



# **PART 70**

## **TECHNICAL SUPPORT DOCUMENT**

### **(STATEMENT of BASIS)**

**APPLICATION FOR:**  
**Minor Revision**

**SUBMITTED BY**  
Georgia-Pacific Gypsum, LLC  
P.O. Box 337350  
North Las Vegas, Nevada 89033

**FOR**  
Georgia-Pacific Gypsum, LLC  
Source: 00593

**LOCATION:**  
11401 US Highway 91  
Las Vegas, Nevada 89165

SIC code 3275, “Gypsum Manufacturing”  
NAICS code 327420, “Gypsum Product Manufacturing”

Application Received: August 28, 2025

TSD Date: April 14, 2026

## EXECUTIVE SUMMARY

Georgia-Pacific Gypsum, LLC (GP) is a gypsum wallboard and plaster manufacturing operation located twenty miles north of the City of Las Vegas, Nevada, along U.S. Highway 91, in Apex, Nevada, Hydrographic Area 216 (Garnet Valley). Garnet Valley is designated as an attainment area for all pollutants.

GP is neither a categorical stationary source as defined in AQR 12.2.2(j) nor does it belong to any other stationary source category regulated under Section 111 or 112 of the Act as of August 7, 1980. Therefore, fugitive emissions are not included in the source status determination. The source is a major Part 70 source for CO and NO<sub>x</sub>, synthetic minor for PM<sub>10</sub> and PM<sub>2.5</sub>, and a minor source for SO<sub>2</sub>, VOC, and HAP. The source emits greenhouse gases.

The source produces wallboard and resin mats. The wallboard operation consists of crushers, screens, calciners, aggregate dryers, impeller mills, mixers, storage bins, conveyors, and a board dryer to manufacture wallboard and two grades of plaster, designated as alpha and beta. The resin mat operation consists of a vacuum loader, hopper dryer, pigment feeder, resin extruder and die head, water tank cooling and forming system, cutter/slitter, and winder. All manufacturing and support processes at the site are grouped under SIC code 3275, “Gypsum Products,” and NAICS code 327420, “Gypsum Products Manufacturing.”

The source is subject to 40 CFR Part 60, Subparts Dc, “Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units”; OOO, “Standards of Performance for Nonmetallic Mineral Processing Plants”; UUU, “Standards of Performance for Calciners and Dryers in Mineral Industries”; and IIII, “Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.” It is also subject to 40 CFR Part 63, Subpart ZZZZ, “National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.”

Table 1 summarizes the source potential to emit for each regulated air pollutant.

**Table 1: Source PTE (tons/year)<sup>1</sup>**

Pollutant	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>	CO	SO <sub>2</sub>	VOC	HAP <sup>2</sup>	Pb	H <sub>2</sub> S	GHG <sup>3</sup>
Applicability/SDE	25,079.30	13,759.62	103.45	231.93	2.56	45.69	14.44	0	0	93,588.77
Point Emissions	60.94	39.06	102.94	231.50	2.55	7.05	7.27	0	0	92,973.30
Fugitive Emissions	13.52	2.56	0.51	0.43	0.00	38.64	7.17	0	0	615.47
Tons/year (PTE)	74.45	40.62	103.45	231.93	2.56	45.69	14.62	0	0	93,588.77
Major Source Thresholds (Title V)	100	100	100	100	100	100	10/25 <sup>1</sup>	100	100	-
Major Stationary Source Thresholds (PSD)	250	250	250	250	250	250	10/25 <sup>1</sup>	250	250	-

<sup>1</sup>Not a source-wide emission limit; values are used for determining the major source status.

<sup>2</sup>Ten tons for any individual HAP or 25 tons for a combination of all HAP. Neither value is exceeded.

<sup>3</sup>Metric tons per year, CO<sub>2e</sub>. PSD requirements for GHG have not been triggered.

This minor revision application is in response to correspondence from DAQ’s Compliance section instructing the permittee to submit a permit revision application if Nevada Cogeneration Associates #1 (NCA #1) exhaust gas is not available by September 2025. This exhaust gas is necessary to complete a required performance test.

