

Facility Name: G-P GYPSUM BRUNSWICK, GA PLANT
 City: Brunswick
 County: Glynn
 AIRS #: 04-13-127-00028

Application #: TV- 9157
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 Permit No: 3275-127-0028-V-01-0

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Introduction

This narrative is being provided to assist the reader in understanding the content of the attached draft Part 70 operating permit. Complex issues and unusual items are explained herein simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act Amendments of 1990. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Chapter I of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The primary purpose of this permit is to consolidate and identify existing state and federal air requirements applicable to G-P Gypsum and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. It initially describes the facility receiving the permit, the applicable requirements and their significance, and the methods for determining compliance with those applicable requirements. This narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

I. Facility Description**A. Facility Identification**

1. Facility Name: G-P GYPSUM BRUNSWICK, GA PLANT

2. Parent/Holding Company Name

G-P GYPSUM CORPORATION

3. Previous and/or Other Name(s)

This facility has also been permitted as Georgia Pacific Corporation and has had either that name or the G-P Gypsum name since the late 1970s.

4. Facility Location

1 Union Street
Brunswick, Georgia 31520-8688

5. Attainment or Non-attainment Area Location

Facility is located in an area designated as attainment for all criteria pollutants.

6. Class I Area Impacts

The facility is located in the city of Brunswick in southeast Georgia. It is located within 100 km of the Wolf Island Class I area and the Okefenokee National Wildlife Refuge Class I area.

B. Site Determination

There are no applicable issues with regard to the site determination. There are no other facilities which could be considered contiguous or adjacent and under common control.

C. Existing Permits**Table 1: List of Current Permits as Amended**

Permit Number and/or Purpose of Issuance	Date of Issuance and Date of Amendments (if any)	Comments	
		Yes	No
3275-063-6810-O	Issued June 18, 1979, amended August 11, 1980, August 9, 1984, January 31, 1989, February 14, 1990, October 26, 1990, February 7, 1992, November 4, 1992, September 28, 1994, October 25, 1995, October 3, 1996, December 30, 1997		✓

D. Process Description

1. SIC Codes(s)

Major – 3275
Other - None

2. Description of Product(s)

This facility produces two products, gypsum wallboard and gypcrete, a product made from stucco, which has been more finely ground than the stucco used for wallboard.

3. Overall Facility Process Description

Gypsum ore is received by ship and unloaded into a stockpile, which is covered with a roof. A separate stockpile from waste board (uncovered) is maintained and gypsum from the waste pile is metered back in with the raw ore for processing. The gypsum is crushed and milled into a powder, which is called landplaster. Hot air is also applied at this point in the process providing some drying. The landplaster is, then, cooked or calcined by driving off the chemically bound water. After calcining, the material is called stucco. The stucco is then metered and mixed with various wet and dry additives including the water needed for the rehydration of the gypsum. The slurry is spread between two layers of paper and formed into a continuous sheet of wallboard.

Once the wallboard is formed, the rehydration of the chemically combined water takes approximately three to five minutes. The wallboard is then, cut to length and dried in a board dryer to remove excess water. Once dried, the board is trimmed to its finished length, bundled, stacked and sent to the warehouse to be shipped to distributors.

Alternatively to the wallboard production, approximately 20 percent of the calcined stucco is metered to one of two “entoleters” which grind the stucco before it is mixed with other ingredients to make gypcrete, which is then packaged and sold in bags.

4. Overall Process Flow Diagram

A process flow diagram may be found in the application.

E. Regulatory Status

1. PSD/NSR

The G-P Gypsum wallboard plant was originally constructed prior to the implementation of the PSD regulations and is considered to be an existing major source, with potential emissions of both particulate matter and PM-10 greater than 250 tons per year. This facility is not one of the 28 named major source categories named in the PSD regulations, so the major source threshold remains 250 tons, not 100 tons. There have been no major

modifications at this facility, which have either triggered PSD or PSD avoidance conditions, since the implementation of those regulations. Since this plant is not in the non-attainment area, NSR regulations are inapplicable.

2. Title V Major Source Status by Pollutant

Table 3: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	Yes	✓		
PM ₁₀	Yes	✓		
SO ₂	Yes			✓
VOC	Yes	✓		
NO _x	Yes	✓		
CO	Yes	✓		
TRS	n/a			
H ₂ S	n/a			
Individual HAP	Yes			✓
Total HAPs	Yes			✓

3. MACT Standards

This facility is not subject to any proposed or final MACT Standards.

4. Program Applicability

Program Code	Applicable (y/n)
Program Code 6 - PSD	No
Program Code 8 – Part 61 NESHAP	No
Program Code 9 - NSPS	Yes
Program Code M – Part 63 NESHAP	No
Program Code V – Title V	Yes

Regulatory Analysis

II. Facility Wide Requirements

All applicable rules covered in Part 3.0 of the Title V Permit are federally enforceable. G-P Gypsum is not subject to any State-only enforceable emission rules.

A. Emission and Operating Caps:

G-P Gypsum has no facility wide emission or operating caps.

B. Applicable Rules and Regulations

Rules and Regulations Assessment – G-P Gypsum is not subject to any facility wide air quality rules other than the general provisions in Part VIII of the permit, the general provisions contained in Rule 391-3-1-.02(2)(a) and the general provisions of Subpart A in 40 CFR 60.

Emission and Operating Standards – Not applicable.

C. Compliance Status

See Section VII.F.

D. Operational Flexibility

See Section VII.A.

E. Permit Conditions

Not applicable.

