Maryland
Department of
the Environment

Wes Moore, Governor
Aruna Miller, Lt. Governor

Serena McIlwain, Secretary
Suzanne E. Dorsey, Deputy Secretary

Mr. Kevin Bushman, Plant Manager
Gold Bond Building Products, LLC
2301 S. Newkirk St.
Baltimore, MD 21224

FEB 11 2025

Dear Mr. Phipps:

Re: Renewal Part 70/ Title V Operating Permit 24-510-0233

Enclosed, please find the renewal Part 70/Title V Operating Permit and Fact Sheet for the Gold Bond Building Products, LLC facility located in Baltimore City, MD. The Permit will expire on March 31, 2029.

The Code of Maryland Regulations (COMAR) 26.11.03.11 states the following:

If the Department denies a Part 70 permit or issues it with terms and conditions that are objectionable to the applicant, the applicant may request that a contested case hearing be held regarding the permit. This request shall be made to the Department in writing not later than 15 days after the applicant receives notice that the permit has been denied or of the objectionable terms and conditions. The request shall include the basis for the request and refer to any objectionable terms and conditions.

Please note the following revised condition in the Permit under Section II, General Conditions, Number 5, Permit Renewal:

The Permittee shall submit to the Department a completed application for renewal of this Part 70 permit 12 months before the expiration of the permit. Upon submitting a complete application, the Permittee may continue to operate this facility pending final action by the Department on the renewal.

If you have any questions, please feel free to contact Ms. Susan Nash at susan.nash@maryland.gov, or (410) 537-3230.

Sincerely,

Suna Yi Sariscak, Manager
Air Quality Permits Program
Air & Radiation Administration

SYS/jm

Enclosures

cc: Mr. James Phipps, Env. Engineering Director
Ms. Meghan Zehringer, Corporate Env. Engineer
EPA Region III (w/encl)

KEEP PERMIT AT SITE

CONTROL NO. B - 07825

Wes Moore
Governor

State of Maryland

Serena McIlwain
Secretary

DEPARTMENT OF THE ENVIRONMENT

Air and Radiation Administration
1800 Washington Boulevard, Suite 720
Baltimore, MD 21230

[ ] Construction Permit

[X] Part 70 Operating Permit

PERMIT NO. 24-510-0233

DATE ISSUED FEB 11 2025

PERMIT FEE To be paid in accordance with COMAR 26.11.02.19B

EXPIRATION DATE March 31, 2029

LEGAL OWNER & ADDRESS

Gold Bond Building Products, LLC
2301 S. Newkirk St.
Baltimore, MD 21224
Attn: Mr. Kevin Bushman, Plant Manager

SITE

Gold Bond Building Products, LLC
2301 S. Newkirk St.
Baltimore, MD 21224
AI # 16681

SOURCE DESCRIPTION

Gypsum wallboard and joint compound manufacturing facility.

This source is subject to the conditions described on the attached pages.

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Program Manager

Director, Air and Radiation Administration

MDE/ARMA/PER.009 (REV. 10-08-03)

(NOT TRANSFERABLE)

GOLD BOND BUILDING PRODUCTS, LLC
2301 S. NEWKIRK STREET
BALTIMORE, MARYLAND 21224
PART 70 OPERATING PERMIT NO. 24-510-0233

SECTION I SOURCE IDENTIFICATION

1. DESCRIPTION OF FACILITY

BACKGROUND

Gold Bond Building Products, LLC (GBBP) (formerly New NGC, Inc. dba National Gypsum Company) manufactures gypsum wallboard. GBBP's Baltimore Plant is located at 2301 South Newkirk Street in Baltimore, MD, Air Quality Area III.

The major activities for the gypsum wallboard manufacturing process consist of four operation categories: (1) gypsum receiving and storage, (2) gypsum milling and processing, (3) stucco/land plaster production and (4) wallboard forming and drying process. The final product is gypsum wallboard.

The SIC code for the facility is 3275.

PROCESS DESCRIPTION

The manufacture of wallboard involves combining several raw materials, primarily gypsum, then charging these materials between two layers of paper to form a board and drying the board in wallboard drying kilns. The process can use natural gypsum ore or synthetic gypsum, which is a calcium sulfate dihydrate material that results from the flue gas desulfurization (FDG) process at coal-fired power plants.

The gypsum is processed in imp mills to remove water and form landplaster and stucco. The processed gypsum or stucco is mixed with a variety of additives that define the properties of the product wallboard. The additives are mixed to form a slurry that is spread between two sheets that serve as a mold. The wet board travels the length of a conveying line where the calcium sulfate hemihydrate combines with water to form solid calcium sulfate dihydrate or gypsum, resulting in a rigid board. This board travels through one of two wallboard drying kilns where the associated water is driven from the gypsum. The dried board is conveyed to the board end sawing area and trimmed and bundled for shipment.

2. FACILITY INVENTORY LIST

Emissions Unit Number	*ARA Registration Number*	Emissions Unit Name and Description	Date of Installation
U01	510-0233-6-0515	Ship unloading: Ship unloading of natural gypsum rock. Truck dumping of synthetic gypsum. [Water/wet suppression system in ship unloading]	07/1996
U01	510-0233-9-0305	Stockpile: Wind erosion and dozer shaping activities of 2 natural/synthetic gypsum stockpiles.	07/1996
U02	510-0233-6-0120	Rock Crusher: 150 tph capacity gypsum rock crusher [1 baghouse]	07/1996
U03, U04	510-0233-6-0126	B.E.T. Systems #1 & #2: Board End Trim (BET) systems #1 and #2. [1 baghouse each]	07/1996
U05		Rock Storage Silo #1: Gypsum rock storage silo #1. [1 baghouse venting inside a building]	07/1996
U09, U10, U11	510-0233-6-1426	Imp Mills #1, 2, 3: 22 MMBTU/hr rated Imp Mills #1, #2, and #3 dry and grind gypsum to produce land plaster or grind, dry and calcine gypsum to produce stucco. (Natural gas, #2 fuel oil secondary, direct fired). [1 baghouse each]	07/1996
U12		Product Screw Elevator: Transfers finished product from imp mills to storage silos. [2 baghouses vent inside building]	07/1996
U13		Product Bucket Elevator: Transfers finished product from imp mills to storage silos. [vents inside building]	07/1996
U14		Product Air Jet Belt Conveyor: Transfers finished product from imp mills to storage silos. [5 baghouses, each venting inside a building]	07/1996
U15, U16, U17, U18	510-0233-6-0123	Stucco Storage Silos: Storage silos for stucco. [1 baghouse each, U18 baghouse vents inside building]	11/1980
U19		Land plaster/Stucco Conveying Elevator: Transfers land plaster or stucco to storage silo. [1 baghouse venting inside building]	04/1978
U20		Land plaster/Stucco Bin & Two Screw Conveyors: Transfers stucco to storage silo. [1 baghouse venting inside building]	04/1997
U21	510-0233-6-1569	BMA Elevator: Ball Mill Accelerator (BMA) is manufactured from land plaster and starch. BMA is transferred from ball mill to the wallboard manufacturing process. [1 baghouse venting inside building]	04/1978
U22		Screw Conveyor #238 & Pin Mixer: Stucco, BMA and other wallboard forming ingredients are conveyed to the pin mixer for wallboard forming process. [1 baghouse venting inside building]	04/1997

U23	510-0233-6-0646	Board Kiln No. 1: 96 MMBtu/hr max rated dryer/kiln with 4 zones (2 burners per zone). Four burners for zones 1 & 2 are rated at 14 MMBtu/hr each. Four burners for zones 3 & 4 are rated at 10 MMBtu/hr each. Process can use ammonium sulfate instead of potash. Emissions of ammonia when ammonium sulfate used in process. (Natural gas, direct fired)	05/1969 RTO Installed 2016 & Baghouse Installed 2017
U24	510-0233-6-0223	Limestone Unloading & Storage Silo: Limestone is delivered by pressure displacement truck and unloads into primary storage silo. [1 baghouse]	04/1996
U25	510-0233-6-1348	Ribbon Mixer, Cyclone Separator, and Pre-Blender Dump Station: Limestone from a cyclone separator, several dry additives and wet additives are placed in the ribbon mixer to produce joint compound. [1 baghouse]	04/1994
U26	510-0233-6-1426	Imp Mill #4: 30 MMBtu/hr rated Imp Mill #4 dry and grind gypsum to produce land plaster or grind, dry and calcine gypsum to produce stucco. (Natural gas, #2 fuel oil secondary, direct fired) [1 Low NOx burner & 1 baghouse]	02/1998
U27		Stucco Storage Bin & Conveyors: Stucco conveying system. [1 baghouse vents inside building]	02/1998
U28		BMA Product Elevator: BMA product elevator. [2 baghouses, each venting inside building]	04/1998
U29	510-0233-6-1569	Stucco Jet Belt, Conveyor and Pin Mixer: Pin mixer, jet belt conveyor, stucco storage silo, conveying systems and 100 ton silo. [1 baghouse]	04/1998
U30	510-0233-6-1569	Board Kiln No. 2: 135 MMBtu/hr max rated dryer/kiln with 3 zones (1 burner per zone). Two burners for zones 1 & 2 are rated at 60 MMBtu/hr each. One burner for zone 3 is rated at 15 MMBtu/hr. Process can use ammonium sulfate instead of potash. Emissions of ammonia when ammonium sulfate used in process (Natural gas, #2 fuel oil secondary, direct fired). [3 Low NOx burners]	04/1998
U32	510-0233-6-1569	#2 Riser Maker (BET #3 System): Riser maker line. [1 baghouse]	04/1998
U34	510-0233-6-1569	Starch Unloading and Storage Silo: Starch unloading and storage silo system. [2 baghouses venting inside building]	04/1998
U35		Mill Department Land plaster Silo: Mill Department Land plaster silo. [1 baghouse]	04/1998
U36		BP-1 Stucco Recirculation Elevator: Boardline #1 stucco recirculation elevator. [1 baghouse venting inside a building]	04/1998
U37		BP-1 Vermiculite System: Boardline #1 vermiculite system. [2 cartridge filters (one on each silo) venting inside building]	04/1998
U39		BP-2 Merrick Potash Feeder: Boardline #2 Merrick potash feeder. [1 baghouse venting inside building]	04/1998

U40		BP-2 Merrick BMA Feeder: Boardline #2 Merrick BMA feeder. [1 baghouse venting inside building]	04/1998
U42		BP-2 Merrick Potash Elevator: Boardline #2 potash elevator. [1 baghouse venting inside building]	04/1998
U43		BP-2 LP Feed B: Boardline #2 land plaster feed B. [1 baghouse venting inside building]	04/1998
U44		BP-2 Starch Feed B: Boardline #2 starch feed B. [1 baghouse venting inside building]	04/1998
U45		BP-2 LP Feed A: Boardline #2 landplaster feed A. [1 baghouse venting inside building]	04/1998
U47		#1 Riser Maker: Riser Maker Line. [1 baghouse venting inside building]	01/2017
U48	510-0233-6-2105	One (1) 12 tons per hour wallboard reclaim system consisting of: • one (1) JC Steele Feeder, one (1) Monster Crusher, one (1) Reclaim Recycling System Staging Area Pile with a wet suppression spray system, and associated conveyors controlled by a building enclosure; • one (1) Board Line #1 Wet Reclaim Storage Area Pile with a wet suppression spray system and controlled by a building enclosure; • one (1) Board Line #2 Wet Reclaim Storage Area Pile with a wet suppression spray system and controlled by a building enclosure; • one (1) blended Reclaim Storage Area Pile with a wet suppression spray system and controlled by a building enclosure.	12/2018 Modified 2022, 2023
U49	510-0233-9-1385	Stucco Cooler System: Rotary drum stucco cooler. [unit venting to dust collector]	05/2020

SECTION II GENERAL CONDITIONS

1. DEFINITIONS

[COMAR 26.11.01.01] and [COMAR 26.11.02.01]

The words or terms in this Part 70 permit shall have the meanings established under COMAR 26.11.01 and .02 unless otherwise stated in this permit.

2. ACRONYMS

ARA	Air and Radiation Administration
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEM	Continuous Emissions Monitor
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMAR	Code of Maryland Regulations
EPA	United States Environmental Protection Agency
FR	Federal Register
gr	grains
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
MDE	Maryland Department of the Environment
MVAC	Motor Vehicle Air Conditioner
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
OTR	Ozone Transport Region
PM	Particulate Matter
PM10	Particulate Matter with Nominal Aerodynamic Diameter of 10 micrometers or less
ppm	parts per million
ppb	parts per billion
PSD	Prevention of Significant Deterioration
PTC	Permit to construct
PTO	Permit to operate (State)
SIC	Standard Industrial Classification

SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
tpy	tons per year
VE	Visible Emissions
VOC	Volatile Organic Compounds

3. EFFECTIVE DATE

The effective date of the conditions in this Part 70 permit is the date of permit issuance, unless otherwise stated in the permit.

4. PERMIT EXPIRATION

[COMAR 26.11.03.13B(2)]

Upon expiration of this permit, the terms of the permit will automatically continue to remain in effect until a new Part 70 permit is issued for this facility provided that the Permittee has submitted a timely and complete application and has paid applicable fees under COMAR 26.11.02.16.

Otherwise, upon expiration of this permit the right of the Permittee to operate this facility is terminated.

5. PERMIT RENEWAL

[COMAR 26.11.03.02B(3)] and [COMAR 26.11.03.02E]

The Permittee shall submit to the Department a completed application for renewal of this Part 70 permit at least 12 months before the expiration of the permit. Upon submitting a completed application, the Permittee may continue to operate this facility pending final action by the Department on the renewal.

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall submit such supplementary facts or corrected information no later than 10 days after becoming aware that this occurred. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a completed application was submitted, but prior to the release of a draft permit. This

information shall be submitted to the Department no later than 20 days after a new requirement has been adopted.

6. CONFIDENTIAL INFORMATION

[COMAR 26.11.02.02G]

In accordance with the provisions of the State Government Article, Sec. 10-611 et seq., Annotated Code of Maryland, all information submitted in an application shall be considered part of the public record and available for inspection and copying, unless the Permittee claims that the information is confidential when it is submitted to the Department. At the time of the request for inspection or copying, the Department will make a determination with regard to the confidentiality of the information. The Permittee, when requesting confidentiality, shall identify the information in a manner specified by the Department and, when requested by the Department, promptly provide specific reasons supporting the claim of confidentiality. Information submitted to the Department without a request that the information be deemed confidential may be made available to the public. Subject to approval of the Department, the Permittee may provide a summary of confidential information that is suitable for public review. The content of this Part 70 permit is not subject to confidential treatment.

7. PERMIT ACTIONS

[COMAR 26.11.03.06E(3)] and [COMAR 26.11.03.20(A)]

This Part 70 permit may be revoked or reopened and revised for cause. The filing of an application by the Permittee for a permit revision or renewal; or a notification of termination, planned changes or anticipated noncompliance by the facility, does not stay a term or condition of this permit.

The Department shall reopen and revise, or revoke the Permittee's Part 70 permit under the following circumstances:

a. Additional requirements of the Clean Air Act become applicable to this facility and the remaining permit term is 3 years or more;

b. The Department or the EPA determines that this Part 70 permit contains a material mistake, or is based on false or inaccurate information supplied by or on behalf of the Permittee;

c. The Department or the EPA determines that this Part 70 permit must be revised or revoked to assure compliance with applicable requirements of the Clean Air Act; or

d. Additional requirements become applicable to an affected source under the Federal Acid Rain Program.

8. PERMIT AVAILABILITY

[COMAR 26.11.02.13G]

The Permittee shall maintain this Part 70 permit in the vicinity of the facility for which it was issued, unless it is not practical to do so, and make this permit immediately available to officials of the Department upon request.

9. REOPENING THE PART 70 PERMIT FOR CAUSE BY THE EPA

[COMAR 26.11.03.20B]

The EPA may terminate, modify, or revoke and reissue a permit for cause as prescribed in 40 CFR §70.7(g)

10. TRANSFER OF PERMIT

[COMAR 26.11.02.02E]

The Permittee shall not transfer this Part 70 permit except as provided in COMAR 26.11.03.15.

11. REVISION OF PART 70 PERMITS – GENERAL CONDITIONS

[COMAR 26.11.03.14] and [COMAR 26.11.03.06A(8)]

a. The Permittee shall submit an application to the Department to revise this Part 70 permit when required under COMAR 26.11.03.15 -.17.

b. When applying for a revision to a Part 70 permit, the Permittee shall comply with the requirements of COMAR 26.11.03.02 and .03 except that the application for a revision need include only information listed that is related to the proposed change to the source and revision to the permit. This information shall be sufficient to evaluate the proposed change and to determine whether it will comply with all applicable requirements of the Clean Air Act.

c. The Permittee may not change any provision of a compliance plan or schedule in a Part 70 permit as an administrative permit amendment or as a minor permit modification unless the change has been approved by the Department in writing.

d. A permit revision is not required for a change that is provided for in this permit relating to approved economic incentives, marketable permits, emissions trading, and other similar programs.

12. SIGNIFICANT PART 70 OPERATING PERMIT MODIFICATIONS

[COMAR 26.11.03.17]

The Permittee may apply to the Department to make a significant modification to its Part 70 Permit as provided in COMAR 26.11.03.17 and in accordance with the following conditions:

a. A significant modification is a revision to the federally enforceable provisions in the permit that does not qualify as an administrative permit amendment under COMAR 26.11.03.15 or a minor permit modification as defined under COMAR 26.11.03.16.

b. This permit does not preclude the Permittee from making changes, consistent with the provisions of COMAR 26.11.03, that would make the permit or particular terms and conditions of the permit irrelevant, such as by shutting down or reducing the level of operation of a source or of an emissions unit within the source. Air pollution control equipment shall not be shut down or its level of operation reduced if doing so would violate any term of this permit.

c. Significant permit modifications are subject to all requirements of COMAR 26.11.03 as they apply to permit issuance and renewal,

including the requirements for applications, public participation, and review by affected states and EPA, except:

(1) An application need include only information pertaining to the proposed change to the source and modification of this permit, including a description of the change and modification, and any new applicable requirements of the Clean Air Act that will apply if the change occurs;

(2) Public participation, and review by affected states and EPA, is limited to only the application and those federally enforceable terms and conditions of the Part 70 permit that are affected by the significant permit modification.

d. As provided in COMAR 26.11.03.15B(5), an administrative permit amendment may be used to make a change that would otherwise require a significant permit modification if procedures for enhanced preconstruction review of the change are followed that satisfy the requirements of 40 CFR 70.7(d)(1)(v).

e. Before making a change that qualifies as a significant permit modification, the Permittee shall obtain all permits-to-construct and approvals required by COMAR 26.11.02.

f. The Permittee shall not make a significant permit modification that results in a violation of any applicable requirement of the Clean Air Act.

g. The permit shield in COMAR 26.11.03.23 applies to a final significant permit modification that has been issued by the Department, to the extent applicable under COMAR 26.11.03.23.

13. MINOR PERMIT MODIFICATIONS

[COMAR 26.11.03.16]

The Permittee may apply to the Department to make a minor modification to the federally enforceable provisions of this Part 70 permit as provided in COMAR 26.11.03.16 and in accordance with the following conditions:

a. A minor permit modification is a Part 70 permit revision that:

(1) Does not result in a violation of any applicable requirement of the Clean Air Act;

(2) Does not significantly revise existing federally enforceable monitoring, including test methods, reporting, record keeping, or compliance certification requirements except by:

(a) Adding new requirements,

(b) Eliminating the requirements if they are rendered meaningless because the emissions to which the requirements apply will no longer occur, or

(c) Changing from one approved test method for a pollutant and source category to another;

(3) Does not require or modify a:

(a) Case-by-case determination of a federally enforceable emissions standard,

(b) Source specific determination for temporary sources of ambient impacts, or

(c) Visibility or increment analysis;

(4) Does not seek to establish or modify a federally enforceable permit term or condition for which there is no corresponding underlying applicable requirement of the Clean Air Act, but that the Permittee has assumed to avoid an applicable requirement to which the source would otherwise be subject, including:

(a) A federally enforceable emissions standard applied to the source pursuant to COMAR 26.11.02.03 to avoid classification as a Title I modification; and

(b) An alternative emissions standard applied to an emissions unit pursuant to regulations promulgated under Section 112(i)(5) of the Clean Air Act

(5) Is not a Title I modification; and

(6) Is not required under COMAR 26.11.03.17 to be processed as a significant modification to this Part 70 permit.

b. Application for a Minor Permit Modification

The Permittee shall submit to the Department an application for a minor permit modification that satisfies the requirements of COMAR 26.11.03.03 which includes the following:

(1) A description of the proposed change, the emissions resulting from the change, and any new applicable requirements that will apply if the change is made;

(2) The proposed minor permit modification;

(3) Certification by a responsible official, in accordance with COMAR 26.11.02.02F, that:

(a) The proposed change meets the criteria for a minor permit modification, and

(b) The Permittee has obtained or applied for all required permits-to-construct required by COMAR 26.11.03.16 with respect to the proposed change;

(4) Completed forms for the Department to use to notify the EPA and affected states, as required by COMAR 26.11.03.07-.12.

c. Permittee's Ability to Make Change

(1) For changes proposed as minor permit modifications to this permit that will require the applicant to obtain a permit to construct, the permit to construct must be issued prior to the new change.

(2) During the period of time after the Permittee applies for a minor modification but before the Department acts in accordance with COMAR 26.11.03.16F(2):

(a) The Permittee shall comply with applicable requirements of the Clean Air Act related to the change and the permit terms and conditions described in the application for the minor modification.

(b) The Permittee is not required to comply with the terms and conditions in the permit it seeks to modify. If the Permittee fails to comply with the terms and conditions in the application during this time, the terms and conditions of both this permit and the application for modification may be enforced against it.

d. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.16 is not within the scope of this regulation.

e. Minor permit modification procedures may be used for Part 70 permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, but only to the extent that the minor permit modification procedures are explicitly provided for in regulations approved by the EPA as part of the Maryland SIP or in other applicable requirements of the Clean Air Act.

14. ADMINISTRATIVE PART 70 OPERATING PERMIT AMENDMENTS

[COMAR 26.11.03.15]

The Permittee may apply to the department to make an administrative permit amendment as provided in COMAR 26.11.03.15 and in accordance with the following conditions:

a. An application for an administrative permit amendment shall:

(1) Be in writing;

(2) Include a statement certified by a responsible official that the proposed amendment meets the criteria in COMAR 26.11.03.15 for an administrative permit amendment, and

(3) Identify those provisions of this part 70 permit for which the amendment is requested, including the basis for the request.

b. An administrative permit amendment:

(1) Is a correction of a typographical error;

(2) Identifies a change in the name, address, or phone number of a person identified in this permit, or a similar administrative change involving the Permittee or other matters which are not directly related to the control of air pollution;

(3) requires more frequent monitoring or reporting by the Permittee;

(4) Allows for a change in ownership or operational control of a source for which the Department determines that no other revision to the permit is necessary and is documented as per COMAR 26.11.03.15B(4);

(5) Incorporates into this permit the requirements from preconstruction review permits or approvals issued by the Department in accordance with COMAR 26.11.03.15B(5), but only if it satisfies 40 CFR 70.7(d)(1)(v);

(6) Incorporates any other type of change, as approved by the EPA, which is similar to those in COMAR 26.11.03.15B(1)—(4);

(7) Notwithstanding COMAR 26.11.03.15B(1)—(6), all modifications to acid rain control provisions included in this Part 70 permit are governed by applicable requirements promulgated under Title IV of the Clean Air Act; or

(8) Incorporates any change to a term or condition specified as State-only enforceable, if the Permittee has obtained all necessary permits-to-construct and approvals that apply to the change.

c. The Permittee may make the change addressed in the application for an administrative amendment upon receipt by the Department of the application, if all permits-to-construct or approvals otherwise required by COMAR 26.11.02 prior to making the change have first been obtained from the Department.

d. The permit shield in COMAR 26.11.03.23 applies to administrative permit amendments made under Section B(5) of COMAR 26.11.03.15 , but only after the Department takes final action to revise the permit.

e. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.15 is not within the scope of this regulation.

15. OFF-PERMIT CHANGES TO THIS SOURCE

[COMAR 26.11.03.19]

The Permittee may make off-permit changes to this facility as provided in COMAR 26.11.03.19 and in accordance with the following conditions:

a. The Permittee may make a change to this permitted facility that is not addressed or prohibited by the federally enforceable conditions of this Part 70 permit without obtaining a Part 70 permit revision if:

(1) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;

(2) The change is not subject to any requirements under Title IV of the Clean Air Act;

(3) The change is not a Title I modification; and

(4) The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of the permit.

b. For a change that qualifies under COMAR 26.11.03.19, the Permittee shall provide contemporaneous written notice to the Department and the EPA, except for a change to an emissions unit or activity that is exempt from the Part 70 permit application, as provided in COMAR 26.11.03.04. This written notice shall describe the change, including the date it was made, any change in emissions, including the pollutants emitted, and any new applicable requirements of the Clean Air Act that apply as a result of the change.

c. Upon satisfying the requirements of COMAR 26.11.03.19, the Permittee may make the proposed change.

d. The Permittee shall keep a record describing:

(1) Changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement of the Clean Air Act , but not otherwise regulated under this permit; and

(2) The emissions resulting from those changes.

e. Changes that qualify under COMAR 26.11.03.19 are not subject to the requirements for Part 70 revisions.

f. The Permittee shall include each off-permit change under COMAR 26.11.03.19 in the application for renewal of the part 70 permit.

g. The permit shield in COMAR 26.11.03.23 does not apply to off-permit changes made under COMAR 26.11.03.19.

h. The Permittee is subject to enforcement action if it is determined that an off-permit change made under COMAR 26.11.03.19 is not within the scope of this regulation.