The Clark County Department of Environment and Sustainability, Division of Air Quality (DAQ) has received delegated authority from the U.S. Environmental Protection Agency to implement the requirements of the Part 70 Operating Permit (OP). The most recent Part 70 OP renewal was issued on May 2, 2023. There have been several permit actions since the last Part 70 OP renewal was issued, including minor revisions, AQR 12.4.3.2(b), Notice and Go revisions, and a Reopen for Cause. Based on the information submitted by the applicant in the renewal application, subsequent revision applications, and a technical review performed by DAQ staff, the draft Part 70 OP revision is proposed for GP.

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## I. ACRONYMS

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

<b>Acronym</b>	<b>Term</b>
AQR	Clark County Air Quality Regulation
AST	Aboveground Storage Tank
ASTM	American Society for Testing Materials
ATC	Authority to Construct
CAAA	Clean Air Act, as amended, or Clean Air Act Amendments
CAM	Compliance Assurance Monitoring
CATEF	California Air Toxics Emission Factor
CEMS	Continuous Emissions Monitoring System
CF	control factor
CFC	Chlorofluorocarbon
CFR	Code of Federal Regulations
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CD	control device
dscf	dry standard cubic feet
DAQ	Division of Air Quality
DES	Clark County Department of Environment and Sustainability
DOM	date of manufacture
EF	emissions factor
EPA	U.S. Environmental Protection Agency
EU	emission unit
GHG	greenhouse gas
HA	Hydrographic Area
HAP	hazardous air pollutant
HCFC	Hydrochlorofluorocarbon
HHV	High Heating Value
hp	horsepower
kg	kilogram
kW	kilowatts
LHV	Lower Heating Value
MEQ	Megawatt Equivalent
MMBtu/hr	Million British thermal units per hour
MW	megawatt
NAC	Nevada Administrative Code
NAAQS	National Ambient Air Quality Standard
NAICS	North American Industry Classification System
NNSR	Nonattainment New Source Review

<b>Acronym</b>	<b>Term</b>
NO <sub>x</sub>	nitrogen oxide(s)
NRS	Nevada Revised Statutes
PM <sub>2.5</sub>	particulate matter less than 2.5 microns in aerodynamic diameter
PM <sub>10</sub>	particulate matter less than 10 microns in aerodynamic diameter
ppm	Parts per million
ppmvd	Parts per million, volumetric dry
PSD	prevention of significant deterioration
PTE	potential to emit
QA	Quality Assurance
QIP	Quality Improvement Plan
RACT	Reasonably Achievable Control Technology
RATA	Relative Accuracy Test Audit
SCC	Source Classification Code
SDE	Status Determination Emissions
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO <sub>2</sub>	sulfur dioxide
UTM	Universal Transverse Mercator
VOC	volatile organic compound

## II. SOURCE INFORMATION

### A. SOURCE DESCRIPTION

The permittee produces wallboard and resin mats. The wallboard operation consists of crushers, screens, calciners, aggregate dryers, impeller mills, mixers, storage bins, conveyors, and a board dryer, to manufacture wallboard and two grades of plaster, designated as Alpha and Beta. The resin mat operation consists of a vacuum loader, hopper dryer, pigment feeder, resin extruder and die head, water tank cooling and forming system, cutter/slitter, and winder. All manufacturing and support processes at the site are grouped under SIC code 3275, “Gypsum Products,” and NAICS code 327420, “Gypsum Products Manufacturing.”

The source is subject to 40 CFR Part 60, Subparts D<sub>C</sub>, “Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units”; OOO, “Standards of Performance for Nonmetallic Mineral Processing Plants”; UUU, “Standards of Performance for Calciners and Dryers in Mineral Industries”; and IIII, “Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.” It is also subject to 40 CFR Part 63, Subpart ZZZZ, “National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.”

### B. PERMITTING HISTORY

The last renewal was issued May 2, 2023.

