PERMIT NO. 3295-319-0029-V-05-0
ISSUANCE DATE:

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Air Quality - Part 70 Operating Permit

Facility Name:	**CARBO Ceramics Inc. – Toomsboro Plant**
Facility Address:	**1880 Dent Road** **Toomsboro, Georgia 31090 (Wilkinson County)**
Mailing Address:	**1880 Dent Road** **Toomsboro, Georgia 31090**
Parent/Holding Company:	**CARBO Ceramics Inc.**
Facility AIRS Number:	**04-13-319-00029**

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued a Part 70 Permit for:

The operation of a ceramic pellet manufacturing facility with associated air pollution equipment.

This Permit is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Permit. Unless modified or revoked, this Permit expires five years after the issuance date indicated above.

This Permit may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above, for any misrepresentation made in Title V Application TV-857282 signed on August 12, 2024 was signed, any other applications upon which this Permit is based, supporting data entered therein or attached thereto, or any subsequent submittal of supporting data, or for any alterations affecting the emissions from this source.

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **70** pages.

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Jeffrey W. Cown, Director
Environmental Protection Division

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PART 1.0 FACILITY DESCRIPTION

1.1 Site Determination

There are no other facilities which could possibly be contiguous or adjacent and under common control.

1.2 Previous and/or Other Names

None

1.3 Overall Facility Process Description

With this permit renewal application, Carbo Ceramics has revised the overall facilities process Description.

CARBO Ceramics Inc. – Toomsboro Plant produces a variety of products used by different industrial sectors. The major raw materials processed at the facility are alumina-rich clay, water, bauxite, and a variety of clay-like nonmetallic and metallic compounds and materials. The Toomsboro plant includes a variety of equipment that can be used to process a wide range of materials. Raw materials are unloaded from trucks into a covered crude storage area upon delivery to the facility. The material can then be processed through a combination of equipment and systems, including shredding, blunging, conveying, screening, mixing, drying, pelletizing, coating, and sintering. The Toomsboro facility also includes multiple storage silos for finished materials, as well as railcar and truck loadout systems and equipment to provide bagging of finished goods for shipment to customers.

Processing units used to process materials at the facility are well controlled and using baghouses/dust collectors to control particulate matter (PM) emissions prior to release through multiple stacks. The kiln/cooler units are equipped with dry sorbent injection (DSI) systems, which are used in conjunction with baghouses to control additional pollutant emissions such as sulfuric acid.

The Facility also has four diesel-powered emergency generators to provide backup electrical power for the operations and one diesel-powered emergency generator near the administration building to provide backup power for the offices.

PART 2.0 REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY

2.1 Facility Wide Emission Caps and Operating Limits

2.1.1 The Permittee shall not cause, let, suffer, permit or allow the combined emissions of sulfuric acid (H_2SO_4) from this facility equal to or exceeding seven (7) tons during any period of consecutive twelve (12) months.
[Avoidance of 40 CFR 52.21]

2.2 Facility Wide Federal Rule Standards

2.2.1 The Permittee shall comply with the standards, provisions and requirements of 40 CFR 60, Subpart A, the General Provisions for all subject emission units.
[40 CFR 60 Subpart A].

2.2.2 The Permittee shall implement measures, including fencing, sign postings, and routine patrols to restrict public access along the entire Source Boundary utilized in the ambient impact assessment/modeling. Signs shall be posted along the property boundary no further than 100 feet apart, and patrols shall be conducted at least once weekly on boundaries that have public access. The Permittee shall maintain a written plan outlining such measures and update the measures as required. The Division reserves the right to require enhancement of the plan.
[40 CFR 52.21-PSD]

2.3 Facility Wide SIP Rule Standards

2.3.1 If any of the emission standards or requirements in this Permit is revised by EPA or the state after the issuance of this Permit, the Permittee shall comply with the revised standard(s) or requirement(s) on and after any applicable compliance date(s).
[391-3-1-.03(2)(c)]

2.4 Facility Wide Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

None

PART 3.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

3.1 Emission Units

With this permit renewal application, Carbo Ceramics has revised the Emission Units ID No.

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
Process Line No. 1				
DFC1	Feed Conveyor No. 1	391-3-1-.02(2)(p)1	None	None
SH1	Shredder No. 1	391-3-1-.02(2)(b)		
SBC1	Shredder Belt Conveyor No. 1	40 CFR Part 60, Subpart OOO		
BFC1	Bin Feed Conveyor No. 1	40 CFR 52.21 – PSD/BACT		
LFB1	Blunger Feeder Bin No. 1			
LFC1	Blunger Feeder Conveyor No. 1			
DDC1	Collection Drag Chain Conveyor No. 1	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	None	None
SD01	Spray Pelletizer #1	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(g) 40 CFR Part 60, Subpart UUU 40 CFR 52.21 – PSD/BACT 112(g) case-by-case MACT/40 CFR 63, Subpart B	SB01, SB02, SB03, SB04	Baghouses (Stack S002)
SD02	Spray Pelletizer #2		SB05, SB06, SB07, SB08	Baghouses (Stack S003)
DSB1	Spray Pelletizer #1 Feed Bin	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	GPB1	Baghouse (Stack S004)
DUB1	Spray Pelletizer #1 Under Bin			
DSB2	Spray Pelletizer #2 Feed Bin			
DUB2	Spray Pelletizer #2 Under Bin			
ABC1	Accepts Belt Conveyor No. 1			
OC01	Overflow Conveyor No. 1			
GPC1	Pellet Collection Conveyor No. 1			
GPT1	Pellet Transfer Conveyor No. 1			
GPE1	Pellet Bucket Elevator No. 1			
GSH1	Screen Surge Hopper No. 1			
GSC1	Pellet Screen 1-1			
GSC2	Pellet Screen 1-2			
GSC3	Pellet Screen 1-3			
OBC1	Oversize Collection Belt Conveyor No. 1			
ORB1	Oversize Surge Bin No. 1			
UBC1	Under Collection Belt Conveyor No. 1			
URC1	Under Reversible Belt Conveyor No. 1			
KFE1	Kiln #1 Feed Bin Bucket Elevator			
KFB1	Kiln #1 Feed Bin			
KRB1	Kiln #1 Recycle Feed Bin			
KRE1	Kiln #1 Rec. Feed Bin B Elevator			
KFC1	Kiln #1 Feed Conveyor			