III. Regulated Equipment Requirements

A. Brief Process Description

The equipment at this facility has not been divided into different processes in Table 3.1 or in section 5.00 of the application. However, there are two separate products which are made at this plant, gypsum wallboard and gypcrete. Most of the point sources listed are used in the production of stucco, which would be used for both products. However, the entoleter (grinder) is an extra grinding step associated only with gypcrete production. The board plant rotary screen and some of the ingredient bins which supply it (such as vermiculite and accelerator) are associated only with the board plant portion of this facility.

B. Equipment List for the Process

The permit contains a list of the significant point sources at this facility along with the rules and regulations to which each source is subject, in Table 3.1. The Georgia Rules for Air Quality Control, which are listed, are rules 391-3-1-.02(2)(b), 391-3-1-.02(2)(d), 391-3-1-.02(2)(e) and 391-3-1-.02(2)(g). Each of these air quality rules is federally enforceable. 40 CFR 60, Subpart OOO, is also listed, which is a federal regulation that has been adopted by the State.

C. Equipment & Rule Applicability

Emission and Operating Caps – this facility has no equipment emission or operating caps.

Applicable Rules and Regulations -

Georgia Rule (b) “Visible Emissions” applies to all sources that are subject to at least one other emission limitation and are not subject to any other, more stringent, opacity standard. Rule (b) limits visible emissions to 40 percent opacity. This Rule, therefore, covers all of the sources subject to Rule (e), but not those subject to Subpart OOO. Fuel burning equipment constructed after 1971 have an opacity limit from Rule (d), and therefore, are also not subject to Rule (b). This is the reason kettle burners #1-5 are listed as being subject to Rule (b), but kettle burner #6 is not.

Georgia Rule (d), parts 1, 2 and 3 apply to the various fuel burning sources located at this facility. Part 1 applies to sources built before 1972. This includes five of the six kettle. Georgia Rule (d)1(i) and (d)1(ii) limit particulate matter emissions from the fuel burning equipment at this facility according to the following equations:

$P = 0.7$ pounds per million BTU heat input, for sources with a heat input of 10 million BTUs per hour or less, where P is the allowable particulate matter emission rate. This would apply to the three flash dryers.

$P = 0.7(10/R)^{0.202}$ where P equals the allowable particulate emission rate in pounds per million BTU heat input and R equals the heat input in million BTUs per hour. This would apply to the board dryer and kettle burners #1-5.

Parts 2 and 3 of Rule (d) apply only to fuel burning sources constructed after January 1, 1972. Currently at this facility, that would only include kettle burner #6. Georgia Rule (d)2(ii) limits particulate matter emissions from this burner according to the following equation:

$P = 0.5(10/R)^{0.5}$ where P equals the allowable particulate emission rate in pounds per million BTU heat input and R equals the heat input in million BTUs per hour. This equation applies to fuel burning equipment whose heat input is between 10 and 250 million BTUs per hour.

Part 3 of this rule limits opacity emissions to 20 percent except for one six-minute period per hour of not more than 27 percent opacity. Again, this part would only apply to kettle burner #6. Part 4 of Rule (d) does not apply, since the fuel burning equipment at this facility have heat inputs of less than 250 million BTUs per hour.

Georgia Rule (e) “Particulate Emission from Manufacturing Processes” applies to all processes that emit particulate matter and are not covered by a more specific rule or regulation. At G-P Gypsum, this includes all of the processing equipment not listed as being subject to Subpart OOO, but does not the fuel burning equipment. Emissions are limited by the equation:

$E = 4.1P^{0.67}$, where E equals the allowable particulate matter emission rate in pounds per hour, and P equals the process input rate in tons per hour. This equation is contained in condition 3.4.5 of the permit.

Georgia Rule (g) "Sulfur Dioxide" applies to all fuel burning sources capable of burning fossil fuel. However, part 1 of the Rule is inapplicable since there are no fuel burning sources at this facility with heat inputs of greater than 250 million BTUS per hour. Part 2 of this Rule limits fuel oil sulfur content to being less than 2.5 percent sulfur. However, for periodic monitoring purposes the no. 2 oil burned in the dryers and kettles at G-P Gypsum must meet ASTM 396 specifications, which limits sulfur content to 0.5 percent.

40 CFR 60, Subpart OOO applies to crushers, grinders, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins and enclosed truck or railcar loading stations at nonmetallic mineral processing plants. Gypsum is defined by this regulation as being a nonmetallic mineral. The emission standards from this regulation are contained in condition 3.3.1 of the permit and apply only to sources constructed or modified after August 31, 1983. These sources are identified in Table 3.1. Other older sources at the plant are considered to be "grandfathered" out of this regulation and would not have to meet the emission limits of condition 3.3.1 unless they shared a control device with equipment that is subject to this regulation.

D. Compliance Status - See Section VII.F.

E. Operational Flexibility - See Section VII.A.

F. Permit Conditions

3.3.1 This is an existing permit condition, which contains the emission limits from 40 CFR 60, Subpart OOO. Fugitive emissions are limited to 10 percent opacity, stack emissions to 7 percent opacity and 0.02 grains of particulate matter per dry standard cubic foot of exhaust and other wet operations are not allowed any visible emissions. These requirements were contained, at least partially, in several existing permit amendments as various equipment was added at this facility, including conditions 23, 36, 39 and 43. As the language for this condition is taken from the federal regulation, as it had been in the SIP permit amendments, no changes are necessary.

3.4.1 Limits the opacity from all of the sources listed in Table 3.1 of the permit, not subject to a Subpart OOO opacity limit, according to Rule (2)(b)1. Although G-P has always been subject to this standard, it had only been included in one amendment, as condition no. 33, as applying to a particular source at the plant. The effected equipment would be expected to meet this limit with the use of the baghouses and the electrostatic precipitator at the plant. The fuel burning equipment at this plant are also not subject to this rule since they are instead subject to the stricter opacity standard of Rule (d), which is in Condition 3.4.4.