**Table II-C-1: Permitting Actions Issued Since Last Renewal Was Issued**

Submittal Date	Description
05/22/2023	Notice and Go (experimental trial – approved. Resulted in PNF or 7/31/2023)
07/31/2023	Notice and Go (relocating an EU – approved. No change to permit needed)
07/31/2023	Minor Revision with regard to heat source and stack testing inboard Dryer.
10/12/2023	Notice and Go (installing flame shields in Board Dryer burners - approved. No change to permit needed)
12/26/2023	Minor Revision with regard to heat source and stack testing in board Dryer. (this action)
11/20/2024	Notice and Go (replacement of worn equipment/components with identical equipment)
05/05/2025	Notice and Go (temporary static grizzly)

### C. CURRENT PERMITTING ACTION

#### Title V Minor Revision Application

DAQ received the Title V minor revision application on August 28, 2025. The application was deemed complete on September 15, 2025.

In the application, the permittee requested to update Condition 4.2.7 in the Part 70 Operating Permit, which requires performance testing the board dryer (EU: E03) while using exhaust gas from Nevada Cogeneration Associates #1 (NCA). The permittee is no longer contracted with NCA to receive exhaust gas for their processes. As a result, the performance testing using NCA exhaust gas cannot be completed within the timeframe specified by the permit.

This test was due on or around December 19, 2024. DAQ agreed to extend this due date to September 2025 in an email sent on May 30, 2025. To date, NCA exhaust gas is not available to the permittee. This email instructed that in this case, GP would submit a permit revision application to update the performance testing requirement for NCA exhaust gas.

In the application, the permittee requested to only require this performance test when the board dryer (EU: E03) is operated on NCA during the permit term for more than 30 days. Following the language of the May 30, 2025, email, the condition will be updated to require the permittee to complete the performance test within 90 days of the NCA exhaust gas startup.

The requested change meets the qualifications of a minor revision listed in AQR 12.5.2.14(a).

During a review of the permit, it was discovered that the Impeller Mills (EUs: C01 through C05) and the Roller Mills (EUs: E05 and E06) were listed as subject to 20% opacity only in Condition 3.2.5. As these units are subject to 40 CFR Part 60, Subpart OOO, they are subject to a 7% opacity standard. This has been corrected in the Part 70 OP.

## D. OPERATING SCENARIOS

No new operating scenarios are requested in this permitting action.

## III. EMISSIONS INFORMATION

### A. SOURCE-WIDE PTE

The source is a major Part 70 source for CO and NO<sub>x</sub>, synthetic minor for PM<sub>10</sub> and PM<sub>2.5</sub>, and a minor source for SO<sub>2</sub>, VOC, and HAP. The source is also a source of greenhouse gases. There are no changes in emissions in this permitting action.

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

PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>	CO	SO <sub>2</sub>	VOC	HAP <sup>1</sup>	Pb	H <sub>2</sub> S	GHG <sup>2</sup>
74.45	40.62	103.45	231.93	2.56	45.69	14.62	0	0	93,588.77

<sup>1</sup> Total HAP. No single HAP equals or exceeds 10 tpy.

<sup>2</sup> Metric tons per year, CO<sub>2e</sub>

### B. EMISSIONS CALCULATIONS

There are no changes to any emissions calculations in this permitting action.

### C. OPERATIONAL LIMITS

There are no changes in operational limits in this permitting action.

### D. CONTROL TECHNOLOGY

There are no changes to control requirements in this permitting action.

### E. MONITORING

There are no changes to monitoring in this permitting action.

## **F. PERFORMANCE TESTING**

Condition 4.2.7 has been updated to allow the permittee to test the board dryer (EU: E03) with NCA exhaust gas after the testing deadline if exhaust gas is not available. The permittee is required to notify the Control Officer if a test cannot be conducted and when NCA exhaust gas is available again.

## **G. CONTROL ANALYSIS**

There was no change in emissions, so no control analysis was triggered.

## **IV. REGULATORY REVIEW**

### **A. LOCAL REGULATORY REQUIREMENTS**

There was no change to any AQR applicability.