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
KLN1	Kiln No. 1 & Cooler	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(g) 40 CFR Part 60, Subpart UUU 40 CFR 52.21 – PSD/BACT 112(g) case-by-case MACT/40 CFR 63, Subpart B	KBH1, KBH2, KBH3, KBH4	Baghouses (Stack S005)
KCE1 KPS1 KFS1 KQC1 KQC2 KQC3 KQC4	Kiln #1 Cooler Bucket Elevator Kiln #1 Product Screen Kiln #1 Fine Screen Kiln #1 Product QC Bin A Kiln #1 Product QC Bin B Kiln #1 Product QC Bin C Kiln #1 Product QC Bin D	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	KNB1	Baghouse (Stack S006)
RWB1	Recycle Weigh Bin No. 1	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	RBF1	Bin Vent Filter
BSS1	Bulk Storage Silo 1-1		BB01	Bin Vent Filter
BSS2	Bulk Storage Silo 1-2		BB02	Bin Vent Filter
BSS3	Bulk Storage Silo 1-3		BB03	Bin Vent Filter
BSS4	Bulk Storage Silo 1-4		BB04	Bin Vent Filter
BSS5	Bulk Storage Silo 1-5		BB05	Bin Vent Filter
RRL1	Railcar Loading Operations No. 1	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	RCB1	Baghouse (S008)
EDG1	Emergency Diesel Generator No. 1 (MTU Detroit Diesel 1820 DSEB; Engine Model No. 16V4000G41)	391-3-1-.03(6)(b)(11)(v)(1) 40 CFR 52.21 – PSD/BACT 40 CFR Part 63, Subpart ZZZZ	None	None
BLR1	Boiler No. 1	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 40 CFR 52.21 – PSD/BACT 112(g) case-by-case MACT/40 CFR 63, Subpart B 40 CFR Part 63, Subpart DDDDD	None	None
EVAP1	Wastewater Evaporator1	391-3-1-.02(2)(b) 391-3-1-.02(2)(d) 40 CFR Part 63, Subpart DDDDD	None	None (Stack S503)
Process Line No. 2				
LFC2	Blunger Feeder Conveyor No. 2	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	None	None
SC7 SC8 SC9 SC10 SC11 SC12	Screen No.2-1 Screen No.2-2 Screen No.2-3 Screen No.2-4 Screen No.2-5 Screen No.2-6			
SD03	Spray Pelletizer #3	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(g) 40 CFR Part 60, Subpart UUU 40 CFR 52.21 – PSD/BACT 112(g) case-by-case MACT/40 CFR 63, Subpart B	SB09, SB10, SB11, SDB12	Baghouses (Stack S010)
SD04	Spray Pelletizer #4		SB13, SB14, SB15, SB16	Baghouses (Stack S011)

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
DSB3 DUB3 DSB4 DUB4 ABC2 OC02 GPC2 GPT2 GPE2 GSH2 GSC4 GSC5 GSC6 OBC2 ORB2 UBC2 URC2 KFE2 KFB2 KRB2 KRE2 KFC2	Spray Pelletizer #3 Feed Bin Spray Pelletizer #3 Under Bin Spray Pelletizer #4 Feed Bin Spray Pelletizer #4 Under Bin Accepts Belt Conveyor No. 2 Overflow Conveyor No. 2 Pellet Collection Conveyor No. 2 Pellet Transfer Conveyor No. 2 Pellet Bucket Elevator No. 2 Screen Surge Hopper No. 2 Pellet Screen 2-1 Pellet Screen 2-2 Pellet Screen 2-3 Oversize Collection Belt Conveyor No. 2 Oversize Surge Bin No. 2 Under Collection Belt Conveyor No. 2 Under Reversible Belt Conveyor No. 2 Kiln No. 2 Feed Bin Bucket Elevator Kiln No.2 Feed Bin Kiln No. 2 Recycle Feed Bin Kiln No. 2 Rec. Feed Bin B Elevator Kiln No. 2 Feed Conveyor	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	GPB2	Baghouse (Stack S012)
KLN2	Kiln No. 2 & Cooler	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(g) 40 CFR Part 60, Subpart UUU 40 CFR 52.21 – PSD/BACT 112(g) case-by-case MACT/40 CFR 63, Subpart B	KBH5, KBH6, KBH7, KBH8	Baghouses (Stack S013)
KCE2 KPS2 KFS2 KQC5 KQC6 KQC7 KQC8	Kiln #2 Cooler Bucket Elevator Kiln #2 Product Screen Kiln #2 Fine Screen Kiln #2 Product QC Bin A Kiln #2 Product QC Bin B Kiln #2 Product QC Bin C Kiln #2 Product QC Bin D	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	KNB2	Baghouse (Stack S014)
BSS6	Bulk Storage Silo 2-1	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	BB06	Bin Vent Filter
BSS7	Bulk Storage Silo 2-2		BB07	Bin Vent Filter
BSS8	Bulk Storage Silo 2-3		BB08	Bin Vent Filter
BSS9	Bulk Storage Silo 2-4		BB09	Bin Vent Filter
BS10	Bulk Storage Silo 2-5		BB010	Bin Vent Filter
BFB2	Line 2 Blunger Feed Bin	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO	MRB1	Baghouse
RRL2	Railcar Loading Operations No. 2	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	RCB2	Baghouse (Stack S022)
BLR2	Boiler No. 2	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 40 CFR 52.21 – PSD/BACT 112(g) case-by-case MACT/40 CFR 63, Subpart B 40 CFR Part 63, Subpart DDDDD	None	None

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
EDG2	Emergency Diesel Generator No. 2 (MTU Detroit Diesel 1820 DSEB; Engine Model No. 16V4000G41)	391-3-1-.03(6)(b)(v)(11)(1) 40 CFR 52.21 – PSD/BACT 40 CFR Part 60, Subpart IIII	None	None
Process Line No. 3				
LFC3	Blunger Feeder Conveyor No. 3	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	None	None
LFC4	Blunger Feeder Conveyor No. 4			
SD05	Spray Pelletizer No. 5	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(g) 40 CFR Part 60, Subpart UUU 40 CFR 52.21 – PSD/BACT 112(g) case-by-case MACT/40 CFR 63, Subpart B	SB17, SB18, SB19, SB20	Spray Pelletizer No. 5 Baghouses A, B, C, D (Stack S017)
SD06	Spray Pelletizer No. 6		SB21, SB22, SB23, SB24	Spray Pelletizer No. 6 Baghouses A, B,C,D (Stack S018)
ABC3	Accepts Belt Conveyor No. 3	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	GPB3	Pallet Nuisance Baghouse #3 (Stack S019)
DSB5	Spray Pelletizer No. 5 Feed Bin			
DUB5	Spray Pelletizer No. 5 Under Bin			
DSB6	Spray Pelletizer No. 6 Feed Bin			
DUB6	Spray Pelletizer No. 6 Under Bin			
GPC3	Pellet Collection Conveyor No. 3			
GPT3	Pellet Transfer Conveyor No. 3			
GPE3	Pellet Bucket Elevator No. 3			
GSH3	Screen Surge Hopper No. 3			
GSC7	Pellet Screen No. 3-1			
GSC8	Pellet Screen No. 3-2			
GSC9	Pellet Screen No. 3-3			
OBC3	Oversize Collection Conveyor No. 3			
ORB3	Oversize Surge Bin No. 3			
UBC3	Under Collection Belt Conveyor No. 3			
URC3	Under Reversible Belt Conveyor No. 3			
KFE3	Kiln No. 3 Feed Bin			
KFB3	Kiln No. 3 Feed Bin			
KRE3	Kin No. 3 Recycle Feed Bin Bucket Elevator			
KFC3	Kiln No. 3 Feed Conveyor			
KRB3	Kiln No. 3 Recycle Feed Bin			
KLN3	Direct-Fired Rotary Kiln No. 3 & Cooler (Kiln No. 3)	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-02(2)(g) 40 CFR Part 60, Subpart UUU 40 CFR 52.21 – PSD/BACT 112(g) case-by-case MACT/40 CFR 63, Subpart B	KB9, KB10, KB11, KB12	Kiln No. 3 Baghouses A,B,C,D (Stack S020)
KCE3	Kiln No. 3 Cooler Bucket Elevator	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	KNB3	Kiln No. 3 Nuisance Baghouse (StackS021)
KPS3	Kiln No. 3 Product Screen			
KFS3	Kiln No. 3 Fine Screen			
KQC9	Kiln No. 3 Product QC Bin A			
KQ10	Kiln No. 3 Product QC Bin B			
KQ11	Kiln No. 3 Product QC Bin C			
KQ12	Kiln No. 3 Product QC Bin D			
PBC3	Kiln No. 3 Product Screen Belt Conveyor	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b)	None	None
PBE3	Kiln No. 3 Product Screen Bucket Elevator			
FBC3	Kiln No. 3 Fines Screen Belt Conveyor			

