



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY TIDEWATER REGIONAL OFFICE

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David K. Paylor
Director

Maria R. Nold
Regional Director

Molly Joseph Ward
Secretary of Natural Resources

October 28, 2014

Mr. David O. Bunch
Plant Manager
United States Gypsum Company - Norfolk Plant
1424 South Main Street
Norfolk, Virginia 23523

Location: Norfolk
Registration No.: 60234
AFS Id. No.: 51-710-00068

Dear Mr. Bunch:

Attached is a permit to operate your gypsum wallboard and industrial gypsum product manufacturing facility pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit incorporates provisions from the permit dated May 19, 2009.

The permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all permit conditions carefully.

In evaluating the application and arriving at a final decision to issue this permit, the Department deemed the application complete on August 5, 2014 and solicited written public comments by placing a newspaper advertisement in the Virginian-Pilot newspaper on Tuesday, September 9, 2014. The thirty day comment period (provided for in 9 VAC 5-80-270) expired on Thursday, October 9, 2014, with no comments having been received in this office.

This approval to operate does not relieve United States Gypsum Company – Norfolk Plant of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
PO Box 1105
Richmond, VA 23218-1105

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Rule 2A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact Lindsey Evans by phone at (757) 518-2168 or by e-mail at lindsey.evans@deq.virginia.gov.

Sincerely,

Troy D. Breathwaite
Regional Air Permits Manager

TDB/LME/60234_017_14_CoverLtr_T5Renewal_USGypsum.docx

Attachment: Permit

cc: Manager, Data Analysis (electronic file submission)
Manager/Inspector, Air Compliance
Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III (electronic file submission)



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Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	USG Corporation
Facility Name:	United States Gypsum Company - Norfolk Plant
Facility Location:	1424 South Main Street Norfolk, Virginia
Registration Number:	60234
Permit Number:	TRO-60234

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Pages 3 through 31)
State Only Enforceable Requirements (Page 32) (Optional)

October 28, 2014

Effective Date

October 27, 2019

Expiration Date

October 28, 2014

Maria R. Nold

Signature Date

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I. Facility Information

Permittee

USG Corporation
550 West Adams Street
Chicago, Illinois 60661-3676

Responsible Official

David O. Bunch
Plant Manager

Facility

United States Gypsum Company - Norfolk Plant
1424 South Main Street
Norfolk, Virginia 23523

Contact Person

Steve Schettler
Technical Manager
(757) 494-8170

County-Plant Identification Number: 51-710-00068

Facility Description:

SIC Code 3275 and NAICS 327420.

The United States Gypsum Company is engaged in the manufacturing of gypsum wallboard and industrial gypsum products. An overview of the current manufacturing process is shown in process flow diagram Figure 2-1 of the Title V permit renewal application dated February 6, 2014. The current manufacturing operations feature the use of flash calcining hammer mills for grinding and heating gypsum in a single step to produce stucco (formerly, Raymond Mills were used for drying and grinding the gypsum prior to the application of heat in kettle calciners for the production of stucco).

The manufacturing process begins as gypsum ore (calcium sulfate dihydrate, $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$) is received by ship, unloaded, and stockpiled. The ore is screened and crushed to less than two inches in diameter and then conveyed to rock storage bins. The crushed gypsum is fed from the rock storage bins to one of two flash calcining hammer mills, where it is ground and heated so that three-quarters of the chemically bonded water is removed, producing stucco ($\text{CaSO}_4 \cdot 1/2\text{H}_2\text{O}$). Auxiliary burners produce hot combustion gases that directly heat the rock in the flash calciners. Stucco is discharged from the calciners and then conveyed to a stucco cooler and a stucco surge hopper.

In the manufacture of wallboard, stucco from the surge hopper is conveyed to the board stucco bin. Stucco from the storage bins is mixed with dry additives such as starch, paper fiber and fiberglass. The stucco and additive mixture is then screw conveyed to the board mixer, where it combines with foam and wet additives. The additives may include a moisture and mold resistant (MMR) additive, which is specified for certain products.

