8 is completed, but not later than 180 days after the initial startup, whichever date comes first. 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 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.

# § 60.734 Monitoring of emissions and operations.

- (a) With the exception of the process units described in paragraphs (b), (c), and (d) of this section, the owner or operator of an affected facility subject to the provisions of this subpart who uses a dry control device to comply with the mass emission standard shall install, calibrate, maintain, and operate a continuous monitoring system to measure and record the opacity of emissions discharged into the atmosphere from the control device.
- (b) In lieu of a continuous opacity monitoring system, the owner or operator of a ball clay vibrating grate dryer, a bentonite rotary dryer, a diatomite flash dryer, a diatomite rotary calciner, a feldspar rotary dryer, a fire clay rotary dryer, an industrial sand fluid bed dryer, a kaolin rotary calciner, a perlite rotary dryer, a roofing granules fluid bed dryer, a roofing granules rotary dryer, a talc rotary calciner, a titanium dioxide spray dryer, a titanium dioxide fluid bed dryer, a vermiculite fluid bed dryer, or a vermiculite rotary dryer who uses a dry control device may have a certified visible emissions observer measure and record three 6-minute averages of the opacity of visible emissions to the atmosphere each day of operation in accordance with Method 9 of appendix A of part 60.
- (c) The owner or operator of a ball clay rotary dryer, a diatomite rotary dryer, a feldspar fluid bed dryer, a fuller's earth rotary dryer, a gypsum rotary dryer, a gypsum flash

calciner, gypsum kettle calciner, an industrial sand rotary dryer, a kaolin rotary dryer, a kaolin multiple hearth furnace, a perlite expansion furnace, a talc flash dryer, a talc rotary dryer, a titanium dioxide direct or indirect rotary dryer or a vermiculite expansion furnace who uses a dry control device is exempt from the monitoring requirements of this section.

(d) The owner or operator of an affected facility subject to the provisions of this subpart who uses a wet scrubber to comply with the mass emission standard for any affected facility shall install, calibrate, maintain, and operate monitoring devices that continuously measure and record the pressure loss of the gas stream through the scrubber and the scrubbing liquid flow rate to the scrubber. The pressure loss monitoring device must be certified by the manufacturer to be accurate within 5 percent of water column gauge pressure at the level of operation. The liquid flow rate monitoring device must be certified by the manufacturer to be accurate within 5 percent of design scrubbing liquid flow rate.

#### § 60.735 Recordkeeping and reporting requirements.

- (a) Records of the measurements required in §60.734 of this subpart shall be retained for at least 2 years.
- (b) Each owner or operator who uses a wet scrubber to comply with §60.732 shall determine and record once each day, from the recordings of the monitoring devices in §§60.734(d), an arithmetic average over a 2-hour period of both the change in pressure of the gas stream across the scrubber and the flowrate of the scrubbing liquid.
- (c) Each owner or operator shall submit written reports semiannually of exceedances of control device operating parameters required to be monitored by §60.734 of this subpart. For the purpose of these reports, exceedances are defined as follows:
- (1) All 6-minute periods during which the average opacity from dry control devices is greater than 10 percent; or
- (2) Any daily 2-hour average of the wet scrubber pressure drop determined as described in §§60.735(b) that is less than 90 percent of the average value recorded according to §§60.736(c) during the most recent performance test that demonstrated compliance with the particulate matter standard; or
- (3) Each daily wet scrubber liquid flow rate recorded as described in §§60.735(b) that is less than 80 percent or greater than 120 percent of the average value recorded according to §§60.736(c) during the most recent performance test that demonstrated compliance with the particulate matter standard.

(d) The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Clean Air Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected facilities within the State will be relieved of the obligation to comply with this section provided that they comply with the requirements established by the State.

[57 FR 44503, Sept. 28, 1992, as amended at 58 FR 40591, July 29, 1993]

# § 60.736 Test methods and procedures.

- (a) In conducting the performance tests required in §60.8, the owner or operator shall use the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §§60.8(b).
- (b) The owner or operator shall determine compliance with the particulate matter standards in §60.732 as follows:
- (1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm.
- (2) Method 9 and the procedures in §60.11 shall be used to determine opacity from stack emissions.
- (c) During the initial performance test of a wet scrubber, the owner or operator shall use the monitoring devices of §§60.734(d) to determine the average change in pressure of the gas stream across the scrubber and the average flowrate of the scrubber liquid during each of the particulate matter runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of §§60.735(c).