3.4.2 Limits the particulate matter emissions from the kettle burners #1-5 according to Rule (2)(d)1. G-P has also always been subject to this rule, although it has not been included in the permits. The exhaust from fuel burning equipment at this facility would be expected to meet this emission limit without use of any controls.

- 3.4.3 Limits the particulate matter emissions from the fuel burning sources constructed after 1971 according to Rule (2)(d)2(ii). As previously stated, G-P has also always been subject to this rule (d), even though it has not been included in any permit amendments. Currently this condition applies only to kettle burner #6 and it would be expected to meet this emission limit without use of any controls.
- 3.4.4 Limits opacity from the fuel burning sources constructed after 1971 to 20 percent, except for one six minute period per hour of not more than 27 percent, based on Rule (2)(d)3. As with condition 3.4.3, this applies only to kettle burner #6 currently, which would be expected to meet this emission limitation without the use of any controls.
- 3.4.5 Limits the particulate matter emissions from all sources other than the boilers according to Rule (2)(e). Since an electrostatic precipitator and baghouses are used for the control of all of these particulate matter sources, they are expected to easily comply. Condition 33 of the SIP permit for this facility had contained the same requirements and formula. The limit of this rule, however, applied to many sources for which it was never listed in the SIP permit. Conditions 21 and 22 contained maximum emission rates for two pieces of equipment, which were calculated using the rule (e) formula. The source codes have been renumbered since that permit amendment was issued.
- 3.4.6 Requires that fuel oil burned by G-P meet ASTM specifications. This requirement was not in the previous permit, but was added due to periodic monitoring.
- 3.5.1 Requires that G-P operate the electrostatic precipitator and all baghouses at all times that the associated sources are in operation. This condition will make it easier for G-P to add controlled sources in the future without amending the permit, since the potential emission rate will be calculated with the control device in place.
- 3.5.2 Requires that an adequate supply of replacement bags be kept on hand for all of the baghouses. This is a standard condition, which was in most SIP permits, although it had not previously been in the G-P permit.

IV. Testing Requirements (with Associated Record Keeping and Reporting)

A. General Testing Requirements

None of the applicable regulations to which this facility is subject require performance testing. Therefore, periodic testing on a fixed schedule has not required for any of the emissions units. However, the permit does contain a condition providing that the Division can require that a performance test be conducted to determine compliance with the emissions limits contained in Part 3.0 of the permit.

Test methods for determining emissions rates are listed in Condition 4.1.3.

B. Specific Testing Requirements

A performance test for emissions of particulate matter (PM) from the emission units controlled by the electrostatic precipitator (ESP, APCD ID No. C201) is required. The performance test will be used to determine compliance with the applicable particulate matter emission limit and to establish a power level for the ESP at which compliance with the PM emissions limitation is achieved.

The existing SIP permit for this facility had required annual PM emission testing of sources controlled by the ESP, however, this requirement is being dropped. Annual testing of the emission units is not required by any of the rules or regulations to which this facility is subject. Also, results for tests conducted over the past several years, have indicated PM emissions rates are only 15-20 percent of the allowable emission limitation. Based upon the margin of compliance with the applicable PM emission limitation, shown by the previous tests, the determination was made that annual emission testing was unnecessary.

Another condition has been added to the specific testing requirements section, which requires initial testing of new emission sources, unless exempted from testing by NSPS regulations. This is a flexible permitting condition, which along with condition 7.1.2 should allow for minor equipment additions at the plant without going through a significant modification of the permit. This addition of sources under these conditions only applies where the new system is similar to existing, permitted equipment. Condition 4.2.4 has also been added, which requires initial testing of one of the Raymond Mill baghouses after startup. The Raymond Mills are currently controlled by the ESP, but after the baghouses are installed, will vent to vent only to them. Table 3.1 shows the mills as being controlled by either the ESP or the baghouses.

V. Monitoring Requirements (with Associated Record Keeping and Reporting)

A. General Monitoring Requirements

Condition 5.1.1 requires that all monitors be operated continuously except during breakdowns, repairs, and quality assurance activities. Any repairs or maintenance should be completed in an expeditious manner so downtime is minimized. All data should also be recorded during any calibration activity to help verify that the calibration was performed and completed properly.

B. Specific Monitoring Requirements

Proper operation of the ESP will provide reasonable assurance that the applicable PM and Visible Emissions (opacity) limitations will not be exceeded. The power level of an ESP is an operating parameter, which is related to ESP performance, by maintaining an adequate level of power, emissions will be controlled below applicable limitations. Conditions 5.2.1 and 5.2.2 deal with monitoring ESP parameters. Condition 5.2.1 requires the installation of monitoring devices for measuring both secondary voltage and secondary current and that, readings of these monitors be made at least once per hour of operation. G-P can either make these readings manually or install a data logger which will record the information automatically. The secondary voltages and currents will be used to calculate the actual ESP power level. The calculations will be made according to the equation in condition 5.2.2 and are, also required to be made on an hourly basis.

An excursion is defined, in Condition 6.1.7, as two consecutive determinations of ESP power level, which are less than 70 percent of the average power at which compliance with the emission limitation was achieved. None of the equipment vented to the ESP is currently subject to Subpart OOO emission limits, but must meet only Rule (e) allowable limits.