The stucco slurry discharges continuously from the mixer in between two sheets of paper, which serve as a mold. The stucco ($\text{CaSO}_4 \cdot 1/2\text{H}_2\text{O}$) combines with water in the slurry to form solid gypsum ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$), resulting in rigid board. The board is rough cut to length and then dried by direct contact with hot combustion gases in a multi-zone kiln. The dried board is cut to final length at the end saw area and bundled for shipment.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
U100	S101	Calcining Hammer Mill #1 Burner (Natural Gas/Distillate Oil)	60 MMBtu/hr	CECOAIRE Grenzebach 310-120 Fabric Filter; 99% Control Efficiency	C105	PM, PM-10	May 19, 2009
U124		Calcining Hammer Mill #1 (NSPS OOO applicable)	60 tons/hr (Gypsum)				May 19, 2009
U101	S102	Calcining Hammer Mill #2 Burner (Natural Gas/Distillate Oil)	60 MMBtu/hr	CECOAIRE Grenzebach 310-120 Fabric Filter; 99% Control Efficiency	C106	PM, PM-10	May 19, 2009
U125		Calcining Hammer Mill #2 (NSPS OOO applicable)	60 tons/hour (Gypsum)				May 19, 2009
U102	S103	Drying Kiln Wet Zone Burner (Natural Gas/Distillate Oil)	100 MMBtu/hr	-	-	-	May 19, 2009
U103		Drying Kiln Dry Zone Burner (Natural Gas/Distillate Oil)	100 MMBtu/hr	-	-	-	May 19, 2009
U104		Drying Kiln Wet Zone End Seal Burner (Natural Gas)	2.5 MMBtu/hr	-	-	-	May 19, 2009
U105		Drying Kiln Dry Zone End Seal Burner (Natural Gas)	2.5 MMBtu/hr	-	-	-	May 19, 2009
U106	S104	HRA Landplaster Hammer Mill Burner (Natural Gas)	2.25 MMBtu/hr	C.P.E. 72CNFB025-TMC 49.8XL Fabric Filter; 99% Control Efficiency	C110	PM, PM-10	May 19, 2009
U130		HRA Landplaster Hammer Mill	3 tons/hr (Landplaster)				May 19, 2009
U107	S105	Mixer Hot Water Boiler (Natural Gas)	2.6 MMBtu/hr	-	-	-	May 19, 2009
U16	S7	Rock Crusher (NSPS OOO applicable)	150 tons/hour (Gypsum)	Flex Kleen 84-BVBS-25 II Fabric Filter; 99 % Control Efficiency	C14	PM, PM-10	May 19, 2009
U36		Crushed Rock Belt (NSPS OOO applicable)	150 tons/hr (Gypsum and Gypsum Reclaim)				May 19, 2009

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
U31	-	Dark Rock Stock Pile	50,000 tons (Gypsum)	-	-	-	May 19, 2009
U33	-	420 Stock Pile	40,000 tons (Anhydrite Rock)	-	-	-	May 19, 2009
U34	-	2A Rock Stock Pile	9,000 tons (Anhydrite Rock)	-	-	-	May 19, 2009
U35	-	Gypsum Reclaim Stock Pile	120,000 tons (Gypsum Reclaim)	-	-	-	May 19, 2009
U43	S35	HRA Ball Mill #1	3 tons/hr (Landplaster)	Flex Kleen 84-BVBC-16 Fabric Filter; 99% Control Efficiency	C41	PM, PM-10	May 19, 2009
U45	-	Trommel Screen (NSPS OOO applicable)	50 tons/hr (Gypsum Reclaim)	-	-	-	May 19, 2009
U46	-	Rock Hopper with Pan Feeder	150 tons/hr (Gypsum)	-	-	-	May 19, 2009
U47	-	Rock Incline Belt (NSPS OOO applicable)	150 tons/hr (Gypsum and Gypsum Reclaim)	-	-	-	May 19, 2009
U48	-	Reclaim Feeder (NSPS OOO applicable)	50 tons/hr (Gypsum Reclaim)	-	-	-	May 19, 2009
U49	-	Reclaim Incline Belt (NSPS OOO applicable)	50 tons/hr (Gypsum Reclaim)	-	-	-	May 19, 2009
U53	-	Ship Unloading Hopper with Pan Feeder	2,000 tons/hr (Gypsum)	USG Design Misting System (wet suppression); 60% Control Efficiency	C45	PM, PM-10	May 19, 2009
U54	-	Ship Unloading Conveyor System	2,000 tons/hr (Gypsum)	-	-	-	May 19, 2009

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
U121	S107	Grizzly Feeder (NSPS OOO applicable)	150 tons/hr (Gypsum)	Seneca 169FMTHS100 Fabric Filter; 99% Control Efficiency	C102	PM, PM-10	May 19, 2009
U122	S108	Calcining Hammer Mill Feed Bin #1 (NSPS OOO applicable)	150 tons/hr (Gypsum)	Flex Kleen 84- BVBS-14IIG Fabric Filter; 99% Control Efficiency	C103	PM, PM-10	May 19, 2009
U123		Calcining Hammer Mill Feed Bin #2 (NSPS OOO applicable)	150 tons/hr (Gypsum)				May 19, 2009
U127	S110	Stucco Cooler	100 tons/hr (Stucco)	Flex Kleen 120 WSTS 121 (111G) Fabric Filter; 99% Control Efficiency	C107	PM, PM-10	May 19, 2009
U128	S111	Stucco Storage Bin	1,200 tons (Stucco)	Seneca 100FMTHS100 Fabric Filter; 99% Control Efficiency	C108	PM, PM-10	May 19, 2009
U129	S112	Stucco Rotary Screen	105 tons/hr (Stucco)	Seneca 154FMTHS100 Fabric Filter; 99% Control Efficiency	C109	PM, PM-10	May 19, 2009
U135		Paper Fiber Mill	0.45 tons/hr (Paper)				May 19, 2009
U131	S113	HRA Landplaster Feed Bin	5 tons (Landplaster)	Seneca 20FMBV100 Fabric Filter; 99% Control Efficiency	C111	PM, PM-10	May 19, 2009
U132	S114	HRA Ball Mill #2	3 tons/hr (Landplaster)	Seneca 16FMBV100 Fabric Filter; 99% Control Efficiency	C112	PM, PM-10	May 19, 2009
U133	S116	Starch Storage Bin	175 tons (Starch)	Seneca 16FMBV100 Fabric Filter; 99% Control Efficiency	C114	PM, PM-10	May 19, 2009
U134	S117	Starch Refill Bin	5 tons (Starch)	Seneca 12FMBV45 Fabric Filter; 99% Control Efficiency	C115	PM, PM-10	May 19, 2009