<u>Discussion</u>: Questions were raised by G-P Gypsum as to the applicability of NSPS, Subpart OOO and/or UUU standards to the five impact mills at the facility (Appendix B-1, 2, 3). The IMP mills applicability to the subparts was in question due to the dates that the rules were promulgated. The effective date for Subpart OOO is August 31, 1983 while the effective date for Subpart UUU was April 23, 1986. It was determined that the IMP mills #1-4 were not subject to either Subparts OOO or UUU because of the fabrication date. (Appendix B-8).

A question also arose as to the applicability of Subpart OOO or UUU to the IMP mills. The equipment dries, grinds and calcines raw materials during processing. The definitions specifically note that if the product is calcined it is subject to the Subpart UUU standard. The IMP mills are considered calciners as they grind and calcine gypsum. Communication with EPA staff supports the fact that the UUU requirements

apply (Appendix B-8). Conditions relative to Subpart UUU will be addressed in the permit.

The applicable testing methods, emission limits, recordkeeping and reporting are included as conditions in the operating permit. EPA testing Method 5 for particulate emissions and Method 9 for Opacity will be required in the conditions of the Part 70 operating permit.

#### CFR 40 Part 60-Standards of Performance For New Stationary Sources

Appendix A-Test Methods

Appendix B-Performance Specifications

Appendix C-Determination of Emission Rate Change

Appendix D-Required Emission Inventory Information

Appendix F-Quality Assurance Procedures

## D. Authority To Construct Conditions

<u>Discussion</u>: An ATC condition was not incorporated into the Part 70 operating permit as it was obsolete and irrelevant. It was:

Condition III-G-1(c) and (d) was not incorporated because the monitor was relocated as specified in the ATC condition. The requirement has been fulfilled and does not need to be incorporated into the permit.

# E. Compliance Plan and Certification

- 19.3.3.8 A compliance plan for all Part 70 Sources shall contain the following:
  - (a) A description of the compliance status of the source with respect to all applicable requirements.
  - (b) A statement that the source will continue to comply with applicable requirements for which the source is in compliance.
  - (c) For applicable requirements that become effective during the permit term, the compliance schedule shall include a statement that the source will meet such requirements in a timely manner including a more detailed schedule if expressly required by an applicable requirement.
  - (d) A compliance schedule must be submitted for sources not in compliance with all applicable requirements at the time of permit issuance. Such a schedule shall include a schedule of remedial measures, including an

enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the source will be in noncompliance at the time of permit issuance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.

- (e) Reserved (Acid Rain-Title IV)
- 19.3.3.9 Requirements for compliance certification:
  - (a) A certification of compliance with all applicable requirements by a Responsible Official shall be submitted to the Control Officer each year or more frequently if specified by the underlying applicable requirement.
  - (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.

**DISCUSSION:** Compliance certification will be required on an annual basis and will be included as a condition in the permit.

# F. Stationary Source Regulatory Compliance Status

G-P Gypsum is subject to Clark County Health District Regulations and to Federal regulations – New Source Performance Standards and Title V requirements. Table III - presents G-P Gypsum's compliance status with the applicable CCHD regulations.

G-P Gypsum is also subject to federal regulations. These regulations include: a). Subpart A-General Provisions, b) Subpart OOO-Standards of Performance for Nonmetallic Mineral Processing, and c) Subpart UUU-Standards of Performance for Calciners and Dryers in Mineral Industries.

Table III-1 shows the compliance status with NSPS regulations- Subparts A, OOO and Subpart UUU. Table III-2 presents a comparison of G-P Gypsum's, potential HAP

emissions to the HAP major source emission limits. A review of Table III-2 shows that G-P Gypsum exceeds the major source threshold limit for formaldehyde and for combined HAPs. Compliance with applicable HAP regulations is required for this source by APCR §§ 12.2.18.2.

Table III: Compliance Status with Applicable Regulations

Section		Status
Ō	Definitions	In Compliance
11	Ambient Air Quality Standards	In Compliance
12	Preconstruction Review for New or Modified Stationary Sources	In Compliance
13	Emission Standards for Hazardous Pollutants	In Compliance
14	New Source Performance Standards	In Compliance
16	Operating Permits	In Compliance
18	Permit and Technical Service Fees	In Compliance
19	Part 70 Operating Permits	In Compliance
20	Emission Standards For Hazardous Air Pollutants For Source Categories	In Compliance
24	Sampling and Testing; Records and Reports	In Compliance
25	Upset/Breakdown, Malfunctions	In Compliance
26	Emission of Visible Air Contaminants	In Compliance
28	Fuel Burning Equipment	In Compliance
29	Sulfur Contents of Fuel Oil	In Compliance
40	Prohibitions of Nuisance Conditions	In Compliance
41	Fugitive Dust	In Compliance
42	Open burning	In Compliance
43	Odors in the Ambient Air	In Compliance
45	Idling of Diesel Powered Motor Vehicles	In Compliance
52	Handling of Gasoline at Dispensing Facilities, Airports and Storage Tanks	In Compliance
53	Oxygenated Gasoline Program	In Compliance
58	Emission Reduction Credits	In Compliance
60	Evaporation and Leakage	In Compliance
70	Emergency Procedures	In Compliance
80	Circumvention	In Compliance
81	Provisions of Regulations Severable	In Compliance