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
FBE3	Kiln No. 3 Fines Screen Bucket Elevator	40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT		
BS11	Bulk Product Silo No. 3-1	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	BB11	Baghouse (Stack BV14)
BS12	Bulk Product Silo No. 3-2		BB12	Baghouse (Stack BV15)
BS13	Bulk Product Silo No. 3-3		BB13	Baghouse (Stack BV16)
BS14	Bulk Product Silo No. 3-4		BB14	Baghouse (Stack BV17)
EDG3	Emergency Diesel Generator No. 3 (MTU Detroit Diesel V2000S6F or equal; Engine Model 16V4000G43 or equal)	391-3-1-.03(6)(b)(11)(v)(1) 40 CFR 52.21 – PSD/BACT 40 CFR Part 60, Subpart IIII	None	None
DSC3	DSI Conveying/Collection System 3	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) Avoidance of 40 CFR 52.21	DSI3	DSI Conveying/Collection System 3 Bin Vent (Stack 305)
BLR3	9.8 MMBtu/Hr. Boiler No. 3	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 40 CFR 52.21 – PSD/BACT 112(g) case-by-case MACT/40 CFR 63, Subpart B 40 CFR Part 63, Subpart DDDDD	None	None
Process Line No. 4				
LFC4	Blunger feeder Conveyor No. 4	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	None	None
SD07	Spray Pelletizer No. 7	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(g) 40 CFR Part 60, Subpart UUU 40 CFR 52.21 – PSD/BACT 112(g) case-by-case MACT/40 CFR 63, Subpart B	SB25, SB26, SB27, SB28	Spray Pelletizer No. 7 Baghouses A,B,C,D (Stack S024)
SD08	Spray Pelletizer No. 8		SB29, SB30, SB31, SB32	Spray Pelletizer No. 8 Baghouses A,B,C,D (Stack S025)
ABC4	Accepts Belt Conveyor No. 4	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	GPB4	Pellet Nuisance Baghouse #4 (Stack S026)
DSB7	Spray Pelletizer No. 7 Feed Bin			
DUB7	Spray Pelletizer No. 7 Under Bin			
DSB8	Spray Pelletizer No. 8 Feed Bin			
DUB8	Spray Pelletizer No. 8 Under Bin			
GPC4	Pellet Collection Conveyor No. 4			
GPT4	Pellet Transfer Conveyor No. 4			
GPE4	Pellet Bucket Elevator No. 4			
GSH4	Screen Surge Hopper No. 4			
GS10	Pellet Screen No. 4-1			
GS11	Pellet Screen No. 4-2			
GS12	Pellet Screen No. 4-3			
OBC4	Oversize Collection Belt Conveyor No. 4			
ORB4	Oversize Surge Bin No. 4			
UBC4	Under Collection Belt Conveyor No. 4			
URC4	Under Reversible Belt Conveyor No. 4			
KFE4	Kiln No. 4 Feed Bin Bucket Elevator			
KFB4	Kiln No. 4 Feed Bin			
KRE4	Kin No. 4 Recycle Feed Bucket Elevator			
KFC4	Kiln No. 4 Feed Conveyor			

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
KRB4	Kiln No. 4 Recycle Feed Bin			
PB03	Line 3 Product Belt	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	None	None
PB04	Line 4 Product Belt			
FBS1	Finished Goods Bagging System	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	BSDC	Bagging System Dust Collector
KLN4	Direct-Fired Rotary Kiln No. 4 & Cooler (Kiln No. 4)	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(g) 40 CFR Part 60, Subpart UUU 40 CFR 52.21 – PSD/BACT 112(g) case-by-case MACT/40 CFR 63, Subpart B	KB13, KB14, KB15, KB16	Kiln No. 4 Baghouses A, B, C D (Stack S027)
DSC4	DSI Conveying/Collection System 4	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) Avoidance of 40 CFR 52.21	DSI4	DSI Conveying/Collection System 4 Bin Vent (Stack 405)
KCE4	Kiln No. 4 Cooler Bucket Elevator	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	KNB4	Kiln No. 4 Nuisance Baghouse (StackS028)
KPS4	Kiln No. 4 Product Screen			
KFS4	Kiln No. 4 Fine Screen			
KQ13	Kiln No. 4 Product QC Bin A			
KQ14	Kiln No. 4 Product QC Bin B			
KQ15	Kiln No. 4 Product QC Bin C			
KQ16	Kiln No. 4 Product QC Bin D			
PBC4	Kiln No. 4 Product Screen Belt Conveyor	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	None	None
PBE4	Kiln No. 4 Product Screen Bucket Elevator			
FBC4	Kiln No. 4 Fines Screen Belt Conveyor			
FBE4	Kiln No. 4 Fines Screen Bucket Elevator			
BS16	Bulk Product Silo No. 4-1	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR Part 60, Subpart OOO 40 CFR 52.21 – PSD/BACT	BB16	Baghouse (Stack BV20)
BS17	Bulk Product Silo No. 4-2		BB17	Baghouse (Stack BV21)
BS18	Bulk Product Silo No. 4-3		BB18	Baghouse (Stack BV22)
BS19	Bulk Product Silo No. 4-4		BB19	Baghouse (Stack BV23)
EDG4	Emergency Diesel Generator No. 4 (MTU Detroit Diesel V2000S6F or equal; Engine Model 16V4000G43 or equal)	391-3-1-.03(6)(b)(v)(11)(1) 40 CFR 52.21 – PSD/BACT 40 CFR Part 60, Subpart IIII	None	None
BLR4	9.8 MMBtu/Hr Boiler No. 4	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 40 CFR 52.21 – PSD/BACT 112(g) case-by-case MACT/40 CFR 63, Subpart B 40 CFR Part 63, Subpart DDDDD	None	None
Emission Units Added via Modifications				
DSF1	DSI Sorbent Feeder 1	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) Avoidance of 40 CFR 52.21	DSB1	DSI Sorbent Feeder 1 Bin Vent
DSF2	DSI Sorbent Feeder 2		DSB2	DSI Sorbent Feeder 2 Bin Vent

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
DSF3	DSI Sorbent Feeder 3		DSB3	DSI Sorbent Feeder 3 Bin Vent
DSF4	DSI Sorbent Feeder 4		DSB4	DSI Sorbent Feeder 4 Bin Vent
DSC1	DSI Conveying/Collection System 1		DSI1	DSI Conveying/Collection System 1 Bin Vent
DSC2	DSI Conveying/Collection System 2		DSI2	DSI Conveying/Collection System 2 Bin Vent
DSI1	DSI Sorbent Silo 1		DS01	DSI Sorbent Silo 1 Bin Vent
DSI2	DSI Sorbent Silo 2		DS02	DSI Sorbent Silo 2 Bin Vent
DSI3	DSI Sorbent Silo 3		DS03	DSI Sorbent Silo 3 Bin Vent
DSI4	DSI Sorbent Silo 4		DS04	DSI Sorbent Silo 4 Bin Vent
DSH1	DSI Sorbent Surge Hopper 1		DSH5	DSI Sorbent Surge Hopper 1 Bin Vent
DSH2	DSI Sorbent Surge Hopper 2		DSH6	DSI Sorbent Surge Hopper 2 Bin Vent
DSH3	DSI Sorbent Surge Hopper 3		DSH7	DSI Sorbent Surge Hopper 3 Bin Vent
DSH4	DSI Sorbent Surge Hopper 4	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) Avoidance of 40 CFR 52.21	DSH8	DSI Sorbent Surge Hopper 4 Bin Vent
PLT1	Pilot plant with a .75 MMBTU burner and a mixed/fluidized bed chamber	391-3-1-.02(2)(b) 391-3-1-.02(2)(g) 391-3-1-.02(2)(p)1 40 CFR Part 60, Subpart UUU	PLTBH	Baghouse
COAT01	Fluidized bed pelletizer with a heat input of 2 MMBTU/hr. to dry coated finished product	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 60, Subpart UUU	COATBH01	Baghouse
PCD2	Line 2 Pellet Coater	40 CFR 60 Subpart UUU 391-3-1-.02(2)(p) 391-3-1-.02(2)(b)	CSB2	Baghouse

* Generally applicable requirements contained in this permit may also apply to the emission units listed above. The lists of applicable requirements/standards are intended as a compliance tool and may not be definitive.