16. ON-PERMIT CHANGES TO SOURCES

[COMAR 26.11.03.18]

The Permittee may make on-permit changes that are allowed under Section 502(b)(10) of the Clean Air Act as provided in COMAR 26.11.03.18 and in accordance with the following conditions:

a. The Permittee may make a change to this facility without obtaining a revision to this Part 70 permit if:

(1) The change is not a Title I modification;

(2) The change does not result in emissions in excess of those expressly allowed under the federally enforceable provisions of the Part 70 permit for the permitted facility or for an emissions unit within the facility, whether expressed as a rate of emissions or in terms of total emissions;

(3) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;

(4) The change does not violate an applicable requirement of the Clean Air Act;

(5) The change does not violate a federally enforceable permit term or condition related to monitoring, including test methods, record keeping, reporting, or compliance certification requirements;

(6) The change does not violate a federally enforceable permit term or condition limiting hours of operation, work practices, fuel usage, raw material usage, or production levels if the term or condition has been established to limit emissions allowable under this permit;

(7) If applicable, the change does not modify a federally enforceable provision of a compliance plan or schedule in this Part 70 permit unless the Department has approved the change in writing; and

(8) This permit does not expressly prohibit the change under COMAR 26.11.03.18.

b. The Permittee shall notify the Department and the EPA in writing of a proposed on-permit change under COMAR 26.11.03.18 not later than 7 days before the change is made. The written information shall include the following information:

(1) A description of the proposed change;

(2) The date on which the change is proposed to be made;

(3) Any change in emissions resulting from the change, including the pollutants emitted;

(4) Any new applicable requirement of the Clean Air Act; and

(5) Any permit term or condition that would no longer apply.

c. The responsible official of this facility shall certify in accordance with COMAR 26.11.02.02F that the proposed change meets the criteria for the use of on-permit changes under COMAR 26.11.03.18.

d. The Permittee shall attach a copy of each notice required by condition b. above to this Part 70 permit.

e. On-permit changes that qualify under COMAR 26.11.03.18 are not subject to the requirements for part 70 permit revisions.

f. Upon satisfying the requirements under COMAR 26.11.03.18, the Permittee may make the proposed change.

g. The permit shield in COMAR 26.11.03.23 does not apply to on-permit changes under COMAR 26.11.03.18.

h. The Permittee is subject to enforcement action if it is determined that an on-permit change made under COMAR 26.11.03.18 is not within the scope of the regulation or violates any requirement of the State air pollution control law.

17. FEE PAYMENT

[COMAR 26.11.02.16A(2) & (5)(b)]

a. The fee for this Part 70 permit is as prescribed in Regulation .19 of COMAR 26.11.02.

b. The fee is due on and shall be paid on or before each 12-month anniversary date of the permit.

c. Failure to pay the annual permit fee constitutes cause for revocation of the permit by the Department.

18. REQUIREMENTS FOR PERMITS-TO-CONSTRUCT AND APPROVALS

[COMAR 26.11.02.09.]

The Permittee may not construct or modify or cause to be constructed or modified any of the following sources without first obtaining, and having in current effect, the specified permits-to-construct and approvals:

a. New Source Review source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;

b. Prevention of Significant Deterioration source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;

c. New Source Performance Standard source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

d. National Emission Standards for Hazardous Air Pollutants source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

e. A stationary source of lead that discharges one ton per year or more of lead or lead compounds measured as elemental lead, permit to construct required, except for generating stations constructed by electric companies;

f. All stationary sources of air pollution, including installations and air pollution control equipment, except as listed in COMAR 26.11.02.10, permit to construct required;

g. In the event of a conflict between the applicability of (a.— e.) above and an exemption listed in COMAR 26.11.02.10, the provision that requires a permit applies.

h. Approval of a PSD or NSR source by the Department does not relieve the Permittee obtaining an approval from also obtaining all permits-to-construct required b y (c.— g.) above.

19. CONSOLIDATION OF PROCEDURES FOR PUBLIC PARTICIPATION

[COMAR 26.11.02.11C] and [COMAR 26.11.03.01K]

The Permittee may request the Department to authorize special procedures for the Permittee to apply simultaneously, to the extent possible, for a permit to construct and a revision to this permit.

These procedures may provide for combined public notices, informational meetings, and public hearings for both permits but shall not adversely affect the rights of a person, including EPA and affected states, to obtain information about the application for a permit, to comment on an application, or to challenge a permit that is issued.

These procedures shall not alter any existing permit procedures or time frames.

20. PROPERTY RIGHTS

[COMAR 26.11.03.06E(4)]

This Part 70 permit does not convey any property rights of any sort, or any exclusive privileges.

21. SEVERABILITY

[COMAR 26.11.03.06A(5)]

If any portion of this Part 70 permit is challenged, or any term or condition deemed unenforceable, the remainder of the requirements of the permit continues to be valid.

22. INSPECTION AND ENTRY

[COMAR 26.11.03.06G(3)]

The Permittee shall allow employees and authorized representatives of the Department, the EPA, and local environmental health agencies, upon presentation of credentials or other documents as may be required by law, to:

a. Enter at a reasonable time without delay and without prior notification the Permittee's property where a Part 70 source is located, emissions-related activity is conducted, or records required by this permit are kept;

b. Have access to and make copies of records required by the permit;

c. Inspect all emissions units within the facility subject to the permit and all related monitoring systems, air pollution control equipment, and practices or operations regulated or required by the permit; and

d. Sample or monitor any substances or parameters at or related to the emissions units at the facility for the purpose of determining compliance with the permit.

23. DUTY TO PROVIDE INFORMATION

[COMAR 26.11.03.06E(5)]

The Permittee shall furnish to the Department, within a reasonable time specified by the Department, information requested in writing by the Department in order to determine whether the Permittee is in compliance with the federally enforceable conditions of this Part 70 permit, or whether cause exists for revising or revoking the permit. Upon request, the Permittee shall also furnish to the Department records required to be kept under the permit.

For information claimed by the Permittee to be confidential and therefore potentially not discloseable to the public, the Department may require the Permittee to provide a copy of the records directly to the EPA along with a claim of confidentiality.

The Permittee shall also furnish to the Department, within a reasonable time specified by the Department, information or records requested in writing by the Department in order to determine if the Permittee is in compliance with the State-only enforceable conditions of this permit.

24. COMPLIANCE REQUIREMENTS

[COMAR 26.11.03.06E(1)] and [COMAR 26.11.03.06A(11)] and [COMAR 26.11.02.05]

The Permittee shall comply with the conditions of this Part 70 permit. Noncompliance with the permit constitutes a violation of the Clean Air Act, and/or the Environment Article Title 2 of the Annotated Code of Maryland and may subject the Permittee to:

a. Enforcement action,

b. Permit revocation or revision,

c. Denial of the renewal of a Part 70 permit, or

d. Any combination of these actions.

The conditions in this Part 70 permit are enforceable by EPA and citizens under the Clean Air Act except for the State-only enforceable conditions.

Under Environment Article Section 2-609, Annotated Code of Maryland, the Department may seek immediate injunctive relief against a person who violates this permit in such a manner as to cause a threat to human health or the environment.

25. CREDIBLE EVIDENCE

Nothing in this permit shall be interpreted to preclude the use of credible evidence to demonstrate noncompliance with any term of this permit.

26. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

[COMAR 26.11.03.06E(2)]

The need to halt or reduce activity in order to comply with the conditions of this permit may not be used as a defense in an enforcement action.

27. CIRCUMVENTION

[COMAR 26.11.01.06]

The Permittee may not install or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total weight of emissions, conceals or dilutes emissions which would otherwise constitute a violation of any applicable air pollution control regulation.

28. PERMIT SHIELD

[COMAR 26.11.03.23]

A permit shield as described in COMAR 26.11.03.23 shall apply only to terms and conditions in this Part 70 permit that have been specifically

identified as covered by the permit shield. Neither this permit nor COMAR 26.11.03.23 alters the following:

a. The emergency order provisions in Section 303 of the Clean Air Act, including the authority of EPA under that section;

b. The liability of the Permittee for a violation of an applicable requirement of the Clean Air Act before or when this permit is issued or for a violation that continues after issuance;

c. The requirements of the Acid Rain Program, consistent with Section 408(a) of the Clean Air Act;

d. The ability of the Department or EPA to obtain information from a source pursuant to Maryland law and Section 114 of the Clean Air Act; or

e. The authority of the Department to enforce an applicable requirement of the State air pollution control law that is not an applicable requirement of the Clean Air Act.

29. ALTERNATE OPERATING SCENARIOS

[COMAR 26.11.03.06A(9)]

For all alternate operating scenarios approved by the Department and contained within this permit, the Permittee, while changing from one approved scenario to another, shall contemporaneously record in a log maintained at the facility each scenario under which the emissions unit is operating and the date and time the scenario started and ended.

SECTION III PLANT WIDE CONDITIONS

1. PARTICULATE MATTER FROM CONSTRUCTION AND DEMOLITION

[COMAR 26.11.06.03D]

The Permittee shall not cause or permit any building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.

2. OPEN BURNING

[COMAR 26.11.07]

Except as provided in COMAR 26.11.07.04, the Permittee shall not cause or permit an open fire from June 1 through August 31 of any calendar year. Prior to any open burning, the Permittee shall request and receive approval from the Department.

3. AIR POLLUTION EPISODE

[COMAR 26.11.05.04]

When requested by the Department, the Permittee shall prepare in writing standby emissions reduction plans, consistent with good industrial practice and safe operating procedures, for reducing emissions creating air pollution during periods of Alert, Warning, and Emergency of an air pollution episode.

4. REPORT OF EXCESS EMISSIONS AND DEVIATIONS

[COMAR 26.11.01.07] and [COMAR 26.11.03.06C(7)]

The Permittee shall comply with the following conditions for occurrences of excess emissions and deviations from requirements of this permit, including those in Section VI – State-only Enforceable Conditions:

a. Report any deviation from permit requirements that could endanger human health or the environment, by orally notifying the Department immediately upon discovery of the deviation;

b. Promptly report all occurrences of excess emissions that are expected to last for one hour or longer by orally notifying the Department of the onset and termination of the occurrence;

c. When requested by the Department the Permittee shall report all deviations from permit conditions, including those attributed to malfunctions as defined in COMAR 26.11.01.07A, within 5 days of the request by submitting a written description of the deviation to the Department. The written report shall include the cause, dates and times of the onset and termination of the deviation, and an account of all actions planned or taken to reduce, eliminate, and prevent recurrence of the deviation;

d. The Permittee shall submit to the Department semi-annual monitoring reports that confirm that all required monitoring was performed, and that provide accounts of all deviations from permit requirements that occurred during the reporting periods. Reporting periods shall be January 1 through June 30 and July 1 through December 31, and reports shall be submitted within 30 days of the end of each reporting period. Each account of deviation shall include a description of the deviation, the dates and times of onset and termination, identification of the person who observed or discovered the deviation, causes and corrective actions taken, and actions taken to prevent recurrence. If no deviations from permit conditions occurred during a reporting period, the Permittee shall submit a written report that so states.

e. When requested by the Department, the Permittee shall submit a written report to the Department within 10 days of receiving the request concerning an occurrence of excess emissions. The report shall contain the information required in COMAR 26.11.01.07D(2).

5. ACCIDENTAL RELEASE PROVISIONS

[COMAR 26.11.03.03B(23)] and [40 CFR 68]

Should the Permittee become subject to 40 CFR 68 during the term of this permit, the Permittee shall submit risk management plans by the date

specified in 40 CFR 68.150 and shall certify compliance with the requirements of 40 CFR 68 as part of the annual compliance certification as required by 40 CFR 70.

The Permittee shall initiate a permit revision or reopening according to the procedures of 40 CFR 70.7 to incorporate appropriate permit conditions into the Permittee's Part 70 permit.

6. GENERAL TESTING REQUIREMENTS

[COMAR 26.11.01.04]

The Department may require the Permittee to conduct, or have conducted, testing to determine compliance with this Part 70 permit. The Department, at its option, may witness or conduct these tests. This testing shall be done at a reasonable time, and all information gathered during a testing operation shall be provided to the Department.

7. EMISSIONS TEST METHODS

[COMAR 26.11.01.04]

Compliance with the emissions standards and limitations in this Part 70 permit shall be determined by the test methods designated and described below or other test methods submitted to and approved by the Department.

Reference documents of the test methods approved by the Department include the following:

a. 40 CFR 60, appendix A

b. 40 CFR 51, appendix M

c. The Department's Technical Memorandum 91-01 "Test Methods and Equipment Specifications for Stationary Sources", (January 1991), as amended through Supplement 3, (October 1, 1997)

8. EMISSIONS CERTIFICATION REPORT

[COMAR 26.11.01.05-1] and [COMAR 26.11.02.19C] and [COMAR 26.11.02.19D]

The Permittee shall certify actual annual emissions of regulated pollutants from the facility on a calendar year basis.

a. The certification shall be on forms obtained from the Department and submitted to the Department not later than April 1 of the year following the year for which the certification is required;

b. The individual making the certification shall certify that the information is accurate to the individual's best knowledge. The individual shall be:

(1) Familiar with each source for which the certifications forms are submitted, and

(2) Responsible for the accuracy of the emissions information;

c. The Permittee shall maintain records necessary to support the emissions certification including the following information if applicable:

(1) The total amount of actual emissions of each regulated pollutant and the total of all regulated pollutants;

(2) An explanation of the methods used to quantify the emissions and the operating schedules and production data that were used to determine emissions, including significant assumptions made;

(3) Amounts, types and analyses of all fuels used;

(4) Emissions data from continuous emissions monitors that are required by this permit, including monitor calibration and malfunction information;

(5) Identification, description, and use records of all air pollution control equipment and compliance monitoring equipment including:

(a) Significant maintenance performed,
(b) Malfunctions and downtime, and
(c) Episodes of reduced efficiency of all equipment;

(6) Limitations on source operation or any work practice standards that significantly affect emissions; and

(7) Other relevant information as required by the Department.

9. COMPLIANCE CERTIFICATION REPORT

[COMAR 26.11.03.06G(6) and (7)]

The Permittee shall submit to the Department and EPA Region III a report certifying compliance with each term of this Part 70 permit including each applicable standard, emissions limitation, and work practice for the previous calendar year by April 1 of each year.

a. The compliance certification shall include:

(1) The identification of each term or condition of this permit which is the basis of the certification;

(2) The compliance status;

(3) Whether the compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of each source, currently and over the reporting period; and

(5) Any other information required to be reported to the Department that is necessary to determine the compliance status of the Permittee with this permit.

b. The Permittee shall submit the compliance certification reports to the Department and EPA simultaneously.

10. CERTIFICATION BY RESPONSIBLE OFFICIAL

[COMAR 26.11.02.02F]

All application forms, reports, and compliance certifications submitted pursuant to this permit shall be certified by a responsible official as to truth, accuracy, and completeness. The Permittee shall expeditiously notify the Department of an appointment of a new responsible official.

The certification shall be in the following form:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. SAMPLING AND EMISSIONS TESTING RECORD KEEPING

[COMAR 26.11.03.06C(5)]

The Permittee shall gather and retain the following information when sampling and testing for compliance demonstrations:

a. The location as specified in this permit, and the date and time that samples and measurements are taken;

b. All pertinent operating conditions existing at the time that samples and measurements are taken;

c. The date that each analysis of a sample or emissions test is performed and the name of the person taking the sample or performing the emissions test;

d. The identity of the Permittee, individual, or other entity that performed the analysis;

e. The analytical techniques and methods used; and

f. The results of each analysis.

12. GENERAL RECORDKEEPING

[COMAR 26.11.03.06C(6)]

The Permittee shall retain records of all monitoring data and information that support the compliance certification for a period of five (5) years from the date that the monitoring, sample measurement, application, report or emissions test was completed or submitted to the Department.

These records and support information shall include:

a. All calibration and maintenance records;

b. All original data collected from continuous monitoring instrumentation;

c. Records which support the annual emissions certification; and

d. Copies of all reports required by this permit.

13. GENERAL CONFORMITY

[COMAR 26.11.26.09]

The Permittee shall comply with the general conformity requirements of 40 CFR 93, Subpart B and COMAR 26.11.26.09.

14. ASBESTOS PROVISIONS

[40 CFR 61, Subpart M]

The Permittee shall comply with 40 CFR 61, Subpart M when conducting any renovation or demolition activities at the facility.

15. OZONE DEPLETING REGULATIONS

[40 CFR 82, Subpart F]

The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for MVACs in subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the prohibitions and required practices pursuant to 40 CFR 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair or disposal of appliances shall comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repairs or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.

d. Persons disposing of small appliances, MVACS, and MVAC-like appliances as defined in 40 CFR 82.152, shall comply with record keeping requirements pursuant to 40 CFR 82.155.

e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

16. ACID RAIN PERMIT

Not applicable.

SECTION IV PLANT SPECIFIC CONDITIONS

This section provides tables that include the emissions standards, emissions limitations, and work practices applicable to each emissions unit located at this facility. The Permittee shall comply with all applicable emissions standards, emissions limitations and work practices included herein.

The tables also include testing, monitoring, record keeping and reporting requirements specific to each emissions unit. In addition to the requirements included here in **Section IV**, the Permittee is also subject to the general testing, monitoring, record keeping and reporting requirements included in **Section III – Plant Wide Conditions** of this permit.

Unless otherwise provided in the specific requirements for an emissions unit, the Permittee shall maintain at the facility for at least five (5) years, and shall make available to the Department upon request, all records that the Permittee is required under this section to establish. **[COMAR 26.11.03.06C(5)(g)]**

Table IV – 1	
1.0	**Emissions Unit Number(s)** **U01:** Natural rock/synthetic gypsum stockpiles, and associated material handling equipment, 1 wet-suppression system for ship unloading. [07/1996]
1.1	**Applicable Standards/Limits:** Control of Particulate Matter **COMAR 26.11.06.03D** – A person may not cause or permit any material to be handled, transported, or stored, or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.
1.2	**Testing Requirements:** Control of Particulate Matter See monitoring requirements.

Table IV – 1	
1.3	**Monitoring Requirements:** Control of Particulate Matter (1) The Permittee shall prepare and update as needed a best management practices plan that describes the procedures and methods that will be used to take reasonable precautions. **[COMAR 26.11.03.06]** (2) The Permittee shall perform an inspection at minimum once a month or when weather conditions are favorable to create particulate matter becoming airborne to verify that best management practices are being implemented and that particulate matter is not becoming airborne. **[COMAR 26.11.03.06]**
1.4	**Record Keeping Requirements:** Control of Particulate Matter The Permittee shall maintain the best management practices plan and records of the dates and results of inspections for at least five (5) years and shall make them available to the Department upon request. **[COMAR 26.11.03.06]**
1.5	**Reporting Requirements:** Control of Particulate Matter See record keeping requirements.

Table IV – 2	
2.0	**Emissions Unit Number(s)** **U02:** Gypsum rock crusher (150 tons per hour maximum rated capacity), 1 baghouse. Installed July 1996. **U05:** Rock storage silo, 1 baghouse venting into building. Installed July 1996. **U13:** Product bucket elevator, vents into building. Installed July 1996. **U14:** Product air jet belt conveyor, 5 baghouses venting into building. Installed July 1996.

Table IV – 2	
2.1	**Applicable Standards/Limits:** A. Visible Emissions Limitations (1) **COMAR 26.11.06.02C(2)** – A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers. (2) **40 CFR §60.672(a) – NSPS Subpart OOO** – The Permittee shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubber control device. **Notes:** (i) Compliance with the no visible emissions requirement of COMAR 26.11.06.02C will be used to demonstrate compliance with the opacity limits specified in 40 CFR, Part 60, Subpart OOO; and (ii) Visible emissions observations are not required for emissions from the baghouses that discharge inside a building (U05, U13, and U14). B. Control of Particulate Matter (1) **COMAR 26.11.06.03B** – A person may not cause or permit particulate matter to be discharged from any installation in excess of 0.03 gr/SCFD (68.7 mg/dscm). (2) **40 CFR §60.672(a) – NSPS Subpart OOO** – The Permittee shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which contain particulate matter in excess of 0.022 gr/dscf (0.05 g/dscm).
2.2	**Testing Requirements:** A. Visible Emissions Limitations See monitoring requirements. B. Control of Particulate Matter

Table IV – 2	
	See monitoring requirements.
2.3	**Monitoring Requirements:** A. Visible Emissions Limitations (1) The exhaust gases from the emission units U02, U13, and U14 shall vent through a dust collector prior to discharging to atmosphere. (2) The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each baghouse stack that exhausts outside a building and look at openings in buildings through which visible emissions can escape to the outside. The Permittee shall record the results of each observation. If emission in the exhaust gases are visible, the Permittee shall perform the following: (a) Inspect all process and/or control equipment that may affect visible emissions; (b) Perform all necessary repairs and/or adjustments to all process and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases are eliminated; (c) Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and (d) If visible emission have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions. **[COMAR 26.11.03.06C]** B. Control of Particulate Matter The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the

Table IV – 2	
	plan and shall maintain a log with records of the dates maintenance was performed. **[COMAR 26.11.03.06C]**
2.4	**Record Keeping Requirements:** A. Visible Emissions Limitations (1) The Permittee shall maintain records of the results of the monthly inspections for at least five (5) years and make them available to the Department upon request. **[COMAR 26.11.03.06C]** (2) The Permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing requirements; 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 five (5) years following the date of such measurements, maintenance, reports, and records. **[40 CFR §60.7(f)]** B. Control of Particulate Matter The maintenance log shall be kept on site for at least five (5) years and shall be made available to the Department upon request. **[COMAR 26.11.03.06C]**
2.5	**Reporting Requirements:** A. Visible Emissions Limitations See record keeping requirements. B. Control of Particulate Matter The Permittee shall furnish the Department written notification or, if acceptable to both the Department and the Permittee, electronic notification, as follows: A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to

Table IV – 2	
	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 Department may request additional relevant information subsequent to this notice. **[40 CFR §60.7(a)]**

Table IV – 3		
3.0	**Emissions Unit Number(s)**	
	U03:	B.E.T. systems No. 1, 1 baghouse each. Installed July 1996.
	U04:	B.E.T. systems No. 2, 1 baghouse each. Installed July 1996.
	U12:	Product screw conveyor, 2 baghouses. Installed Jul 1996.
	U15:	Stucco storage silos No. 1, 1 baghouse each. Installed September 1980.
	U16:	Stucco storage silos No. 2, 1 baghouse each. Installed September 1980.
	U17:	Stucco storage silos No. 3, 1 baghouse each. Installed September 1980.
	U18:	Stucco storage silo No. 4, 1 baghouse each. Installed September 1980.
	U19:	Stucco conveying elevator, 1 baghouse. Installed September 1980.
	U20:	Stucco bin and two screw conveyors, 1 baghouse venting into building. Installed April 1978.
	U21:	BMA elevator, 1 baghouse venting into building. Installed April 1978.
	U22:	Screw conveyor and pin mixer, 1 baghouse venting into building. Installed April 1977.
	U24:	Limestone unloading and storage silo, 1 baghouse. Installed April 1996.
	U25:	Ribbon mixer, cyclone separator and dump station, 1 baghouse. Installed April 1994.
	U27:	BP-2 Catenary bin and conveyors, 1 baghouse. Installed April 1998.

Table IV – 3		
	U28:	BMA feed system, 2 baghouses venting into building. Installed April 1998.
	U29:	Stucco jet belt conveyor and pin mixer, 1 baghouse. Installed April 1998.
	U32:	#2 Riser maker line (BET #3 System), 1 baghouse. Installed April 1998.
	U34:	Starch feed system A & B, 1 baghouse venting into building. Installed April 1998.
	U35:	Mill department landplaster silo, 1 baghouse. Installed April 1998.
	U36:	BP-1 Stucco recirculation elevator – Boardline #1 stucco recirculation. Elevator, 1 baghouse. Installed April 1998.
	U37:	BP-1 Vermiculite system – Boardline #1, baghouse venting into building. Installed April 1998.
	U39:	BP-2 Merrick Potash Feeder – Boardline #1, 1 baghouse venting into building. Installed April 1998.
	U40:	BP-2 Merrick BMA Feeder – Boardline #2 Merrick ball mill accelerator (BMA) feeder, 1 baghouse venting into building. Installed April 1998.
	U42:	BP-2 Potash elevator – Boardline #2 potash elevator, 1 baghouse venting into building. Installed April 1998.
	U43:	BP-2 LP Feed B – Boardline #2 landplaster feed B, 1 baghouse venting into building. Installed April 1998.
	U44:	BP-2 Starch feed B – Boardline #2, 1 baghouse venting into building. Installed April 1998.
	U45:	BP-2 LP Feed A – Boardline #2 landplaster feed A, 1 baghouse venting into building. Installed April 1998.
	U47:	#1 Riser Maker, 1 baghouse venting inside building. Installed January 2017.
	U49:	Stucco cooler system – rotary drum stucco cooler, vents to dust collector. Installed May 2020.
3.1	**Applicable Standards/Limits:**	
	A. Visible Emissions Limitations	
	COMAR 26.11.06.02C(2) – A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers.	
	Note: Visible emission observations are not required for baghouses that discharge inside a building (Emission Units U20, U21, U22, U34 and U36-U47).	

Table IV – 3	
	B. Control of Particulate Matter **COMAR 26.11.06.03B** – A person may not cause or permit particulate matter to be discharged from any installation in excess of 0.03 gr/SCFD (68.7 mg/dscm).
3.2	**Testing Requirements:** A. Visible Emissions Limitations See monitoring requirements. B. Control of Particulate Matter See monitoring requirements.
3.3	**Monitoring Requirements:** A. Visible Emissions Limitations (1) The exhaust gases from each emission unit shall vent through a dust collector before discharging to atmosphere. **[COMAR 26.11.03.06C]** (2) The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each baghouse stack that exhausts outside a building and look at openings in buildings through which visible emissions can escape to the outside. The Permittee shall record the results of each observation. If emission in the exhaust gases are visible, the Permittee shall perform the following: (a) Inspect all process and/or control equipment that may affect visible emissions; (b) Perform all necessary repairs and/or adjustments to all process and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases are eliminated;

Table IV – 3	
	(c) Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and (d) If visible emission have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions. **[COMAR 26.11.03.06C]** B. Control of Particulate Matter The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates maintenance was performed. **[COMAR 26.11.03.06C]**
3.4	**Record Keeping Requirements:** A. Visible Emissions Limitations & B. Control of Particulate Matter The Permittee shall maintain the following records for at least five (5) years and shall make them available to the Department upon request: (1) Records of the results of the walk-through inspections and any required repairs and/or adjustments to equipment; (2) A log of maintance performed; and (3) Monthly records of the stucco processed in the stucco cooler (U49).
3.5	**Reporting Requirements:** A. Visible Emissions Limitations See record keeping requirements. B. Control of Particulate Matter See record keeping requirements.