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
U136	S118	End Saw	6 tons/hr (Gypsum Board)	Seneca 196FMTHS100 Fabric Filter; 99% Control Efficiency	C116	PM, PM-10	May 19, 2009
U137	S119	Dunnage System	6 tons/hr (Dunnage)	Seneca 196FMTHS100 Fabric Filter; 99% Control Efficiency	C117	PM, PM-10	May 19, 2009
U138	S120	Waste Shredder	50 tons/hr (Gypsum Board)	Seneca 196FMTHS100 Fabric Filter; 99% Control Efficiency	C118	PM, PM-10	May 19, 2009
U139	Various	Miscellaneous Conveying Equipment, Bins and Hoppers	Various	Various	Various	Various	May 19, 2009

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 1-3 and 5. The annual throughput in Condition 2 shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 23 of May 19, 2009 SOP Permit)

5. **Fuel Burning Equipment Requirements - (U102, U103, U104, U105, and U107) - Limitations -** No owner or other person shall cause or permit to be discharged into the atmosphere from any affected facility any visible emissions which exhibit greater than 20% opacity, except for one six-minute period in any one hour of not more than 30% opacity. Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this condition.
(9 VAC 5-80-110 and VAC 5-50-80)

B. Monitoring

6. **Fuel Burning Equipment Requirements - (U100, U101, U102, U103, U104, U105, U106, U107) - Monitoring** - The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
- (a) The name of the fuel supplier;
 - (b) The date on which the distillate oil was received;
 - (c) The quantity of distillate oil delivered in the shipment; and,
 - (d) A statement that the distillate oil complies with the American Society of Testing and Materials D396 specifications for number 2 fuel oil.

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition 3 above. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.

(9 VAC 5-80-110 and Condition 12 of May 19, 2009 SOP Permit)

7. **Fuel Burning Equipment Requirements - (U102 and U103) - Monitoring** - The permittee shall observe the stacks of units U102 and U103 at least once per month during normal daylight operations when burning distillate oil. If such visual observation indicates any visible emissions, the permittee shall take corrective action to eliminate the visible emissions. If such corrective action fails to eliminate the visible emissions, the permittee shall conduct a visible emissions evaluation (VEE) using 40 CFR 60, Appendix A, Method 9, for six minutes. If the six-minute VEE opacity average exceeds 50% of the standard for a specific unit, the VEE for that unit shall continue for an additional 12 minutes. If any of the six-minute averages during the 18 minutes exceeds the standard for a specific unit, the VEE for that unit shall continue for one hour from initiation on the stack to determine compliance with the opacity limit. Results of observations and/or VEEs shall be recorded in an operation log. Records of observations shall include the following:
- The name of the observer,
 - Date and time of the observation,
 - An indication that the process was operating,

An indication of the presence or absence of visible emissions, and
Any corrective action taken to eliminate visible emissions, including the date and time the
process was shut down and/or repairs were completed.

If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A).
(9 VAC 5-80-110)

C. Recordkeeping

8. **Fuel Burning Equipment Requirements - (U100, U101, U102, U103, U104, U105, U106, and U107) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
- (a) The annual throughput of distillate oil for the fuel burning equipment, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - (b) The annual throughput of natural gas for the fuel burning equipment, calculated annually each calendar year for emissions reporting purposes.
 - (c) All fuel supplier certifications.
 - (d) Records of visual emissions observations, visible emissions evaluations, and any corrective action taken, as required by Condition 7.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-50-50, 9 VAC 5-80-110 and Condition 30 a/b/c of May 19, 2009 SOP Permit)

IV. Process Equipment Requirements - (U16, U17, U19, U31, U33-U36, U38-U43, U45-U49, U53, U54, U100-U107, U121-U125, U127-U139)

A. Limitations

9. **Process Equipment Requirements - (U16 and U121-U139) - Limitations** - Particulate emissions from the process equipment (Units U16 and U121-U139) shall be controlled by fabric filter dust collectors. The fabric filter dust collectors shall be provided with adequate access for inspection and shall be in operation when the gypsum products manufacturing facility is operating.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 3 of May 19, 2009 SOP Permit)
10. **Process Equipment Requirements - (U53) - Limitations** - Particulate matter emissions from the Ship Unloading surge hopper/pan feeder (Unit U53) shall be controlled by a wet misting system. The wet misting system shall be provided with adequate access for inspection and shall be operational when the unloading system is operating. Particulate matter emissions shall be controlled at all times.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 4 of May 19, 2009 SOP Permit)
11. **Process Equipment Requirements - (U43) - Limitations** - Particulate matter emissions from the HRA ball mill #1 (Unit U43) shall be controlled by a fabric filter dust collector. The fabric filter dust collector shall be provided with adequate access for inspection and shall be in operation when the ball mill is operating.
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 5 of May 19, 2009 SOP Permit)
12. **Process Equipment Requirements - (Fugitive Dust and Fugitive Emissions) - Limitations** - Fugitive dust and fugitive emissions shall be effectively controlled by the following methods, or equivalent:
 - (a) Use of water or chemicals for the control of dust in the demolition of existing buildings or structures, construction operations, grading of roads, or clearing of land;
 - (b) Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; paving of roadways, and maintenance of roadways in a clean condition;
 - (c) Installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials; and, adequate containment methods shall be employed during sandblasting or other similar operations;
 - (d) Open equipment for conveying or transporting materials likely to create objectionable air pollution when airborne shall be covered, or treated in an equally effective manner at all times when in motion;
 - (e) Prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion;
 - (f) Dust from material handling, and load-outs, shall be controlled by wet suppression or equivalent. The wet suppression spray systems shall be operated at optimum design; and
 - (g) Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.
(9 VAC 5-80-110, 9 VAC 5-50-90, and Condition 6 of May 19, 2009 SOP Permit)

