

# STATEMENT OF BASIS for GEORGIA PACIFIC GYPSUM LLC.

## TITLE V OPERATING PERMIT SIGNIFICANT MODIFICATION

Program Interest (PI): 51611 / Permit Activity Number: BOP190005

### I. FACILITY INFORMATION

Georgia Pacific Gypsum is located at 1101 South Front St., Camden, Camden County, NJ 08103 and manufactures various types of gypsum products – screened gypsum rock, ground gypsum and calcined gypsum. The facility is owned and operated by Georgia Pacific Gypsum LLC.

The facility is classified as a major facility based on its potential to emit 34.4 tons per year Oxides of Nitrogen (NOx).

This permit allows individual hazardous air pollutants to be emitted at a rate not to exceed: 4 pounds per year of Polycyclic Organic Matter, and 10 pounds per year of Formaldehyde.

### II. AREA ATTAINMENT CLASSIFICATION

The Federal Clean Air Act (CAA) sets National Ambient Air Quality Standards (NAAQS) for six common air pollutants. These commonly found air pollutants (also known as "criteria pollutants") are particulate matter, ground-level ozone, carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), and lead. The US Environmental Protection Agency (USEPA) also classifies areas as "attainment" or "nonattainment" for each criteria pollutant, based on the magnitude of an area's problem. Nonattainment classifications are used to specify what air pollution reduction measures an area must adopt, and when the area must reach attainment. Currently, the entire State of New Jersey is designated as nonattainment for the 8-hour ozone NAAQS. New Jersey is designated attainment for all other pollutants. For nonattainment classification refer to <https://www.epa.gov/green-book/green-book-national-area-and-county-level-multi-pollutant-information>.

### III. BACKGROUND AND HISTORY

The equipment that emits air contaminants from this facility include: process dryers, kettles, mills, bins, silos and material handling equipment that are equipped with baghouse filters and electrostatic precipitator that provide no less than 99% reduction of particulate emissions.

A Facility-Wide Risk Assessment will be conducted during the next Operating Permit Renewal process. Health Risk Assessment was not conducted with this permit modification, since no changes were made to Air Toxics (including HAPs) emissions.

This is a Permit Modification and includes the following changes:

1. U7 Board Dryer: Remove the U7 emission unit compliance plan, associated equipment and emission points. Delete the annual PTE emission limits for VOC (-24.5 ton/yr), NOx (-33.6 ton/yr), CO (-40.9 ton/yr), SO<sub>2</sub> (-13.5 ton/yr), TSP (-4.9 ton/yr), PM<sub>10</sub> (-4.9 ton/yr) , PM<sub>2.5</sub> (-4.9 ton/yr) and total HAPs (-0.01 ton/yr).
2. U44 Dry End Central Vacuum System: Remove the U44 emission unit compliance plan, associated equipment, control device and emission points. Delete the annual PTE emission limits for TSP (-2.5 ton/yr), PM<sub>10</sub> (-2.5 ton/yr) and PM<sub>2.5</sub> (-2.5 ton/yr).
3. U14 LP Reserve Bin & Landplaster Bulk Loading (Incorporate minor modification BOP190001): Increase the annual material throughput from 219,000 to 657,000 tons/year, and increase the hourly material throughput from 50,000 to 150,000 lb/hr for U14 OS1 and OS2; Increase the annual PTE emission limit TSP from 0.054 to 1.65 ton/yr, PM<sub>10</sub> from 0.054 to 1.56 ton/yr, and PM<sub>2.5</sub> from 0.054 to 1.48 ton/yr; Add once initial stack testing to demonstrate compliance with short-term emission limits for TSP, PM<sub>10</sub> & PM<sub>2.5</sub>, and outlet grain loading of 0.02 gr/dscf for OS1 and OS2.
4. U31 Stucco Cooling: Replace existing Stucco Loading Spout (E71) in U31 OS8 and Stucco Screener (E58) U31 OS10 with identical new equipment with same specifications; Increase the maximum operating hours from 1000 to 8760 hr/yr. Increase the annual PTE emission limit for U31: TSP from 1.01 to 1.58 ton/year, and PM<sub>10</sub> and PM<sub>2.5</sub> from 0.62 to 1.18 ton/year. Add once initial stack testing to demonstrate compliance with the NSPS Subpart OOO PM limit of 0.014 gr/dscf at maximum throughput rate.