### **B. FEDERALLY APPLICABLE REGULATIONS**

There was no change in federal CFR applicability.

## **V. COMPLIANCE**

### **A. COMPLIANCE CERTIFICATION**

There are no changes to the reporting requirements in this permitting action.

### **B. COMPLIANCE SUMMARY**

There has been no change to the compliance summary with this action.

### **C. SUMMARY OF MONITORING FOR COMPLIANCE**

There has been no change to monitoring with this action.

### **D. PERMIT SHIELD**

#### Permit Shield

The permittee did not request a permit shield in this action.

#### Streamlining

There has been no change to the streamlining with this action.

## **VI. EMISSION REDUCTION CREDITS (OFFSETS)**

The source is no subject to offset requirements in this permitting action.

## VII. MODELING

Facility Location: 686600, 4024250 (Universal Transverse Mercator (UTM) NAD83)

Georgia Pacific Gypsum is a major Title V source in Hydrographic Area 216 (Garnet Valley). Permitted emission units include gypsum products manufacturing. Since minor source baseline dates for PM<sub>10</sub> (December 31, 1980), NO<sub>x</sub> (January 24, 1991) and SO<sub>2</sub> (December 31, 1980) have been triggered, Prevention of Significant Deterioration (PSD) increment analysis is required.

DAQ had analyzed the alternate scenario of all emissions exhausted either through the main stack or the existing scenario of three dryer zones for the operating permit that was issued on May 2, 2023. The analysis showed compliance with the PSD increment for both scenarios. In this permitting action, the source has proposed to add flexibility to exhaust the dryer emissions utilizing both the scenarios at the same time (main stack and three zone stacks). DAQ performed modeling to assess the impacts when the exhaust passes through these stacks in different proportions. As shown in Table VII-1, the impacts using a combination of the stacks were less than when all emissions were exhausted through the main stack.

**Table VII-1: Impacts for Different Stack Scenarios (µg/m<sup>3</sup>)**

Exhaust Proportion	Main Stack	0 %	25 %	50 %	75 %	100 %
	Three Zones	100 %	75 %	50 %	25 %	0 %
NO <sub>x</sub>	1-hour	57.87	59.73	63.85	71.83	79.33
NO <sub>x</sub>	Annual	15.38	16.01	16.63	17.25	17.87
PM <sub>10</sub>	24-hour	11.04	11.19	11.68	12.12	12.41
PM <sub>10</sub>	Annual	5.53	5.78	6.03	6.29	6.54

DAQ modeled the source using AERMOD to track the increment consumption. The average of 2021 and 2022 actual emissions were used in the model. Stack data submitted by the applicant were supplemented with information available for similar emission units. Five years (2011 to 2015) of meteorological data from the McCarran Station were used in the model. U.S. Geological Survey National Elevation Dataset terrain data were used to calculate elevations. Table VII-2 shows the location of the maximum impact and the potential PSD increment consumed by the source at that location. The impacts are below the PSD increment limits.

**Table VII-2: PSD Increment Consumption**

Pollutant	Averaging Period	Source's PSD Increment Consumption (µg/m <sup>3</sup> )	Location of Maximum Impact	
			UTM X (m)	UTM Y (m)
SO <sub>2</sub>	3-hour	1.55 <sup>1</sup>	686683	4024085
SO <sub>2</sub>	24-hour	0.87 <sup>1</sup>	686776	4024416
SO <sub>2</sub>	Annual	0.46	686776	4024416
NO <sub>x</sub>	Annual	12.84	686776	4024416
PM <sub>10</sub>	24-hour	22.90 <sup>1</sup>	686453	4024403
PM <sub>10</sub>	Annual	11.86	686695	4024407

<sup>1</sup> Highest Second High Concentration.

## **VIII. PUBLIC PARTICIPATION**

Under AQR 12.5.2.17, the public participation requirement is not triggered for a minor Part 70 OP revision.

## **IX. ADMINISTRATIVE REQUIREMENTS**

There has been no change to any administrative requirements.