13. **Process Equipment Requirements - (U47) - Limitations** - The throughput of total raw material (gypsum rock or synthetic gypsum) for the crushed rock belt (U36) and rock incline belt (U47) shall not exceed 1,314,000 tons per year, calculated monthly as the sum of each consecutive twelve (12) month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110 and Condition 13 of May 19, 2009 SOP Permit)
14. **Process Equipment Requirements - (U45) - Limitations** - The throughput of total raw material (gypsum rock or synthetic gypsum) for the trommel screen (U45) shall not exceed 60,000 tons per year, calculated monthly as the sum of each consecutive twelve (12) month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110 and Condition 14 of May 19, 2009 SOP Permit)
15. **Process Equipment Requirements - (U48) - Limitations** - The throughput of total raw material (gypsum rock or synthetic gypsum) for the reclaim feeder (U48) and reclaim incline belt (U49) shall not exceed 200,000 tons per year, calculated monthly as the sum of each consecutive twelve (12) month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110 and Condition 15 of May 19, 2009 SOP Permit)
16. **Process Equipment Requirements - (U53 and U54) - Limitations** - The throughput of total raw material (gypsum rock or synthetic gypsum) for the ship unloading hopper (U53) and conveyor system (U54) shall not exceed 1,314,000 tons per year, calculated monthly as the sum of each consecutive twelve (12) month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110 and Condition 16 of May 19, 2009 SOP Permit)
17. **Process Equipment Requirements - (U102-U105) - Limitations** - The total throughput of moisture and mold resistant additive (MMR) for the gypsum wallboard, plasters, and industrial gypsum products manufacturing facility shall not exceed 1,600,000 lbs per year, calculated monthly as the sum of each consecutive twelve (12) month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110 and Condition 17 of May 19, 2009 SOP Permit)
18. **Process Equipment Requirements - (U16, U36, U45, U47, U48, U49, U121, U122, U123, U124, and U125) - Limitations - Requirements by Reference** - Except where this permit is more restrictive than the applicable requirement, the NSPS equipment described in Section II, shall be operated in compliance with the requirements of 40 CFR 60, Subpart OOO, as applicable. This condition refers to the following units:

Emission Unit ID	Stack or Fugitive?	Stack ID	Equipment Unit Description	Applicable Regulation
U16	Stack	S7	Rock Crusher	NSPS OOO
U36	Stack	S7	Crushed Rock Belt	NSPS OOO
U45	Fugitive	N/A	Trommel Screen	NSPS OOO
U47	Fugitive	N/A	Rock Incline Belt	NSPS OOO
U48	Fugitive	N/A	Reclaim Feeder	NSPS OOO
U49	Fugitive	N/A	Reclaim Incline Belt	NSPS OOO
U121	Stack	S107	Grizzly Feeder	NSPS OOO
U122	Stack	S108	Calcining Hammer Mill Feed Bin #1	NSPS OOO
U123	Stack	S108	Calcining Hammer Mill Feed Bin #2	NSPS OOO
U124	Stack	S101	Calcining Hammer Mill #1	NSPS OOO
U125	Stack	S102	Calcining Hammer Mill #2	NSPS OOO

(9 VAC 5-80-110, 9 VAC 5-50-400, and 9 VAC 5-50-410, and Condition 18 of May 19, 2009 SOP Permit)

19. **Process Equipment Requirements - (U43 and U127-U139) - Limitations** - Visible emissions from fabric filter dust collectors not associated with an NSPS unit shall not exceed five (5) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
 (9 VAC 5-80-110, 9 VAC 5-50-80, 9 VAC 5-50-260, and Condition 26 of May 19, 2009 SOP Permit)

20. **Process Equipment Requirements - (U16, U36, U121, U122, U123, U124, and U125) - Limitations - NSPS OOO** - No owner or operator subject to the provisions of 40 CFR 60, Subpart OOO shall cause to be discharged into the atmosphere from any transfer point on belt conveyors, or from any other affected facility, any stack emissions which exhibit greater than 7 percent opacity. This condition applies at all times except during startup, shutdown, and malfunction.
 (9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-50-410, 40 CFR 60.672, and Condition 27 of May 19, 2009 SOP Permit)

21. **Process Equipment Requirements - (U45, U47, U48, and U49) - Limitations - NSPS OOO** - No owner or operator subject to the provisions of 40 CFR 60, Subpart OOO shall cause to be discharged into the atmosphere from any transfer point on belt conveyors, or from any other affected facility, any fugitive emissions which exhibit greater than 10 percent opacity. This condition applies at all times except during startup, shutdown, and malfunction. If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected must comply with the emission limits in paragraphs (a), (b), and (c) of 40 CFR 60.672, or the building enclosing the affected facility or facilities must comply with the following emission limits:

- (a) No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any affected facility any visible fugitive emissions except emissions from a vent.
- (b) No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed 7 percent opacity.