3.2 Equipment Emission Caps and Operating Limits

3.2.1 The Permittee shall fire boilers, spray pelletizers and kilns with natural gas or propane only. [40 CFR 52.21-PSD/BACT, 391-3-1-.02(2)(g) subsumed]

3.2.2 VOC emissions from Process Line Nos. 1 and 2 and Nos. 3 and 4 shall not equal or exceed the following limits:
[Avoidance of 40 CFR 52.21]

Table 3.2.2-1: Annual VOC Emission Limits for Existing & New Process Lines

Source Description	Emission Unit ID No.	VOC Emission Limit, tons per 12 consecutive months
Process Line Nos. 1 and 2	refer to Table 3.1	40
Process Line Nos. 3 and 4	refer to Table 3.1	40

3.2.3 The Permittee shall use the following technologies and/or procedures to comply with the relevant BACT emission limits:
[40 CFR 52.21-PSD/BACT]

a. NOx emissions:

i. Good Combustion Techniques (e.g., those such as equipment design, maintenance, and combustion process control such as appropriate combustion temperature, air to fuel ratio, staged and/or controlled combustion that can lower NOx emissions.);

ii. Low NO_x burner;

iii. Use of "clean fuels", i.e., natural gas and propane.

b. Stack PM emissions:

i. Fabric filters/baghouses

c. Fugitive Emissions:

i. Wet suppression or timely cleanup;

ii. Enclosure if applicable;

iii. Covering if applicable.

d. SO_2 emissions:

i. Use of "clean fuels", i.e., natural gas and propane.

e. CO emissions

i. Equipment design, maintenance and combustion process control with good operating practices (i.e., adequate combustion temperature, residence time and/or excess air, etc.) that can lower the CO emissions.

The Permittee shall develop written operation, inspection and maintenance procedures and work practice requirements/plans regarding paragraphs a., b., c., d. and e. of this condition. These procedures and requirements/plans shall be developed and implemented to ensure satisfaction with the applicable operating requirements in this condition. All inspection and maintenance activities shall be recorded in a permanent form suitable for inspection and submission to the Division.

3.2.4 The Permittee shall implement measures to remove kaolin residue from plant roads, including, at a minimum, cleaning the roads at least weekly. The Permittee may use a vacuum street sweeper(s) and a truck washing station(s) to prevent accumulation of fugitive dust on paved roads used to haul raw materials into the facility.
[40 CFR 52.21 - PSD/BACT]

3.2.5 The accumulated annual operating time for each of the stationary emergency diesel generator/engine Nos. 1, 2, 3 and 4 (Emissions Unit ID Nos. EDG1, EDG2, EDG3 and EDG4) shall not exceed 500 hours per year.
[40 CFR 52.21(j) – PSD/BACT, 391-3-1-.03(6)(b)(11)(v)(l)]

3.2.6 When operating any of the DSI system(s) to comply with sulfuric acid (H_2SO_4) limit in Condition 2.1.1, the Permittee shall operate the kiln and the associated DSI system involved in such a manner that the current sorbent injection rate allows the mass ratio between the sorbent and the sulfur contained in the kiln feed feeding each kiln to remain at or greater than the ratio established during the most recent Division-approved performance test. The current sorbent injection rate shall be determined in accordance with Condition 6.2.22. The Permittee may choose not to use any or all the DSI systems provided that the 12-month rolling total of H_2SO_4 emissions from all the kilns and pelletizers combined, as determined by Condition 6.2.15, remains below the 7-ton limit in Condition 2.1.1.
[Avoidance of 40 CFR 52.21]

3.2.7 The Permittee shall maintain the temperature at the inlet of each kiln baghouse equal to or greater than 275°F when the kiln served by the baghouse is in operation/production.
[Avoidance of 40 CFR 52.21]

3.2.8 The Permittee shall not exhaust particulate matter emissions (PM/PM_{10}) from Line 2 Pellet Coater (Emission Unit ID No. PCD2) exceeding 0.010 gr/dscf.
[Avoidance of 40 CFR 52.21(b)(2)(i)]

3.3 Equipment Federal Rule Standards

3.3.1 The Permittee shall comply with the provisions of 40 CFR, Part 60, Subpart OOO, *"Standards of Performance for Nonmetallic Mineral Processing Plants"* as amended on April 28, 2009, for all subject equipment {for reference, see listing in Section/Subpart 3.1}. In particular, for affected facilities/sources subject to Subpart OOO that were constructed, modified, or reconstructed after August 31, 1983, but before April 22, 2008, the Permittee shall comply with the following emissions requirements for each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, silo, enclosed truck or railcar loading station or any other affected facilities as defined in 40 CFR 60.670 and 60.671:[40 CFR 60.672 (a) thru (f)]

The Permittee shall not discharge or cause the discharge into the atmosphere, from each affected facility/source subject to 40 CFR 60 Subpart OOO, any

a. fugitive emissions (including those escaping capture systems) greater than 10 percent opacity except for any crusher that does not use a capture system, which shall not exhibit fugitive emissions greater than 15 percent opacity.

b. stack emissions from capture systems feeding a dry control device which:

i. contains particulate matter in excess of 0.05 g/dscm (0.022 grains/dscf) except for individually enclosed storage bins.

ii. exhibit greater than 7 percent opacity.

For any transfer point on a conveyor belt or any other affected facility enclosed in a building, each enclosed affected facility shall comply with the emission limits in paragraphs a. and b. of this condition, or the building shall comply with the following emission limits:

c. Fugitive emissions from the building openings (except vents with mechanically induced air flow for exhausting PM emissions from the building) shall not exceed 7 percent opacity.

d. PM emissions from any aforementioned vent shall not:

i. contains particulate matter in excess of 0.05 g/dscm (0.022 grains/dscf).

ii. exhibit greater than 7 percent opacity.

Note:

- Truck dumping nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this condition
- Any baghouse that controls emissions from only an individually enclosed storage bin is exempt from the stack PM concentration limit (and associated performance testing) in paragraph b.i but shall meet the stack opacity limit in paragraph b.ii.
- The emission limit in paragraph b.ii with associated opacity testing requirements do not apply for affected facilities using wet scrubbers).