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4.0	**Emissions Unit Number(s)** **U48:** One (1) 12 tons per hour wallboard reclaim system consisting of: • one (1) JC Steele Feeder, one (1) Monster Crusher, one (1) Reclaim Recycling System Staging Area Pile with a wet suppression spray system, and associated conveyors controlled by a building enclosure; • one (1) Board Line #1 Wet Reclaim Storage Area Pile with a wet suppression spray system and controlled by a building enclosure; • one (1) Board Line #2 Wet Reclaim Storage Area Pile with a wet suppression spray system and controlled by a building enclosure; • one (1) blended Reclaim Storage Area Pile with a wet suppression spray system and controlled by a building enclosure.
4.1	**Applicable Standards/Limits:** A. Visible Emissions Limitations (1) **Permit to Construct (No. 510-0233-6-2105)** issued April 1, 2022 – The Permittee shall install a wet suppression spray system on the Reclaim Recycling Staging Area Pile. (2) **Permit to Construct (No. 510-0233-6-2105)** issued May 26, 2023 – Authorizes the installation of building enclosures and wet suppression spray systems to control fugitive dust from the one (1) Board Line #1 Wet Reclaim Storage Area Pile, the one (1) Board Line #2 Wet Reclaim Storage Area Pile, and the one (1) Blended Reclaim Storage Area Pile. (3) **COMAR 26.11.06.02C(2)** – A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers. (4) The Permittee shall comply with the following opacity limits for fugitive emission for sources constructed after April 22, 2008,

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	specified in **40 CFR Part 60 Subpart OOO** for the Nonmetallic Mineral Processing Plant: (a) No more than 12 percent opacity from the crusher; and (b) No more than 7 percent opacity from transfer points on belt conveyors **Note:** Compliance with the no visible emission requirement of COMAR 26.11.06.02C will be used for the compliance demonstration for this NSPS opacity standard. B. Control of Particulate Matter (1) **Permit to Construct (No. 510-0233-6-2105)** issued April 1, 2022 – The JC Steele Feeder, Monster Crusher, Reclaim Recycling Staging Area Pile with a wet suppression spray system, and associated conveyors shall be controlled by a building enclosure. (2) **Permit to Construct (No. 510-0233-6-2105)** issued May 26, 2023 – Authorizes the installation of building enclosures and wet suppression spray systems to control fugitive dust from the one (1) Board Line #1 Wet Reclaim Storage Area Pile, the one (1) Board Line #2 Wet Reclaim Storage Area Pile, and the one (1) Blended Reclaim Storage Area Pile. (3) **COMAR 26.11.06.03C and D** – The Permittee must take reasonable precautions to prevent particulate matter from unconfined sources and materials handling and construction operations from becoming airborne.
4.2	**Testing Requirements:** A. Visible Emissions Limitations See monitoring requirements. B. Control of Particulate Matter See monitoring requirements.

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4.3	**Monitoring Requirements:** A. Visible Emissions Limitations & B. Control of Particulate Matter (1) **Permit to Construct (No. 510-0233-6-2105)** issued April 1, 2022 – The Permittee shall only use the reclaim system to process recycled gypsum from off-spec wallboard produced at the Baltimore facility. (2) **Permit to Construct (No. 510-0233-6-2105)** issued April 1, 2022 – The wet suppression spray system on the Reclaim Recycling System Staging Area Pile shall be used whenever it is needed to comply with the visible emissions limits specified in COMAR 26.11.06.02C(2) and 40 CFR Part 60 Subpart OOO, and when it is needed as a reasonable precaution to prevent particulate matter from becoming airborne. (3) **40 CFR §60.672(e)** – If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then the building enclosing the affected facility must comply with the fugitive emissions limit of 7 percent opacity from enclosure openings. (4) The Permittee shall use Method 9 of Appendix A-4 of 40 CFR, Part 60 and the procedures in 40 CFR §60.11, in order to determine compliance with opacity limits, and shall include the following additions: (a) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet). (b) 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 of Appendix A-4 of 40 CFR, Part 60, Section 2.1) must be followed. (c) 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

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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) The duration of the Method 9 observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Table 3 of 40 CFR, Part 60, Subpart OOO must be based on the average of the five 6-minute averages.

(e) Method 9 observations for buildings shall be conducted while all affected facilities inside the building are operating.

(Reference: 40 CFR § 60.675)

Note: In order to demonstrate compliance with 40 CFR Part 60 Subpart OOO, as required by Permit to Construct No. 510-0233-6-2105 issued April 1, 2022, the initial Method 9 test was performed on March 12, 2020. The highest average opacity recorded was 1.3% from the front of the building.

(5) **Permit to Construct (No. 510-0233-6-2105)** issued April 1, 2022 – During each opacity observation, the affected equipment shall be operated at 90% or higher of its rated capacity.

(6) The Permittee shall notify the Department at least 7 days in advance of any Method 9 performance test. **[40 CFR §60.675(g)]**

(7) **Permit to Construct (No. 510-0233-6-2105)** issued April 1, 2022 – The Permittee shall submit the results of Method 9 performance tests to the Department within 45 days after the visible emission observation was performed.

(8) The Permittee shall develop and maintain a preventative maintenance plan which includes the wet suppression spray system and that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates maintenance was performed. **[40 CFR §60.674(b)]**

(9) **Permit to Construct (No. 510-0233-6-2105)** issued April 1, 2022 – The Permittee shall perform monthly periodic inspections to

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	check that water is flowing from the discharge spray nozzles in the wet suppression spray system. The Permittee shall initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly. (10) The Permittee shall develop and maintain a fugitive dust plan that describes the procedures, methods, and best practices that will be used to take reasonable precautions to prevent particulate matter from becoming airborne. **[COMAR 26.11.06.03]** (11) **Permit to Construct (No. 510-0233-6-2105)** issued April 1, 2022 & May 26, 2023 – The Permittee shall perform an inspection, minimally once a month, to verify that the fugitive dust plan reasonable precautions are being implemented and that particulate matter is not becoming airborne. The inspection shall include a visual observation for a minimal duration of five (5) minutes for each of the four (4) reclaim piles while material handling is occurring.
4.4	**Record Keeping Requirements:** A. Visible Emissions Limitations & B. Control of Particulate Matter (1) **Permit to Construct (No. 510-0233-6-2105)** issued December 19, 2018, April 1, 2022, May 26, 2023 - The Permittee shall maintain the following records, and records of the results of the weekly inspections for at least five (5) years and shall make them available to the Department upon request: (a) The amount and type of material processed in the crusher of the reclaim system each month; (b) All Method 9 visible emissions observations; (c) Each inspection of the spray nozzles in the wet suppression system including the date of each inspection and any corrective actions taken; (d) The preventative maintenance plan;

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	(e) Records of maintenance activities to demonstrate compliance with the preventative maintenance plan; (f) The fugitive dust plan; and (g) Each inspection verifying the fugitive dust plan is being implemented and particulate matter is not becoming airborne, including the date, time and duration of the inspection. **[40 CFR §60.676(b), COMAR 26.11.03.06C]** (2) **Permit to Construct (No. 510-0233-6-2105)** issued December 19, 2018 & April 1, 2022 - The Permittee shall comply with the federal recordkeeping requirements under 40 CFR §60.7, §60.19 and §60.676, which include the following and the records shall be kept on site for at least five years and shall be made available to the EPA Region III and the Department upon request: (a) Records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility and any malfunction of the air pollution control equipment. (b) Records of each periodic inspection required under 40 CFR §60.674(b) or (c) for affected facilities (as defined in §§60.670 and 60.671) for which construction, modification, or reconstruction commenced on or after April 22, 2008, including dates and any corrective actions taken, in a logbook (in written or electronic format). (c) The Permittee shall comply with the reporting requirements of 40 CFR §60.676. **[40 CFR §60.7(b)]**
4.5	**Reporting Requirements:** A. Visible Emissions Limitations & B. Control of Particulate Matter (1) The Permittee shall comply with the reporting requirements of 40 CFR §60.676.

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	(2) The Permittee shall furnish the Department written notification, or, if acceptable to both the Department and the Permittee, electronic notification, as follows: 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 40 CFR §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 Department may request additional relevant information subsequent to this notice. **[40 CFR §60.7(a)(4)]**

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5.0	**Emissions Unit Number(s)** **U09 to U11:** 22 MMBtu/hr Imp Mills Nos. 1, 2 & 3, 1 baghouse each. Installed July 1996. **U26:** 30 MMBtu/hr (low NOx) Imp Mill No. 4, 1 baghouse. Installed February 1998.
5.1	**Applicable Standards/Limits:** A. Visible Emissions Limitations (1) **COMAR 26.11.06.02C(2)** – A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers. (2) **40 CFR §60.672(a) – NSPS Subpart OOO** – The Permittee shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubber control device.

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Note: Compliance with the no visible emission requirement of COMAR 26.11.06.02C will be used for the compliance demonstration for this NSPS opacity standard.

B. Control of Particulate Matter

(1) **COMAR 26.11.06.03B** – A person may not cause or permit particulate matter to be discharged from any installation in excess of 0.03 gr/SCFD (68.7 mg/dscm).

(2) **40 CFR §60.672(a) – NSPS Subpart OOO** – The Permittee shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubber control device.

C. Control of Nitrogen Oxides

Permit to Construct (No. 510-6-0646, 1569, and 1426) issued May 12, 2010, which superseded a previous permit to construct issued November 17, 2004 – In order to avoid major NSR reviews, the Permittee shall demonstrate, to the Department's satisfaction, that the NOx emissions from the imp mills and the board kilns resulting from the increased use of fuel oil does not exceed 25 tons during any rolling 12-month period **or** the NOx emissions from the imp mills and the board kilns does not exceed 69.6 tons during any 12-month period.

D. Control of Sulfur Oxides

(1) **COMAR 26.11.06.05C(1)** – A person may not cause or permit the discharge into the atmosphere from installations other than fuel-burning equipment of gases containing more than 500 ppm of sulfur dioxide.

(2) **COMAR 26.11.06.05C(2)** – A person may not cause or permit the discharge into the atmosphere from installations other than fuel-burning equipment of gases containing sulfuric acid, sulfur trioxide, or any combination of them, greater than 35 milligrams per cubic meter reported as sulfuric acid.

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	(3) **Permit to Construct (No. 510-0233-6-0646, 6-1569, & 6-1426)** issued May 12, 2010, which superseded a previous permit to construct issued on November 17, 2004, requires that the Permittee cannot burn #2 fuel oil with a sulfur content greater than 0.2% by weight in the imp mills. (4) In order to avoid major PSD review, the Permittee shall demonstrate, to the Department's satisfaction that the SOx emissions from the imp mills and the board kilns resulting from the increased use of fuel oil does not exceed 40 tons during any rolling 12-month period **or** the SOx emissions from the imp mills and the board kilns do not exceed 46.8 tons during any 12-month period. **[Permit to Construct No. 510-0233-6-0646, 6-1569, & 6-1426 issued May 12, 2010]** **Note**: Compliance with (3) demonstrates compliance with (1) and (2).
5.2	**Testing Requirements:** A. Visible Emissions Limitations See monitoring requirements. B. Control of Particulate Matter See monitoring requirements. C. Control of Nitrogen Oxides See monitoring requirements. D. Control of Sulfur Oxides See monitoring requirements.
5.3	**Monitoring Requirements:** A. Visible Emissions Limitations (1) The exhaust gases from each imp mill shall vent through a dust collector before discharging to atmosphere. **[COMAR 26.11.03.06C]**

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(2) The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each baghouse stack that exhausts outside a building and look at openings in buildings through which visible emissions can escape to the outside. The Permittee shall record the results of each observation.

If emission in the exhaust gases are visible, the Permittee shall perform the following:

(a) Inspect all process and/or control equipment that may affect visible emissions.

(b) Perform all necessary repairs and/or adjustments to all process and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases are eliminated.

(c) Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment.

(d) If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions. **[COMAR 26.11.03.06C]**

B. Control of Particulate Matter

The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates maintenance was performed. **[COMAR 26.11.03.06C]**

C. Control of Nitrogen Oxides

(1) The equipment operator shall attend an operator training course sponsored by the Department as well as an in-house training course approved by the Department. **[COMAR 26.11.09.08B(5)(b)]**

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(2) The Permittee shall comply with the applicable source specific requirements in COMAR 26.11.09.08J of this regulation, which are as follows:

(a) Maintain good operating practices as recommended by the equipment vendor to minimize NOx emission;

(b) Prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation; and

(c) Burn only gas in each installation, where gas is available, during the period May 1 through September 30 of each year. **[COMAR 26.11.09.08B(1)(b)]**

(3) The Permittee shall use the following NOx emission factors for compliance demonstration:

Imp Mills #1-3	Natural gas	0.063 lb/ MMBtu (1996 Test)
	Fuel oil	0.143 lb/MMBtu (AP-42)
Imp Mill #4	Natural gas	0.0188 lb/MMBtu (1999 Test)
	Fuel oil	0.143 lb/MMBtu (AP-42)

D. Control of Sulfur Oxides

(1) Burn only gas in each installation, where gas is available, during the period May 1 through September 30 of each year. **[Permit to Construct No. 510-0233-6-0643, 6-1569, & 6-1426 issued on May 12, 2010]**

(2) The Permittee shall continuously monitor sulfur content in fuel oil to ensure it does not exceed 0.2% by weight. **[COMAR 26.11.03.06C]**

(3) The Permittee shall obtain a certification from the fuel supplier indicating that the oil complies with the limitation on the sulfur content of fuel oil. **[COMAR 26.11.03.06C]**

(4) In order to demonstrate compliance with the emission limits for SOx at the end of each calendar month, the Permittee is required to calculate the total emissions of SO_2 from the imp mills for the

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previous 12-month period, using the following emission factors, where s = sulfur content (%):

Imp Mills #1-3	Natural gas	0.03 lb/ MMBtu (AP-42)
	Fuel oil	142(s)/1000 gallons (AP-42)
Imp Mill #4	Natural gas	0.03 lb/MMBtu (AP-42)
	Fuel oil	142(s)/1000 gallons (AP-42)

[Permit to Construct No. 510-0233-6-0643, 6-1569, & 6-1426 issued on May 12, 2010]

5.4 **Record Keeping Requirements:**

A. Visible Emissions Limitations

The Permittee shall maintain records of the results of the weekly inspections for at least five (5) years and shall make them available to the Department upon request. **[COMAR 26.11.03.06C]**

B. Control of Particulate Matter

(1) The maintenance log shall be kept on site for at least five (5) years and shall be made available to the Department upon request. **[COMAR 26.11.03.06C]**

(2) The Permittee 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 five (5) years following the date of such measurements, maintenance, reports, and records. **[40 CFR §60.7(f)]**

C. Control of Nitrogen Oxides

(1) The Permittee shall comply with the applicable source specific requirements in COMAR 26.11.09.08J of this regulation, which are as follows:

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(a) Maintain and make available to the Department upon request, the written in-house operator training program; and

(b) Maintain operator training attendance records for each operator at the site for at least two (2) years and make these records available to the Department upon request.

[COMAR 26.11.09.08B(1)(b)]

(2) The following records shall be kept on the premises for at least five (5) years and shall be made available to the Department upon request:

(a) Types and amounts of fuel burned in each imp mill each month;

(b) Calculations of the NOx emissions from all imp mills each month;

(c) Manual of good operating practices recommended by the equipment vendors; and

(d) Training operators receive to reduce NOx emissions and dates of attendance.

[Permit to Construct No. 510-0233-6-0643, 6-1569, & 6-1426 issued on May 12, 2010]

D. Control of Sulfur Oxides

The following records shall be kept on the premises for at least five (5) years and shall be made available to the Department upon request:

(1) Certifications from the oil suppliers;

(2) Types and amounts of fuel burned in each imp mill each month;

(3) Calculations of SO2 emissions from each imp mill each month; and

(4) Total SO2 emissions from all imp mills for the previous 12-month period.

[Permit to Construct No. 510-0233-6-0643, 6-1569, & 6-1426 issued on May 12, 2010]

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5.5 Reporting Requirements:

A. Visible Emissions Limitations

The Permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in 40 CFR §60.672, including reports of opacity observations made using Method 9 to demonstrate compliance with §60.672(b), (c), and (f), and reports of observations using Method 22 to demonstrate compliance with §60.672(e). **[40 CFR §60.676(f)]**

B. Control of Particulate Matter

The Permittee shall furnish the Department written notification, or, if acceptable to both the Department and the Permittee, electronic notification, as follows:

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 40 CFR §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 Department may request additional relevant information subsequent to this notice. **[40 CFR §60.7(a)(4)]**

C. Control of Nitrogen Oxides

The Permittee shall submit a report containing the following information to the Department within 30 days after the end of each calendar quarter for each of the previous three (3) 12-month periods:

(1) Types and amounts of fuels burned in each imp mill; and

(2) Calculations of the NOx emissions from each imp mill.
[Permit to Construct No. 510-0233-6-0643, 6-1569, & 6-1426 issued on May 12, 2010]

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	D. Control of Sulfur Oxides The Permittee shall submit a report containing SO2 emissions from each imp mill the Department within 30 days after the end of each calendar quarter for each of the previous three (3) 12-month periods. **[Permit to Construct No. 510-0233-6-0643, 6-1569, & 6-1426 issued on May 12, 2010]**

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6.0	**Emissions Unit Number(s)** **U23:** 96 MMBtu/hr wallboard dryer/kiln (Board Kiln No. 1). Installed May 1969. **U30:** 135 MMBtu/hr (low NOx) wallboard dryer/kiln (Board Kiln No. 2). Installed April 1998.
6.1	**Applicable Standards/Limits:** A. Visible Emissions Limitations **COMAR 26.11.06.02C(2)** – A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers. B. Control of Particulate Matter **COMAR 26.11.06.03B** – A person may not cause or permit particulate matter to be discharged from any installation in excess of 0.03 gr/SCFD (68.7 mg/dscm). C. Control of Nitrogen Oxides **Permit to Construct (No. 510-6-0646, 1569, and 1426)** issued May 12, 2010, which superseded a previous permit to construct issued November 17, 2004 – In order to avoid major NSR reviews, the Permittee shall demonstrate, to the Department's satisfaction, that the NOx emissions from the imp mills and the board kilns resulting from the increased use of fuel oil does not exceed 25 tons during any rolling 12-month period **or** the NOx emissions from the imp mills and the board kilns does not exceed 69.6 tons during any 12-month period.

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D. Control of Sulfur Oxides

(1) **COMAR 26.11.06.05C(1) –** A person may not cause or permit the discharge into the atmosphere from installations other than fuel-burning equipment of gases containing more than 500 ppm of sulfur dioxide.

(2) **COMAR 26.11.06.05C(2)** – A person may not cause or permit the discharge into the atmosphere from installations other than fuel-burning equipment of gases containing sulfuric acid, sulfur trioxide, or any combination of them, greater than 35 milligrams per cubic meter reported as sulfuric acid.

(3) **Permit to Construct (No. 510-0233-6-0646, 6-1569, &6-1426)** issued May 12, 2010, which superseded a previous permit to construct issued on November 17, 2004, requires that the Permittee cannot burn #2 fuel oil with a sulfur content greater than 0.2% by weight in the imp mills.

(4) In order to avoid major PSD review, the Permittee shall demonstrate, to the Department's satisfaction that the SOx emissions from the imp mills and the board kilns resulting from the increased use of fuel oil does not exceed 40 tons during any rolling 12-month period **or** the SOx emissions from the imp mills and the board kilns do not exceed 46.8 tons during any 12-month period. **[Permit to Construct No. 510-0233-6-0646, 6-1569, & 6-1426 Issued May 12, 2010]**

Note: Compliance with (3) demonstrates compliance with (1) and (2).

E. Control of Volatile Organic Compounds (VOC)

(1) Total VOC emissions from Board Kiln Nos. 1 and 2, combined, shall not exceed 195 pounds per operating day. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**

(2) Total premises wide VOC emissions shall be less than 25 tons in any rolling 12-month period to ensure that the total net VOC emissions increase resulting from the modification of Board Kiln Nos. 1 and 2, combined, is less than the non-attainment new source review threshold, 25 tons in any rolling 12-month period. **[Permit to**

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	Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016] (3) The Permittee shall, at all times of operation including startup and shutdown, vent flue gases from Board Kiln #1 through the RTO prior to discharging to the atmosphere during all stages of the silicone XP water resistant wallboard or the eXP water resistant wallboard manufacturing process. **[Consent Order No. 510-0233-6-0646 and 6-1569 executed on March 11, 2016; Permit to Construct No. 510-0233-6-0643 &6-1569 issued on March 11, 2016; Consent Order executed on June 8, 2022]**
6.2	**Testing Requirements:** A. Visible Emissions Limitations See monitoring requirements. B. Control of Particulate Matter See monitoring requirements. C. Control of Sulfur Oxides See monitoring requirements. D. Control of VOC (1) Within 180 days of the start-up date of the RTO controlling VOC emissions from Board Kiln No. 1, the Permittee shall conduct stack emissions tests for Board Kiln Nos. 1 and 2 to demonstrate compliance with the alternative VOC emissions standard. During the stack emissions tests, the Permittee shall determine the following: (a) The inlet mass VOC concentration and the outlet mass VOC concentrations for Board Kiln No. 1 when manufacturing silicone XP water resistant wallboard and when manufacturing eXP water resistant wallboard; (b) The outlet mass VOC concentrations from Board Kiln No. 1 when manufacturing regular wallboard;

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(c) The outlet mass VOC for Board Kiln No. 2 when manufacturing regular wallboard;

(d) The minimum temperature of the RTO combustion chamber required to achieve the overall VOC emission control efficiency necessary to demonstrate compliance with the alternative VOC emissions standard;

(e) The amount in thousand square feet (MSF) of silicone XP water resistant wallboard, eXP water resistant wallboard and regular wallboard produced in each specific test; and

(f) The amount and types of fuels used in Board Kiln No. 1, Board Kiln No. 2 and the RTO during each test.
[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]

Note: An initial stack test was performed on July 13, 2017. The combusion temperature of the RTO during the stack teset was 1575 °F.

(2) All required stack emissions tests shall be conducted in accordance with the testing specifications in the Department's Technical Memorandum 91-01, "Test Methods and Equipment Specifications for Stationary Sources" (January 1991), or other test methods approved by the Department. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**

(3) During each required stack emissions tests, Board Kiln Nos. 1 and 2 shall be operated at 90 percent or higher of its rated capacity unless an alternate operating scenario is approved by the Department. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**

(4) At least 60 days prior to each required stack emissions tests, the Permittee shall submit to the Department a test protocol for review and approval. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**

(5) Within 45 days following the required stack emissions tests, the Permittee shall submit to the Department a stack emissions test

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	report, including the following information: (a) The overall VOC control efficiency of the RTO when Board Kiln Line No. 1 is manufacturing silicone XP water resistant wallboard and when manufacturing eXP water resistant wallboard; (b) The minimum temperature of the RTO combustion chamber required to achieve the overall VOC emission control efficiency necessary to demonstrate compliance with the alternative VOC emissions standard; (c) The inlet mass VOC concentration and the outlet mass VOC concentration for Board Kiln No. 1 when manufacturing silicone XP water resistant wallboard; (d) The inlet mass VOC concentration and the outlet mass VOC concentration for Board Kiln No. 1 when manufacturing eXP water resistant wallboard; (e) The outlet mass VOC concentration for Board Kiln No. 1 when manufacturing regular wallboard; (f) The outlet mass VOC concentration for Board Kiln No. 2 when manufacturing regular wallboard; (g) The amount of silicone XP water resistant wallboard for Board Kiln No. 1 in MSF; (h) The amount of eXP water resistant wallboard for Board Kiln No. 1 in MSF; (i) The amount of regular wallboard for Board Kiln No. 1 in MSF; (j) The amount of regular wallboard for Board Kiln No. 2 in MSF; (k) The VOC emissions factor in pounds of VOC per MSF of the silicone XP water resistant wallboard for Board Kiln No. 1; (l) The VOC emissions factor in pounds of VOC per MSF of regular wallboard for Board Kiln No. 1;

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	(m) The VOC emissions factor in pounds of VOC per MSF of regular wallboard for Board Kiln No. 1; (n) The VOC emissions factor in pounds of VOC per MSF of regular wallboard for Board Kiln No. 2; and (o) The amount and types of fuels used in Board Kiln No. 1, Board Kiln No. 2 and the RTO. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**
6.3	**Monitoring Requirements:** A & B. Control of Visible and Particulate Matter Emissions (1) The exhaust gases from Board Kiln No. 1 shall vent through a dust collector before discharging into the atmosphere. **[COMAR 26.11.03.06C]** (2) The Board Kiln No. 1 shall burn natural gas only. **[Permit to Construct No. 510-0233-6-0646, 6-1569, & 6-1426 issued on May 12, 2010]** (3) The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each baghouse stack that exhausts outside a building and look at openings in buildings through which visible emissions can escape to the outside atmosphere. The Permittee shall record the results of each observation in a logbook. (a) Inspect all process and/or control equipment that may affect visible emissions; (b) Perform all necessary repairs and/or adjustments to all processes and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases are eliminated; (c) Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and

Table IV – 6

(d) If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions. **[COMAR 26.11.03.06C]**

(4) The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. **[COMAR 26.11.03.06C]**

(5) The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates and description of maintenance activity was performed. **[COMAR 26.11.03.06C]**

C. Control of Nitrogen Oxides

(1) The Board Kiln No. 1 shall burn natural gas only. **[Permit to Construct No. 510-0233-6-0646, 6-1569, & 6-1426 issued on May 12, 2010]**

(2) The equipment operator shall attend an operator training course sponsored by the Department as well as an in-house training course approved by the Department. **[COMAR 26.11.09.08B(5)(b)]**

(3) The Permittee shall comply with the applicable source specific requirements in COMAR 26.11.09.08J of this regulation, which are as follows:

(a) Maintain good operating practices as recommended by the equipment vendor to minimize NOx emission;

(b) Prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation; and

(c) Burn only gas in each installation, where gas is available, during the period May 1 through September 30 of each year. **[COMAR 26.11.09.08B(1)(b)]**

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(4) The Permittee shall use the following NOx emission factors for compliance demonstration:

Board Kiln No. 1	Natural gas	0.06 lb/ MMBtu Composite
Board Kiln No. 2	Natural gas	0.0114 lb/MMBtu (1999 Test)
	Fuel oil	0.25 lb/MMBtu (2001 Test)

D. Control of Sulfur Oxides

(1) Board Kiln No. 1 shall burn natural gas only. **[Permit to Construct No. 510-0233-6-0646, 6-1569, & 6-1426 issued on May 12, 2010]**

(2) Burn only gas in Board Kiln No. 2, where gas is available, during the period May 1 through September 30 of each year. **[Permit to Construct No. 510-0233-6-0646, 6-1569, & 6-1426 issued on May 12, 2010]**

(3) Sulfur content in fuel oil shall not exceed 0.2% by weight. **[Permit to Construct No. 510-0233-6-0646, 6-1569, & 6-426 issued on May 12, 2010]**

(4) The Permittee shall obtain a certification from the fuel supplier indicating that the oil complies with the limitation on the sulfur content of fuel oil. **[COMAR 26.11.03.06C]**

(5) In order to demonstrate compliance with the emission limits for SOx at the end of each calendar month, the Permittee is required to calculate the total emissions of SO_2 from the board kilns for the previous 12-month period, using the following emission factors, where s = sulfur content (%):

Board Kiln No. 1	Natural gas	0.6 lb/ mmcf
Board Kiln No. 2	Natural gas	0.6 lb/mmcf
	Fuel oil	142(s)/1000 gallons (AP-42)

[Permit to Construct No. 510-0233-6-0646, 6-1569, & 6-1426 issued on May 12, 2010]

Table IV – 6	
	E. Control of VOC (1) The Permittee shall vent the flue gases from Board Kiln No. 1 through the RTO prior to discharging to the atmosphere when manufacturing silicone XP water resistant wallboard and eXP water resistant wallboard. In the event that the RTO bypass is triggered due to an RTO malfunction, the Permittee shall comply with the reporting requirements. The RTO malfunction report shall include an assessment whether or not the facility is in compliance with the following limits: (a) The combined VOC emissions limit of 195 lb/day from Board Kiln Line Nos. 1 and 2; and (b) The premises-wide VOC emission limit of 25 tons for any 12-month period, rolling monthly. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]** (2) The temperature of the combustion zone of the RTO shall be maintained to at least the minimum temperature established during the most recent stack emissions test demonstrating compliance with the daily VOC emission limit of 195 pounds per operating day. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]** (3) The Permittee shall manufacture regular wallboard only in Board Kiln No. 2. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]** (4) The Permittee shall monitor daily production for each type of wallboard and shall calculate total daily emissions from Board Kiln Nos. 1 and 2 to demonstrate compliance with the alternative VOC emission standard of 195 pounds per operating day. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]** (5) The Permittee shall continuously monitor and record the RTO combustion zone temperature while flue gases are vented to the RTO to ensure that the temperature is at least the minimum temperature established during the most recent stack emissions tests demonstrating compliance with daily VOC emissions limit of

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195 pounds per operating day. To comply with the requirement of the RTO combustion zone temperature, the Permittee shall calculate the temperature based on a 3-hour block average by using continuous monitoring data during each operating day. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**

(6) The Permittee shall not produce any combination of silicone XP water resistant wallboard, eXP water resistant wallboard, and/or regular wallboard in Board Kiln No. 1 and regular wallboard in Board Kiln No. 2 in excess of the amounts established during the most recent stack emissions tests demonstrating compliance with daily VOC emission limit of 195 pounds per operating day. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**

(7) The Permittee shall monitor the following wallboard production rates for each operating day:

(a) The amount of silicone XP water resistant wallboard produced in Board Kiln No. 1 in MSF;

(b) The amount of eXP water resistant wallboard produced in Board Kiln No. 1 in MSF;

(c) The amount of regular wallboard produced in Board Kiln No. 1 in MSF; and

(d) The amount of regular wallboard in Board Kiln No. 2 in MSF. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**

(8) The Permittee shall calculate daily VOC emissions for each operating day by using the following equation to demonstrate that the daily VOC emissions rate does not exceed the alternative VOC emissions limit of 195 pounds per operating day:

Total Daily VOC Emissions = $(P_1*EF_1)+(P_2*EF_2)+(P_3*EF_3)+(P_4*EF_4)$

Where
P_1 is the amount of silicone XP water resistant wallboard produced for Board Kiln No. 1 in MSF per day.