(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-50-410, 40 CFR 60.672, and Condition 28 of May 19, 2009 SOP Permit)

22. **Process Equipment Requirements - (U43, U121-U125, and U127-U139) - Limitations** - Emissions from each fabric filter dust collector, with the exception of the fabric filter dust collector for HRA Ball Mill #1 (U43), shall not exceed 0.01 grains per dry standard cubic foot. Emissions from the fabric filter dust collector at HRA Ball Mill #1 (U43) shall not exceed 0.02 grains per dry standard cubic foot. Initial compliance with these limits was previously determined via stack test. Continuing compliance with these limits may be determined as stated in Condition numbers 29-31.

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 19 of May 19, 2009 SOP Permit)

23. **Process Equipment Requirements - (U16 and U36) - Limitations - NSPS OOO** - No owner or operator of any facility subject to the provisions of 40 CFR 60, Subpart OOO shall cause to be discharged into the atmosphere from any transfer point on belt conveyors, or from any other affected facility, any stack emissions which contain particulate matter in excess of 0.05 grams per dry standard cubic meter (0.022 grains per dry standard cubic foot). Continuing compliance with this limit may be determined as stated in Condition numbers 29 and 30.

(9 VAC 5-80-110, 9 VAC 5-50-400, 9 VAC 5-50-410, 9 VAC 5-50-260, 40 CFR 60.672, and Condition 20 of May 19, 2009 SOP Permit)

24. **Process Equipment Requirements - (U16, U43, U45, U47, U48, U49, U53, U54, U100-U107, U121-U125, and U127-U139) - Limitations** - Hourly emissions from the operation of the facility shall not exceed the limits specified below:

Process Units with Fabric Filter Dust Collectors:

Emission Unit No.	Emission Unit Description	Air Flow (ft ³ /min)	PM/PM10 Hourly Emissions (lbs/hr)
U121, U139	Miscellaneous DC	9,000	0.77
U122, U123	Calcining Hammer Mill Feed Bin #1 & Feed Bin #2 DC	700	0.06
U124	Calcining Hammer Mill #1 DC	115,000	9.86
U125	Calcining Hammer Mill #2 DC	115,000	9.86
U127	Stucco Cooler DC	6,500	0.56
U128	Stucco Storage Bin Vent DC	5,000	0.43
U129, U135, U139	Stucco and Dry Additive DC	8,000	0.69
U130	HRA Landplaster Hammer Mill DC	3,300	0.28
U131	HRA Landplaster Bin Vent DC	1,000	0.09
U132	HRA Ball Mill #2 DC	1,000	0.09
U133	Starch Storage Bin Vent DC	850	0.07
U134	Starch Refill Bin Vent DC	600	0.05
U136	End Saw DC	10,000	0.86
U137	Dunnage System DC	10,000	0.86
U138	Waste Shredder DC	6,000	0.51

Fuel Burning Equipment:

Unit No.	NO _x (lbs/hr)	CO (lbs/hr)	SO ₂ (lbs/hr)	PM10 (lbs/hr)	PM (lbs/hr)	VOC (lbs/hr)
U100	11.8	9.5	3.1	1.0	1.4	0.3
U101	11.8	9.5	3.1	1.0	1.4	0.3
U102	19.6	15.9	5.1	1.6	2.4	0.6
U103	19.6	15.9	5.1	1.6	2.4	0.6
U104	0.3	0.2	0.0	0.02	0.02	0.01
U105	0.3	0.2	0.0	0.02	0.02	0.01
U106	0.2	0.2	0.0	0.0	0.0	0.0
U107	0.3	0.2	0.0	0.0	0.0	0.0

Plant Equipment:

Emission Unit No.	Emission Unit Description	Hourly Emissions (lbs/hr)	
		PM	VOC
U100	Calcining Hammer Mill #1	N/A	1.2
U101	Calcining Hammer Mill #2	N/A	1.2
U102-U105	Board Drying Kiln	15.5	16.0

Equipment Permitted Prior to New Plant Construction:

Emission Unit No.	Emission Unit Description	Hourly Emissions (lbs/hr)	
		PM	PM10
U16	Rock Crusher	0.8	0.4
U43	HRA Ball Mill #1	0.1	---
U45	Trommel Screen	15.0	3.6
U47	Rock Incline Belt	---	---
U48	Reclaim Feeder	---	---
U49	Reclaim Incline Belt	---	---
U53	Ship Unloading Hopper with Pan Feeder	---	---
U54	Ship Unloading Conveyor System	---	---

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 1-3 and 5-23.