3.3.2 The Permittee shall comply with the provisions of 40 CFR, Part 60, Subpart UUU, *"Standards of Performance for Calciners and Dryers in Mineral Industries,"* for all subject equipment {for reference, see listing in Section/Subpart 3.1 above}. In particular, sources subject to Subpart UUU, the Permittee shall comply with the following conditions for each calciner/kilns and dryer/pelletizer:
[40 CFR 60.732(a) & (b)]

The Permittee shall not discharge or cause the discharge into the atmosphere, from each of the processing equipment subject to 40 CFR, Part 60, Subpart UUU, any gases which:

a. Contain particulate matter in excess of 0.04 grains/dscf (0.092 grams/dscm) for calciners/kilns and dryers installed in series.

b. Contain particulate matter in excess of 0.025 grains/dscf (0.057 grams/dscm) for dryers.

c. Exhibit greater than 10 percent opacity.

3.3.3 Emissions from each of the listed process units shall not exceed the following pertinent BACT limits:
[40 CFR 52.21 - PSD/BACT]

3.3.3-1: BACT Emission Limits for Process Units

Operation	Emission	Emission Limit	Compliance Method	Averaging Time
Each kiln	PM/PM_{10}	0.010 gr/dscf, not to exceed 3.09 lbs./hr.	Method 5 for PM; Method 201A/202 with Method 5/202 as alternative for PM_{10} if necessary	3 hours
Each spray pelletizer	PM/PM_{10}	0.020 gr/dscf, not to exceed 4.54 lbs./hr.	Method 5 for PM; Method 201A/202 with Method 5/202 as alternative for PM_{10} if necessary	3 hours
Each spray pelletizer and kiln	Visible	10% opacity	Method 9	6-minute average
All emission units with baghouse control excluding spray pelletizers and kilns	PM/PM_{10}	0.010 gr/dscf	Method 5 for PM; Method 201A/202 with Method 5/202 as alternative for PM_{10} if necessary	3 hours
	Visible	7% opacity	Method 9	6-minute average
All fugitive sources	Fugitive	10% opacity	Method 22 and/or Method 9	Per Method 22 or Method 9
Each kiln	SO_2	34.25 lb./hr.	Method 6 or 6C; Daily Analyzing of Kaolin Clay Sulfur Content	3 hours; daily average
	NO_x	121 lbs./hr.	Method 7 or 7E	3 hours
	CO	24.7 lbs./hr.	Method 10	3 hours
Each spray pelletizer	NO_x	8.3 lbs./hr.	Method 7 or 7E	3 hours
	CO	16.6 lbs./hr.	Method 10	3 hours
9.8 MMBtu/hr. natural gas fired boiler No. 1, 2, 3 and 4	NO_x	12 ppmv@ 3% O_2 at dry standard conditions	Manufacturer's written guarantee	N/A

a. The following applicable State rules or emission limits are subsumed by the applicable and more stringent BACT or NSPS emission limits:

- Georgia Air Quality Rule 391-3-1-.02(2)(b): "Visible Emissions"
- Georgia Air Quality Rule 391-3-1-.02(2)(p): "Particulate Emission from Kaolin and Fuller's Earth Processes"
- Georgia Rule 391-3-1-.02(2)(g): "Sulfur Dioxide"

- Georgia Air Quality Rule 391-3-1-.02(2)(n)2: "Fugitive Dust"

b. The Permittee may assume that 100% of the PM emissions from the baghouses as determined by Method 5 are PM_{10}.

3.3.4 Each of the stationary emergency diesel generators/engines Nos. 1, 2, 3 and 4 (Emissions Unit ID Nos. EDG1, EDG2, EDG3 and EDG4) shall be operated and maintained according to the manufacturer's written specifications/instructions or procedures developed by the Permittee that are approved by the engine manufacturer, over the entire life of the engines.
[40 CFR 52.21 – PSD /BACT, 40 CFR 60.4206 & 60.4211(a)]

3.3.5 Each of the stationary emergency diesel generators/engines Nos. 1, 2, 3 and 4 (Emissions Unit ID Nos. EDG1, EDG2, EDG3 and EDG4) shall be certified for emission standards from new nonroad compression ignition engines specified in 40 CFR part 1039 and 40 CFR parts 1065 and 1068 for the applicable model year and engine rated power.
[40 CFR 52.21 PSD/BACT, 40 CFR 60.4205 subsumed, 60.4211(b)(1) and 60.4211(c)]

3.3.6 The Permittee shall operate the stationary emergency diesel generators/engines Nos. 2, 3 and 4 (Emissions Unit ID Nos. EDG2, EDG3 and EDG4) using diesel fuel that has a maximum sulfur content of 15 parts per million (ppm) (0.0015% by weight) and either a minimum cetane index of 40 or maximum aromatic content of 35 volume percent.
[40 CFR 60.4207(b)]

3.3.7 The Permittee shall comply with all applicable provisions of the National Emission Standard for Hazardous Air Pollutants (NESHAP) as found in 40 CFR Part 63, Subpart B, *"Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections 112(g)."*
[40 CFR 63, Subpart B]

3.3.8 Emissions of hazardous air pollutants (HAPs) shall not exceed the following 112(g) case-by-case MACT emission standards:
[40 CFR 63.40 through 63.44/112(g) case-by-case MACT]

Table 3.3.8-1: 112(g) Case-By-Case MACT Emission Limit

Affected Source	HAP	Emission Limit	Averaging Time	Compliance Method
Spray Pelletizer Nos. 1 & 2	Methanol	0.12 lbs./ton of kiln feed, not to exceed 10.04 tons per 12-rolling months	Monthly 12-month rolling	Mass balance based on kiln feed and methanol-containing additive input records and MSDS
Spray Pelletizer Nos. 3 & 4		0.12 lbs./ton of kiln feed, not to exceed 10.04 tons per 12-rolling months		
Spray Pelletizer Nos. 5 & 6		0.12 lbs./ton of kiln feed, not to exceed 10.04 tons per 12-rolling months		
Spray Pelletizer Nos. 7 & 8		0.12 lbs./ton of kiln feed, not to exceed 10.04 tons per 12-rolling months		

Affected Source	HAP	Emission Limit	Averaging Time	Compliance Method
Each Kiln	HCl	0.099 lbs./ton of kiln feed	3 hours	Method 26 or 26A of 40 CFR Part 60, Appendix A or Method 320 of 40 CFR Part 63, Appendix A
		8.70 tons per year	12-month rolling	Calculation based on annual testing results & production records
	HF	0.433 lbs./ton of kiln feed	3 hours	Method 26 or 26A of 40 CFR Part 60, Appendix A or Method 320 of 40 CFR Part 63, Appendix A
		37.92 tons per year	12-month rolling	Calculation based on annual testing results & production records

3.3.9 The Permittee shall comply with the provisions of 40 CFR, Part 60, Subpart OOO, *"Standards of Performance for Nonmetallic Mineral Processing Plants"* as amended on April 28, 2009, for all subject equipment {for reference, see listing in Section/Subpart 3.1}. In particular, for sources subject to Subpart OOO that were constructed, modified, or reconstructed on or after April 22, 2008, the Permittee shall comply with the following for each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, silo, enclosed truck or railcar loading station or any other affected facilities as defined in 40 CFR 60.670 and 60.671:
[40 CFR 60.672 (a) thru (f)]

The Permittee shall not discharge or cause the discharge into the atmosphere, from each affected facility/source subject to 40 CFR 60 Subpart OOO, any

a. fugitive emissions (including those escaping capture systems) exhibiting greater than 7 percent opacity except for any crusher that does not use a capture system, which shall not exhibit fugitive emissions greater than 12 percent opacity.

b. stack emissions from capture systems feed a dry control device which contains particulate matter in excess of 0.032 g/dscm (0.014 grains/dscf) except for individually enclosed storage bins.