Certain sources at the facility have baghouses for control of Particulate Matter (PM) emissions and are subject to the PM and Visible Emissions limitations of Rule (e), (b) and /or 40 CFR Part 60, Subpart OOO. The processes that are substantial sources of PM emissions are controlled by the larger baghouses installed at the facility and are subject to the monitoring requirements of Condition 5.2.3 and 5.2.4. To reasonably assure compliance with applicable PM limitations, a Visible Emissions (VE) check is required each day of operation of the emissions units controlled by the baghouses. Corrective actions are required for either the presence of visible emissions or for visible emissions, which exceed a specified opacity action level. In addition, a Preventive Maintenance Program is required on these baghouses. The program requires weekly monitoring of baghouse pressure drop and the performance of operation and maintenance checks on the baghouses. All VE and Preventative Maintenance Program information is retained by the Permittee and submitted to the Division upon request. Excursions, to be reported semiannually, are specified.

Dust collectors, bin vents and filter receivers controlling emissions from individual bins, wet screening operations, bucket elevators, belt and pneumatic conveyances, and bagging operations are exempted from previously detailed monitoring provisions due to little likelihood of significant particulate matter emissions.

Baghouses RMBH 1, RMBH 3, and RMBH 3, which receive gases from a combustion source, are required to monitor (not record) temperature continuously and to record all incidents when the temperature exceeds a temperature based on the maximum temperature that the bags can withstand. The specified excursions are to be reported semiannually.

Sources which are subject to the PM emission and opacity limitation of Subpart OOO and Georgia Rule (e) and which have no air pollution control equipment are required to be inspected each day of operation for visible emissions and/or malfunction which might cause emissions. The permit includes a requirement to take corrective action and keep records. If problems are revealed during the daily check, they must be reported in the semiannual report if not corrected within 24 hours. The specified excursions are to be reported semiannually. Daily checks of the visible emissions from the Maxigrinder and Nordberg System have also been required.

The Kettle Burners and the Board Dryer are all uncontrolled sources, which are subject to Georgia Rule (d) for particulate matter (PM) emissions and either Rule (b) or (d) for opacity. These sources all burn natural gas, propane and the Kettle Burners also burn No. 2 Fuel Oil. These are clean burning fuels and the likelihood of applicable particulate matter emission limitations being exceeded is low. Therefore, no monitoring is required while these sources burn natural gas or propane. The AP-42 emission factors for PM for the Kettle Burners, indicate very little likelihood that these emission limits will be exceeded, therefore no monitoring is necessary while burning fuel oil.

VI. Other Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

Section 6.1 of the Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and the prompt reporting of all related information to deviations from applicable requirements. The submission of written reports (semiannually) of any failure to meet an applicable emission and/or any failure to comply with or complete any work practice or standard contained in this permit is also required. Condition 6.1.7 requires the Permittee to report any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of monitoring.

B. Specific Record Keeping and Reporting Requirements

All fuel burning sources (dryers and kettle burners) are subject to Georgia Rule (g) for sulfur dioxide emissions. Natural gas and propane are processed fuels (cleaned), which have negligible amounts of sulfur; therefore no monitoring is required when these fuels are burned. Fuel oil burned (as backup fuel) in the dryers and kettles (calciners) is limited to Number 2 with a maximum sulfur content of 0.5 percent. Fuel supplier certifications that the fuel oil meets the specifications for Number 2 fuel oil as defined in ASTM 396 (*Standard Specifications for Fuel Oils*) are required for determining compliance with the fuel sulfur limit. Since the Rule (g) sulfur limit is 2.5 percent, the fuel burning sources will be well within compliance with the rule. Condition 6.2.1 requires that G-P obtain these certifications from their fuel supplier and Condition 6.2.2. requires semi-annual reporting of these records.

Condition 6.2.3 requires that records be kept of any actions made to control fugitive emissions. This requirement is typically included in mineral source permits and these records will be available to plant inspectors.

Conditions 6.2.4 and 6.2.5 contain the record keeping and reporting requirements of Subpart OOO. These requirements include notifications of equipment construction and startup dates as well as any operational changes, in advance of those changes being made. Condition 6.2.5 requires that equipment sizes and capacities be reported to the Division for any replacement equipment subject to Subpart OOO.

VII. Specific Requirements

A. Operational Flexibility

G-P did not request that any operational flexibility conditions be included in their permit. However, Conditions 3.5.1 is written to include all control equipment, which would include future baghouses. With this condition, the potential emissions from future modifications can be calculated as controlled, instead of at the allowable rate under rule (e). Potential emissions will be lower and less likely to trigger a significant modification with this wording already in the permit. Conditions 3.5.2 has similar, all-inclusive language. Also, condition 7.1.2 allows the addition of equipment at this facility that is the same as other equipment already at the

plant with the same types of controls, provided, however, that the potential emissions from this new equipment is below emission exemption (from permitting) thresholds. Finally, Table 3.1 lists the three Raymond mills with flash dryers as being controlled by an electrostatic precipitator or baghouses. Currently the combined emissions from these sources are vented to the ESP. However, baghouses are already in place on site which will handle the emissions from these sources in the future, although the final installation has not yet been completed. G-P represented this fact in their application by showing two different process scenarios in section 6.10 of their application. In scenario 1 these sources are included with the equipment that is vented to the ESP, but in scenario 2 they are listed as being controlled by a baghouse. Once the baghouses are up and running, they will be used exclusively. This should provide greater control of emissions from the Raymond mills as well as improve the performance of the ESP by decreasing its inlet loading.

B. Alternative Requirements

There are not alternative requirements that need to be incorporated into the Title V permit.

C. Insignificant Activities

Insignificant activities are listed in Attachment B of the permit and in section 4.10 and section 4.50 of the Title V permit application.