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 22 of May 19, 2009 SOP Permit)

25. **Process Equipment Requirements - (Facility Wide) - Limitations - Criteria Pollutants - Total emissions from the facility shall not exceed the limits specified below:**

Process Units with Fabric Filter Dust Collectors (Units U121-U125 and U127-U139, combined):

Particulate Matter (PM)	109.6 tons/yr
PM10	109.6 tons/yr

Equipment Permitted Prior to Construction of New Facility (Unit U16)

Particulate Matter (PM)	1.4 tons/yr
PM10	0.7 tons/yr

Equipment Permitted Prior to Construction of New Facility (Unit U43)

Particulate Matter (PM)	0.4 tons/yr
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Equipment Permitted Prior to Construction of New Facility (Units U36, U45, U47, U48, and U49, combined):

Particulate Matter (PM)	9.2 tons/yr
PM10	2.2 tons/yr

Existing Fuel Tanks Not Previously Permitted (Units U17, U19, U38, U39, U40, and U41, combined):

Volatile Organic Compounds	0.5 tons/yr
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TOTAL Facility-Wide Emissions:

<i>Particulate Matter (PM)</i>	<i>166.5 tons/yr</i>
<i>PM10</i>	<i>156.9 tons/yr</i>
<i>Sulfur Dioxide</i>	<i>13.5 tons/yr</i>
<i>Nitrogen Oxides (as NO2)</i>	<i>94.9 tons/yr</i>
<i>Carbon Monoxide</i>	<i>86.1 tons/yr</i>
<i>Volatile Organic Compounds</i>	<i>54.1 tons/yr</i>

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 1-3, 5-23, and 38. The annual throughputs in Conditions 13, 14, 15, and 16 shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. (9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 23 of May 19, 2009 SOP Permit)

26. Process Equipment Requirements - (Facility Wide) - Limitations - Hazardous Air Pollutants -

The permittee is limited to the use of the following volatile hazardous air pollutants (HAP) in additives, adhesives, thinners and/or cleaning solutions for the gypsum wallboard and products operations:

<u>Volatile HAP</u>	<u>CAS Number</u>
Formaldehyde	50-00-0

The permittee may use additional toxic compounds or HAP in the gypsum wallboard, plasters, and industrial gypsum products manufacturing facility under 9 VAC 5 Chapter 60, Article 5 without obtaining a new permit provided the following conditions are met:

- (a) Notification shall be given to the Tidewater Regional Office. Such notification shall be made within fifteen (15) days after the use of additional toxic compounds or HAP and shall include identification of the toxic compound or HAP, the date the toxic compound or HAP was first

used, and the anticipated maximum throughput of that compound in lbs/hour and tons/year. Additional details of the notification should be arranged with the Tidewater Regional Office.

- (b) The permittee shall operate this facility in compliance with 9 VAC 5, Chapter 60, Article 5, for all toxic compounds/HAP.
 - (c) If a permit is required, failure to obtain the permit prior to change in process formulation or the use of any additional toxic compound or HAP may result in enforcement action.
- (9 VAC 5-80-110, 9 VAC 5-60-340, and Condition 24 of May 19, 2009 SOP Permit)

27. Process Equipment Requirements - (Facility Wide) - Limitations - Hazardous Air Pollutants - Emissions of Hazardous Air Pollutants from the operation of the gypsum wallboard, plaster, and industrial gypsum products manufacturing facility shall not exceed the limits specified below:

Formaldehyde	3.19 lbs/hour	7.29 tons/year
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These emissions are derived from the estimated overall contributions from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions numbers 17 and 38. The annual throughput in Condition 17 shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9 VAC 5-80-110, 9 VAC 5-60-320, and Condition 25 of May 19, 2009 SOP Permit)

B. Monitoring

28. Process Equipment Requirements - (U16, U36, U43 and U121-U139) - Monitoring - The fabric filter dust collectors shall be equipped with devices to continuously measure the differential pressure drop across the fabric filter. Each monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the gypsum manufacturing process is operating.

(9 VAC 5-80-110, 9 VAC 5-50-20 C, 9 VAC 5-50-260, and Condition 7 of May 19, 2009 SOP Permit)

29. Process Equipment Requirements - (U16, U36, U43 and U121-U139) - Monitoring - To ensure good performance, the devices used to continuously measure the differential pressure drop across the fabric filter dust collectors shall be observed by the permittee with a frequency of not less than once each operating week. The permittee shall keep records of observations including, but not limited to, date, time, observation description, observer's name, the acceptable pressure drop range, and any corrective action taken, including, but not limited to, a brief description of the corrective action and the date of completion.