For any transfer point on a conveyor belt or any other affected facility enclosed in a building, each enclosed affected facility shall comply with the emission limits in paragraphs a. and b. of this condition, **or** the building shall comply with the following emission limits:

c. Fugitive emissions from the building openings (except vents with mechanically induced air flow for exhausting PM emissions from the building) shall not exceed 7 percent opacity.

d. PM emissions from any building vent with mechanically induced air flow for exhausting PM emissions shall not contain particulate matter in excess of 0.032 g/dscm (0.014 grains/dscf).

Note:

- Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this condition; and

- Any dry control device that controls emissions from an individually enclosed storage bin is exempt from the stack PM concentration limit (and associated performance testing) in paragraph (b) but shall not exhibit greater than 7 percent stack opacity.

3.3.10 The accumulated maintenance checks and readiness testing time for each of the stationary emergency diesel generators/engines shall not exceed 100 hours per year. The Permittee may petition the Division for approval of additional hours for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of the new emergency stationary diesel engine/generator beyond 100 hours per year. Any operation other than emergency power generation, and maintenance check and readiness testing are prohibited.
[40 CFR Part 52.21 and 40 CFR 60.4211(f)]

3.3.11 Each of the stationary emergency diesel generators/engines Nos. 2, 3 and 4 (Emissions Unit ID Nos. EDG2, EDG3 and EDG4) and any associated control devices if applicable, shall be installed and configured according to the manufacturer's written instructions.
[40 CFR 60.4211(c)]

3.3.12 The Permittee shall operate each of the stationary emergency diesel generators/engines Nos. 1, 2, 3 and 4 (Emissions Unit ID Nos. EDG1, EDG2, EDG3 and EDG4) only in an emergency situation such as to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility is interrupted, or to pump water in the case of fire or flood, etc. It may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine.
[40 CFR 60.4211(f) and/or 40 CFR 63.6590(b)(i)]

3.3.13 The Permittee shall comply with all applicable provisions of the National Emissions Standards for Hazardous Air Pollutants (NESHAPS) as found in 40 CFR Part 63, Subpart DDDDD – *"National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters."* In particular, the Permittee shall comply with the following work practice standards at all

times during the operation of the natural gas fired boilers Nos. BLR1, BLR2, BLR3 and BLR4:
[40 CFR 63.7490(d), 63.7495(b), 63.7499(l), 63.7500(a)(1) & 63.7505(a)]

a. Conduct biennial tune-ups on each of the boiler Nos. BLR1, BLR2, BLR3 and/or BLR4 for any of the boilers not equipped with a continuous oxygen trim system in accordance with Condition 5.2.11
[40 CFR 63.7500(a)(1), 63.7500(e) & Table 3 to 40 CFR Part 63, Subpart DDDDD]

b. Conduct tune-ups on each of the boiler Nos. BLR1, BLR2, BLR3 and/or BLR4 for any of the boilers equipped with a continuous oxygen trim system that maintains an optimum air to fuel ratio every five (5) years in accordance with Condition 5.2.11
[40 CFR 63.7500(a)(1)]

c. Conduct an initial performance tune-up on each of the boiler Nos. BLR1 and BLR2 in accordance with Condition 5.2.13 within 180 days after the boiler(s) resumes its normal operation.
[40 CFR 63.7500(a)(1)]

d. Conduct a one-time energy assessment on each of the boiler Nos. BLR1 and BLR2 and its energy use systems in accordance with Condition 5.2.12 within 180 days after the boiler(s) resumes its normal operation.
[40 CFR 63.7510(e)]

3.3.14 At all times the Permittee shall operate and maintain Boiler Nos. BLR1, BLR2, BLR3 and BLR4, including associated air pollution control equipment and monitoring equipment if applicable, in a manner consistent with safety and good air pollution control practices for minimizing emissions.
[40 CFR 63.7500(a)(3)]

3.3.15 The Permittee shall comply with any applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR 63 Subpart A, *"General Provisions"* for the operation of all emission sources subject to NESHAP standards.
[40 CFR Part 63]

3.4 Equipment SIP Rule Standards

3.4.1 The Permittee shall comply with the provisions of Georgia Air Quality Control Rule 391-3-1-.02(2)(p), "Particulate Emissions from Kaolin and Fullers Earth Processes". The Permittee shall not discharge, or cause the discharge from any source, particulate matter emissions in total quantities equal to or exceeding the allowable rates specified in the equations below, unless otherwise specified in this Permit.
[391-3-1-.02(2)(p)]

$E = 3.59P^{0.62}$, for equipment with process input weight rate up to and including 30 tons per hour;

$E = 17.31P^{0.16}$, for equipment with process input weight rate above 30 tons per hour.

Where: E = The allowable emission rate is in pounds per hour.
P = The process input weight rate is in tons per hour.

3.4.2 The Permittee shall not discharge or cause the discharge into the atmosphere from all process equipment any gases which exhibit visible emissions, the opacity of which is equal to or greater than 40 percent unless otherwise specified.
[391-3-1-.02(2)(b)1]

3.4.3 The Permittee shall not discharge or cause the discharge into the atmosphere from Boiler Nos. BLR1, BLR2, BLR3 or BLR4 any gases which exhibit 20% opacity or greater, except for one six-minute period per hour of not more than 27% opacity.
[391-3-1-.02(2)(d)]

3.4.4 The Permittee shall not cause, let, suffer, permit or allow the emission of fly ash and/or other particulate matter from Boiler Nos. BLR1, BLR2, BLR3 or BLR4 in amounts equal to or exceeding the allowable rate calculated as follows:

a. P = 0.5 pounds per million BTU heat input; for equipment with a rated capacity of less than 10 million BTU heat input per hour
[391-3-1-.02(2)(d)2(i)]

b. $P = 0.5(10/R)^{0.5}$; for equipment with a rated capacity equal to or greater than 10 million BTU heat input per hour, or equal to or less than 250 million BTU heat input per hour
[391-3-1-.02(2)(d)2(ii)]

c. P = 0.10 pounds per million BTU heat input; for equipment with a rated capacity greater than 250 million BTU heat input per hour
[391-3-1-.02(2)(d)2(iii)]

Where:

P = allowable weight of emissions of fly ash and/or other particulate matter in pounds per million BTU heat input
R = heat input of fuel-burning equipment in million BTU per hour

3.4.5 The Permittee shall not burn fuel containing
[391-3-1-.02(2)(g)]

a. more than 2.5% sulfur, by weight, in any fuel burning sources rated below 100 million BTUs of heat input per hour;

b. more than 3% sulfur, by weight, in any fuel burning sources rated at or above 100 million BTUs of heat input hour.