D. Temporary Sources

G-P did not request the permitting of any temporary sources.

E. Short-Term Activities

G-P did not include any short-term activities in their application.

F. Compliance Schedule/Progress Reports

The facility is considered to be in compliance with all Air Quality Regulations. Therefore, no compliance schedule or progress reports are necessary.

G. Emissions Trading

This facility is not involved in any emissions trading programs.

H. Acid Rain Requirements

This facility is not subject to any requirements of Title IV of the Clean Air Act Amendments (acid rain).

I. Prevention of Accidental Releases

This facility has indicated that they store propane in quantities above the threshold for the Accidental Release Prevention Program.

J. Stratospheric Ozone Protection Requirements

The facility has indicated that they have either air conditioners or refrigeration equipment which use CFCs, HFCs or other stratospheric ozone-depleting substances listed in 40 CFR Part 82, Subpart A, Appendices A and B.

K. Pollution Prevention

There are no pollution prevention provisions incorporated into this Title V Permit.

L. Specific Conditions

None

VIII. General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Addendum to Narrative

The public comment period ended on November 28, 2002. Written comments were received from the Sierra Club by letter (and also by e-mail) dated November 15, 2002. Comments were also received from G-P Gypsum, however, no comments were received from EPA.

The comments below have been copied from the electronic copy sent and have been put into italics. The formatting and numbering of the comments is from the Sierra Club, the Division's response to each comment follows. No changes have been made to the draft permit as the result of these comments.

Comments by Sierra Club:**1. GENERAL COMMENTS:*****1.1 THE PERMIT MUST REQUIRE THE PERMITTEE TO SUBMIT ALL MONITORING INFORMATION TO EPD.***

According to 40 CFR § 70.6(a)(3)(iii)(A) and 42 U.S.C. § 7661(c)(a), permits issued by state agencies must require the permittee to submit reports containing all monitoring data at least every 6 months. The reporting of excess emissions, exceedances, and/or excursions by Condition 6.1.4 does not meet this requirement. As pointed out in our earlier comments, Section 5.3.1 should be amended to require submission of the records from the monitoring systems and activities required under Section 5.2, at least semiannually.

A Title V permit is supposed to enable the public to track emission levels and the degree to which a permittee complies with air pollution laws and regulations. Access to monitoring data is obviously indispensable.

RESPONSE

This comment has previously been made by the Sierra Club and has been rejected by EPA Region IV. 40 CFR §70.6(a)(3)(iii)(A) does require the submittal of monitoring reports every 6 months, but not the submittal of all monitoring data. Condition 6.1.4 of the permit complies with this requirement. In a letter from Winston Smith, Director of Air, Pesticide and Toxics Management Division of Region 4 EPA to Robert Ukeiley, Counsel for the Sierra Club, dated March 29, 2002, Mr. Smith noted that "EPD has reasonably interpreted 40 CFR §70.6(a)(3)(iii)(A)" in EPA's review of condition 6.1.4.

1.2 THE PERMIT SHOULD ALLOW ALL CREDIBLE EVIDENCE UNAMBIGUOUSLY.

Section 8.23.1 is incoherent and unintelligible. It should be rewritten.

RESPONSE

Condition 8.23.1, which deals with the use of credible evidence, is based on the language of section 1.3(g) of the Division's *Procedures for Testing and Monitoring Sources of Air Pollutants*, which is incorporated into Georgia EPD's *Rules for Air Quality Control* at 391-3-1-.02(3)(a) and other locations. It was added as a standard condition in Georgia Title V permits as per an agreement with Region IV EPA, which has reviewed and approved the wording of the condition.

1.3 *CONDITION 8.15.1 IS NOT ONLY ENFORCEABLE BY THE STATE.*

Condition 8.15.1 is labeled as enforceable only by the state. As we have noted in earlier comments, this is actually a federal requirement contained in 42 U.S.C. § 7423. Therefore, this condition should not be labeled as state only enforceable condition.

RESPONSE

42 U.S.C. § 7423, titled “Stack Heights,” deals with “good engineering practice (GEP)” stack heights, whereas Condition 8.15.1 is about the circumvention of applicable standards, two different topics. Condition 8.15.1 is taken directly from the Georgia Rules for Air Quality Control, but is not part of Georgia’s SIP and is not part of an applicable federal regulation. Therefore, it has been appropriately classified as a “State Only Enforceable” condition.

2. SPECIFIC COMMENTS

2.1 *PERMIT CONDITIONS SHOULD IDENTIFY AFFECTED SOURCE UNITS.*

2.1.1 Condition 3.4.2 cites provisions of rule 391-3-1-.02(2)(d) which restrict emissions of fly ash and/or other particulate matter from equipment in operation or under construction on or before January 1, 1972. The condition cites two formulas – the first for equipment of less than 10 million BTUs heat input per hour, and the second for equipment with greater heat input.

The condition states that all fuel-burning equipment listed in Table 3.1 is subject to this rule but does not identify the units to which the rule applies nor which of the two formulas is applicable. In Table 3.1, condition 3.4.2 is only listed next to Kettle Burners #1-5.

If condition 3.4.2 is only applicable to Kettle Burners #1-5, these units should be specified in the text of the condition - with their respective heat input capacities.

RESPONSE

Condition 3.4.2 does not state that it affects all fuel burning sources in Table 3.1 but rather states that it covers fuel-burning equipment that is “... listed in Table 3.1, as being subject to this Rule.” The commenter was also incorrect in stating that kettle burners #1-5 are the only sources listed in the table as being covered by condition 3.4.2, as it is also listed as an applicable permit condition for the Raymond mills with flash dryers and also for the board dryer.