(9 VAC 5-80-110 and Condition 8 of May 19, 2009 SOP Permit)

30. Process Equipment Requirements - (U121, U124, U125, U127, U128, U129, U130, U135, U136, U137, and U139) - Monitoring - Compliance Assurance Monitoring (CAM) - The permittee shall monitor, operate, calibrate and maintain the CAM control devices controlling the CAM-affected units according to the following:

Emission Unit Ref. Nos.	Control Device Ref. No.	Stack Ref. No.	Performance Criteria	Indicator Range
U121, U139	C102	S35	Visible emissions	Yes or No
U124	C105	S101	Visible emissions	Yes or No
U125	C106	S102	Visible emissions	Yes or No
U127	C107	S110	Visible emissions	Yes or No
U128	C108	S111	Visible emissions	Yes or No
U129, U135, U139	C109	S112	Visible emissions	Yes or No
U130	C110	S104	Visible emissions	Yes or No
U136	C116	S118	Visible emissions	Yes or No
U137	C117	S119	Visible emissions	Yes or No
U138	C118	S120	Visible emissions	Yes or No

31. **Process Equipment Requirements - (U121, U124, U125, U127, U128, U129, U130, U135, U136, U137, and U139) - Monitoring - Compliance Assurance Monitoring (CAM)** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
 (9 VAC 5-80-110 E and 40 CFR 64.6 (c))

32. **Process Equipment Requirements - (U121, U124, U125, U127, U128, U129, U130, U135, U136, U137, and U139) - Monitoring - Compliance Assurance Monitoring (CAM)** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
 (9 VAC 5-80-110 E and 40 CFR 64.7 (b))

33. **Process Equipment Requirements - (U121, U124, U125, U127, U128, U129, U130, U135, U136, U137, and U139) - Monitoring - Compliance Assurance Monitoring (CAM)** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the CAM-affected units are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
 (9 VAC 5-80-110 E and 40 CFR 64.7 (c))

34. **Process Equipment Requirements - (U121, U124, U125, U127, U128, U129, U130, U135, U136, U137, and U139) - Monitoring - Compliance Assurance Monitoring (CAM)** - Upon detecting an excursion or exceedance, the permittee shall restore operation of the CAM-affected units (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup

and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable. (9 VAC 5-80-110 E and 40 CFR 64.7 (d)(1))

35. **Process Equipment Requirements - (U121, U124, U125, U127, U128, U129, U130, U135, U136, U137, and U139) - Monitoring - Compliance Assurance Monitoring (CAM)** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9 VAC 5-80-110 E and 40 CFR 64.7(d)(2))
36. **Process Equipment Requirements - (U121, U124, U125, U127, U128, U129, U130, U135, U136, U137, and U139) - Monitoring - Compliance Assurance Monitoring (CAM)** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Tidewater Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9 VAC 5-80-110 E and 40 CFR 64.7(e))
37. **Process Equipment Requirements - (U121, U124, U125, U127, U128, U129, U130, U135, U136, U137, and U139) - Monitoring - Compliance Assurance Monitoring (CAM)** - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the CAM-affected units for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
- (a) Improved preventative maintenance practices;
 - (b) Process operation changes;
 - (c) Appropriate improvements to control methods;
 - (d) Other steps appropriate to correct control performance; and
 - (e) More frequent or improved monitoring.
- (9 VAC 5-80-110 E and 40 CFR 64.8(a) and (b))

C. Recordkeeping

38. **Process Equipment Requirements - (U36, U47, U48, U49, U53, U54, U102-U105, and U121-U139) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
- (a) The annual total throughput of raw material (gypsum rock and synthetic gypsum) for Emissions Units U36, U47, U48, U49, U53, and U54, each calculated monthly as the sum of each consecutive twelve (12) month period, to demonstrate compliance with Conditions 13, 14, 15, and 16. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - (b) The annual throughput of moisture and mold resistant additive (MMR additive), calculated monthly as the sum of each consecutive twelve 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - (c) Operation and control device monitoring records for the fabric filter dust collectors.
 - (d) Scheduled and unscheduled maintenance and operator training.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110, and Condition 30 of May 19, 2009 SOP Permit)

39. **Process Equipment Requirements - (U121, U124, U125, U127, U128, U129, U130, U135, U136, U137, and U139) - Recordkeeping - Compliance Assurance Monitoring (CAM)** - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
- (9 VAC 5-80-110 E and 40 CFR 64.9(b))

D. Reporting

40. **Process Equipment Requirements - (U121, U124, U125, U127, U128, U129, U130, U135, U136, U137, and U139) - Reporting - Compliance Assurance Monitoring (CAM)** - The permittee shall submit CAM reports as part of the Title V semi-annual monitoring reports required by General Condition 54 of this permit to the Director, Tidewater Regional Office. Such reports shall include at a minimum:

- (a) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- (b) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- (c) A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(9 VAC 5-80-110 F and 40 CFR 64.9(a))

V. Facility Wide Conditions

A. Testing

41. **Facility Wide Conditions - Testing** - The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. This includes constructing the facility/equipment such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing a stack or duct that is free from cyclonic flow. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.
(9 VAC 5-50-30, 9 VAC 5-80-110, and Condition 31 of May 19, 2009 SOP Permit)
42. **Facility Wide Conditions - Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-110)

VI. Insignificant Emission Units

43. **Insignificant Emission Units** - The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
U17	Diesel Tank (1,000 gallons)	9 VAC 5-80-720B	VOC	
U18	Anhydrite System (15 tons/hr)	9 VAC 5-80-720B	PM-10	
U19	Gasoline Tank (1,000 gallons)	9 VAC 5-80-720B	VOC	
U38	#4 fuel oil tank to store #2 fuel oil (30,000 gallons)	9 VAC 5-80-720B	VOC	
U39	#2 fuel oil tank (15,000 gallons)	9 VAC 5-80-720B	VOC	
U40	West waste oil tank (2,500 gallons)	9 VAC 5-80-720B	VOC	
U41	East waste oil tank (2,500 gallons)	9 VAC 5-80-720B	VOC	
U42	Paved roads (road traffic)	9 VAC 5-80-720B	N/A	
PW1	Aqueous parts washer	9 VAC 5-80-720B	VOC	
VAC1	Housekeeping vacuum system (vents inside building)	9 VAC 5-80-720B	PM-10	