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P_2 is the amount of eXP water resistant wallboard produced for Board Kiln No. 1 in MSF per day.
P_3 is the amount of regular wallboard produced for Board Kiln No. 1 in MSF per day.
P_4 is the amount of regular wallboard produced for Board Kiln No. 2 in MSF per day.
EF_1 is the VOC emissions factor in pounds of VOC per MSF of the silicone XP water resistant wallboard for Board Kiln No. 1.
EF_2 is the VOC emissions factor in pounds of VOC per MSF of the silicone eXP water resistant wallboard for Board Kiln No. 1.
EF_3 is the VOC emissions factor in pounds of VOC per MSF of the regular wallboard for Board Kiln No. 1.
EF_4 is the VOC emissions factor in pounds of VOC per MSF of the regular wallboard for Board Kiln No. 2.
[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]

(9) The Permittee shall develop and maintain an Operations and Maintenance Plan for Board Kiln No. 1 and Board Kiln No. 2, including the RTO for Board Kiln No. 1 used for air pollution control, which incorporates all of the following:

(a) Information that is sufficient to demonstrate that air emissions from each affected emissions unit can be expected to comply with all applicable regulatory requirements during periods of normal operation. Examples of types of information that could be included to support the required demonstrations would be design criteria, vendor specifications and performance guarantees, approved computer modeling studies, and results of testing programs in which approved test methods and procedures were utilized.

(b) Procedures that provide for proper operation and maintenance of all affected emissions units and air pollution control equipment within the facility.

(c) Provisions for periodic monitoring of operating parameters and emissions as necessary to determine that the affected emissions units and air pollution control equipment are functioning properly.

(d) Descriptions of procedures to be followed and corrective actions to be taken when monitoring information indicates that an

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	affected emissions unit or pollution control device is not functioning properly. (e) Provisions for developing written or printable electronic records that will show whether prescribed operating, maintenance and monitoring procedures are consistently followed, and whether timely and appropriate corrective actions are taken when malfunctions occur. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]** (10) The Permittee shall update the CAM Plan specified in the permit and operate RTO in accordance with the current CAM Plan. **[COMAR 26.11.03.06C]**
6.4	**Record Keeping Requirements:** A. Control of Visible and Particulate Matter Emissions (1) The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates maintenance was performed. **[COMAR 26.11.03.06C]** (2) The Permittee shall keep records of the results of the walk-through inspections and any required repairs and/or adjustments to equipment for at least five (5) years and shall make them available to the Department upon request. **[COMAR 26.11.03.06C]** (3) The log shall be kept on site for at least five (5) years and shall be made available to the Department upon request. **[COMAR 26.11.03.06C]** B. Control of Nitrogen Oxides (1) The Permittee shall comply with the applicable source specific requirements in COMAR 26.11.09.08J of this regulation which are as follows: (a) Maintain and make available to the Department upon request, the written in-house operator training program; and

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(b) Maintain operator training attendance records for each operator at the site for at least two (2) years and make these records available to the Department upon request.
[COMAR 26.11.09.08B(1)(b)]

(2) The following records shall be kept on the premises for at least five (5) years and shall be made available to the Department upon request:

(a) Types and amounts of fuel burned in each board kiln each month;

(b) Calculations of the NOx emissions from all board kilns each month;

(c) Manual of good operating practices recommended by the equipment vendors; and

(d) Training operators receive to reduce NOx emissions and dates of attendance.
[Permit to Construct No. 510-0233-6-0646, 6-1569, & 6-1426 issued on May 12, 2010]

C. Control of Sulfur Oxides

The following records shall be kept on the premises for at least five (5) years and shall be made available to the Department upon request:

(1) Certifications from the oil suppliers;

(2) Types and amounts of fuel burned in each board kiln each month;

(3) Calculations of SO2 emissions from each board kiln each month; and

(4) Total SO2 emissions from both board kilns for the previous 12-month period.
[Permit to Construct No. 510-0233-6-0646, 6-1569, & 6-1426 issued on May 12, 2010]

Table IV – 6	
	D. Control of VOC The following records shall be kept on the premises for at least five (5) years and shall be made available to the Department upon request: (1) All stack emissions test reports; (2) The Operations and Maintenance plan for Board Kiln Nos. 1 and 2; (3) The amount of silicone XP water resistant wallboard produced in Board Kiln No. 1 in MSF per operating day; (4) The amount of eXP water resistant wallboard produced in Board Kiln No. 1 in MSF per operating day; (5) The amount of regular wallboard produced in Board Kiln No. 1 in MSF per operating day; (6) The amount of regular wallboard produced in Board Kiln No. 2 in MSF per operating day; (7) The temperature of the RTO combustion zone based on a 3-hour block average during each operating day; (8) Total VOC emissions in pounds per operating day; (9) The total net VOC emission increase resulting from the modification of Board Kiln Nos. 1 and 2, combined, in tons per month and tons per rolling 12-month period; and (10) Safety Data Sheets (SDS) for each raw material used for wallboard production. **[Permit to Construct No. 510-0233-6-0646 &6-1569 issued on March 11, 2016; COMAR 26.11.03.06C]**
6.5	**Reporting Requirements:** A. Visible Emissions Limitations

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	The Permittee shall report to the Department any occurrences of excess emissions in accordance with COMAR 26.11.01.07. B. Control of Nitrogen Oxides The Permittee shall submit a report containing NOx emissions to the Department within 30 days after the end of each calendar quarter for each of the previous three (3) 12-month periods. **[Permit to Construct No. 510-0233-6-0646, 6-1569, & 6-1426 issued on May 12, 2010]** C. Control of Sulfur Oxides The Permittee shall submit a report containing SO2 emissions from each board kiln to the Department within 30 days after the end of each calendar quarter for each of the previous three (3) 12-month periods. **[Permit to Construct No. 510-0233-6-0646, 6-1569, & 6-1426 issued on May 12, 2010]** C. Control of VOC (1) If total daily VOC emissions, as calculated using the equation in Part 6.3E(8) of this table (Table IV – 6) exceed 195 pounds on any one operating day, the Permittee shall submit a report to the Department in writing or via e-mail correspondence within five (5) business days following the day of the exceedance. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]** (2) The Permittee shall submit a quarterly report containng the following information to the Department within 30 days after the end of each calendar quarter: (a) All deviations from the Operations and Maintenance Plan for Board Kiln No.1, the RTO, and Board Kiln No. 2 OR (b) A statement affirming that no deviations from the Operations and Maintance Plans have occurred. **[COMAR 26.11.03.06C]** (3) The Permittee shall update the CAM Plant a specified in Table IV-7 of this Permit and shall operate the RTO in accordance with the current CAM Plan. **[COMAR 26.11.03.06C]**

Table IV – 7 Compliance Assurance Monitoring (CAM) Plan - Part 64 Requirements	
Indicator No. 1	
I. Indicator 64.4(a)(1)	RTO Combustion Chamber Temperature
Monitoring Approach	Monitor temperature of the RTO combustion chamber
II. Indicator Range 64.4(a)(2)	The normal operation range will be established during the upcoming initial stack VOC emission test. **Note:** The RTO combustion chamber was 1575°F during the initial stack test performed on July 13, 2017.
Reporting Threshold	An excursion occurs if the combustion chamber temperature is out of normal operation range. An excursion will trigger an investigation, corrective action, and a reporting requirement. All excursions and corrective actions taken shall be reported to the Department within five (5) business days following the day of excursion.
III. Performance Criteria 64.4(a)(3)	
A. Data Representatives	Temperature recorded automatically on a data acquisition system.
B. Verification of Operational Status	The temperature monitoring system is in place to document compliance status.
C. QA/QC Practices and Criteria	Calibration, maintenance and operation of the temperature monitoring system is conducted according to manufacturer's specification.
D. Monitoring Frequency	Continuous.
E. Data Collection	Temperature recorded automatically on a data acquisition system. The

	records shall be maintained on site for at least five (5) years.
F. Averaging Period	3-hour block average.
Indicator No. 2	
I. Indicator 64.4(a)(1)	Each type of wallboard production by each board Kkln, MSF per day
Monitoring Approach	Production rate and emission factor for each type of wallboard produced by each Board Kiln are used to demonstrate compliance with the alternative VOC emission standard, 195 pounds per operating day.
II. Indicator Range 64.4(a)(2) Reporting Threshold	An excursion occurs if a combined production rate for all wallboard products exceeding the established emissions limit. All excursions and corrective actions taken shall be reported to the Department within five (5) business days following the day of excursion.
III. Performance Criteria 64.4(a)(3)	
A. Data Representatives	Operators monitor and record production rate for each product on a daily basis.
B. Verification of Operational Status	Each operating day is documented.
C. QA/QC Practices and Criteria	Each board kiln operator is trained according to its standard operating procedures.
D. Monitoring Frequency	Production rate for each product is monitored every day.
E. Data Collection	Results of production range, MSF per day, for each product is recorded and maintained on site.
F. Averaging Period	Each operating day.

SECTION V INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) ✓ Space heaters utilizing direct heat transfer and used solely for comfort heat;

(2) Containers, reservoirs, or tanks used exclusively for:

(a) No. 2 Storage of lubricating oils;

(3) ✓ First aid and emergency medical care provided at the facility, including related activities such as sterilization and medicine preparation used in support of a manufacturing or production process;

SECTION VI STATE-ONLY ENFORCEABLE CONDITIONS

The Permittee is subject to the following State-only enforceable requirements:

1. Applicable Regulations

(A) COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.

(B) COMAR 26.11.15.05, which requires that the Permittee implement "Best Available Control Technology for Toxics" (T – BACT) to control emissions of toxic air pollutants.

(C) COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions will unreasonably endanger human health

2. Compliance Demonstration for A

As long as GBBP meets all federally enforceable requirements, GBBP would comply with these requirements.

3. Compliance Demonstration for B and C

(1) Ammonium Emissions

(a) The Permittee shall not use ammonium sulfate in Boardline #1 and #2 at the same time during the wallboard manufacturing process unless it can be demonstrated, to the satisfaction of the Department, that the ammonia emissions would not cause the 1-hour and 8-hour toxic screening levels to be exceeded;

(b) When Boardline #1 is operating and using ammonium sulfate in the wallboard manufacturing process, the Permittee shall not use more than 1,325 pounds of ammonium sulfate per day;

(c) When Boardline #2 is operating and using ammonium sulfate in the wallboard manufacturing process, the Permittee shall not use more than 2,960 pounds of ammonium sulfate per day;

(d) The following records shall be kept on the premises for at least five (5) years and shall be made available to the Department upon request:

(i) Amount of ammonium sulfate used each day in each board line; and
(ii) Daily hours of operation of each board line.

[Permit to Construct No. 510-0233-6-0643, 6-1568, &6-1426 issued on May 12, 2010]

(2) **Formaldehyde Emissions**

(a) The Permittee shall vent the flue gases from Board Kiln No. 1 through the RTO prior to discharging to the atmosphere when manufacturing silicone XP water resistant wallboard and eXP water resistant wallboard. In the event that the RTO bypass is triggered due to an RTO malfunction, the Permittee shall comply with the reporting requirements. The RTO malfunction report shall include an assessment whether or not the facility is in compliance with the formaldehyde emissions limit of 1.5 pounds per hour based on a 3-hour block average.

(b) The Permittee shall not manufacture silicone XP water resistant wallboard and eXP water resistant wallboard in Board Kiln No. 2.

(c) Total formaldehyde emissions from Board Kiln No. 1 and 2, combined, shall not exceed 1.50 pounds per hour based on a 3-hour block average unless the Permittee can demonstrate compliance with the air toxics ambient impact requirements of COMAR 26.11.15.06 for emissions of formaldehyde at a higher formaldehyde emission rate. In the event that the total hourly emission rates for all combinations of products remain below the compliance limit for air toxics ambient impacts, the stack test results can be used as compliance documentation in lieu of a 3-hour block average.

(d) During each required stack emission performance test, the Permittee shall establish formaldehyde emission factors for each wallboard production.

(e) The Permittee shall calculate hourly formaldehyde emissions based on a 3-hour block average, if required, by using the following

equation to demonstrate compliance with the hourly formaldehyde limit.

Total Hourly Formaldehyde Emissions = $((FP_1*FEF_1)+ (FP_2*FEF_2)+ (FP_3*FEF_3)+ (FP_4*FEF_4)/3)$

Where
F is formaldehyde.
FP_1 is the amount of silicone XP water resistant wallboard, in MSF, produced during a 3-hour contemporaneous period from Board Kiln No. 1.
FP_2 is the amount of silicone eXP water resistant wallboard, in MSF, produced during a 3-hour contemporaneous period from Board Kiln No. 1.
FP_3 is the amount of regular wallboard, in MSF, produced during a 3-hour contemporaneous period from Board Kiln No. 1.
FP_4 is the amount of regular wallboard, in MSF, produced during a 3-hour contemporaneous period from Board Kiln No. 2.
FEF_1 is the F emissions factor in pounds of F per MSF of the silicone XP water resistant wallboard for Board Kiln No. 1.
FEF_2 is the F emissions factor in pounds of F per MSF of the silicone eXP water resistant wallboard for Board Kiln No. 1.
FEF_3 is the F emissions factor in pounds of F per MSF of regular wallboard for Board Kiln No. 1.
FEF_4 is the F emissions factor in pounds of F per MSF of regular wallboard for Board Kiln No. 2.

(f) The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information:

(i) Formaldehyde emission factor for each wallboard production; and

(ii) Date and time of each occurrence when formaldehyde emissions exceed 1.5 pounds per hour based on a 3-hour block average.

(g) The Permittee shall report to the Department for each occurrence when formaldehyde emissions exceed 1.5 pounds per hour, in accordance with COMAR 26.11.01.07C.

[Permit to Construct No. 510-0233-6-0646 and 1569]

(3) The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

(a) A statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or

(b) A revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.

GOLD BOND BUILDING PRODUCTS, LLC
2301 S. NEWKIRK STREET
BALTIMORE, MARYLAND 21224
PERMIT NO. 24-510-0233
PART 70 OPERATING PERMIT FACT SHEET

BACKGROUND

Gold Bond Building Products, LLC (GBBP) (formerly New NGC, Inc. dba National Gypsum Company) is located at 2301 S. Newkirk Street in Baltimore, MD 21224. The facility resides in Baltimore County in Air Quality Area III. GBBP has a SIC code of 3275, and manufactures gypsum wallboard, which consists of four operation categories: (1) gypsum receiving and storage, (2) gypsum milling and processing, (3) stucco/land plaster production and (4) wall board forming and drying process. The final products are gypsum wallboard and joint finishing compound.

PROCESS DESCRIPTION

The manufacture of wallboard involves combining several raw materials, primarily gypsum, then charging these materials between two layers of paper to form a board and drying the board in wallboard drying kilns. The process can use natural gypsum ore or synthetic gypsum, which is a calcium sulfate dihydrate material that results from the flue gas desulfurization (FDG) process at coal-fired power plants.

The gypsum is processed in imp mills to remove water and form landplaster and stucco. The processed gypsum or stucco is mixed with a variety of additives that define the properties of the product wallboard. The additives are mixed to form a slurry that is spread between two sheets that serve as a mold. The wet board travels the length of a conveying line where the calcium sulfate hemihydrate combines with water to form solid calcium sulfate dihydrate or gypsum, resulting in a rigid board. This board travels through one of two wallboard drying kilns where the associated water is driven from the gypsum. The dried board is conveyed to the board end sawing area and trimmed and bundled for shipment.

NEW SOURCE PERFORMANCE STANDARDS (NSPS) APPLICABILITY

GBBP is subject to 40 CFR Part 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants for any equipment constructed or modified after August 31, 1983.

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) APPLICABILITY

GBBP is not subject to any NESHAP requirements.

EMISSIONS

The following table summarizes the actual emissions from GBBP based on its Annual Emission Certification Reports:

Table 1: Actual Emissions

Year	NO_x (TPY)	SO_x (TPY)	PM_{10} (TPY)	CO (TPY)	VOC (TPY)	Total HAP (TPY)
2016	27.20	8.37	16.35	59.89	8.84	0.51
2017	28.74	8.77	21.45	62.89	14.70	3.19
2018	31.83	9.97	22.99	71.05	17.73	3.17
2019	33.50	9.95	23.01	73.79	17.58	3.39
2020	29.25	9.00	17.54	65.95	14.90	2.80
2021	26.99	8.80	17.10	63.24	14.48	2.93
2022	31.10	10.52	21.23	68.20	15.50	2.44

The major source threshold for triggering Title V permitting requirements in Baltimore City is 25 tons per year for VOC, 25 tons for NOx, and 100 tons per year for any other criteria pollutants and 10 tons for a single HAP or 25 tons per year for total HAPS. Since the actual NOx emissions from the facility are greater than the major source threshold, GBBP is required to obtain a Title V – Part 70 Operating Permit under COMAR 26.11.03.01.

The Department received an application for the renewal of the facility's Part 70 Operating Permit on March 29, 2021.

RECENT PLANT MODIFICATIONS

Since the last Title V – Part 70 Operating Permit, the following modifications and significant activities have occurred:

December 19, 2018 – A permit to construct was issued for one (1) wallboard reclaim system consisting of one (1) 12 ton per hour crusher, one (1) feeder, and associated conveyors. The new system was a replacement for the previous one and has been designated emission unit 48 (U48). Wet and dry reclaim material is transported to a storage bunker, then ground and crushed using a feeder and crusher. All the equipment and the feeding and grinding of wallboard occurs inside a building, preventing fugitive dust emissions.

May 3, 2019 – A permit to construct was issued for one (1) drum stucco cooler system controlled by one (1) dust collector, designated as emission unit 49 (U49). The stucco cooler is a rotary drum that has separate process material (Stucco) and cooling air pathways. The stucco is introduced into the cooler via an inlet conveyor and tumbled to the discharge end. An independent air stream is introduced against the material flow direction via a series of pipes running the length of the rotary drum. The process air is drawn into the fan ductwork from outside, as ambient air, and returned to the outside at an elevated temperature. A dust collector was installed to recycle captured dust back to a feed screw conveyor.

February 7, 2020 – A Notice of Violation was issued to GBBP for violating Consent Order No. 510-0233-6-0646 and 6-1569 executed March 11, 2016. The Order stated that the Permittee shall vent the flue gases from Kiln No. 1 through the RTO prior to discharging to atmosphere when manufacturing XP silicone water resistant wallboard and eXP water resistant wallboard. For 16 days in 2019, XP and/or eXP wallboard was manufactured with the flue gases from Kiln No. 1 being discharged to atmosphere without being vented through the RTO.

March 27, 2020 – A Notice of Violation was issued to GBBP for operating the wallboard reclaim system without the installation of a dust suppression spray system on the crusher. The Permittee also failed to maintain certain records required by Permit to Construct 510-0233-6-2103 issued on December 19, 2018.

April 1, 2022 - A permit to construct was issued authorizing the modification of the wallboard reclaim system to install a wet suppression spray system upstream of the crusher to control particulate matter emissions. At this time the registration number of the wallboard reclaim system was corrected, the correct ARA Registration number is 510-0233-6-2105.

June 7, 2022 – A Settlement Agreement and Consent Order between the Department and the Permittee was executed to correct issues with the RTO being bypassed during water resistant XP and eXP manufacturing, and to correct dusting issued at the facility generally related to the operation of the wallboard reclaim system. On December 14, 2022 the Permittee submitted a letter to the Department requesting a Force Majeure extension for the installation of enclosures with permanent wet suppression spray systems over the board line #1 wet reclaim storage pile, the board line #2 wet reclaim storage pile and the blended reclaim storage pile. On December 20, 2022 the request was granted, extending the deadline to complete construction from January 1, 2023 to August 1, 2023.

May 26, 2023 – A permit to construct was issued authorizing the installation of building enclosures and wet suppression spray systems to control fugitive dust from the one (1) Board Line #1 Wet Reclaim Storage Area Pile, the one (1) Board Line #2 Wet Reclaim Storage Area Pile, and the one (1) Blended Reclaim Storage Area Pile, which are associated with emission unit 48 (U48).

February 1, 2024 – The Consent Order executed on June 8, 2022 was formally cleared on February 1, 2024 after Gold Bond fully complied with all requirements. As such, requirements specific to the Consent Order pertaining to the reclaim system (EU48, item 4) were not included in the renewal Title V Operating Permit.

COMPLIANCE ASSURANCE MONITORING REQUIREMENTS

Compliance Assurance Monitoring (CAM) is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act for large emission units that rely on air pollution control (APC) equipment to achieve compliance. The CAM approach establishes monitoring for the purpose of:

(1) documenting continued operation of the control measures within ranges of specified indicators of performance (such as emissions, control device parameters, and process parameters) that are designed to provide a reasonable assurance of compliance with applicable requirements;

(2) indicating any excursions from these ranges; and

(3) responding to the data so that the cause or causes of the excursions are corrected.

In order for a unit to be subject to CAM, the unit must be located at a major source, be subject to an emission limitation or standard; use a control device to achieve compliance; have pre-control emissions of at least 100% of the major source amount; and must not otherwise by exempt from CAM. Applicability determinations are made on a pollutant-by-pollutant basis for each emissions unit.

GBBP uses all of the baghouses at the facility as "inherent process equipment" that, according to 40 CFR, Part 64, are "necessary for the proper or safe functioning of the process, or material recovery equipment that the owner or operator documents is installed and operated primarily for purposes other than compliance with air pollution regulations." Therefore, these baghouses are not considered control devices under the CAM rule and are exempt from the requirements of a CAM plan.

GBBP has installed and operates an RTO to reduce VOC emissions from Board Kiln No. 1 when it is manufacturing silicone XP and eXP water resistant wallboard products. The RTO operation is subject to the CAM requirements.

GREENHOUSE GAS (GHG) EMISSIONS

GBBP emits the following greenhouse gases (GHGs) related to Clean Air Act requirements: carbon dioxide, methane, and nitrous oxide. These GHGs originate from various processes (i.e., natural gas/No. 2 fuel oil-fired heaters, natural gas-fired boiler, and RTO) contained within the facility premises. The facility has not triggered Prevention of Significant Deterioration (PSD) requirements for GHG emissions; therefore, there are no applicable GHG Clean Air Act requirements. While there may be no applicable requirements as a result of PSD, emission certification reports for the years 2018 to 2022, showed that GBBP was a minor source (threshold: 100,000 tpy CO_2e) for GHG's in 2020 to 2022, but a major source in both 2018 and 2019 (see Table 2 shown below). The Permittee shall quantify facility wide GHGs emissions and report them in accordance with Section 3 of the Part 70 permit.

The following table summarizes the actual emissions from GBBP based on its Annual Emission Certification Reports:

Table 2: Greenhouse Gases Emissions Summary

GHG	Conversion factor	2018 tpy CO_2e	2019 tpy CO_2e	2020 tpy CO_2e	2021 tpy CO_2e	2022 tpy CO_2e
Carbon dioxide CO_2	1	101,502	105,433	94,214	90,318	97,554
Methane CH_4	25	49	50	45	44	47
Nitrous Oxide N_2O	300	558	579	519	498	536
Total GHG CO_{2eq}		**102,109**	**106,062**	**94,778**	**90,860**	**98,137**

EMISSION UNIT IDENTIFICATION

GBBP has identified the following emission units as being subject to Title V permitting requirements and having applicable requirements.