3.5 Equipment Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

3.5.1 The Permittee shall operate all particulate matter controlling baghouses at all times that associated equipment is being operated.
[391-3-1-.03(2)(c)]

3.5.2 The Permittee shall maintain an adequate inventory of replacement filter bags for all other baghouses.
[391-3-1-.03(2)(c)]

PART 4.0 REQUIREMENTS FOR TESTING

4.1 General Testing Requirements

4.1.1 The Permittee shall cause to be conducted a performance test at any specified emission unit when so directed by the Environmental Protection Division ("Division"). The test results shall be submitted to the Division within 60 days of the completion of the testing. Any tests shall be performed and conducted using methods and procedures that have been previously specified or approved by the Division.
[391-3-1-.02(6)(b)1(i)]

4.1.2 The Permittee shall provide the Division thirty (30) days (or sixty (60) days for tests required by 40 CFR Part 63) prior written notice of the date of any performance test(s) to afford the Division the opportunity to witness and/or audit the test and shall provide with the notification a test plan in accordance with Division guidelines.
[391-3-1-.02(3)(a) and 40 CFR 63.7(b)(1)]

4.1.3 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants. The methods for the determination of compliance with emission limits listed under Sections 3.2, 3.3, 3.4 and 3.5 are as follows:

a. Method 1 for the determination of sample point locations;

b. Method 2 for the determination of flow rate;

c. Method 3 or 3A for the determination of stack gas molecular weight;

d. Method 4 for the determination of stack gas moisture;

e. Methods 201A and 202 shall be used for determination of total particulate matter, PM_{10}, and $PM_{2.5}$. As an alternative, Methods 5 and 202 may be used.

f. Method 6 or 6C for the determination of the concentration of Sulfur Dioxide;

g. Method 7 or 7E for the determination of the concentration of Nitrogen Oxides;

h. Method 9 and the procedures contained in Section 1.3 of the above reference document for the determination of opacity;

i. Method 10 for the determination of the concentration of Carbon Monoxide;

j. Method 22 for the visual determination of fugitive emissions;

k. Method 201A/202 with Method 5/202 as alternative for determination of PM_{10} emissions if necessary;

l. Method 19, when applicable, to convert, if necessary, PM, CO, SO_2 and NO_x concentrations (e.g., gr./dscf for PM, ppm for gaseous pollutants), as determined using other methods specified in this section, to emission rates (e.g., lb/MMBtu);

m. Method 26 or 26A of 40 CFR part 60, Appendix A or Method 320 of 40 CFR Part 63, Appendix A for the determination of HCl and HF emissions;

n. Method 5I of 40 CFR Part 60, Appendix A for determination of Particulate Matter concentration for sources operating less than 1 hour as allowed by NSPS 40 CFR 60 Subpart OOO;

o. Method 8, 8A or Condition Test Method 013 as published by US EPA for the determination of sulfuric acid and sulfur dioxide emissions from stationary sources;

p. Methods referenced in the applicable NSPS (found in 40 CFR 60) or NESHAP (found in 40 CFR 63) shall be used for determination of emissions specified in applicable requirements of such standards.

Minor changes in methodology may be specified or approved by the Director or his designee when necessitated by process variables, changes in facility design, or improvement or corrections that, in his opinion, render those methods or procedures, or portions thereof, more reliable.
[391-3-1-.02(3)(a)]

4.1.4 The Permittee shall submit performance test results to the US EPA's Central Data Exchange (CDX) using the Compliance and Emissions Data Reporting Interface (CEDRI) in accordance with any applicable NSPS or NESHAP standards (40 CFR 60 or 40 CFR 63) that contain Electronic Data Reporting Requirements. This Condition is only applicable if required by an applicable standard and for the pollutant(s) subject to said standard.
[391-3-1-.02(8)(a) and 391-3-1-.02(9)(a)]

4.2 Specific Testing Requirements

4.2.1 In accordance with the provisions of 40 CFR 60.8, for any equipment constructed or modified at the facility, the Permittee shall conduct a performance test within 60 days after achieving the maximum production rate at which the equipment will be operated, but no later than 180 days after initial startup, unless the equipment is specifically exempt from testing in the applicable subpart of 40 CFR Part 60. The tests shall be conducted using the test methods and procedures specified in Condition 4.1.3. The specific pollutants, sample volumes, run times, and other testing parameters shall be as specified in the applicable subpart of 40 CFR Part 60.
[40 CFR 60.8]

4.2.2 The Permittee shall conduct a performance test(s) at any specified emission unit(s) listed the following table below when so directed by the Environmental Protection Division ("Division"). The Permittee shall conduct the performance test(s) following the requirements specified in the following table and using applicable test methods and/or procedures specified in Subsection 4.1. The tests shall be conducted under the conditions

that exist when the affected source(s) is operating at the representative performance conditions.
[391-3-1-.02(3) and 391-3-1-.03(2)(c)]

Table 4.2.2-1: Performance Test Requirements

Emission Unit	Emission Unit ID	Emissions
Kiln Nos. 1, 2, 3 and/or 4	KLN1, KLN2, KLN3 and/or KLN4	Visible Emissions, CO, NO_x, PM/PM_{10}, SO_2, HCl, HF
Spray Pelletizer Nos. 1, 2, 3, 4, 5, 6, 7 and/or 8	SD01, SD02, SD03, SD04, SD05, SD06, SD07 and/or SD08	Visible Emissions, CO, NO_x, PM/PM_{10}
Stack emission sources excluding spray pelletizers, kilns and silos with dedicated bin vents.	(refer to Table 3.1)	Visible Emissions, PM/PM_{10}
Silos with dedicated bin vents.	(refer to Table 3.1)	Visible Emissions
Fugitive emission sources	(refer to Table 3.1)	Visible Emissions

a. Suitable methods shall be used to determine the kiln feed rate for each run.

b. The visible emissions from each spray pelletizer and kiln during the performance tests for PM/PM_{10} shall be determined using Method 9 following the requirements of 40 CFR 60.11(e) or of relevant state rules.

c. The duration of the Method 9 test shall be 3 hours (thirty 6-minute averages), except that the duration of the test for sources subject to 40 CFR Part 60, Subpart OOO as amended on April 28, 2009:

   i. shall be 1 hour (ten 6-minute averages) for stack visible emissions from any baghouse that controls PM emissions only from an individual enclosed storage bin per 40 CFR 60.675(c)(2)(i).

   ii. may be reduced to the duration the affected facilities operate (but no less than 30 minutes) for baghouses controlling storage bins or enclosed truck or railcar loading stations that operate for less than 1 hour at a time per 40 CFR 60.675(c)(2)(ii).

   iii. shall be 30 minutes (five 6-minute averages) for fugitive PM emissions from any affected facilities subject to the opacity limit(s) of 40 CFR Part 60, Subpart OOO as amended on April 28, 2009.

d. PM_{10} testing is not required if all the PM emissions as determined using Method 5 are assumed as PM_{10}.

e. For the purpose of this condition, kiln operating day means a 24-hour period between 12:00 midnight and the following midnight during which the kiln is operated.

f. Emissions control technologies, procedures and measurements utilized by any source(s) during the performance testing shall be recorded in detail and included with the pertinent test report(s).

g. If a listed source has been tested previously and the testing result(s) has been accepted by the Division, this source is exempt from the testing requirement(s) in this condition for the same pollutants.

4.2.3 The Permittee shall conduct a performance test(s) at any specified emission unit(s) subject to NSPS Subpart UUU when so directed by the Division. The Permittee shall determine compliance with the NSPS Subpart UUU PM and visible emission limits in Condition 3.3.2 under 40 CFR 60.732 as follows:
[40 CFR 60.736]

a. Method 5 or Method 17 shall be used to determine the PM concentration. The sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm (60 dscf).

b. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity from stack emissions.