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5. U36 Blender/Packer System: Add new equipment Supersac Loading Spout (E103) in U36 OS7 for automated bulk bagging operation with a material throughput rate of 60,000 lb/hr. The OS7 maximum hourly emission limit for TSP, PM10 and PM2.5 is 0.49 lb/hr. Added the requirement that OS7 shall not operate simultaneously with the existing manual bagging operating scenarios U36 OS1 and OS6. Increase the hourly material throughput for U36 OS2 Plaster Blender/Weigher from 40,000 lb/hr to 60,000 lb/hr to match the material throughput of OS7. Increase the TSP, PM10 and PM2.5 annual emission limits from below reporting threshold to 2.17 ton/yr.

6. U54 Resin Extrusion Process: Add new silo (E103) in OS7 to store polypropylene pellets and supply pellets to the extruder, equipped with 3 Cartridge Bin Vent filters (CD41, CD42, CD43) with a control efficiency greater than 99% efficiency during loading and unloading of material. The maximum hourly and annual OS7 PTE emission limits for TSP, PM10 and PM2.5 are 0.195 lb/hr and 0.853 ton/yr.

7. U2 Kettle Calciners: Reconfigure the Kettle #2 Calciner (E4) flue gas arrangement. No change in U2 emission limits.

8. U24 Raymond Mills: Replace the clean air plenums for both the Raymond Mill #2 (CD18) and Kettle #3 (CD3) dust collectors. No change in the emission limits.

This modification will also change the facility-wide emission limits as listed in the following table:

Allowable Emission Limits	Facility's Potential Emissions (tons per year)*									
	VOC (total)	NO <sub>x</sub>	CO	SO <sub>2</sub>	TSP (total)	PM <sub>10</sub> (total)	PM <sub>2.5</sub> (total)	Pb	HAPs (total)	CO <sub>2e</sub> (total)
Current Permit	28.6	68.0	64.9	16.9	51.0	38.2	37.5	0.003	0.017	135,571
Proposed Permit	4.1	34.4	24.0	3.4	48.8	35.9	32.9	0.000	0.007	89,506
Change (+ / -)	-24.5	-33.6	-40.9	-13.5	-2.2	-2.3	-4.6	-0.003	-0.010	-46,065

VOC Volatile Organic Compounds

NO<sub>x</sub> Nitrogen Oxides

CO Carbon Monoxide

SO<sub>2</sub> Sulfur Dioxide

TSP Total Suspended Particulates

\* Other Any other air contaminant regulated under the Federal Clean Air Act. This permit does not contain any air pollutants under this category.

PM<sub>10</sub> Particulates under 10 microns

PM<sub>2.5</sub> Particulates under 2.5 microns

Pb Lead

HAPs Hazardous Air Pollutants

CO<sub>2e</sub> Carbon Dioxide equivalent

**IV. CASE-BY-CASE DETERMINATIONS**

No case-by-case determinations were required for this modification.

**V. EMISSION OFFSET REQUIREMENTS**

This modification is not subject to Emission Offset requirements.

**VI. BASIS FOR MONITORING AND RECORDKEEPING REQUIREMENTS**

The facility's operating permit includes monitoring, recordkeeping and reporting requirements that are sufficient to demonstrate the facility's continued compliance with the applicable requirements consistent with the following:

1. Provisions to implement the testing and monitoring requirements of N.J.A.C. 7:27-22.18, the recordkeeping and reporting requirements of N.J.A.C. 7:27-22.19, and all emissions monitoring and analysis procedures or compliance assurance methods required under the applicable requirements, including any procedures and methods promulgated pursuant to 40 CFR 64; and

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2. Where the applicable requirement does not require direct periodic monitoring of emissions, the Department requires periodic monitoring of surrogate parameters sufficient to yield reliable data from the relevant time period that are representative of the facility's compliance with the permit.
  - For manufacturing and materials handling equipment in U14, U31, U36 and U54, the facility monitors the total material transferred (TPY) as the surrogate for the long-term (TPY) emission limits for TSP, PM-10, and PM-2.5. Raw materials and total material transferred (lb/hr) are monitored as surrogates for the short-term (lb/hr) emission limits for TSP, PM-10, and PM-2.5.
3. In some cases, direct periodic monitoring of emissions and/or surrogate parameters is not required due to one or more of the following:
  - Equipment size and capacity limitations,
  - Subject equipment being permitted at the maximum rated capacity,
  - There is no specific state or Federal standard that applies to this piece of equipment,
  - Not a pollutant of concern for this piece of equipment,
  - Agreements with EPA on the frequency of testing and monitoring for combustion sources.