Table 3: Emission Unit Identification

Emissions Unit Number	*ARA Registration Number*	Emissions Unit Name and Description	Date of Installation
U01	510-0233-6-0515	Ship unloading: Ship unloading of natural gypsum rock. Truck dumping of synthetic gypsum. [Water/wet suppression system in ship unloading]	07/1996
U01	510-0233-9-0305	Stockpile: Wind erosion and dozer shaping activities of 2 natural/synthetic gypsum stockpiles.	07/1996
U02	510-0233-6-0120	Rock Crusher: 150 tph capacity gypsum rock crusher [1 baghouse]	07/1996
U03, U04	510-0233-6-0126	B.E.T. Systems #1 & #2: Board End Trim (BET) systems #1 and #2. [1 baghouse each]	07/1996
U05		Rock Storage Silo #1: Gypsum rock storage silo #1. [1 baghouse venting inside a building]	07/1996
U09, U10, U11	510-0233-6-1426	Imp Mills #1, 2, 3: 22 MMBTU/hr rated Imp Mills #1, #2, and #3 dry and grind gypsum to produce land plaster or grind, dry and calcine gypsum to produce stucco. (Natural gas, #2 fuel oil secondary, direct fired). [1 baghouse each]	07/1996
U12		Product Screw Elevator: Transfers finished product from imp mills to storage silos. [2 baghouses vent inside building]	07/1996
U13		Product Bucket Elevator: Transfers finished product from imp mills to storage silos. [vents inside building]	07/1996
U14		Product Air Jet Belt Conveyor: Transfers finished product from imp mills to storage silos. [5 baghouses, each venting inside a building]	07/1996
U15, U16, U17, U18	510-0233-6-0123	Stucco Storage Silos: Storage silos for stucco. [1 baghouse each, U18 baghouse vents inside building]	11/1980
U19		Land plaster/Stucco Conveying Elevator: Transfers land plaster or stucco to storage silo. [1 baghouse venting inside building]	04/1978
U20		Land plaster/Stucco Bin & Two Screw Conveyors: Transfers stucco to storage silo. [1 baghouse venting inside building]	04/1997
U21	510-0233-6-1569	BMA Elevator: Ball Mill Accelerator (BMA) is manufactured from land plaster and starch. BMA is transferred from ball mill to the wallboard	04/1978

		manufacturing process. [1 baghouse venting inside building]	
U22		Screw Conveyor #238 & Pin Mixer: Stucco, BMA and other wallboard forming ingredients are conveyed to the pin mixer for wallboard forming process. [1 baghouse venting inside building]	04/1997
U23	510-0233-6-0646	Board Kiln No. 1: 96 MMBtu/hr max rated dryer/kiln with 4 zones (2 burners per zone). Four burners for zones 1 & 2 are rated at 14 MMBtu/hr each. Four burners for zones 3 & 4 are rated at 10 MMBtu/hr each. Process can use ammonium sulfate instead of potash. Emissions of ammonia when ammonium sulfate used in process. (Natural gas, direct fired)	05/1969 RTO Installed 2016 & Baghouse Installed 2017
U24	510-0233-6-0223	Limestone Unloading & Storage Silo: Limestone is delivered by pressure displacement truck and unloads into primary storage silo. [1 baghouse]	04/1996
U25	510-0233-6-1348	Ribbon Mixer, Cyclone Separator, and Pre-Blender Dump Station: Limestone from a cyclone separator, several dry additives and wet additives are placed in the ribbon mixer to produce joint compound. [1 baghouse]	04/1994
U26	510-0233-6-1426	Imp Mill #4: 30 MMBtu/hr rated Imp Mill #4 dry and grind gypsum to produce land plaster or grind, dry and calcine gypsum to produce stucco. (Natural gas, #2 fuel oil secondary, direct fired) [1 Low NOx burner & 1 baghouse]	02/1998
U27		Stucco Storage Bin & Conveyors: Stucco conveying system. [1 baghouse vents inside building]	02/1998
U28		BMA Product Elevator: BMA product elevator. [2 baghouses, each venting inside building]	04/1998
U29	510-0233-6-1569	Stucco Jet Belt, Conveyor and Pin Mixer: Pin mixer, jet belt conveyor, stucco storage silo, conveying systems and 100 ton silo. [1 baghouse]	04/1998
U30	510-0233-6-1569	Board Kiln No. 2: 135 MMBtu/hr max rated dryer/kiln with 3 zones (1 burner per zone). Two burners for zones 1 & 2 are rated at 60 MMBtu/hr each. One burner for zone 3 is rated at 15 MMBtu/hr. Process can use ammonium sulfate instead of potash. Emissions of ammonia when ammonium sulfate used in process (Natural gas, #2 fuel oil secondary, direct fired). [3 Low NOx burners]	04/1998
U32	510-0233-6-1569	#2 Riser Maker (BET #3 System): Riser maker line. [1 baghouse]	04/1998
U34	510-0233-6-1569	Starch Unloading and Storage Silo: Starch unloading and storage silo system. [2 baghouses venting inside building]	04/1998
U35		Mill Department Land plaster Silo: Mill Department Land plaster silo. [1 baghouse]	04/1998

U36		BP-1 Stucco Recirculation Elevator: Boardline #1 stucco recirculation elevator. [1 baghouse venting inside a building]	04/1998
U37		BP-1 Vermiculite System: Boardline #1 vermiculite system. [2 cartridge filters (one on each silo) venting inside building]	04/1998
U39		BP-2 Merrick Potash Feeder: Boardline #2 Merrick potash feeder. [1 baghouse venting inside building]	04/1998
U40		BP-2 Merrick BMA Feeder: Boardline #2 Merrick BMA feeder. [1 baghouse venting inside building]	04/1998
U42		BP-2 Merrick Potash Elevator: Boardline #2 potash elevator. [1 baghouse venting inside building]	04/1998
U43		BP-2 LP Feed B: Boardline #2 land plaster feed B. [1 baghouse venting inside building]	04/1998
U44		BP-2 Starch Feed B: Boardline #2 starch feed B. [1 baghouse venting inside building]	04/1998
U45		BP-2 LP Feed A: Boardline #2 landplaster feed A. [1 baghouse venting inside building]	04/1998
U47		#1 Riser Maker: Riser Maker Line. [1 baghouse venting inside building]	01/2017
U48	510-0233-6-2105	One (1) 12 tons per hour wallboard reclaim system consisting of: • one (1) JC Steele Feeder, one (1) Monster Crusher, one (1) Reclaim Recycling System Staging Area Pile with a wet suppression spray system, and associated conveyors controlled by a building enclosure; • one (1) Board Line #1 Wet Reclaim Storage Area Pile with a wet suppression spray system and controlled by a building enclosure; • one (1) Board Line #2 Wet Reclaim Storage Area Pile with a wet suppression spray system and controlled by a building enclosure; • one (1) blended Reclaim Storage Area Pile with a wet suppression spray system and controlled by a building enclosure.	12/2018 Modified 2022, 2023
U49	510-0233-9-1385	Stucco Cooler System: Rotary drum stucco cooler. [unit venting to dust collector]	05/2020

AN OVERVIEW OF THE PART 70 PERMIT

The Fact Sheet is an informational document. If there are any discrepancies between the Fact Sheet and the Part 70 permit, the Part 70 permit is the enforceable document.

Section I of the Part 70 Permit contains a brief description of the facility and an inventory list of the emissions units for which applicable requirements are identified in Section IV of the permit.

Section II of the Part 70 Permit contains the general requirements that relate to administrative permit actions. This section includes the procedures for renewing, amending, reopening, and transferring permits, the relationship to permits to construct and approvals, and the general duty to provide information and to comply with all applicable requirements.

Section III of the Part 70 Permit contains the general requirements for testing, record keeping and reporting; and requirements that affect the facility as a whole, such as open burning, air pollution episodes, particulate matter from construction and demolition activities, asbestos provisions, ozone depleting substance provisions, general conformity, and acid rain permit. This section includes the requirement to report excess emissions and deviations, to submit an annual emissions certification report and an annual compliance certification report, and results of sampling and testing.

Section IV of the Part 70 Permit identifies the emissions standards, emissions limitations, operational limitations, and work practices applicable to each emissions unit located at the facility. For each standard, limitation, and work practice, the permit identifies the basis upon which the Permittee will demonstrate compliance. The basis will include testing, monitoring, record keeping, and reporting requirements. The demonstration may include one or more of these methods.

Section V of the Part 70 Permit contains a list of insignificant activities. These activities emit very small quantities of regulated air pollutants and do not require a permit to construct or registration with the Department. For insignificant activities that are subject to a requirement under the Clean Air Act, the requirement is listed under the activity.

Section VI of the Part 70 Permit contains State-only enforceable requirements. Section VI identifies requirements that are not based on the Clean Air Act, but solely on Maryland air pollution regulations. These requirements generally relate

to the prevention of nuisances and implementation of Maryland's Air Toxics Program.

REGULATORY REVIEW/TECHNICAL REVIEW/COMPLIANCE METHODOLOGY

1. Emission Unit:

U01: Natural rock/synthetic gypsum stockpiles, and associated material handling equipment, 1 wet suppression system for ship unloading (ARA Registration No. 510-0233-6-0515). Installed July 1996.

Applicable Standards and Limitations

Particulate Matter

COMAR 26.11.06.03D – A person may not cause or permit any material to be handled, transported, or stored, or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.

Compliance Demonstration (Particulate Matter Emissions)

(1) The Permittee shall prepare and update as needed a best management practices plan that describes the procedures and methods that will be used to take reasonable precautions. **[COMAR 26.11.03.06]**

(2) The Permittee shall perform an inspection at minimum once a month or when weather conditions are favorable to create particulate matter becoming airborne to verify that best management practices are being implemented and that particulate matter is not becoming airborne. **[COMAR 26.11.03.06]**

(3) The Permittee shall maintain the plan and records of the dates and results of inspections for at least five (5) years and make them available to the Department upon request. **[COMAR 26.11.03.06]**

Rationale for Compliance Demonstration

The Permittee has prepared a best management plan in which the reasonable precautions that the Permittee has implemented are listed and described. To document that reasonable precautions are being implemented, the Permittee is required to perform a monthly inspection and maintain records of the results. Inspections are required at times when weather conditions are favorable for particulate matter to become airborne. The best management plan is required to be updated when it is determined that additional or different procedures are needed to prevent particulate matter from becoming airborne. The combination of monthly walk-through inspection, implementation of the best management plan, and recordkeeping is sufficient to demonstrate compliance with all applicable requirements. The best management plan is located on-site and is under the facility's rock pile management program.

2. Emission Units:

U02: Gypsum rock crusher (150 tons per hour maximum rated capacity), 1 baghouse. Installed July 1996.
U05: Rock storage silo, 1 baghouse venting into building. Installed July 1996.
U13: Product bucket elevator, venting into building. Installed July 1996.
U14: Product air jet belt conveyor, 5 baghouses venting into building. Installed July 1996.

Note:
These units are subject to 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants since they were all built after the August 31, 1983 applicability date.

Applicable Standards and Limitations

A. Visible Emissions

(1) **COMAR 26.11.06.02C(2)** – A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers.

(2) **40 CFR §60.672(a) – NSPS Subpart OOO** – The Permittee shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which exhibit greater than 7 percent opacity, unless the

stack emissions are discharged from any affected facility using a wet scrubber control device.

Notes:

(i) Compliance with the no visible emission requirement of COMAR 26.11.06.02C will be used for the compliance demonstration for the NSPS opacity standards.

(ii) Visible emissions observations will not be required for emissions from the baghouses that discharge inside a building (U05, U13 and U14).

B. Particulate Matter Emissions

(1) **COMAR 26.11.06.03B** – A person may not cause or permit particulate matter to be discharged from any installation in excess of 0.03 gr/SCFD (68.7 mg/dscm).

(2) **40 CFR §60.672(a) – NSPS Subpart OOO** – The Permittee shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which contain particulate matter in excess of 0.022 gr/dscf (0.05 g/dscm).

Compliance Demonstration for A and B (Visible and Particulate Matter Emissions)

(1) The exhaust gases from the emission units of **U02, U13 and U14** shall vent through a dust collector.

(2) The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each baghouse stack that exhausts outside a building and look at opening in buildings through which visible emissions can escape to the outside. The Permittee shall record the results of each observation.

If emissions in the exhaust gases are visible, the Permittee shall perform the following:

(a) Inspect all process and/or control equipment that may affect visible emissions;

(b) Perform all necessary repairs and/or adjustments to all processes and/or control equipment, within 48 hours, so that visible emission in all exhaust gases are eliminated;
(c) Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and
(d) If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions.

[COMAR 26.11.03.06C]

(3) The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates maintenance was performed. **[COMAR 26.11.03.06C]**

(4) The Permittee shall maintain records of the results of the monthly inspections for at least five (5) years and make them available to the Department upon request. **[COMAR 26.11.03.06C]**

(5) The Permittee 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 five (5) years following the date of such measurements, maintenance, reports, and records. **[40 CFR §60.7(f)]**

(6) The maintenance log shall be kept on site for at least five (5) years and shall be made available to the Department upon request.

(7) The Permittee shall furnish the Department written notification or, if acceptable to both the Department and the Permittee, electronic notification, as follows:

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 40 CFR §60.14€. 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 Department may request additional relevant information subsequent to this notice. **[40 CFR §60.7(a)]**

Rationale for Compliance Demonstration

The baghouses were designed and have been operated and maintained to comply with both visible and particulate matter limits. A preventive maintenance plan has been implemented to protect integrity of each baghouse and ensure continuous compliance. The best management plan has been used to prevent particulate matter from becoming airborne. Since the no visible emission requirement under COMAR is more stringent than the opacity requirements under Subpart OOO, the best management plan with a frequent walk-through inspection is sufficient to demonstrate compliance with both State and federal requirements. The requirements of record-keeping and notification should adequately document the compliance status.

3. **Emission Units:**

U03: B.E.T. systems No. 1, 1 baghouse each. Installed July 1996.
U04: B.E.T. systems No. 2, 1 baghouse each. Installed July 1996.
U12: Product screw conveyor, 2 baghouses. Installed Jul 1996.
U15: Stucco storage silos No. 1, 1 baghouse each. Installed September 1980.
U16: Stucco storage silos No. 2, 1 baghouse each. Installed September 1980.
U17: Stucco storage silos No. 3, 1 baghouse each. Installed September 1980.
U18: Stucco storage silo No. 4, 1 baghouse each. Installed September 1980.
U19: Stucco conveying elevator, 1 baghouse. Installed September 1980.
U20: Stucco bin and two screw conveyors, 1 baghouse venting into building. Installed April 1978.
U21: BMA elevator, 1 baghouse venting into building. Installed April 1978.
U22: Screw conveyor and pin mixer, 1 baghouse venting into building. Installed April 1977.

U24: Limestone unloading and storage silo, 1 baghouse. Installed April 1996.

U25: Ribbon mixer, cyclone separator and dump station, 1 baghouse. Installed April 1994.

U27: BP-2 Catenary bin and conveyors, 1 baghouse. Installed April 1998.

U28: BMA feed system, 2 baghouses venting into building. Installed April 1998.

U29: Stucco jet belt conveyor and pin mixer, 1 baghouse. Installed April 1998.

U32: #2 Riser maker line (BET #3 System), 1 baghouse. Installed April 1998.

U34: Starch feed system A & B, 1 baghouse venting into building. Installed April 1998.

U35: Mill department landplaster silo, 1 baghouse. Installed April 1998.

U36: BP-1 Stucco recirculation elevator – Boardline #1 stucco recirculation. Elevator, 1 baghouse. Installed April 1998.

U37: BP-1 Vermiculite system – Boardline #1, baghouse venting into building. Installed April 1998.

U39: BP-2 Merrick Potash Feeder – Boardline #1, 1 baghouse venting into building. Installed April 1998.

U40: BP-2 Merrick BMA Feeder – Boardline #2 Merrick ball mill accelerator (BMA) feeder, 1 baghouse venting into building. Installed April 1998.

U42: BP-2 Potash elevator – Boardline #2 potash elevator, 1 baghouse venting into building. Installed April 1998.

U43: BP-2 LP Feed B – Boardline #2 landplaster feed B, 1 baghouse venting into building. Installed April 1998.

U44: BP-2 Starch feed B – Boardline #2, 1 baghouse venting into building. Installed April 1998.

U45: BP-2 LP Feed A – Boardline #2 landplaster feed A, 1 baghouse venting into building. Installed April 1998.

U47: #1 Riser Maker, 1 baghouse venting inside building. Installed January 2017.

U49: Stucco cooler system – rotary drum stucco cooler, vents to dust collector. Installed May 2020.

Applicable Standards and Limitations

A. Visible Emissions

COMAR 26.11.06.02C – A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers.

Note: Visible emission observations are not required for baghouses that discharge inside a building (Emission Units U20, U21, U22, U28, U36-47).

B. Particulate Matter Emissions

COMAR 26.11.06.03B – A person may not cause or permit particulate matter to be discharged from any installation in excess of 0.03 gr/SCFD (68.7 mg/dscm).

Compliance Demonstration for A and B (Visible and Particulate Matter Emissions)

(1) The exhaust gases from each equipment shall vent through a dust collector before discharging to the atmosphere. **[COMAR 26.11.03.06C]**

(2) The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each baghouse stack that exhausts outside a building and look at openings in buildings through which visible emissions can escape to the outside atmosphere. The Permittee shall record the results of each observation in a logbook.

If emissions in the exhaust gases are visible, the Permittee shall perform the following:

(a) Inspect all process and/or control equipment that may affect visible emissions;
(b) Perform all necessary repairs and/or adjustments to all processes and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases are eliminated;
(c) Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and
(d) If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions.

[COMAR 26.11.03.06C]

(3) The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates maintenance was performed. **[COMAR 26.11.03.06C]**

(4) The Permittee shall keep records of the results of the walk-through inspections and any required repairs and/or adjustments to equipment for at least five years and shall make them available to the Department upon request. **[COMAR 26.11.03.06C]**

(5) The log shall be kept on site for at least five (5) years and shall be made available to the Department upon request. **[COMAR 26.11.03.06C]**

(6) The Permittee shall maintain monthly records of the stucco processed in the stucco cooler (U49) for at least five (5) years, and the records shall be made available to the Department upon request. **[COMAR 26.11.03.06C]**

Rationale for Compliance Demonstration

The baghouses, the best control device for visible and particulate emissions, were designed and have been operated and maintained to comply with both visible and particulate matter limits. The preventive maintenance plan has been implemented to protect integrity of each baghouse and ensure continuous compliance. The best management with a frequent walk-through inspection is sufficient to demonstrate compliance with both visible and particulate matter requirements. The requirements of record-keeping and notification should be sufficient to document compliance status.

4. Emission Units:

U48: One (1) 12 tons per hour wallboard reclaim system consisting of:

- one (1) JC Steele Feeder, one (1) Monster Crusher, one (1) Reclaim Recycling System Staging Area Pile with a wet suppression spray system, and associated conveyors controlled by a building enclosure;

- one (1) Board Line #1 Wet Reclaim Storage Area Pile with a wet suppression spray system and controlled by a building enclosure;
- one (1) Board Line #2 Wet Reclaim Storage Area Pile with a wet suppression spray system and controlled by a building enclosure;
- one (1) blended Reclaim Storage Area Pile with a wet suppression spray system and controlled by a building enclosure.

Installed 12/2018, modified 2022 & 2023.

A. Visible Emissions

(1) **Permit to Construct (No. 510-0233-6-2105)** issued April 1, 2022 – The Permittee shall install a wet suppression spray system on the Reclaim Recycling Staging Area Pile.

(2) **Permit to Construct (No. 510-0233-6-2105)** issued May 26, 2023 – Authorizes the installation of building enclosures and wet suppression spray systems to control fugitive dust from the one (1) Board Line #1 Wet Reclaim Storage Area Pile, the one (1) Board Line #2 Wet Reclaim Storage Area Pile, and the one (1) Blended Reclaim Storage Area Pile.

(3) **COMAR 26.11.06.02C(2)** – A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers.

(4) The Permittee shall comply with the following opacity limits for fugitive emission for sources constructed after April 22, 2008, specified in **40 CFR Part 60 Subpart OOO** for the Nonmetallic Mineral Processing Plant:

(a) No more than 12 percent opacity from the crusher; and
(b) No more than 7 percent opacity from transfer points on belt conveyors

Note: Compliance with the no visible emission requirement of COMAR 26.11.06.02C will be used for the compliance demonstration of this NSPS opacity standard.

B. Particulate Matter Emissions

(1) **Permit to Construct (No. 510-0233-6-2105)** issued April 1, 2022 – The JC Steele Feeder, Monster Crusher, Reclaim Recycling Staging Area Pile with a wet suppression spray system, and associated conveyors shall be controlled by a building enclosure.

(2) **Permit to Construct (No. 510-0233-6-2105)** issued May 26, 2023 – Authorizes the installation of building enclosures and wet suppression spray systems to control fugitive dust from the one (1) Board Line #1 Wet Reclaim Storage Area Pile, the one (1) Board Line #2 Wet Reclaim Storage Area Pile, and the one (1) Blended Reclaim Storage Area Pile.

(3) **COMAR 26.11.06.03C and D** – The Permittee must take reasonable precautions to prevent particulate matter from unconfined sources and materials handling and construction operations from becoming airborne.

Compliance Demonstration for A and B (Visible and Particulate Matter Emissions)

(1) **Permit to Construct (No. 510-0233-6-2105)** issued April 1, 2022 – The Permittee shall only use the reclaim system to process recycled gypsum from off-spec wallboard produced at the Baltimore facility.

(2) **Permit to Construct (No. 510-0233-6-2105)** issued April 1, 2022 – The wet suppression spray system on the Reclaim Recycling System Staging Area Pile shall be used whenever it is needed to comply with the visible emissions limits specified in COMAR 26.11.06.02C(2) and 40 CFR Part 60 Subpart OOO, and when it is needed as a reasonable precaution to prevent particulate matter from becoming airborne.

(3) **40 CFR §60.672(e)** – If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then the building enclosing the affected facility must comply with the fugitive emissions limit of 7 percent opacity from enclosure openings.

(4) The Permittee shall use Method 9 of Appendix A-4 of 40 CFR, Part 60 and the procedures in 40 CFR §60.11, in order to determine compliance with opacity limits, and shall include the following additions:

(a) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
(b) 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 of Appendix A-4 of 40 CFR, Part 60, Section 2.1) must be followed.
(c) 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) The duration of the Method 9 observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Table 3 of 40 CFR, Part 60, Subpart OOO must be based on the average of the five 6-minute averages.
(e) Method 9 observations for buildings shall be conducted while all affected facilities inside the building are operating.

(Reference: 40 CFR § 60.675)

NOTE: In order to demonstrate compliance with 40 CFR Part 60 Subpart OOO, as required by Permit to Construct No. 510-0233-6-2105 issued April 1, 2022, the initial Method 9 test was performed on March 12, 2020. The highest average opacity recorded was 1.3% from the front of the building.

(5) **Permit to Construct (No. 510-0233-6-2105)** issued April 1, 2022 – During each opacity observation, the affected equipment shall be operated at 90% or higher of its rated capacity.

(6) The Permittee shall notify the Department at least 7 days in advance of any Method 9 performance test. **[40 CFR §60.675(g)]**

(7) **Permit to Construct (No. 510-0233-6-2105)** issued April 1, 2022 – The Permittee shall submit the results of Method 9 performance tests to the Department within 45 days after the visible emission observation was performed.

(8) The Permittee shall develop and maintain a preventative maintenance plan, which includes the wet suppression spray system installed to control particulate matter emissions from the Reclaim Recycling

System Staging Area Pile. The plan shall describe the preventative maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log describing the maintenance activities performed and the dates that the maintenance activities were performed. **[40 CFR §60.674(b)]**

(9) **Permit to Construct (No. 510-0233-6-2105)** issued April 1, 2022 – The Permittee shall perform monthly periodic inspections to check that water is flowing properly from the discharge spray nozzles in the wet suppression spray system installed to control particulate emissions from the Reclaim Recycling System Staging Area Pile. The Permittee shall initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly.

(10) The Permittee shall develop and maintain a fugitive dust plan that describes the procedures, methods, and best practices that will be used to take reasonable precautions to prevent particulate matter from becoming airborne. **[COMAR 26.11.06.03]**

Note: An updated fugitive dust plan was provided to the Department in September 2023.

(11) **Permit to Construct (No. 510-0233-6-2105)** issued April 1, 2022 & May 26, 2023 – The Permittee shall perform an inspection, minimally once a month, to verify that the fugitive dust plan reasonable precautions are being implemented and that particulate matter is not becoming airborne. The inspection shall include a visual observation for a minimal duration of five (5) minutes for each of the four (4) reclaim piles while material handling is occurring.

(12) **Permit to Construct (No. 510-0233-6-2105)** issued April 1, 2022 & May 26, 2023 – The Permittee shall maintain the following records for at least 5 years, and shall make them available to the Department upon request:

(a) The amount and type of material processed in the crusher of the reclaim system each month;
(b) All Method 9 visible emissions observations;
(c) Each inspection of the spray nozzles in the wet suppression system including the date of each inspection, findings of the inspection, and any corrective actions taken;

(d) The preventative maintenance plan;
(e) Records of maintenance activities to demonstrate compliance with the preventative maintenance plan;
(f) The fugitive dust plan; and
(g) Each inspection verifying the fugitive dust control plan is being implemented and that particulate matter is not becoming airborne, including the date, time, duration, and findings of the inspection.

[40 CFR §60.676(b), COMAR 26.11.03.06C]

(13) **Permit to Construct (No. 510-0233-6-2105)** issued April 1, 2022 – The Permittee shall comply with the federal record keeping requirements under **40 CFR §60.7, §60.19 and §60.676**, which include the following, and the records shall be kept on site for at least five years and shall be made available to the EPA Region III and the Department upon request:

(a) Records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility and any malfunction of the air pollution control equipment;
(b) Records of each periodic inspection required under 40 CFR §60.674(b) or (c) for affected facilities (as defined in 40 CFR §§60.670 and 60.671) for which construction, modification, or reconstruction commenced on or after April 22, 2008, including dates and any corrective actions taken, in a logbook (in written or electronic format); and
(c) The Permittee shall comply with the reporting requirements of 40 CFR §60.676.
(d) The Permittee shall furnish the Department written notification, or, if acceptable to both the Department and the Permittee, electronic notification, as follows:

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 40 CFR §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 Department may request additional relevant information subsequent to this notice. **[40 CFR §60.7(a)(4)]**

Rationale for Compliance Demonstration

The fugitive dust plan will ensure compliance with applicable limits and reasonable precautions to prevent dust from becoming airborne. The record keeping and notification requirements should adequately document the compliance status.

5. Emission Units:

U09 to U11:	22 MMBtu/hr Imp Mills Nos. 1, 2 & 3, 1 baghouse each. Installed July 1996.
U26:	30 MMBtu/hr (low Nox) Imp Mill No. 4, 1 baghouse. Installed February 1998.