Table III-1: Compliance Status with New Source Performance Standards

Federal Regulations, Title 40					
Part 60		Status			
Subpart A	Standards of Performance for New Stationary Sources	In Compliance			

Federal Regulations, Title 40						
Part 60	·	Status				
Subpart OOO	Standards of Performance for Nonmetallic Mineral processing Plants	In Compliance				
Subpart UUU	Standards of Performance for Calciners & Dryers in Mineral Industries	In Compliance				
Appendix	Appendices - A, B, C, D, and F	In Compliance				

Table III-2: HAP Emissions

HAP Emissions							
Pollutant	Total HAP Emissions	HAP Threshold for Major Source	Exceed Major HAP Threshold*				
	tpy	tpy	Yes/No				
Acetaldehyde	2.5	10	No				
Formaldehyde	25.0	10	Yes				
Ethylene Glycol	0.013	10	No				
Total	27.513	25	Yes				

APCR Subsection 12.2.18, HAP Sources in Clark County.

G-P Gypsum Corporation is in compliance with all applicable requirements and demonstrates compliance by submitting reports on a quarterly basis. These reports include the requirements of the APCD "Authority To Construct" (9/27/96) conditions noted in subsection <u>L. REPORTS AND REPORTING</u>.

# G. Rule and Regulation Compliance

G-P Gypsum certifies that all emission units at the facility are currently in compliance with all applicable requirements identified in the Part 70 permit application. Furthermore, G-P Gypsum states that they will continue to comply with these applicable requirements, and will, in a timely manner, comply with changes in these applicable requirements and comply with any new applicable requirements that become effective during the permit term.

#### H. Conclusion

G-P Gypsum has submitted a complete application, with amendments, for a Part 70 operating permit. Review of this application consisted of examining all known applicable requirements and the corresponding state of compliance. G-P Gypsum complied with the requirements that were in force at the time the emission units were installed. Emission limits for emission units and processes have been established. Moisture content during processing, enclosures, baghouse filters, and production limitations along with performance tests, opacity tests, and specific recordkeeping and reporting are used to meet compliance with the existing regulations.

G-P Gypsum was issued its first "Conditions of the Authority to Construct" on November 17, 1986. The ATC conditions increased as additional emission units were added and new regulations were implemented. Emission limits were set for each of the criteria pollutants. Compliance with emission limits is met by monitoring, testing and through extensive recordkeeping and reporting.

Emission reduction credits are not required in the PSD area.

In conclusion, APCD proceeds with the preliminary determination that a Part 70 Operating Permit should be issued to G-P Gypsum Corporation.

#### VII ADMINISTRATIVE REGUIREMENTS.

This document was prepared in accordance with the latest interpretation of District guidelines, policies, verbal and/or written supervisory and managerial instructions, issued on or before August 5, 1998.

Subsection 19.4.1.1(a) requires that the District shall identify the origin of authority for each term or condition in the Part 70 Operating Permit. Such reference of origin of authority is denoted by [italic text enclosed in brackets] after each Part 70 Operating Permit Condition.

Pursuant to Subsection 19.5.1.5 of the Regulations, the Clark County Health District issues the draft Part 70 Operating Permit conditions on the following basis:

#### Legal:

On July 13, 1995, in Federal Register Notice (FR36070), the EPA promulgated interim approval of the Title V Operating Permits Program submitted by the Clark County Health District for the purpose of complying with Title V of the 1990 Clean Air Act Amendments and implementing Part 70 of title 40, Code of Federal Regulations. The interim approval has remained effective since August 14, 1995. The Clark County Health District has the authority to issue Part 70 operating permits.

#### Factual:

G-P Gypsum Corporation (G-P), submitted the initial Part 70 operating permit application in February 14, 1996. On April 11, 1996, the Health District determined that the application was complete. G-P has provided all the necessary information for the Health District to develop the draft Part 70 Operating Permit conditions encompassing all the applicable requirements and their compliance.