This permit condition lists two formulas for determining the allowable particulate matter emission limit from the affected emission units, because either formula could apply to the same unit, depending on the heat input of unit when the determination was made. The allowable emission rate varies with the actual heat input and is not determined by the capacity of the unit. Georgia Rule for Air Quality Control 391-3-1-.02(2)(d), from which the two formulas in condition 3.4.2 were taken, also contains a third formula, which was not included in the permit since it could not apply to any of the emission units at this facility.

2.1.2 Condition 3.4.3 is as opaque as 3.4.2. This condition is associated with Kettle Burner #6 in Table 3.1, but the heat input of this burner is not specified so it is not clear which of the two formulas in this condition is applicable.

If condition 3.4.3 is only applicable to Kettle Burner #6, this unit should be specified in the text of the condition with its heat input capacity and the condition should contain a single formula.

RESPONSE

Condition 3.4.3 contains two formulas, since either formula could apply to Kettle Burner #6, depending on its heat input at the time of the determination. As was stated in the preceding response, the allowable emission rate varies with the heat input and is not determined by the capacity of the emission unit.

2.1.3 The observations in our comments 2.1.1 and 2.1.2 are also applicable to condition 3.4.5, which provides two formulas for allowable particulate matter emissions by rule 391-3-1-.02(2)(e). This rule is associated with several source units in Table 3.1. If the condition is to be enforced, it should identify the source units and the appropriate formula for each. Otherwise it is not clear how the performance tests required under 4.2.2 will be carried out, nor how the results of the tests as reported by condition 4.2.3 can be evaluated.

RESPONSE

The responses to comments 2.1.1 and 2.1.2 are also applicable to comment 2.1.3. Two formulas are included in the Georgia Rules for Air Quality Control, therefore, both must be included in the Title V permit. In order to calculate the allowable emission rate for the performance test required by condition 4.2.2, it would be necessary to know the actual process input weight during the time when the test was performed. This would be determined during the test and included in the test report. The Division's test report review would show the allowable emission rate in comparison to the actual measured rate during the test.

2.1.4 Condition 4.1.2 requires unspecified performance tests, stating that "[t]he specific pollutants, sample volumes, run times, and other testing parameters shall be as specified in the applicable subpart of 40 CFR Part 60." This is much too vague and hardly enforceable as a practical matter.

RESPONSE

This comment appears to address condition 4.2.1 and not 4.1.2. Condition 4.2.1 does not require any testing at the present time, but applies to equipment constructed or modified at the facility in the future, which would be allowed under condition 7.1.2. The pollutants to be measured and the testing procedures would depend on what unit was being constructed or modified and would be determined at that future time in accordance with the provisions of 40 CFR Part 60.

2.1.5 Condition 5.2.3 details procedures for monitoring visible emissions from baghouses and other source units. Any visible emissions are to be evaluated by reference to Table 3.1, employing the following rule.

The opacity action level for baghouses subject to the emission limitations of the NSPS regulations is 5 percent and for baghouses not subject to NSPS regulations is 10 percent. The opacity

action level for uncontrolled sources is 10 percent.

The condition does not identify all affected source units, but it should at least identify the source units that are subject to the NSPS regulations.

RESPONSE

Table 3.1 lists the applicable standards for each emission unit including the units subject to 40 CFR 60, Subpart OOO, the only NSPS standard shown in the table.

2.1.6 Condition 5.2.3 applies “to all baghouses” with exceptions as follows.

Baghouses controlling emissions from silos with dedicated bin vents, wet screening operations, bucket elevators, screw conveyors, bagging operations, and pneumatic conveyors are exempt from this condition.

It is impossible for people other than employees of the facility to know which source units are actually subject to Condition 5.2.3. All affected source units should be identified in the text of this condition.

RESPONSE

Table 3.1 lists the emission units that are subject to condition 5.2.3 and it also lists a description of each of the emission units.

2.1.7 The preceding comment is also applicable to Condition 3.3.1.c. This condition prohibits any visible emissions from general types of source units. It is not clear if the affected source units are represented in Table 3.1 and how they are monitored.

RESPONSE

The language in condition 3.3.1.c is taken directly from the federal regulation, 40 CFR 60, Subpart OOO. A description of the emission units at this facility is given in table 3.1 along with a list of those units subject to Subpart OOO and condition 3.3.1.

2.2 ALL CONDITIONS SHOULD BE PHRASED CLEARLY AND UNAMBIGUOUSLY.

2.2.1 Paragraph b of condition 7.1.2 is unintelligible. The entire text follows.

The change is otherwise exempt from State permit review requirements under Rule 391-3-1-.03(6). Specifically: cumulative modifications, not covered in an existing permit, where the combined particulate matter potential to emit (PTE) increase is below 10 tons per year.

The subject of the second sentence is “cumulative modifications” but there is no predicate. Furthermore, the subject of the first sentence is “the change”, and it is not clear how “cumulative modifications” specifies “change”.

RESPONSE

The text in paragraph b is to be read in conjunction with the initial paragraph of condition 7.1.2 and in that context makes sense. The second part of paragraph b is an example of a change (modification) that would be exempted from permitting under the Georgia Rules for Air Quality Control. It is intended to aid the readers understanding of the first sentence, by drawing their attention to what is expected to be the most commonly used exemption for this facility, in a section of the Rule book which covers eight pages.

2.2.2 Condition 5.2.1 requires continuous monitoring of electrostatic precipitators. It contains the following statement.

Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements. [391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

The Division surely can determine whether there exist performance specifications for implementing the current condition or not. If such specifications do exist, they should be stated explicitly.