Note:
Imp Mill No. 4 (U26) is equipped with low NOx burners.

Applicable Standards and Limitations

A. Visible Emissions

(1) **COMAR 26.11.06.02C(2)** – A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers.

(2) **40 CFR §60.672(a) – NSPS Subpart OOO** – The Permittee shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubber control device.

Note:
Compliance with the no visible emission requirement of COMAR 26.11.06.02C will be used for the compliance demonstration for the NSPS opacity standards.

B. Particulate Matter Emissions

(1) **COMAR 26.11.06.03B** – A person may not cause or permit the discharge from any installation in excess of 0.03 gr/SCFD (68.7

mg/dscm).

(2) **40 CFR §60.672(a) – NSPS Subpart OOO** – The Permittee shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which contain particulate matter in excess of 0.022 gr/dscf (0.05 g/dscm).

C. NOx Emissions

Permit to Construct (Nos. 510-6-0646, 1569, and 1426) issued May 12, 2010 which superseded a previous permit to construct issued on November 17, 2004 – In order to avoid major NSR review, the Permittee shall demonstrate, to the Department's satisfaction, that the NOx emissions from the imp mills and the board kilns resulting from the increased use of fuel oil does not exceed 25 tons during any rolling 12-month period **or** the NOx emissions from the imp mills and the board kilns does not exceed 69.6 tons during any rolling 12-month period.

D. SOx Emissions

(1) **COMAR 26.11.06.05C(1)** – A person may not cause or permit the discharge into the atmosphere from installations other than fuel-burning equipment of gases containing more than 500 ppm of sulfur dioxide.

(2) **COMAR 26.11.06.05C(2)** – A person may not cause or permit the discharge into the atmosphere from installations other than fuel-burning equipment of gases containing sulfuric acid, sulfur trioxide, or any combination of them, greater than 35 milligrams per cubic meter reported as sulfuric acid.

(3) **Permit to Construct (No. 510-0233-6-0646, 1569, and 1426)** issued May 12, 2010, which superseded a previous permit to construct issued on November 17, 2004, requires that the Permittee cannot burn #2 fuel oil with a sulfur content greater than 0.2% by weight in the imp mills.

(4) In order to avoid major PSD review, the Permittee shall demonstrate, to the Department's satisfaction that the SOx emissions from the imp mills and the board kilns resulting from the increased use of fuel oil does not exceed 40 tons during any rolling 12-month period **or** the SOx emissions from the imp mills and the

board kilns do not exceed 46.8 tons during any rolling 12-month period. **[Permit to Construct (No. 510-0233-6-0646, 1569, and 1426) issued May 12, 2010]**

Note:
Compliance with (3) demonstrates compliance with (1) and (2).

Compliance Demonstration for A and B (Visible and Particulate Matter Emissions)

Notes:

(i) A NSPS performance test was conducted on December 20, 1996 on the No. 1 Imp Mill baghouse exhaust. The results showed no visible emissions and the particulate emission rate was 0.0067 gr/dscf. The baghouses on Imp Mills Nos. 2 and 3 are identical in design and operation as the baghouse on Imp Mill No. 1. A NSPS performance test was performed on May 12, 1999 on the No. 4 Imp Mill baghouse exhaust. The results were significantly less than the NSPS requirements of 0.022 gr/dscf.

(ii) The compliance demonstration with the particulate emission standard of COMAR 26.11.06.03B and of NSPS Subpart OOO will be based on compliance with the no visible emissions requirement of COMAR 26.11.06.021c and proper preventative maintenance.

(iii) The particulate emissions from the imp mills will be in compliance with the particulate emissions standards if the baghouses on the imp mills are maintained in an operating condition as during the initial compliance test.

(1) The exhaust gases from each imp mill shall vent through a dust collector before discharging into the atmosphere. **[COMAR 26.11.03.06C]**

(2) The Permittee shall perform a walk-through inspection of the facility once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each baghouse stack that exhausts outside a building and look at openings in buildings through which visible emissions can escape to the outside atmosphere. The Permittee shall record the results of each observation in a logbook.

If emissions in the exhaust gases are visible, the Permittee shall perform the following:

(a) Inspect all process and/or control equipment that may affect visible emissions;
(b) Perform all necessary repairs and/or adjustments to all processes and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases are eliminated;
(c) Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and
(d) If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions.

[COMAR 26.11.03.06C]

(3) The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates maintenance was performed. **[COMAR 26.11.03.06C]**

(4) The Permittee shall maintain records of the results of the weekly inspections for at least five years and shall make them available to the Department upon request. **[COMAR 26.11.03.06C]**

(5) The maintenance log shall be kept onsite for at least five (5) years and shall be made available to the Department upon request. **[COMAR 26.11.03.06C]**

(6) The Permittee 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 five (5) years following the date of such measurements, maintenance, reports, and records. **[40 CFR §60.7(f)]**

(7) The Permittee 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), (c), and (f), and reports of observations using Method 22 to demonstrate compliance with §60.672(e). **[40 CFR §60.676(f)].**

(8) The Permittee shall furnish the Department written notification or, if acceptable to both the Department and the Permittee, electronic notification, as follows:

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 40 CFR §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 Department may request additional relevant information subsequent to this notice. **[40 CFR §60.7(a)(4)]**

Rationale for Compliance Demonstration

The baghouses, the best control device for visible and particulate emissions, were designed and have been operated and maintained to comply with both visible and particulate matter limits. As shown in previous performance testing for Imp Mills Nos. 1 and 4, the test results are well below the visible emissions and particulate matter emission limits. The preventive maintenance plan has been implemented to protect integrity of each baghouse and ensure continuous compliance. The best management with a frequent walk-through inspection is sufficient to demonstrate compliance with both visible and particulate matter requirements. The requirements of record-keeping and notification should be sufficient to document compliance status.

Compliance Demonstration for C (NOx Emissions)

(1) The equipment operator shall attend an operator training course sponsored by the Department as well as an in-house training course approved by the Department. **[COMAR 26.11.09.08B(5)(b)]**

(2) The Permittee shall comply with the applicable source specific requirements in **COMAR 26.11.09.08J**, which are as follows:

(a) Maintain good operating practices as recommended by the equipment vendor to minimize NOx emissions;
(b) Prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation;
(c) Maintain and make available to the Department upon request, the written in-house operator training program;
(d) Burn only gas in each installation, where gas is available, during the period May 1 through September 30 of each year, and
(e) Maintain operator training attendance records for each operator at the site for at least two years and make these records available to the Department upon request.

[COMAR 26.11.09.08B(1)(b)]

(3) The Permittee shall use the following NOx emission factors for compliance demonstration:

Emission Unit	Fuel	Pollutant	Emission Factor
Imp Mills #1-3	Natural gas	NOx	0.063 lb/MMBtu (1996 Test)
	Fuel oil	NOx	0.143 lb/MMBtu (AP-42)
Imp Mill #4	Natural gas	NOx	0.0188 lb/MMBtu (1999 Test)
	Fuel oil	NOx	0.143 lb/MMBtu (AP-42)

(4) The following records shall be kept on the premises for at least five (5) years and shall be made available to the Department upon request:

(a) Types and amounts of fuel burned in each imp mill each month;
(b) Calculations of the NOx emissions from all imp mills each month;
(c) Manual of good operating practices recommended by the equipment vendors; and
(d) Training operators receive to reduce NOx emissions and dates of attendance.

[Permit to Construct No. 510-0233-6-0643, 6-1569, & 6-1426 issued on May 12, 2010]

(5) The Permittee shall submit a report containing the following information to the Department within 30 days after the end of each calendar quarter for each of the previous three (3) 12-month periods:
(a) Types and amounts of fuels burned in each imp mill; and

(b) Calculations of the NOx emissions from each imp mill.
[Permit to Construct No. 510-0233-6-0643, 6-1569, & 6-1426 issued on May 12, 2010]

Rationale for Compliance Demonstration

Imp Mill #4 is equipped with low NOx burners to reduce NOx emissions. In addition to low NOx burners, the good operating practices have been demonstrated to comply with the emission limit. Each imp mill operator is required to be trained to operate in accordance with the manual of good operating practices. An emission test was conducted in 1996 for Imp Mill #1-3 and in 1999 for Imp Mill #4 to establish an emission factor. Fuel usage and emission factors shall be used to calculate NOx emission for compliance determination. The record-keeping and reporting requirements are sufficient to document compliance status.

Compliance Demonstration for D (SOx Emissions)

(1) Burn only gas in each installation, where gas is available, during the period May 1 through September 30 of each year. **[Permit to Construct No. 510-0233-6-0643, 6-1569, & 6-1426 issued on May 12, 2010]**
(2) The Permittee shall continuously monitor sulfur content in fuel oil to ensure it does not exceed 0.2% by weight. **[COMAR 26.11.03.06C]**
(3) The Permittee shall obtain a certification from the fuel supplier indicating that the oil complies with the limitation on the sulfur content of fuel oil. The basis for these monitoring, record keeping, and reporting requirements is the Department's authority to create periodic monitoring requirements. **[COMAR 26.11.03.06C]**
(4) In order to demonstrate compliance with the emission limits for SOx, at the end of each calendar month, the Permittee is required to calculate the total emissions of SO2 from the imp mills for the previous 12-month period, using the following emission factors, where s is the sulfur content (%):

Emission Unit	Fuel	Pollutant	Emission Factor (AP-42)
Imp Mills #1-4	Natural gas	SO2	0.03 lb/MMBtu
	Fuel oil	SO2	142 s/1000 gallons

(5) The following records shall be kept on the premises for at least five (5) years and shall be made available to the Department upon request:

(a) Certifications from the oil suppliers;

(b) Types and amounts of fuel burned in each imp mill each month;
(c) Calculations of SO2 emissions from each imp mill each month; and
(d) Total SO2 emissions from all imp mills for the previous 12-month period.

[Permit to Construct No. 510-0233-6-0643, 6-1569, & 6-1426 issued on May 12, 2010]

(6) The Permittee shall submit a report containing SO2 emissions from each imp mill the Department within 30 days after the end of each calendar quarter for each of the previous three (3) 12-month periods. **[Permit to Construct No. 510-0233-6-0643, 6-1569, & 6-1426 issued on May 12, 2010]**

Rationale for Compliance Demonstration

Sulfur content in fuel is the major factor for SOx emissions. The requirements to burn natural gas in each imp mill, where gas is available, during the period May 1 through September 30 of each year would significantly reduce SOx emissions because fuel content in natural gas is much lower than that in fuel oil. In addition, sulfur content limit (0.2% by weight) in fuel oil would further reduce SOx emissions. Fuel usage and sulfur content in fuel should be used to calculate SOx emissions for compliance determination. The record-keeping and reporting requirements are sufficient to document compliance status.

6. Emission Units:

U23: 96 MMBtu/hr wallboard dryer/kiln (Board Kiln No. 1). Installed May 1969.
U30: 135 MMBtu/hr (low NOx) wallboard dryer/kiln (Board Kiln No. 2). Installed April 1998.

Note: Board Kiln No. 1 is equipped with a regenerative thermal oxidizer to comply with the VOC alternative emission limit and is allowed to burn natural gas only. Board Kiln No. 2 is equipped with low NOx burners.

Applicable Standards and Limitations

A. Visible Emissions

COMAR 26.11.06.02C(2) – A person may not cause or permit the discharge of emissions from any installations or building, other than water in an uncombined form, which is visible to human observers.

B. Particulate Matter Emissions

COMAR 26.11.06.03B – A person may not cause or permit particulate matter to be discharged from any installation in excess of 0.03 gr/SCFD (68.7 mg/dscm).

C. NOx Emissions

Permit to Construct (No. 510-6-0646, 1569, and 1426) issued May 12, 2010, which superseded a previous permit to construct issued November 17, 2004 – In order to avoid major NSR reviews, the Permittee shall demonstrate to the Department's satisfaction, that the NOx emission from the imp mills and the board kilns resulting from the increased use of fuel oil does not exceed 25 tons during any rolling 12-month period **or** the NOx emission from the imp mills and the board kilns does not exceed 69.6 tons during any rolling 12-month period.

D. SOx Emissions

(1) **COMAR 26.11.06.05C(1)** – A person may not cause or permit the discharge into the atmosphere from installations other than fuel-burning equipment of gases containing more than 500 ppm of sulfur dioxide.

(2) **COMAR 26.11.06.05C(2) –** A person may not cause or permit the discharge into the atmosphere from installations other than fuel-burning equipment of gases containing sulfuric acid, sulfuric trioxide, or any combination of them, greater than 35 milligrams per cubic meter reported as sulfuric acid.

(3) **Permit to Construct (Nos. 510-0233-6-0646, 1569, and 1426)** issued May 12, 2010, which supersedes a previous permit to construct issued November 17, 2004, requires that the Permittee cannot burn #2 fuel oil with a sulfur content greater than 0.2% by

weight in Board Kiln No. 2.

(4) In order to avoid major PSD reviews, the Permittee shall demonstrate to the Department's satisfaction that the SOx emission from the imp mills and the board kilns resulting from the increased use of fuel oil does not exceed 40 tons during any rolling 12-month period **or** the SOx emission from the imp mills and the board kilns do not exceed 46.8 tons during any rolling 12-month period. **[Permit to Construct No. 510-0233-6-0643, 6-1569, & 6-1426 issued on May 12, 2010]**

E. VOC Emissions

(1) Total VOC emissions from Board Kiln Nos. 1 and 2 combined shall not exceed 195 pounds per operating day. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**

(2) Total premises wide VOC emissions shall be less than 25 tons in any rolling 12-month period to ensure that the total net VOC emissions increase resulting from the modification of board kiln Nos. 1 and 2 combined is less than the non-attainment new source review threshold, 25 tons in any rolling 12-month period. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**

(3) The Permittee shall at all times of operation, including startup and shutdown, vent flue gases from Board Kiln #1 through the RTO prior to discharging to the atmosphere during all stages of the silicone XP water resistant wallboard or eXP water resistant wallboard manufacturing process. **[Consent Order No. 510-0233-6-0646 and 6-1569 executed on March 11, 2016; Permit to Construct No. 510-0233-6-0643 &6-1569 issued on March 11, 2016; Consent Order executed on June 8, 2022]**

Compliance Demonstration for A and B (Visible and Particulate Matter Emissions)

(1) The exhaust gases from Board Kiln No. 1 shall vent through a dust collector before discharging into the atmosphere. **[COMAR 26.11.03.06C]**

(2) The Board Kiln No. 1 shall burn natural gas only. **[Permit to Construct No. 510-0233-6-0646, 6-1569, & 6-1426 issued on May 12, 2010]**

(3) The Permittee shall perform a walk-through inspection once a month of the facility to look for sources of visible emissions. The Permittee shall visually inspect the exhaust gases from each baghouse stack that exhausts outside of a building and look at openings in buildings through which visible emissions can escape to the outside atmosphere. The Permittee shall record the results of each observation in a logbook.

If emissions in the exhaust gases are visible, the Permittee shall perform the following:

(a) Inspect all process and/or control equipment that may affect visible emissions;
(b) Perform all necessary repairs and/or adjustments to all processes and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases are eliminated;
(c) Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and
(d) If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions.

[COMAR 26.11.03.06C]

(4) The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates maintenance was performed. **[COMAR 262.11.03.06C]**

(5) The Permittee shall keep records of the results of the walk-through inspections and any required repairs and/or adjustments to equipment for at least five (5) years and shall make them available to the Department upon request. **[COMAR 26.11.03.06C]**

(6) The log shall be kept on site for at least five (5) years and shall be made available to the Department upon request. **[COMAR 26.11.03.06C]**

Rationale for Compliance Demonstration

The baghouses, the best control device for visible and particulate emissions, were designed and have been operated and maintained to comply with both visible and particulate matter limits. The preventive maintenance plan has been implemented to protect integrity of each baghouse and ensure continuous compliance. The best management with a frequent walk-through inspection is sufficient to demonstrate compliance with both visible and particulate matter requirements. The requirements of record-keeping and notification are sufficient to document compliance status.

Compliance Demonstration for C (NOx Emissions)

(1) The Board Kiln No. 1 shall burn natural gas only. **[Permit to Construct No. 510-0233-6-0646, 1569, & 6-1426 issued on May 12, 2010]**

(2) The equipment operator shall attend an operator training course sponsored by the Department as well as an in-house training course approved by the Department. **[COMAR 26.11.09.08B(5)(b)]**

(3) The Permittee shall comply with the applicable source specific requirements in COMAR 26.11.09.08J, which are as follows:
   (a) Maintain good operating practices as recommended by the equipment vendor to minimize NOx emissions;
   (b) Prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation;
   (c) Maintain and make available to the Department upon request the written in-house operator training program;
   (d) Burn only natural gas in each installation, where gas is available, during the period May 1 through September 30 of each year; and
   (e) Maintain operator training attendance records for each operator at the site for at least two (2) years and make these records available to the Department upon request.

(4) The Permittee shall use the following NOx emission factors for compliance demonstration:

Emission Unit	Fuel	Pollutant	Emission Factor
Board Kiln No. 1	Natural gas	NOx	0.06 lb/MMBtu Composite
Board Kiln No. 2	Natural gas	NOx	0.0114 lb/MMBtu (1999 Test)
	Fuel oil	NOx	0.25 lb/MMBtu (2001 Test)

(5) The following records shall be kept on the premises for at least five (5) years and shall be made available to the Department upon request:
   (a) Types and amounts of fuel burned in each board kiln each month;
   (b) Calculations of the NOx emissions from all board kilns each month;
   (c) Manual of good operating practices recommended by the equipment vendors; and
   (d) Training operators receive to reduce NOx emissions and dates of attendance.

(6) The Permittee shall submit a report containing NOx emissions to the Department within 30 days after the end of each calendar quarter for each of the previous three (3) 12-month periods. **[Permit to Construct No. 510-0233-6-0643, 6-1569, & 6-1426 issued on May 12, 2010]**

Rationale for Compliance Demonstration

NOx emissions from Board Kiln Nos. 1 and 2 have been minimized by burning natural gas only in Board Kiln No. 1 and the use of low NOx burners in Board Kiln No. 2. In addition, good operating practices are the most cost-effective way for NOx emission reduction from each board kiln and each operator must be trained to operate in accordance with the manual of good operating practices. For Board Kiln No. 2, an emissions test was conducted in 1999 for natural gas burning and in 2001 for fuel oil burning to establish emission factors. Fuel usage and emission factors should be used to calculate NOx emissions for compliance determination. The record-keeping and reporting requirements are sufficient to document compliance status.

Compliance Demonstration for D (SOx Emissions)

(1) The Board Kiln No. 1 shall burn natural gas only. **[Permit to Construct No. 510-0233-6-0646, 6-1569, & 6-1426 issued on May 12, 2010]**

(2) Burn only gas in Board Kiln No. 2, when gas is available, during the period May 1 through September 30 of each year. **[Permit to Construct No 510-0233-6-0646, 6-1569, & 6-1426 issued on May 12, 2010]**

(3) Sulfur content in fuel oil shall not exceed 0.2% by weight. **[Permit to Construct No 510-0233-6-0646, 6-1569, & 6-426 issued on May 12, 2010]**

(4) The Permittee shall obtain a certification from the fuel supplier indicating that the oil complies with the limitation on the sulfur content of fuel oil. The basis for these monitoring, record keeping, and reporting requirements is the Department's authority to create periodic monitoring requirements. **[COMAR 26.11.03.06C]**

(5) In order to demonstrate compliance with the emission limits for NOx and SOx at the end of each calendar month, the Permittee is required to calculate the total emissions of NOx and SO2 from the board kilns for the previous 12-month period, using the following emission factors, where s is the sulfur content (%):

Emission Unit	Fuel	Pollutant	Emission Factor
Board Kiln No. 1	Natural gas	SO2	0.6 lb/mmcf
Board Kiln No. 2	Natural gas	SO2	0.6 lb/mmcf
	Fuel oil	SO2	142 s/1000 gallons (AP-42)

[Permit to Construct No. 510-0233-6-0646, 6-1569, & 6-1426 issued on May 12, 2010]

(6) The following records shall be kept on the premises for at least five (5) years and shall be made available to the Department upon request:

(a) Certifications from the oil suppliers;
(b) Types and amounts of fuel burned in each board kiln each month;
(c) Calculations of SO2 emissions from each board kiln each month; and
(d) Total SO2 emissions from all board kilns the previous 12-month period.

[Permit to Construct No. 510-0233-6-0646, 1569, and 1426 issued May 12, 2010]

(7) The Permittee shall submit a report containing SO2 emissions from each board kiln to the Department within 30 days after the end of each calendar quarter for each of the previous three (3) 12-month periods. **[Permit to Construct No. 510-0233-6-0643, 6-1569, & 6-1426 issued on May 12, 2010]**

Rationale for Compliance Demonstration

Sulfur content in fuel is the major factor for SOx emissions. The requirements to burn natural gas only in Board Kiln No. 1 and burn natural gas in Board Kiln No. 2, where gas is available, during the period of May 1 through September 30 of each year would significantly reduce SOx emissions because fuel content in natural gas is much lower than that in fuel oil. In addition, sulfur content limit (0.2% by weight) in fuel oil would further reduce SOx emissions. Fuel usage and sulfur content in fuel should be used to calculate SOx emissions. Fuel usage and sulfur content in fuel should be used to calculate SOx emissions for compliance determination. The record-keeping and reporting requirements are sufficient to document compliance status.

Compliance Demonstration for E (VOC Emissions)

(1) Within 180 days of the start-up date of the RTO controlling VOC emissions from Board Kiln No. 1, the Permittee shall conduct stack emissions tests for Board Kiln Nos. 1 and 2 to demonstrate compliance with the alternative VOC emissions standard. During the stack emissions tests, the Permittee shall determine the following:

(a) The inlet mass VOC concentration and the outlet mass VOC concentrations for Board Kiln No. 1 when manufacturing silicone XP water resistant wallboard and when manufacturing eXP water resistant wallboard;
(b) The outlet mass VOC concentrations from Board Kiln No. 1 when manufacturing regular wallboard;
(c) The outlet mass VOC for Board Kiln No. 2 when manufacturing regular wallboard;
(d) The minimum temperature of the RTO combustion chamber required to achieve the overall VOC emission control efficiency necessary to demonstrate compliance with the alternative VOC emissions standard;
(e) The amount in thousand square feet (MSF) of silicone XP water resistant wallboard, eXP water resistant wallboard and regular wallboard produced in each specific test; and
(f) The amount and types of fuels used in Board Kiln No. 1, Board Kiln No. 2 and the RTO during each test.

[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]

Note: The initial stack test was performed on July 13, 2017. The RTO combustion chamber temperature was 1575 °F.

(2) All required stack emissions tests shall be conducted in accordance with the testing specifications in the Department's Technical Memorandum 91-01, "Test Methods and Equipment Specifications for Stationary Sources" (January 1991), or other test methods approved by the Department. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**

(3) During each required stack emissions tests, Board Kiln Nos. 1 and 2 shall be operated at 90 percent or higher of its rated capacity unless an alternate operating scenario is approved by the Department. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**

(4) At least 60 days prior to each required stack emissions tests, the Permittee shall submit to the Department a test protocol for review and approval. **[Permit to Construct Nos. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**

(5) Within 45 days following the required stack emissions tests, the Permittee shall submit to the Department a stack emissions test report, including the following information:

(a) The overall VOC control efficiency of the RTO when Board Kiln Line No. 1 is manufacturing silicone XP water resistant wallboard and when manufacturing eXP water resistant wallboard;
(b) The minimum temperature of the RTO combustion chamber required to achieve the overall VOC emission control efficiency necessary to demonstrate compliance with the alternative VOC emissions standard;
(c) The inlet mass VOC concentration and the outlet mass VOC concentration for Board Kiln No. 1 when manufacturing silicone XP water resistant wallboard;
(d) The inlet mass VOC concentration and the outlet mass VOC concentration for Board Kiln No. 1 when manufacturing eXP water resistant wallboard;
(e) The outlet mass VOC concentration for Board Kiln No. 1 when manufacturing regular wallboard;
(f) The outlet mass VOC concentration for Board Kiln No. 2 when manufacturing regular wallboard;
(g) The amount of silicone XP water resistant wallboard for Board Kiln No. 1 in MSF;
(h) The amount of eXP water resistant wallboard for Board Kiln No. 1 in MSF;
(i) The amount of regular wallboard for Board Kiln No. 1 in MSF;
(j) The amount of regular wallboard for Board Kiln No. 2 in MSF;

(k) The VOC emissions factor in pounds of VOC per MSF of the silicone XP water resistant wallboard for Board Kiln No. 1;
(l) The VOC emissions factor in pounds of VOC per MSF of regular wallboard for Board Kiln No. 1;
(m) The VOC emissions factor in pounds of VOC per MSF of regular wallboard for Board Kiln No. 1;
(n) The VOC emissions factor in pounds of VOC per MSF of regular wallboard for Board Kiln No. 2; and
(o) The amount and types of fuels used in Board Kiln No. 1, Board Kiln No. 2 and the RTO.

[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]

(6) The Permittee shall vent flue gases from Board Kiln No. 1 through the RTO prior to discharging to the atmosphere when manufacturing silicon XP water resistant wallboard and eXP water resistant wallboard. In the event that the RTO bypass is triggered due to an RTO malfunction, the Permittee shall comply with the reporting requirements. The RTO malfunction report shall include an assessment whether or not the facility is in compliance with the following limits:

(a) 195 lb/day for the combined VOC emissions from Lines #1 and #2; and
(b) 25 tons for any rolling 12-month period of the premises-wide VOC emissions.

(7) The temperature of the combustion zone of the RTO shall be maintained to at least the minimum temperature established during the most recent stack emissions test demonstrating compliance with the daily VOC emission limit of 195 pounds per operating day. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**

(8) The Permittee shall manufacture regular wallboard only in Board Kiln No. 2. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**

(9) The Permittee shall monitor daily production for each type of wallboard and shall calculate total daily emission from Board Kiln Nos. 1 and 2 to demonstrate compliance with the alternative VOC emission standard, 195 pounds per operating day. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**

(10) The Permittee shall continuously monitor and record the RTO combustion zone temperature while flue gases are vented to the RTO to ensure that the

temperature is at least the minimum temperature established during the most recent stack emissions tests demonstrating compliance with daily VOC emission limit of 195 pounds per operating day. To comply with the requirement of the RTO combustion zone temperature, the Permittee shall calculate the temperature based on 3-hour block average by using continuous monitoring data during each operating day. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**

(11) The Permittee shall not produce any combination of silicone XP water resistant wallboard, eXP water resistant wallboard, and/or regular wallboard in Board Kiln No. 1 and regular wallboard in Board Kiln No. 2 in excess of the amounts established during the most recent stack emissions tests demonstrating compliance with daily VOC emission limit of 195 pounds per operating day. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**

(12) The Permittee shall monitor the following wallboard production rates for each operating day:

(a) The amount of silicone XP water resistant wallboard produced in Board Kiln No. 1 in MSF;
(b) The amount of eXP water resistant wallboard produced in Board Kiln No. 1 in MSF;
(c) The amount of regular wallboard produced in Board Kiln No. 1 in MSF; and
(d) The amount of regular wallboard produced in Board Kiln No. 2 in in MSF.