### VII. APPLICABLE STATE AND FEDERAL RULES

This modification is subject to New Jersey Air Pollution Control Regulations, codified in N.J.A.C. 7:27-1 through 34, as applicable. A complete text of these regulations is available at:

<http://www.nj.gov/dep/aqm/rules27.html>

This modification is also subject to Federal regulations listed below.

NSPS Subpart A: General Provisions

NSPS Subpart OOO: Standards of Performance for Nonmetallic Mineral Processing Plants

The Greenhouse Gas (GHG) emissions from this facility are 89,506 TPY CO<sub>2</sub>e and the GHG emissions was decreased. This modification is not subject to PSD rules at 40 CFR 52.21.

### VIII. FACILITY'S COMPLIANCE STATUS

The Responsible Official at the facility has certified that the facility currently meets all applicable requirements of the Federal Clean Air Act and the New Jersey Air Pollution Control Act. Based on this certification, the Department's evaluation of the information included in the facility's application, and a review of the facility's compliance status, the Department has concluded that this air pollution control operating permit should be approved.

This operating permit includes a permit shield, pursuant to the provisions of N.J.A.C. 7:27-22.17. A permit shield provides that compliance with the relevant conditions of the operating permit shall be deemed compliance with the specific applicable requirements that are in effect on the date of issuance of the draft operating permit, and which form the basis for the conditions in the operating permit.

Prior to the expiration of the Operating Permit's five-year term, the facility will be required to apply for a renewal, at which time the Department will evaluate the facility and issue a public notice with its findings.

### IX. EXEMPT ACTIVITIES

The facility's operating permit does not include exempt activities such as office and interior maintenance activities, maintenance shop activities, food preparation facilities, cafeterias and dining rooms, etc. A complete list of exempt activities, as allowed by the Operating Permit rule, can be found at N.J.A.C. 7:27-22.1.

FACILITY NAME (FACILITY ID NUMBER)  
BOP050001

Activity Number assigned by the Department

**New Jersey Department of Environmental Protection  
Facility Specific Requirements**

Emission Unit Number assigned by the Facility

Brief description of emission unit

**Emission Unit:** U40 Sewage Sludge Incinerators  
**Operating Scenario:** OS Summary

**OR OS2 Fluidized Bed Incinerator**

OS Summary lists all rules and requirements that apply to an emission unit. An emission unit may contain one or more pieces of equipment and corresponding operating scenarios.

OSX denotes the operating scenario number and lists the rules and requirements that apply to a scenario. An operating scenario represents various ways (or scenarios) a piece of equipment is permitted to operate.

Item Number

Description of applicable requirement

Monitoring method to ensure compliance

Recordkeeping to show facility's compliance

Actions and submittals required for the facility

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
3	The permittee shall conduct an annual performance test for each pollutant in Table 2 of 40CFR62 Subpart LLL between 11 and 13 calendar months after the previous performance test or within 60 days of a process change. [40 CFR 62.16000(a)]	Other: Conduct the performance test using the test methods, averaging methods and minimum sampling volumes or durations as specified in 40CFR62 Subpart LLL and according to the testing, monitoring and calibration requirements specified in 40 CFR 62.16015(a). [40 CFR 62.16000(a)].	Other: (1) Maintain records of the results of initial, annual and any subsequent performance tests conducted to determine compliance with the emission limits and standards and/or to establish operating limits, as applicable. [40 CFR 62.16025(e)].	Submit a report: Annually to the Administrator and to the Department. The permittee shall submit an annual compliance report as specified in 40 CFR 62. [40 CFR 62.16000(d)]

Rule citation for applicable requirement

Rule citation for monitoring requirement

Rule citation for recordkeeping requirement

Rule citation for submittal/ action requirement

**Explanation Sheet for Facility Specific Requirements**