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

VII. Permit Shield & Inapplicable Requirements

44. **Permit Shield & Inapplicable Requirements** - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 63, Subpart JJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers	Per §63.11195, gas-fired boilers are not subject to this subpart.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
 (9 VAC 5-80-140)

VIII. General Conditions

45. **General Conditions - Federal Enforceability** - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
 (9 VAC 5-80-110 N)
46. **General Conditions - Permit Expiration** - This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
47. **General Conditions - Permit Expiration** - The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
48. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
49. **General Conditions - Permit Expiration** - No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
50. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until

the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

51. **General Conditions - Permit Expiration** - The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application. (9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
52. **General Conditions - Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
- (a) The date, place as defined in the permit, and time of sampling or measurements.
 - (b) The date(s) analyses were performed.
 - (c) The company or entity that performed the analyses.
 - (d) The analytical techniques or methods used.
 - (e) The results of such analyses.
 - (f) The operating conditions existing at the time of sampling or measurement.
- (9 VAC 5-80-110 F)
53. **General Conditions -Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (9 VAC 5-80-110 F)
54. **General Conditions -Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
- (a) The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - (b) All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
 - (1) Exceedance of emissions limitations or operational restrictions;
 - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
 - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

- (c) If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”
(9 VAC 5-80-110 F)

55. **General Conditions - Annual Compliance Certification** - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- (a) The time period included in the certification. The time period to be addressed is January 1 to December 31.
 - (b) The identification of each term or condition of the permit that is the basis of the certification.
 - (c) The compliance status.
 - (d) Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
 - (e) Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
 - (f) Such other facts as the permit may require to determine the compliance status of the source.
 - (g) One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:
 - (h) R3_APD_Permits@epa.gov
- (9 VAC 5-80-110 K.5)

56. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Director, Tidewater Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 54 of this permit.
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

57. **General Conditions - Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Tidewater Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the

estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Tidewater Regional Office.
(9 VAC 5-20-180 C)

58. **General Conditions - Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)
59. **General Conditions - Duty to Comply** - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-110 G.2)
60. **General Conditions - Need to Halt or Reduce Activity not a Defense** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3)
61. **General Conditions - Permit Modification** - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-190 and 9 VAC 5-80-260)
62. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)
63. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)
64. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)

65. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350 in addition to an annual permit maintenance fee consistent with the requirements of 9 VAC 5-80-2310 through 9 VAC 5-80-2350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. The amount of the annual permit maintenance fee shall be the largest applicable base permit maintenance fee amount from Table 8-11A in 9 VAC 5-80-2340, adjusted annually by the change in the Consumer Price Index.
(9 VAC 5-80-110 H, 9 VAC 5-80-340 C and 9 VAC 5-80-2340 B)

66. **General Conditions - Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9 VAC 5-50-20 E)

General Conditions - Alternative Operating Scenarios - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.
(9 VAC 5-80-110 J)

67. **General Conditions - Inspection and Entry Requirements** - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- (a) Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- (b) Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- (d) Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

68. **General Conditions - Reopening For Cause** - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its

terms and conditions has been extended pursuant to 9 VAC 5-80-80 F. The conditions for reopening a permit are as follows:

- (a) The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - (b) The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
 - (c) The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.
(9 VAC 5-80-110 L)
69. **General Conditions - Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-150 E)
70. **General Conditions - Transfer of Permits** - No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)
71. **General Conditions - Transfer of Permits** - In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)
72. **General Conditions - Transfer of Permits** - In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)
73. **General Conditions - Malfunction as an Affirmative Defense** - A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of Condition 74 are met.
(9 VAC 5-80-250)
74. **General Conditions - Malfunction as an Affirmative Defense** - The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

- (a) A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - (b) The permitted facility was at the time being properly operated.
 - (c) During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - (d) The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
(9 VAC 5-80-250)
75. **General Conditions - Malfunction as an Affirmative Defense** - In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
(9 VAC 5-80-250)
76. **General Conditions - Malfunction as an Affirmative Defense** - The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
(9 VAC 5-80-250)
77. **General Conditions - Permit Revocation or Termination for Cause** - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-190 C and 9 VAC 5-80-260)
78. **General Conditions - Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-80 E)
79. **General Conditions - Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A-F)

80. **General Condition - Asbestos Requirements** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)
81. **General Condition - Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)
82. **General Conditions - Changes to Permits for Emissions Trading** - No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-110 I)
83. **General Conditions - Emissions Trading** - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:
- (a) All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
 - (b) The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
 - (c) The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.
- (9 VAC 5-80-110 I)

IX. State-Only Enforceable Requirements (Optional)

84. **State-Only Enforceable Requirements - Other Terms and Conditions** - The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

(a) 9 VAC 5-50-140 Standard for Odorous Emissions

(b) 9 VAC 5-60-320 Standard for Toxic Pollutants

(9 VAC 5-80-110 N and 9 VAC 5-80-300)