[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]

(13) The Permittee shall calculate daily VOC emissions for each operating day by using the following equation to demonstrate that the daily VOC emissions rate does not exceed the alternative VOC emissions limit of 195 pounds per operating day:

Total Daily VOC Emissions = $(P_1*EF_1)+(P_2*EF_2)+(P_3*EF_3)+(P_4*EF_4)$

Where
P_1 is the amount of silicone XP water resistant wallboard produced for Board Kiln No. 1 in MSF per day.
P_2 is the amount of eXP water resistant wallboard produced for Board Kiln No. 1 in MSF per day.

P_3 is the amount of regular wallboard produced for Board Kiln No. 1 in MSF per day.
P_4 is the amount of regular wallboard produced for Board Kiln No. 2 in MSF per day.
EF_1 is the VOC emissions factor in pounds of VOC per MSF of the silicone XP water resistant wallboard for Board Kiln No. 1.
EF_2 is the VOC emissions factor in pounds of VOC per MSF of the silicone eXP water resistant wallboard for Board Kiln No. 1.
EF_3 is the VOC emissions factor in pounds of VOC per MSF of the regular wallboard for Board Kiln No. 1.
EF_4 is the VOC emissions factor in pounds of VOC per MSF of the regular wallboard for Board Kiln No. 2.

(14) The Permittee shall develop and maintain an Operations and Maintenance Plan for Board Kiln No. 1, including the RTO used for air pollution control, and Board Kiln No. 2. The plan shall not provide for any RTO bypass operations, except when the RTO bypass is triggered as the result of a malfunction. The plan shall be compliant with all applicable terms of this Operating Permit. The plan shall incorporate all of the following:

(a) Information that is sufficient to demonstrate that air emissions from each affected emissions unit can be expected to comply with all applicable regulatory requirements during periods of normal operation. Examples of types of information that could be included to support the required demonstrations would be design criteria, vendor specifications and performance guarantees, approved computer modeling studies, and results of testing programs in which approved test methods and procedures were utilized.
(b) Procedures that provide for proper operation and maintenance of all affected emission units and air pollution control equipment within the facility.
(c) Provisions for periodic monitoring of operating parameters and emissions as necessary to determine that the affected emissions units and air pollution control equipment are functioning properly.
(d) Descriptions of procedures to be followed and corrective actions to be taken when monitoring information indicates that an affected emissions unit or pollution control device is not functioning properly.
(e) Provisions for developing written or printable electronic records that will show whether prescribed operating, maintenance and monitoring procedures are consistently followed, and whether timely and appropriate corrective actions are taken when malfunctions occur.

[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]

Note: The Operations and Maintenance Plan was submitted to the Department in September 2022.

(15) The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information:

(a) All stack emissions test reports;
(b) The Operations and Maintenance plan for Board Kiln Nos. 1 and 2;
(c) The amount of silicone XP water resistant wallboard produced in Board Kiln No. 1 in MSF per operating day;
(d) The amount of eXP water resistant wallboard produced in Board Kiln No. 1 in MSF per operating day;
(e) The amount of regular wallboard produced in Board Kiln No. 1 in MSF per operating day;
(f) The amount of regular wallboard produced in Board Kiln No. 2 in MSF per operating day;
(g) The temperature of the RTO combustion zone based on a 3-hour block average during each operating day;
(h) Total VOC emissions in pounds per operating day;
(i) The total net VOC emission increase resulting from the modification of Board Kiln Nos. 1 and 2, combined, in tons per month and tons per rolling 12-month period; and
(j) Safety Data Sheets (SDS) for each raw material used for wallboard production.

[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016; COMAR 26.11.03.06C]

(16) If total daily VOC emissions, as calculated using the equation in Part 6.3 E(8) of Table IV-6 of the permit, exceed 195 pounds on any one (1) operating day, the Permittee shall submit a report to the Department in writing or via e-mail correspondence within five (5) business days following the day of exceedance. **[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]**

(17) The Permittee shall submit a quarterly report containing the following information to the Department within 30 days after the end of each calendar quarter:

(a) All deviations from the Operations and Maintenance Plan for Board Kiln No.1, the RTO and Board Kiln No. 2; OR
(b) A statement affirming that no deviations from the Operations and Maintenance Plan have occurred.

[COMAR 26.11.03.06 C]

(18) The Permittee shall update the CAM Plan as specified in Table IV-7 of the Permit and shall operate the RTO in accordance with the current CAM plan. **[COMAR 26.11.03.06C]**

Rationale for Compliance Demonstration

Board Kiln No. 2 is only allowed to produce regular wallboard since the VOC content of the raw materials is much lower in regular wallboard than in that of silicone XP and eXP wallboards. Additionally, Board Kiln No. 1 must use the RTO to control VOC emissions when producing silicone XP and eXP wallboards. The Permittee must conduct stack emission performance tests to optimize the RTO temperature for better VOC emission control, to establish VOC emission factors for each wallboard production, and to develop a CAM plan for Board Kiln No. 1 operation.

The RTO temperature shall be maintained within the range stated in the CAM plan. VOC emission factors and wallboard production shall be used to demonstrate compliance with the alternative VOC emission standard. The requirements of record-keeping and reporting are sufficient to document compliance status.

7. Compliance Assurance Monitoring (CAM) – Board Kiln No. 1 equipped with a RTO is subject to the following CAM Plan.

Table IV-6 CAM Plan – Part 64 Requirements	
Indicator No. 1	
I. Indicator	RTO Combustion Chamber Temperature
Monitoring Approach	Monitor temperature of the RTO combustion chamber
II. Indicator Range 64.4(a)(2)	The normal operation range will be established during the upcoming initial stack VOC emissions test. **Note:** The RTO combustion chamber was 1575°F during the initial stack test performed on July 13, 2017. An excursion occurs if the combustion chamber temperature is out of normal

Reporting Threshold	operation range. An excursion will trigger an investigation, corrective action, and a reporting requirement. All excursions and corrective actions taken shall be reported to the Department within five (5) business days following the day of excursion.
III. Performance Criteria 64.4(a)(3)	
A. Data Representatives	Temperature recorded automatically on a data acquisition system.
B. Verification of Operational Status	The temperature monitoring system is in place to document compliance status.
C. QA/QC Practices and Criteria	Calibration, maintenance and operation of the temperature monitoring system is conducted according to manufacturer's specification.
D. Monitoring Frequency	Continuous.
E. Data Collection	Temperature recorded automatically on a data acquisition system. The records shall be maintained on site for at least five (5) years.
F. Averaging Period	3-hour block average.

Table IV-6 CAM Plan – Part 64 Requirements	
Indicator No. 2	
I. Indicator	Each type of wallboard production by each board kiln, MSF per day.
Monitoring Approach	Production rate and emission factor for each type of wallboard produced by each wallboard kiln are used to demonstrate compliance with the alternative VOC emission standard, 195 pounds per operating day.
II. Indicator Range 64.4(a)(2)	An excursion occurs if a combined production rate for all wallboard products exceeds the established emissions limit.

Reporting Threshold	All excursions and corrective actions taken shall be reported to the Department within five (5) business days following the day of excursion.
III. Performance Criteria 64.4(a)(3)	
A. Data Representatives	Operators monitor and record production rate for each product on a daily basis.
B. Verification of Operational Status	Each operating day is documented.
C. QA/QC Practices and Criteria	Each board kiln operator is trained according to the standard operating procedures.
D. Monitoring Frequency	Production rate for each product is monitored every day.
E. Data Collection	Results of production range, MSF per day, for each product is recorded and maintained on site.
F. Averaging Period	Each operating day.

COMPLIANCE SCHEDULE

GBBP is currently in compliance with all applicable air quality regulations.

TITLE IV – ACID RAIN

Not Applicable.

TITLE VI – OZONE DEPLETING SUBSTANCES

GBBP is not subject to Title VI requirements.

SECTION 112(r) – ACCIDENTAL RELEASE

GBBP is not subject to the requirements of Section 112(r).

PERMIT SHIELD

GBBP requested that a permit shield be expressly included in the Title V – Part 70 renewal permit. Permit shields are granted on an emission unit by emission unit basis. A permit shield shall apply for the applicable requirements included for each of the emissions units identified in Table IV-1 through IV-6. A permit shield statement is included in the opening summary statement in Section IV - Plant Specific Conditions of the permit.

INSIGNIFICANT ACTIVITIES

(1) ✓ Space heaters utilizing direct heat transfer and used solely for comfort heat;

(2) Containers, reservoirs, or tanks used exclusively for:

(a) No. 2 Storage lubricating oils;

(3) ✓ First aid and emergency medical care provided at the facility, including related activities such as sterilization and medicine preparation used in support of a manufacturing or production process.

STATE ONLY ENFORCEABLE REQUIREMENTS

This section of the permit contain state-only enforceable requirements. The requirements in this section will not be enforced by the U.S. Environmental Protection Agency. The requirements in this section are not subject to COMAR 26.11.03 10 - Public Petitions for Review to EPA Regarding Part 70 Permits.

The Permittee is subject to the following State-only enforceable requirements:

1. Applicable Regulations

(A) COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.

(B) COMAR 26.11.15.05, which requires that the Permittee implement "Best Available Control Technology for Toxics" (T – BACT) to control emissions of toxic air pollutants.

(C) COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions will unreasonably endanger human health

2. Compliance Demonstration for A

As long as GBBP meets all federally enforceable requirements, it would comply with these requirements.

3. Compliance Demonstration for B and C

(1) Ammonium Emissions

(a) The Permittee shall not use ammonium sulfate in Board Lines #1 and #2 at the same time during the wallboard manufacturing process unless it can be demonstrated, to the satisfaction of the Department, that the ammonia emissions would not cause the 1-hour and 8-hour toxic screening levels to be exceeded;
(b) When Board Line #1 is operating and using ammonium sulfate in the wallboard manufacturing process, the Permittee shall not use more than 1,325 lbs of ammonium sulfate per day;
(c) When Board Line #2 is operating and using ammonium sulfate in the wallboard manufacturing process, the Permittee shall not use more than 2,960 lbs of ammonium sulfate per day; and
(d) The following records shall be kept on the premises for at least five (5) years and shall be made available to the Department upon request:
    (i) Amount of ammonium sulfate used each day in each Board Line; and
    (ii) Daily hours of operation of each Board Line.

[Permit to Construct issued May 12, 2010]

(2) Formaldehyde Emissions

(a) The Permittee shall vent the flue gases from Board Kiln No. 1 through the RTO prior to discharging to the atmosphere when manufacturing silicone XP water resistant wallboard and eXP water resistant wallboard. In the event that the RTO bypass is triggered due to an RTO malfunction, the Permittee shall comply

with the reporting requirements. The RTO malfunction report shall include an assessment whether or not the facility is in compliance with the formaldehyde emissions limit of 1.5 lb/hr based on a 3-hour block average.

(b) The Permittee shall not manufacture silicone XP water resistant wallboard and eXP water resistant wallboard in Board Kiln No. 2.

(c) Total formaldehyde emissions from Board Kiln Nos. 1 and 2, combined, shall not exceed 1.50 pounds per hour based on a 3-hour block average unless the Permittee can demonstrate compliance with the air toxics ambient impact requirements of COMAR 26.11.15.06 for emissions of formaldehyde at a higher formaldehyde emission rate. In the event that the total hourly emission rates for all combinations of products remain below the compliance limit for air toxics ambient impacts, the stack test results can be used as compliance documentation in lieu of a 3-hour block average.

(d) During each required stack emission performance test, the Permittee shall establish formaldehyde emission factors for each wallboard production.

(e) The Permittee shall calculate hourly formaldehyde emissions based on a 3-hour block average, if required, by using the following equation to demonstrate compliance with the hourly formaldehyde limit:

Total Hourly Formaldehyde Emissions =
$((FP_1*FEF_1)+(EF_2*FEF_2)+(EP_3*FEF_3)+(FP_4*FEF_4)) / 3$

Where
F is formaldehyde.
FP_1 is the amount of silicone XP water resistant wallboard, in MSF, produced during a 3-hour contemporaneous period from Board Kiln No. 1.
FP_2 is the amount of silicone eXP water resistant wallboard, in MSF, produced during a 3-hour contemporaneous period from Board Kiln No. 1.
FP_3 is the amount of regular wallboard, in MSF, produced during a 3-hour contemporaneous period from Board Kiln No. 1.
FP_4 is the amount of regular wallboard, in MSF, produced during a 3-hour contemporaneous period from Board Kiln No. 2.

FEF_1 is the F emissions factor in pounds of F per MSF of the silicone XP water resistant wallboard for Board Kiln No. 1.
FEF_2 is the F emissions factor in pounds of F per MSF of the silicone eXP water resistant wallboard for Board Kiln No. 1.
FEF_3 is the F emissions factor in pounds of F per MSF of regular wallboard for Board Kiln No. 1.
FEF_4 is the F emissions factor in pounds of F per MSF of regular wallboard for Board Kiln No. 2.

(f) The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information:

(i) Formaldehyde emission factor for each wallboard production; and
(ii) Date and time of each occurrence when formaldehyde emission exceeds 1.5 pounds per hour based on a 3-hour block average.

(g) The Permittee shall report to the Department for each occurrence, when formaldehyde emission exceeds 1.5 pounds per hour, in accordance with COMAR 26.11.01.07C.

[Permit to Construct No. 510-0233-6-0646 & 6-1569 issued on March 11, 2016]

(3) The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

(a) a statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or
(b) a revised compliance demonstration, developed in accordance with requirements included in COMAR 26.11.15 and 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.

APPENDIX A: Fugitive Dust Plan

Gold Bond Building Products Baltimore Plant Fugitive Dust Control Plan

LAST REVISED: SEPTEMBER 22, 2023

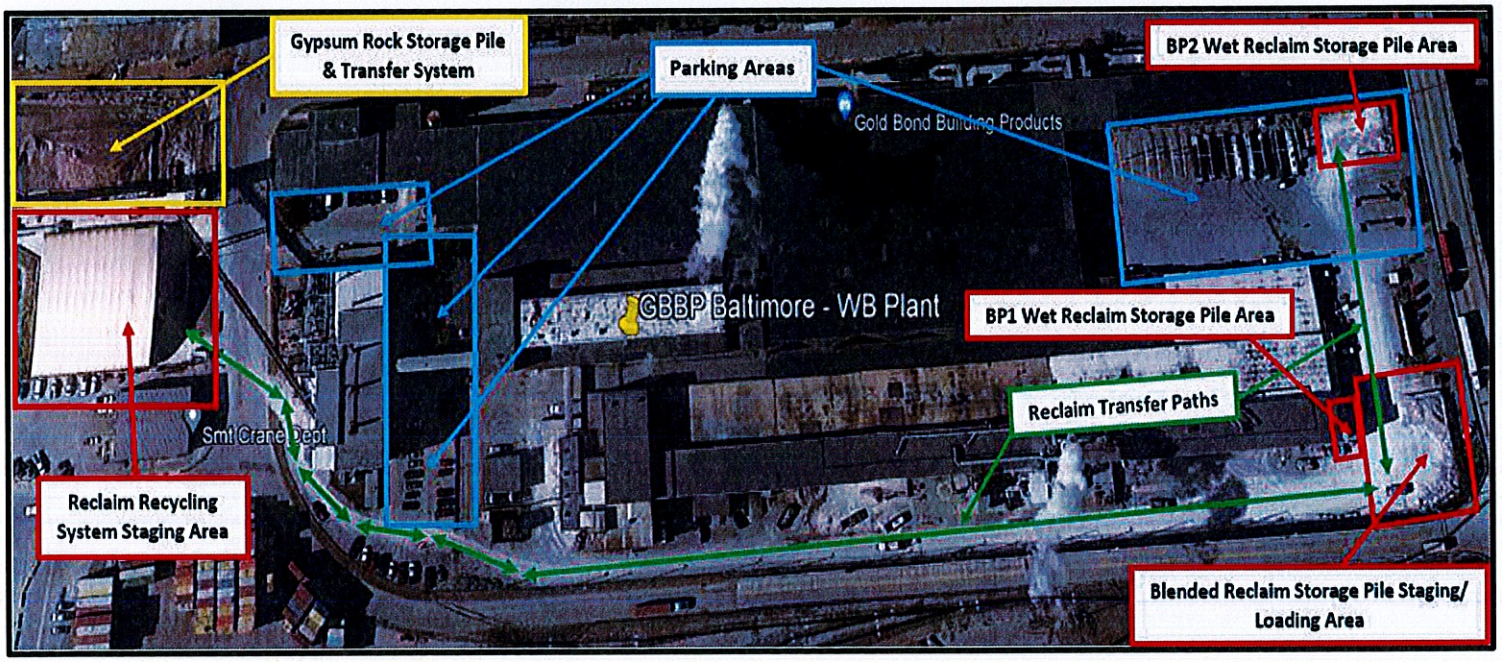
Purpose:

- The following plan details the fugitive dust control and dust track out mitigation activities associated with the Gold Bond Building Products, LLC ("Gold Bond") wallboard manufacturing facility in Baltimore, MD. The purpose of this plan is to limit the sources of fugitive dust emissions and provide controls to prevent the creation of fugitive dust and materials track out throughout the facility.

Applicability / Scope:

- This control plan covers all probable sources for fugitive emissions and material track-out issues and identifies the control measures in place to limit dust creation and material track-out concerns.

- This plan outlines fugitive dust and material track -out control measures for the following areas:



- This plan covers:

    - Fugitive dust control measures and material track-out control measures for the reclaim recycling system staging area, the reclaim transfer paths, board plant line #1 (BP1)/board plant line #2 (BP2) wet reclaim storage areas, the mixed reclaim storage pile staging/loading area, and the parking areas throughout the plant.

    - Fugitive dust and material track-out control measures for reclaim pile manipulation, reclaim transfer, the loading/transport/dumping of reclaim materials, and the discharge/storage/transfer of raw gypsum rock. In addition:

        - Reclaim pile manipulation will address how the pile of reclaim gypsum is rearranged/processed using heavy equipment.

- Reclaim transfer will address how fugitive dust will be controlled when the reclaim gypsum board is transferred from one pile to another.

- Loading/transport/dumping will address fugitive dust controls for the loading of reclaim gypsum board into a dump truck that transfers the material from the blended reclaim storage pile staging/loading area to the reclaim recycling system staging area. The control of fugitive dust for this segment will also address the dust from the truck as it transports the material between the piles and the dust that results from dumping the material at the reclaim recycling system staging area.

- To standardize the terminology utilized within this plan, the facility has identified three general operations that have the potential to produce fugitive dust and cause material track-out. These types of operations are defined below and will be assigned to each of the locations covered under this plan for the purpose of establishing controls for fugitive dust sources:

  - Heavy Machinery Operations

    - This covers all areas where heavy machinery is utilized for the purpose of transporting the material, pile management or crushing the material.

  - Material Transportation

    - This covers the transportation of material from one location to another and the track-out of material from material handling areas on tires/tracks vehicles. This does not cover the loading or dumping of the material.

  - Material Handling (Reclaim/Natural Gypsum Rock)

    - This covers all pile management (to include the crushing of the reclaim board), the loading/dumping of reclaim material prior to/after transportation, and the material handling conveying/crushing/milling process for natural rock.

Responsibility:

- Kevin Bushman, Plant Manager
  - Phone Number: (410) 631-4948
  - Email: kevinbu@goldbondbuilding.com
  - Address: 2301 S. Newkirk Street, Baltimore, MD 21224

- Vearnol Hazel, Plant Environmental Coordinator
  - Phone Number: (410) 631-4940
  - Email: hazelh@goldbondbuilding.com
  - Address: 2301 S. Newkirk Street, Baltimore, MD 21224

- Meghan Zehringer, Corporate Environmental Engineer
  - Phone Number: 980-309-5249

- Email: meghanz@nationalgypsum.com
- Address: 2001 Rexford Road, Charlotte, NC 28211

Fugitive Dust Control Measures by Location:

- **Reclaim Recycling System Staging Area:**

- **Type of Operations:** Heavy Machinery Operation and Material Handling (Reclaim)
- **Control Measures:**
  - Fugitive Dust Controls: The Reclaim Recycling System Staging Area is completely covered to control the potential for air borne dusting from the storage pile. The area is also equipped with a sprinkler system that wets the material three times per day for 15 minute intervals. The system is also engaged as needed when excessive dusting is observed. During the months of November to April, the use of the sprinkler system will be based on the weather conditions each day to ensure that the use of the system will not create an unsafe condition for operators in the area or cause damage to the system. Except in an emergency situation, the sprinkler system will not be utilized when the

external temperature is below 25 degrees Fahrenheit. All operations during this time that have the potential to cause fugitive dusting will be limited and closely monitored.

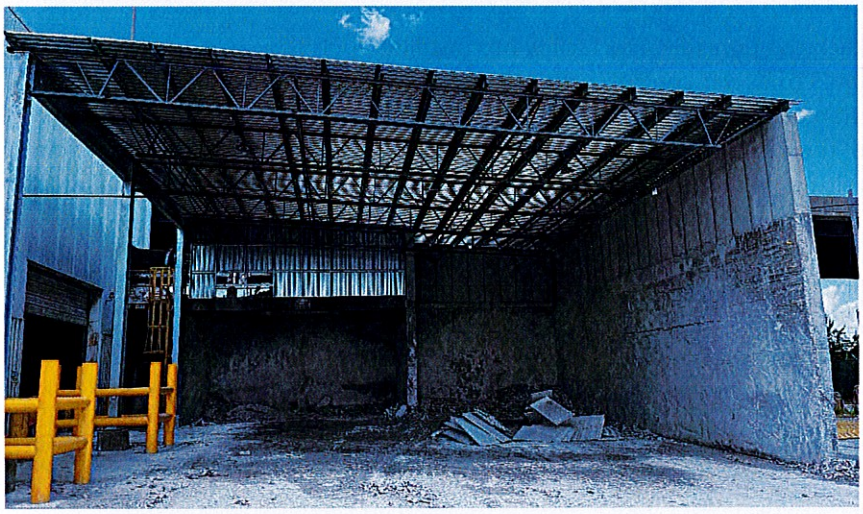
- Material Track-out Controls: The facility has installed four 8' by 10' rumble grates at both entrance gates to better control track-out into and from the area due to the transportation of reclaim into the area. To ensure the rumble grates are properly maintained, the facility has engaged a local vacuum truck company to remove the material built-up under the grates when it is required. The facility engages an industrial street sweeping company that sweeps the facility's roadways and parking areas for 8 hours twice a week. The site also operates it's own external sweeper daily throughout the site when the roadways are dry to control any build-up.

- **Monitoring and Documentation:**

  - Daily: The daily use of the sprinkler system and the site's sweeping activities will be recorded in the Daily Fugitive Dust Control Measures Monitoring Log (see Enclosure 2).

  - Monthly: An inspection of the effectiveness of the fugitive dust control measures in the Reclaim Recycling System Staging Area will be completed monthly and documentation of these inspections will be maintained on the site (see Enclosure 3).

- **BP2 Wet Reclaim Storage Pile Area:**



  - **Type of Operations:** Heavy Machinery Operation, Material Transportation and Material Handling (Reclaim)

  - **Current Control Measures:**

    - Fugitive Dust Controls: The BP2 Wet Reclaim Storage Pile Area is completely covered to control the potential for air borne dusting. In addition, the material being deposited in this area is already wet and does not typically produce fugitive dust when deposited in into the enclosure from the Facility. However, when the material is transferred to the Blended Reclaim Storage Pile Staging/Loading Area there is the potential for fugitive dusting to occur so the enclosure is equipped with a sprinkler system which is engaged when the material is being worked. Transfer of this material from this area occurs twice a day and the installed sprinkler system is engaged for the duration of the transfer period (15 to 30 minutes depending on the amount of material). During the months of November to April, the use of the sprinkler system will be based on the weather conditions each day to ensure that the use of the system will not create an unsafe condition for operators in the area or cause damage to the system. Except in an emergency situation, the sprinkler system will not be utilized when the external temperature is below 25 degrees Fahrenheit. All operations during this time that have the potential to cause fugitive dusting will be limited and closely monitored.

    - Material Track-out Controls: To control track-out of the material from this area, the facility operates it's own external sweeper daily throughout the site when the roadways are dry to control any build-up. The facility also engages an industrial street sweeping company that sweeps the facility's roadways and parking areas for 8 hours twice a week.

  - **Monitoring and Documentation:**

    - Daily: The daily use of the sprinkler system and the site's sweeping activities will be recorded in the Daily Fugitive Dust Control Measures Monitoring Log (see Enclosure 2).

- Monthly: An inspection of the effectiveness of the fugitive dust control measures in the BP2 Wet Reclaim Storage Pile Area will be completed monthly and documentation of these inspections will be maintained on the site (see Enclosure 3).

- **BP1 Wet Reclaim Storage Pile Area:**

  - **Type of Operations:** Heavy Machinery Operation, Material Transportation and Material Handling (Reclaim)

  - **Current Control Measures:**

    - Fugitive Dust Controls: The BP1 Wet Reclaim Storage Pile Area is completely covered to control the potential for air borne dusting. In addition, the material being deposited in this area is already wet and does not typically produce fugitive dust when deposited in into the enclosure from the Facility. However, when the material is transferred to the Blended Reclaim Storage Pile Staging/Loading Area there is the potential for fugitive dusting to occur so the enclosure is equipped with a sprinkler system which is engaged when the material is being worked. Transfer of this material from this area occurs twice a day and the installed sprinkler system is engaged for the duration of the transfer period (15 to 30 minutes depending on the amount of material). During the months of November to April, the use of the sprinkler system will be based on the weather

conditions each day to ensure that the use of the system will not create an unsafe condition for operators in the area or cause damage to the system. Except in an emergency situation, the sprinkler system will not be utilized when the external temperature is below 25 degrees Fahrenheit. All operations during this time that have the potential to cause fugitive dusting will be limited and closely monitored.