RESPONSE

Currently there are no applicable performance specifications for this type of instrumentation in the Division's monitoring requirements. However, with condition 5.2.1 worded in this manner, the permittee would have to start complying with any specifications added to the Division's *Procedures for Testing and Monitoring Sources of Air Pollutants*, that were added in the future, even without their permit being amended.

2.2.3 Condition 5.2.5 requires the permittee to "install continuous temperature monitors on the inlet of baghouses that receive gases from sources that dry or calcine, including baghouses RMBH 1, RMBH 2, and RMBH 3". This text implies that there are additional baghouses that are subject to this condition. It should be stated clearly and unambiguously which baghouses are subject to this condition.

RESPONSE

Table 3.1 lists shows the emission units affected by this permit condition and also shows the three baghouses specified in condition 5.2.5. The wording of this condition allows for the possibility that there could be additional baghouses subject to this condition in the future. With this wording, this condition would still cover the existing three baghouses, even if their identifying names and numbers were changed.

2.3 PERFORMANCE TEST RESULTS MUST BE REPORTED.

The results of performance tests conducted by conditions 4.2.1 and 4.2.4 should be reported to the Division.

RESPONSE

Condition 4.1.1 requires that the results of any performance tests required by the Division, be submitted to the Division, within thirty days of the completion of testing.

2.4 SECTION 112(r) PROBLEM.

Condition 7.10.1 is to apply “when and if the requirements of 40 CFR Part 68 become applicable.” In order to make the permit enforceable as a practical matter, the permit must state whether Section 112(r) applies. See IN THE MATTER OF KINGS PLAZA, ORDER RESPONDING TO PETITIONER'S REQUEST TO OBJECT, Petition No.: II-2000-03, at pp. 30-31, Issue 5.

RESPONSE

The applicability of 112(r) is triggered by a facility storing certain specific chemicals or flammable materials in amounts above their corresponding threshold quantities. Different sections of 112(r) apply, depending on the chemical or substance being stored. A facility may increase or decrease the amount of a material stored, or start or cease storing a particular material, all without triggering any air quality permitting activity. The applicability of 112(r) to a facility may change several times during the lifetime of their Title V permit, therefore, this permit condition is included in all of Georgia's Title V permits, whether applicable to the facility at the time of permit issuance or not.

2.5 THE DRAFT PERMIT IS INCOMPLETE.

2.5.1 Table 3 in the accompanying narrative classifies the facility as a Title V major source of VOC, NO_x, and CO emissions. These emissions are not referred to by any of the conditions in the draft permit. The status of such emissions is not discussed in the narrative either. This omission should be rectified.

RESPONSE

This permit contains the necessary conditions to ensure compliance with all applicable rules and regulations. There are no air quality rules regarding VOC, NO_x or CO emissions. Thus, none have been omitted from the permit.

2.5.2 The process description in Section 1.3 does not specify the equipment used at each stage of the process. This is especially puzzling in view of the fact that heat is crucial for the manufacturing process. The public needs to know exactly how heat is generated in the facility, which emissions may be involved, and how they are controlled.

Also, the draft permit contains a condition that restricts the permittee to burn only propane, natural gas, or number 2 fuel oil (Condition 3.4.6). The permit should make it clear when and where these fuels are burned and how the facility demonstrates compliance with this condition.

RESPONSE

Although the Division has been including process descriptions in its Title V permits, they are neither a required nor a necessary part of a Title V permit. Table 3.1 in the permit lists the emission units at this facility and shows which equipment is subject to the “fuel-burning equipment” rule. Table 3.1 also lists the control devices, if any, associated with the emission units listed. Condition 6.2.1 contains the record keeping requirements that are to ensure that only number 2 fuel oil is burned at this facility.

Comments by G-P Gypsum

Part 1.0

Sections 1.1, 1.2 and 1.3

G-P suggested changes to all three sections of the facility description, the site determination, previous names for the facility and the overall process description. The more detailed information regarding the buildings at the plant site and the exact year of purchase of the facility were included in the first two sections of this part of the permit.

The process description of section 1.3 was also modified slightly. The draft permit description was written with the current plant production in mind. Changes in the wording have been made to indicate that different products or a different proportion of the current products being made could be accomplished with the permitted equipment.

Parts 2.0

Condition 2.2.1

G-P commented that the words "40 CFR 60" should be inserted before the words "Subpart A" in this condition for clarification. This condition is meant to require compliance with subpart A of 40 CFR 60, as may be seen from the citation given. The addition of these words will not affect the meaning of the condition, but are being added since it may help clarify the reader's understanding.

Part 3.0

Table 3.1

A comment was made that permit condition 5.2.6 did not apply to emission units E007, E101, E313-E318 and E508. A change had been made in an earlier draft of the permit, making sources E007 and E101 subject to condition 5.2.3 instead of 5.2.6. Table 3.1 has been changed to match the actual permit conditions. Emission units E313-E318 and E508 are fuel-burning sources, which are listed in condition 5.2.6 as being exempt from its requirements. Table 3.1 has been changed to match the permit condition wording.

Another comment was made that emission units E342 and E404 should not be listed in table 3.1 as being subject to condition 5.2.3, since they are a dedicated bin vent and a bucket elevator, respectively. This condition specifically exempts sources of these types from its requirements. The listing of condition 5.2.3 as a corresponding permit condition in table 3.1 for E404 has been removed, since it is a bucket elevator. However, E342 vents to a baghouse, C401, which also controls other emission units and therefore, is not dedicated. Condition 5.2.3 will still apply to emission unit E342.

A comment was made that the four ball mills E411/1-4 should be listed as having no control equipment, since the filter receivers they have are primarily for product collection and not for air pollution control. These emission units had been listed in the permit application as being controlled by baghouse C405. The Division agrees that these filter receivers should not be considered control devices and table 3.1 will now show these emission units as being uncontrolled.

Condition 3.3.1

G-P requested that part c of condition 3.3.1 be deleted, since they currently have no emission units at the plant that would be subject to these requirements. The wording for this condition is taken directly from 40 CFR 60, Subpart OOO. Since additional emission units may be added to this facility without a permit amendment, if the requirements of condition 7.1.2 are met, it is better to have all of the NSPS requirements already in the permit, even if they are currently inapplicable. No changes are being made to this condition.

Condition 3.5.1

G-P requested that this condition be changed to state that control equipment need not be operated during periods of excess emissions as described by Georgia Rule for Air Quality Control 391-3-1-.02(2)(a)7(i). This rule is applicable to all facilities in Georgia and does excuse excess emissions under certain circumstances. To clarify that certain periods when the control equipment is not running may not be a violation of the permit, a new condition, condition 7.14.1, is being added to the permit containing the requirements of this rule.

Part 5.0

Condition 5.2.1

G-P requested that the data recording frequency for the ESP be changed from once every hour to every two hours. This change has been made, to make this permit consistent with other Title V permits, which have already been issued and contain the two-hour recording frequency.

Condition 5.2.2

It was also requested that the calculation of ESP power be changed to every two hours. This change was made to match condition 5.2.1.

Condition 5.2.3

G-P listed a number of sources, which they felt should be included under condition 5.2.3 instead of 5.2.6. Condition 5.2.3 deals primarily with checking visible emissions from sources controlled by baghouses, whereas condition 5.2.6 requires checking for visible emissions from uncontrolled sources. The sources listed by G-P are NSPS emission units that do not have control devices. These emission units would not be expected to have any visible emissions during normal operation and therefore, it was the Division's intent that these units be covered under condition 5.2.6. Originally, the Maxigrinder (E007) and the Nordberg System (E101) had been included under condition 5.2.6, but were moved to condition 5.2.3. This was due to the fact that these systems may be expected to have some visible emissions even under normal operation. The Division would not intend for a company to constantly be reporting visible emissions when they occur with normal operation and are in compliance with the rules. However, this is not the case with the emission units listed by G-P in this comment. Since the occurrence of visible emissions would be indicative of a problem for these sources, they will not be exempted from condition 5.2.6. No changes are being made to the permit as a result of this comment.

Condition 5.2.5

G-P requested that the requirement to have temperature monitors on baghouses, which receive gases at higher than ambient temperatures be removed from the permit. The Division considers this monitoring to be necessary for sources of this type and is therefore leaving it in the permit, unchanged.

Condition 5.2.6

This condition requires that the occurrence of any visible emissions from certain uncontrolled emission units be noted in a daily logbook. A request was made to change the wording to any visible emissions greater than 10 percent opacity, since this is the NSPS standard. Visible emissions in this condition however, are being used as a surrogate to indicate potential problems with particulate matter emissions. The occurrence of these visible emissions may indicate the emission unit is not meeting the particulate matter standard, which is a separate standard from the opacity standard. Therefore, no changes are being made to this condition.

A comment was also made that repairs and reinspection of an emission unit exhibiting visible emissions may not be possible within 24 hours, as required by this condition, if the unit or the plant is not in operation during that time period. A request was made to change the time period for repairs to 72 hours. The existence of visible emissions may indicate a problem that should be corrected as expeditiously as possible. Therefore, although the Division considers 24 hours to be a reasonable time period to effect repairs in most cases, the language of this condition has been changed to make the repair period to be within 24 hours of operation of the plant. Visible emission problems that are not corrected within 24 hours must be reported as excursions under condition 6.1.7.

Part 6.0

Condition 6.1.7

G-P requested that temperature monitors not be required for baghouses and that condition 5.2.5 be deleted. If condition 5.2.5 were deleted, part c.iii of condition 6.1.7 would be unnecessary, as it requires reporting of instances of baghouse temperatures exceeding their design temperatures. However, since condition 5.2.5 is not being removed from the permit, part c.iii will also not be deleted.

Condition 6.2.3

A comment was made that mobile road sweeping be exempted from this condition, which requires that all measures taken to control fugitive dust be noted in a log. The Division believes it is important to keep records of dust control measures that have been taken and therefore no changes are being made to this condition.

Part 7.0

Condition 7.10.1

G-P commented that this condition should be removed, as it is not currently applicable to this facility. This condition, however, is not being removed for the reasons explained above in response to the Sierra Club comment on the same condition. (see response to Sierra Club comment 2.4)

Throughout Permit

G-P requested that the following three equipment name changes be made:

The "Torit Day Bin Vent" be changed to "Torit Day Baghouse"

The "Board Bin Baghouse" be changed to "Board Bins Bin Vent"

And the 30" entolator be referred to as either the South or the North Entolator.

All of these name changes have been made. The only mention of the Torit Day baghouse was in the control equipment description for emission unit E404 in table 3.1. Similarly the only mentions of the Board Bins bin vent were in table 3.1, in the control device descriptions for emission units E342 and E404. Entoleter 30" is listed in the description of emission unit E330 in table 3.1. This name was taken directly from the permit application and was even used by G-P in their comments on condition 5.2.3. The 30" description had been used to distinguish this entoleter from the 42" unit, which is listed in attachment B as emission unit E331, an insignificant activity based on emission level. A telephone call was made to G-P to determine which unit is the north entoleter and which is the south. During this conversation it was requested that we change the name of the 30" unit to be a 36" unit. This change will be made, with no changes being made to the 42" unit.