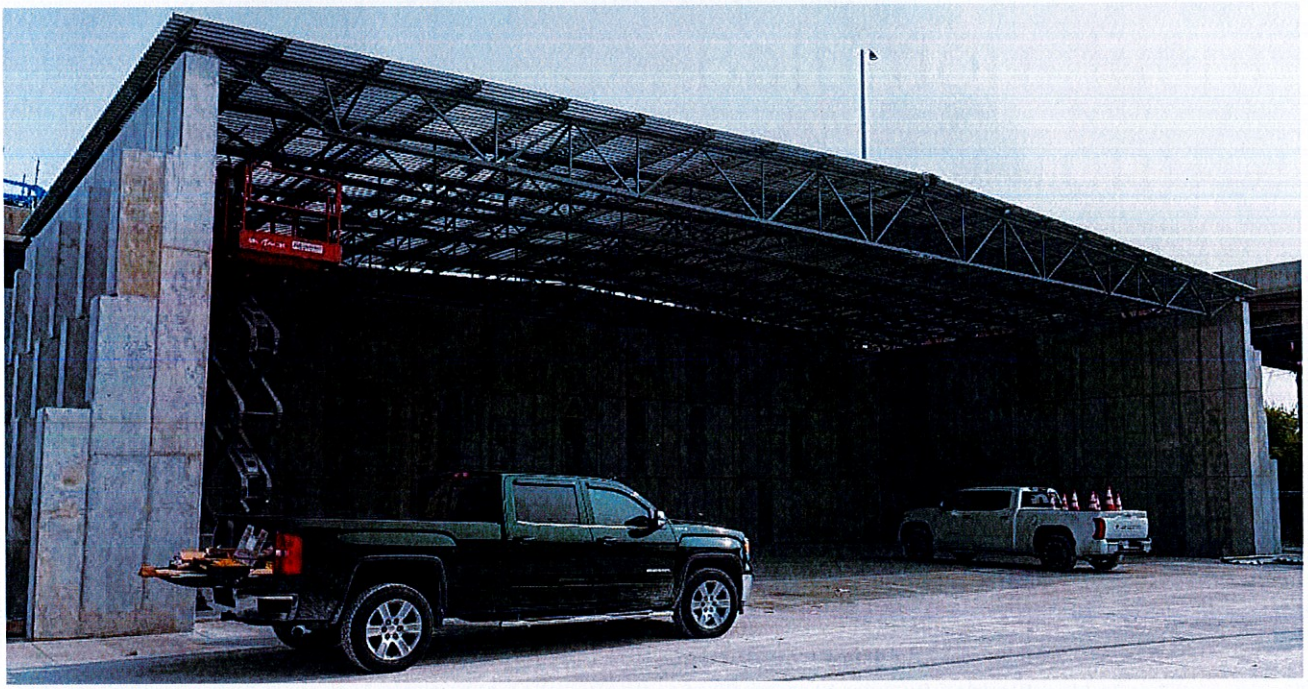
- Material Track-out Controls: To control track-out of the material from this area, the facility operates it's own external sweeper daily throughout the site when the roadways are dry to control any build-up. The facility also engages an industrial street sweeping company that sweeps the facility's roadways and parking areas for 8 hours twice a week.

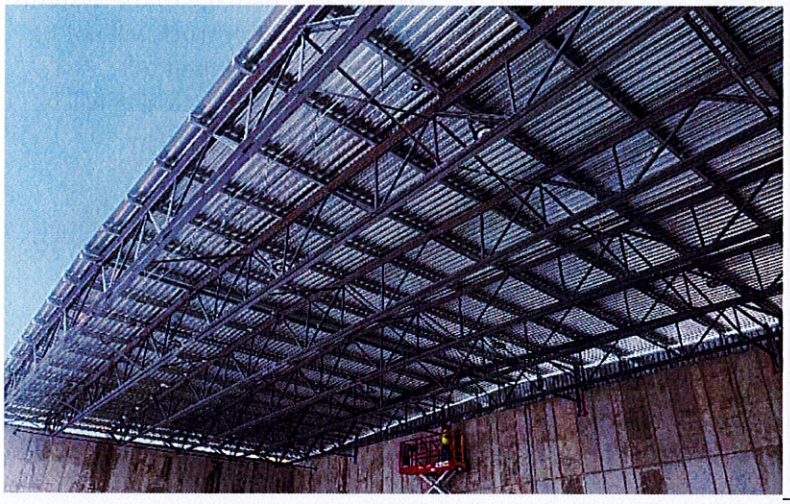
- **Monitoring and Documentation:**

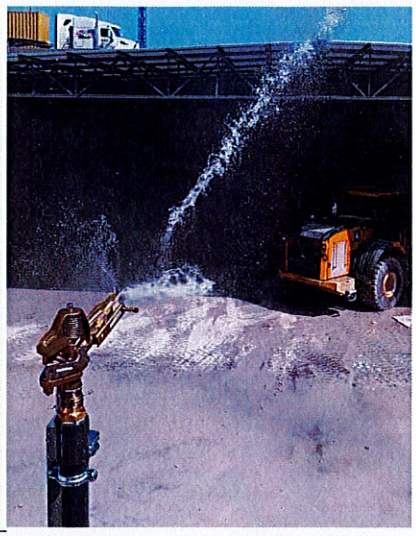
  - Daily: The daily use of the sprinkler system and the site's sweeping activities will be recorded in the Daily Fugitive Dust Control Measures Monitoring Log (see Enclosure 2).

  - Monthly: An inspection of the effectiveness of the fugitive dust control measures in the BP1 Wet Reclaim Storage Pile Area will be completed monthly and documentation of these inspections will be maintained on the site (see Enclosure 3).

- **Blended Reclaim Storage Pile Staging/Loading Area:**







- **Type of Operations:** Heavy Machinery Operation, Material Transportation and Material Handling (Reclaim)

- **Current Control Measures:**

  - Fugitive Dust Controls:

    - The material in this area consists of deposits from the BP1/BP2 Wet Reclaim Storage Pile Areas and rejected wallboard that is crushed to be reclaimed back into the process. Fugitive dust is produced when the existing wallboard is broken down by the front-end loader, when material is placed on the existing pile, when the pile is being managed, when the loader is prepping the material for loading into the dump truck for transportation to the Reclaim Recycling System Staging Area and while the material is being loaded into the dump truck.

    - To control dusting while the existing wallboard is broken down by the front-end loader, when material is placed on the existing pile, when the pile is being managed, when the loader is prepping the material for loading into the dump truck for transportation to the Reclaim Recycling System Staging Area, the entire storage pile and working area is covered for the purpose of dust control. In addition, the enclosure is equipped with an installed sprinkler system which is engaged for the duration of any activity under the enclosure. The facility also utilizes it's water truck, which is equipped with a directable spray nozzle and ground level spray nozzles, to help with the control any fugitive dust that is able to leave the enclosure.

    - To control fugitive dusting while the material is being loaded into the dump truck, a separately mounted elevated sprinkler is engaged that is designed to cover the entire Blended Reclaim Storage Pile Staging/Loading Area and the site's water truck is also utilized to assist with fugitive dust control during truck loading. During the months of November to April, the use of the areas sprinkler systems and the water truck will be based on daily weather conditions to ensure that the use of the system will not

create an unsafe condition for operators in the area or cause damage to the systems. Except in an emergency situation, the sprinkler systems and water truck will not be utilized when the external temperature is below 25 degrees Fahrenheit. All operations during this time that have the potential to cause fugitive dusting will be limited and closely monitored.

- To control any dusting during the transit from the Blended Reclaim area to the Reclaim Recycling System, dump trucks utilized the installed dump body canopy to prevent dust from emitting from the bed during transit.

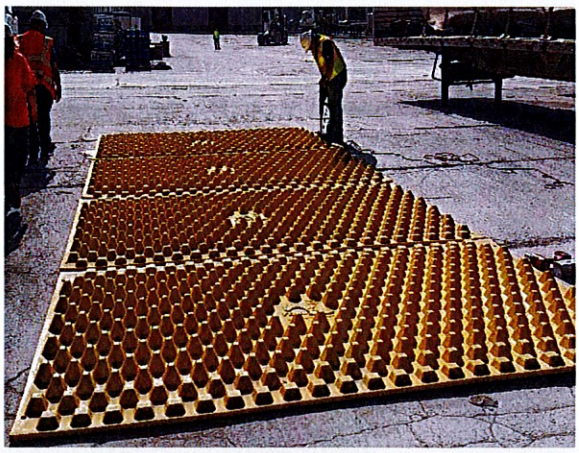
- Material Track-out Controls: To control track-out of the material from this area, the facility operates it's own external sweeper daily throughout the site when the roadways are dry to control any build-up. The facility also engages an industrial street sweeping company that sweeps the facility's roadways and parking areas for 8 hours twice a week.

- **Monitoring and Documentation:**

  - Daily: The daily use of the area's sprinkler systems, site's water truck and the site's sweeping activities will be recorded in the Daily Fugitive Dust Control Measures Monitoring Log (see Enclosure 2).

  - Monthly: An inspection of the effectiveness of the fugitive dust control measures in the Blended Reclaim Storage Pile Staging/Loading Area will be completed monthly and documentation of these inspections will be maintained on the site (see Enclosure 3).

- **Reclaim Transfer Paths:**



- **Type of Operations:** Material Transportation
- **Current Control Measures:**
  - Fugitive Dust and Material Track-out Controls: To control track-out of the material from this area, the facility operates it's own external sweeper daily throughout the site when the roadways are dry to control any build-up. The facility also engages an industrial street sweeping company that sweeps the facility's roadways and parking areas for 8 hours twice a week. In addition to sweeping the facility has installed two 24 foot long rumble grate runs at locations 2A and 2B to capture materials attached to the tires of vehicles entering and exiting the facility at those locations. The facility has also installed 28 feet of FODs mats at locations 3A and 3B to control track-out from vehicles entering and exiting the facility at those locations. Speed along these transfer paths is closely monitored to ensure that no fugitive dust occurs as a result of vehicles driving these routes. To ensure the rumble grates are properly maintained, the facility has engaged a local vacuum truck company to remove the material built-up under the grates when it is required.
- **Monitoring and Documentation:**

- Monthly: A monthly inspection of all track-out control devices will be completed and documentation of these inspections will be maintained on the site (see Enclosure 3).

- **Parking Lots:**

  - **Type of Operations:** Material Transportation

  - **Current Control Measures:**

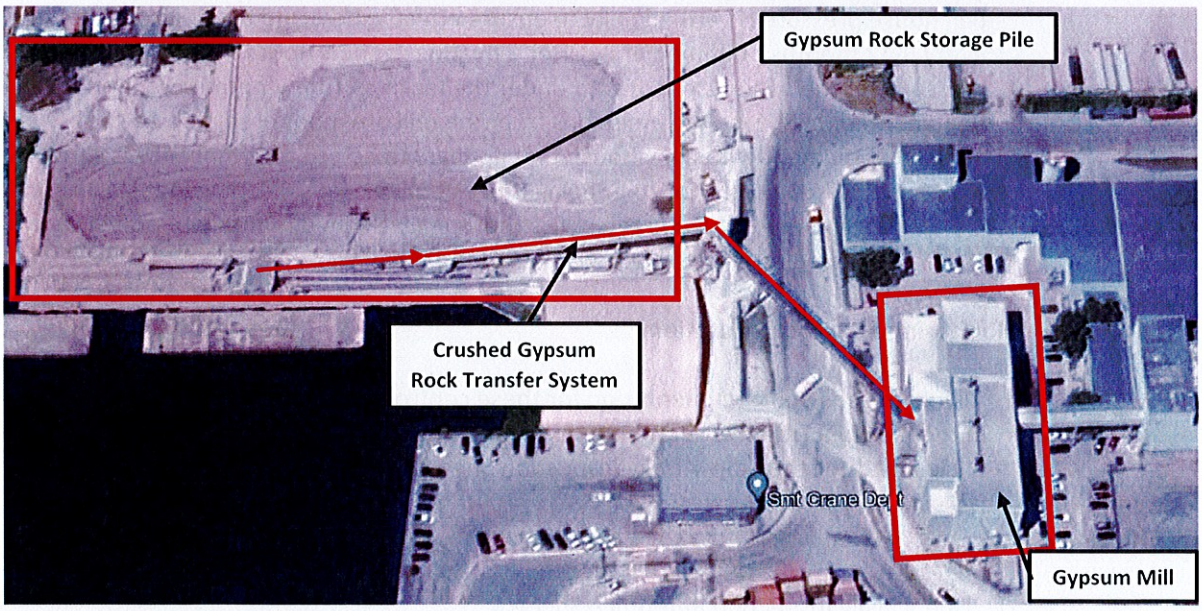
    - Fugitive Dust and Material Track-out Controls: To control track-out of the material from this area, the facility operates it's own external sweeper daily throughout the site when the roadways are dry to control any build-up. The facility also engages an industrial street sweeping company that sweeps the facility's roadways and parking areas for 8 hours twice a week. The facility has also installed track-out control measures at all facility entrances/exits as outlined in the Reclaim Transfer Paths Section.

  - **Monitoring and Documentation:**

    - Daily: The daily use of the sweeper will be recorded in the Daily Fugitive Dust Control Measures Monitoring Log (see Enclosure 2).

    - Monthly: A monthly inspection of all parking areas will be completed to ensure sweeping has been effective. Documentation of this inspection will be maintained on the site (see Enclosure 3).

- **Gypsum Rock Storage Pile and Transfer System:**



  - **Type of Operations:** Heavy Machinery Operation and Material Handling (Natural Gypsum Rock)

  - **Current Control Measures:** Dust control measures in this area are altered based on the operation taking place in the gypsum rock storage pile and transfer system.

- Gypsum Rock Offload and Pile Maintenance: When the rock is being offloaded by a ship, dust control measures are employed by the ship's offloading system to control the fugitive dusting from rock being offloaded from their boom and the use of a funnel at the discharge point to control any fugitive emissions from the end of the boom. When the pile is being managed by a bulldozer both during and after an offload, fugitive emissions from the pile management are closely monitored by facility personnel. If the wind is too strong, pile management is minimized to prevent excessive fugitive dust from occurring. In addition, when able, the facility utilizes its water truck to manage sections of the pile to prevent dusting.

- Gypsum Rock Crushing and Transfer Operations: Fugitive dust from the gypsum rock conveying/transfer system is covered and all transfer points are internal to prevent any fugitive dust from occurring during this operation. When operating, the conveying system is monitored for fugitive dust emissions daily by plant personnel per Method 9 guidance. When the dust exceeds the standards the offending area in the system is inspected and repaired/cleaned to ensure dusting does not continue.

- Gypsum Mill: Once the gypsum rock is in the Gypsum Mill for processing each silo is equipped with an internal baghouse to prevent fugitive dust emissions from being emitted. Control of these emissions inside the building is monitored daily by mill personnel and issues are rectified immediately. The equipment processing the gypsum rock (Imp Mill #1, #2, #3 and #4) vent to the atmosphere and are equipped with baghouses to prevent an uncontrolled release of fugitive dust into the atmosphere. Each bag house pressure is verified daily to ensure effectiveness and the bags are changed every 6-12 months or immediately after a dusting event is noticed. The differential pressures of the baghouses covered under the facility's Title V permit are monitored and documented daily. External emissions from the mill are monitored daily by facility person and any equipment with a baghouse that appears to be out of compliance is shut down and assessed/repaired prior to bringing it back online. Housekeeping in the Gypsum Mill is also closely monitored, and the mill is thoroughly cleaned monthly to prevent any material from being blown or tracked out of the building.

- **Monitoring and Documentation:**

  - All inspections and documentation for these control measures are completed as required in the facility's Title V Air Permit and are maintained as required in the permit. (See Enclosure 1 for the Title V Daily Inspection Sheet)

Enclosures:

1) Title V Daily Inspection Reference Sheet
2) Daily Fugitive Dust Control Measures Monitoring Log
3) Fugitive Dust Control Plan – Monthly Inspection Form

NGC - Baltimore

Dust Collector - Daily Inspections

Mill Department

Week Beginning: _____

Title V Daily Inspection/ Reference Sheet

Ref. #			Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	**Imp Mill #1**	**U-09**	***Sys Fan 1***						
	Pressure Drop								
	Exhaust Appearance								
2	**Imp Mill #2**	**U-10**	***Sys Fan 2***						
	Pressure Drop								
	Exhaust Appearance								
3	**Imp Mill #3**	**U-11**	***Sys Fan 3***						
	Pressure Drop								
	Exhaust Appearance								
4	**Imp Mill #4**	**U-26**	***Sys Fan 4***						
	Pressure Drop								
	Exhaust Appearance								
5	**Rock Crusher**	**U-02**	***M-1101***						
	Pressure Drop								
	Exhaust Appearance								
6	**Landplaster Silo**	**U-35**	***M-1711***						
	Pressure Drop								
	Exhaust Appearance								
7	**B.E.T. #1 (South)**	**U-03**	***M-1235***						
	Pressure Drop								
	Exhaust Appearance								
8	**B.E.T. #2 (Center)**	**U-04**	***M-1238***						
	Pressure Drop								
	Exhaust Appearance								
9	**B.E.T. #3 (North)**	**U-32**	***M-1311***						
	Pressure Drop								
	Exhaust Appearance								

Exhaust Appearance"OK" means no visible appearance observed when observation was performed

This form can be found @: Shared\ Environmental\ Air\ Air Permits\ Title V Daily Inspection/ Reference Sheet

Enclosure 1

NGC - Baltimore

Dust Collector - Daily Inspections

Mill Department

Week Beginning: _____

Title V Daily Inspection/ Reference Sheet

Ref. #			Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
10	**Prod. Screw Conv. E**	**U-12**	***M-1111***						
	Pressure Drop								
	Exhaust Appearance								
11	**Prod. Screw Conv. W**	**U-12**	***M-1151***						
	Pressure Drop								
	Exhaust Appearance								
12	**Cantenary Bin**	**U-27**	***M-1713***						
	Pressure Drop								
	Exhaust Appearance								
13	**Rock Storage Silo**	**U-05**	***M-1223***						
	Pressure Drop								
	Exhaust Appearance								
14	**Product Bucket Elevator**	**U-13**	***M-1242***						
	Pressure Drop		system not in use	system not in use	system not in use	system not in use	system not in use	system not in use	system not in use
	Exhaust Appearance		system not in use	system not in use	system not in use	system not in use	system not in use	system not in use	system not in use
15	**Jet Belt (south)**	**U-14**	***M-1243***						
	Pressure Drop								
	Exhaust Appearance								
16	**Jet Belt (middle)**	**U-14**	***M-1244***						
	Pressure Drop								
	Exhaust Appearance								
17	**Jet Belt (north)**	**U-14**	***M-1245***						
	Pressure Drop								
	Exhaust Appearance								
48	**Stucco Cooler**	**U-14**	***M-1246***						
	Pressure Drop								
	Exhaust Appearance								

Exhaust Appearance"OK" means no visible appearance observed when observation was performed

This form can be found @: Shared\ Environmental\ Air\ Air Permits\ Title V Daily Inspection/ Reference Sheet

NGC - Baltimore

Dust Collector - Daily Inspections

Boardline #1

Week Beginning: _____

Title V Daily Inspection/ Reference Sheet

Ref. #			Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
18	**BMA Elevator**	**U-21**	***M-310***						
	Pressure Drop								
	Exhaust Appearance								
19	**LP Bin & 2 Screws**	**U-20**	***M-304***						
	Pressure Drop								
	Exhaust Appearance								
20	**Stucco Recirc. Elevator**	**U-36**	***M-122***						
	Pressure Drop		system not in use	system not in use	system not in use	system not in use	system not in use	system not in use	system not in use
	Exhaust Appearance		system not in use	system not in use	system not in use	system not in use	system not in use	system not in use	system not in use
21A	**Vermiculite System - East**	**U-37**	***M-200***						
	Pressure Drop								
	Exhaust Appearance								
21B	**Vermiculite System - West**	**U-37**	***M-200***						
	Pressure Drop								
	Exhaust Appearance								
22	**118 Screw & Pin Mixer**	**U-22**	***M-115***						
	Pressure Drop								
	Exhaust Appearance								
23	**Stucco Elevator**	**U-19**	***M-***						
	Pressure Drop								
	Exhaust Appearance								

Exhaust Appearance"OK" means no visible appearance observed when observation was performed

This form can be found @: Shared\ Environmental\ Air\ Air Permits\ Title V Daily Inspection/ Reference Sheet

Enclosure 1

NGC - Baltimore

Week Beginning: _____

Dust Collector - Daily Inspections

Board line #1

Title V Daily Inspection/ Reference Sheet

Ref. #			Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
24	**Stucco Storage #4**	U-18	***M-120***						
	Pressure Drop		system not in use	system not in use	system not in use	system not in use	system not in use	system not in use	system not in use
	Exhaust Appearance		system not in use	system not in use	system not in use	system not in use	system not in use	system not in use	system not in use
25	**Stucco Storage #3**	U-17	***M-106***						
	Pressure Drop								
	Exhaust Appearance								
26	**Stucco Storage #2**	U-16	***M-103***						
	Pressure Drop								
	Exhaust Appearance								
27	**Stucco Storage #1**	U-15	***M-100***						
	Pressure Drop								
	Exhaust Appearance								
28	**61 E Screw**	U-14							
	Pressure Drop								
	Exhaust Appearance								
29	**61 W Screw**	U-14							
	Pressure Drop		out of service	out of service	out of service	out of service	out of service	out of service	out of service
	Exhaust Appearance		out of service	out of service	out of service	out of service	out of service	out of service	out of service
30	**Heat Exchanger Exhaust**								
	Pressure Drop								
	Exhaust Appearance								
31	**RTO Exhaust**								
	Pressure Drop								
	Exhaust Appearance								
32	**Riser Maker Line #1**								
"NEW" 2017	Pressure Drop								
	Exhaust Appearance								

Exhaust Appearance"OK" means no visible appearance observed when observation was performed

This form can be found @: Shared\ Environmental\ Air\ Air Permits\ Title V Daily Inspection/ Reference Sheet

NGC - Baltimore
Dust Collector - Daily Inspections
Boardline #2

Enclosure 1

Week Beginning : _____

Title V Daily Inspection/ Reference Sheet

Ref. #			Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
33	**Potash Elevator**	**U-42**	***M-1690***						
	Pressure Drop		system not in use	system not in use	system not in use	system not in use	system not in use	system not in use	system not in use
	Exhaust Appearance		system not in use	system not in use	system not in use	system not in use	system not in use	system not in use	system not in use
34	**LP Feed B**	**U-43**	***M-1663***						
	Pressure Drop								
	Exhaust Appearance								
35	**BMA Feed B**	**U-28**	***M-1666***						
	Pressure Drop								
	Exhaust Appearance								
36	**Starch Feed B**	**U-44**	***No Motor***						
	Pressure Drop		system removed	system removed	system removed	system removed	system removed	system removed	system removed
	Exhaust Appearance		system removed	system removed	system removed	system removed	system removed	system removed	system removed
37	**LP Feed A**	**U-45**	***M-1655***						
	Pressure Drop								
	Exhaust Appearance								
38	**BMA Feed A**	**U-28**	***M-1658***						
	Pressure Drop								
	Exhaust Appearance								
39	**Starch Feed A**	**U-38**	***No Motor***						
	Pressure Drop		system removed	system removed	system removed	system removed	system removed	system removed	system removed
	Exhaust Appearance		system removed	system removed	system removed	system removed	system removed	system removed	system removed
40	**Merrick Potash**	**U-39**	***M-1681***						
	Pressure Drop		system removed	system removed	system removed	system removed	system removed	system removed	system removed
	Exhaust Appearance		system removed	system removed	system removed	system removed	system removed	system removed	system removed

Exhaust Appearance"OK" means no visible appearance observed when observation was performed

This form can be found @: Shared\ Environmental\ Air\ Air Permits\ Title V Daily Inspection/ Reference Sheet

NGC - Baltimore
Dust Collector - Daily Inspections
Boardline #2

Enclosure 1

Week Beginning: _____

Title V Daily Inspection/ Reference Sheet

Ref. #			Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
41	**Merrick BMA**	**U-40**	***M-1688***						
	Pressure Drop								
	Exhaust Appearance								
42	**Merrick Starch**	**U-41**	***M-1687***						
	Pressure Drop								
	Exhaust Appearance								
43	**Stucco System**	**U-29**	***M-1710***						
	Pressure Drop								
	Exhaust Appearance								
44	**Starch Silo**	**U-34**	***No Motor***						
	Pressure Drop								
	Exhaust Appearance								
45	**Vermiculite Storage Silo**	**U-47**							
	Pressure Drop								
	Exhaust Appearance								
46	**Merrick Vermiculite**	**U-48**							
	Pressure Drop								
	Exhaust Appearance								
Visual	**Main Kiln Exhaust Large Stack**								
10/21/2013	Weather Condition								
	Exhaust Appearance								
Visual	**Main Kiln Exhaust Small Stack**								
10/21/2013	Weather Condition								
	Exhaust Appearance								
47	**BP-2 Prod Screw on Mezz**								
10/21/2013	Pressure Drop								
	Exhaust Appearance								

Exhaust Appearance"OK" means no visible appearance observed when observation was performed

This form can be found @: Shared\ Environmental\ Air\ Air Permits\ Title V Daily Inspection/ Reference Sheet

Enclosure 2

Daily Fugitive Dust Control Measures Monitoring Log			
Month:			
	BP1 Sprinkler System: Timeframe System Used	BP2 Sprinkler System: Timeframe System Used	Reclaim Recycling Sprinkler System: Timeframe System Used
1			
2			
3			
4			
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Enclosure 2

Daily Fugitive Dust Control Measures Monitoring Log			
Month:			
	Sweeper: Was it used and when? Site Sweeper or Contractor?	Water Truck: Was it used and when?	Blended Reclaim Sprinkler System: Timeframe System Used
1			
2			
3			
4			
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6			
7			
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Enclosure 2

Daily Fugitive Dust Plan Weather Log

Month:

	Daily Forecast:	Temperature and Humidity:	Wind Speed and Direction:
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
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Enclosure 3

Fugitive Dust Control Plan - Monthly Inspection Form		
Month:		
System Checked:	**Area all dust control measures effective?**	**Were emissions noted after 5 min of observation? If yes, explain corrective actions.**
BP1 Wet Reclaim Area - Enclosure Sprinkler System		
BP2 Wet Reclaim Area - Enclosure Sprinkler System		
Blended Reclaim Area - Enclosure Sprinkler System		
Blended Reclaim Area - External Loading Area Sprinkler System		
Reclaim Recycling Area - Sprinkler System		
	Area all dust control measures effective?	**Additional Notes or Corrective Actions Taken:**
Truck Trailer Parking Lot - Sweeping		
Employee Parking Lot - Sweeping		
Rumble Grates - 1A, 1B, 2A and 2B		
FODS Mats - 3A and 3B		
Reclaim Transfer Path - Sweeping		
Gypsum Pile and Offload System		
Rock Crusher Building and Transfer Operations		
Gypsum Mill		