4.2.4 The Permittee shall conduct a performance test(s) at any specified emission unit(s) subject to NSPS Subpart OOO when so directed by the Division. The Permittee shall determine compliance with the applicable visible emission limits under NSPS Subpart OOO as follows:
[40 CFR 60.675(a), (b), (c), (d) and (e)]

a. Determining compliance with the NSPS Subpart OOO visible emission standards in Condition 3.3.9 using Method 9 and the procedures 40 CFR 60.11, with the following additions:

i. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

ii. 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, Section 2.1) shall be followed.

iii. When a water mist caused by wet dust suppression/water spray is present, the observation of fugitive emissions is to be made at a point in the plume where the mist is no longer visible.

iv. In determining compliance with the opacity limit for stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under 40 CFR 60.672(f) using Method 9, the duration of the Method 9 observations shall be 1 hour (ten 6-minute averages).

v. The duration of the Method 9 observations may be reduced to the duration the affected facility operates (but not less than 30 minutes) for baghouses that control storage bins or enclosed truck or railcar loading stations that operate for less than 1 hour at a time.

vi. The duration of the Method 9 observations must be 30 minutes (five 6-minute averages) for fugitive PM emissions from any affected facilities subject to the opacity limit(s) of 40 CFR Part 60, Subpart OOO as amended on April 28, 2009.

b. To demonstrate compliance with the fugitive emission limits for buildings specified in Condition 3.3.9, the Permittee shall complete the testing specified below. Performance tests must be conducted while all affected facilities inside the building are operating.

i. If the building encloses any affected facility constructed, modified, or reconstructed on or after April 22, 2008, the Permittee shall conduct an initial Method 9 according to this condition and 40 CFR 60.11.

ii. If the building encloses only affected facilities constructed, modified, or reconstructed before April 22, 2008, and the Permittee has previously conducted an initial Method 22 test showing zero visible emissions, then the Permittee has demonstrated compliance with the opacity limit in Condition 3.3.9. If the Permittee has not conducted an initial performance test for the building before April 22, 2008, then the Permittee shall conduct an initial Method 9 test according to this condition and 40 CFR 60.11 to show compliance with the opacity limit in Condition 3.3.9.

c. Subsequent testing shall be performed as required by Table 3 to 40 CFR 60 Subpart OOO as applicable.

4.2.5 When determining compliance with the fugitive emissions standard for any affected facility described under Conditions 3.3.1 and 3.3.9, the duration of the Method 9 observations shall be 30 minutes (five 6-minute average). Compliance with the applicable fugitive emission limits shall be based on the average of the five 6-minute averages.
[40 CFR 60.675(c)(3)]

4.2.6 The Permittee may use the following as alternatives to the reference methods and procedures specified in Conditions 4.2.4:
[40 CFR 60.675(e)]

a. If the fugitive emissions from two or more facilities continuously interfere so that the opacity from an individual affected facility cannot be read, the Permittee may use either the following as alternatives to the reference methods and procedures specified in Condition 4.2.4:

i. Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.

ii. Separate the emissions so that the opacity of emissions from each affected facility can be read.

b. A single visible emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met:

i. No more than three emission points may be read concurrently.

ii. All three emission points shall be within a 70-degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

iii. If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer shall stop reading for the other two points and continue reading just that single point.

c. Method 5I may be used to determine the PM concentration as an alternative to method 5 or method 17 for affected facilities that operate for less than 1 hour at a time such as (but not limited to) storage bins or enclosed truck or railcar loading stations.

d. In case velocities of exhaust gases from building vents may be too low to measure accurately with the type S pitot tube specified in EPA Method 2 [i.e., velocity head <1.3 mm H_2O (0.05 in. H_2O)] and referred to in Method 5, the Permittee may determine the average gas flow rate produced by the power fans (e.g., from vendor-supplied fan curves) to the building vent. The Permittee may calculate the average gas velocity at the building vent measurement site using the following and use this average velocity in determining and maintaining isokinetic sampling rates.

$$V_e = Q_f/A_e$$

Where:
V_e = average building vent velocity (feet per minute);
Q_f = average fan flow rate (cubic feet per minute); and
A_e = area of building vent and measurement location (square feet).

4.2.7 For performance tests required in Condition 4.2.4 involving only Method 9 testing, the Permittee may reduce the 30-day advance notification of performance test to a 7-day advance notification.
[40 CFR 60.675(g)]

4.2.8 The visible emissions from each spray pelletizer and kiln during the Method 5 performance tests required by Condition 4.2.3 shall be determined using Method 9 following the requirements of 40 CFR 60.11(e) or applicable procedures and methods specified in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants.
[391-3-1-.02(3) and 391-3-1-.03(2)(c)]

4.2.9 The Permittee shall conduct periodic HCl and HF emission performance tests on each kiln to demonstrate that the kiln is in compliance with the case-by-case MACT emission limits in Condition 3.3.8. Such performance tests shall be conducted once every 36 months or the accumulated operational time since the last performance test on the relevant kiln exceeds 8,760 hours, whichever occurs first. The Permittee shall keep records of operating hours for each kiln.
[391-3-1-.02(3) and 391-3-1-.03(2)(c)]

4.2.10 The Permittee shall conduct periodic CO performance tests on each of the kiln Nos. 1, 2, 3, and 4 once every 36 months or the accumulated operational time since the last performance test on the relevant kiln exceeds 8,760 hours, whichever occurs first. The Permittee shall keep records of operating hours for each kiln.
[391-3-1-.02(3) and 391-3-1-.03(2)(c)]

4.2.11 Every three years the Permittee shall conduct PM/PM_{10} emission performance tests on each kiln and on one of the spray pelletizers on each kaolin clay processing line to demonstrate compliance with the BACT emission limits in Condition 3.3.3. The spray pelletizers shall be tested on a rotating schedule.
[391-3-1-.02(3) and 391-3-1-.03(2)(c)]

4.2.12 Every three years the Permittee shall conduct NO_x and CO emission performance tests on one of the spray pelletizers on each kaolin clay processing line to demonstrate compliance with the BACT emission limits in Condition 3.3.3. The spray pelletizers shall be tested on a rotating schedule.
[391-3-1-.02(3) and 391-3-1-.03(2)(c)]

4.2.13 The Permittee shall conduct periodic NO_x and SO_2 emission performance tests on each kiln to demonstrate compliance with the BACT emission limits in Condition 3.3.3. Such performance tests shall be conducted once every 36 months or the accumulated operational time since the last performance test on the relevant kiln exceeds 8,760 hours, whichever occurs first. The Permittee shall keep records of operating hours for each kiln.
[40 CFR 52.21, 391-3-1-.02(3) and 391-3-1-.03(2)(c)]

PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)

5.1 General Monitoring Requirements

5.1.1 Any continuous monitoring system required by the Division and installed by the Permittee shall be in continuous operation and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Monitoring system response, relating only to calibration checks and zero and span adjustments, shall be measured and recorded during such periods. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service.
[391-3-1-.02(6)(b)1]

5.2 Specific Monitoring Requirements

5.2.1 For each of the emission units listed in the table below, the Permittee shall have a certified visible emissions observer to measure and record three 6-minute averages of the opacity of visible emissions from the emission unit each day in accordance with Method 9 of Appendix A of 40 CFR Part 60, unless the unit(s) is not in operation on the day of the observation.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i) and 40 CFR 60.734(b)]

Emission Unit	Emission Unit ID	Emissions or Parameters	Method 9 Monitoring Location
Kiln No. 1	KLN1	Visible	Outlet of the Kiln No. 1 Baghouses (KBH1, KBH2, KBH3 and KBH4)/Stack S005
Kiln No. 2	KLN2	Visible	Outlet of the Kiln No. 2 Baghouses (KBH5, KBH6, KBH7 and KBH8)/Stack S013
Spray Pelletizer No. 1	SD01	Visible	Outlet of the Spray Pelletizer No. 1 Baghouses (SB01, SB02, SB03 and SB04)/Stack S002
Spray Pelletizer No. 2	SD02	Visible	Outlet of the Spray Pelletizer No. 2 Baghouses (SB05, SB06, SB07 and SB08)/Stack S003
Spray Pelletizer No. 3	SD03	Visible	Outlet of the Spray Pelletizer No. 3 Baghouses (SB09, SB10, SB11 and SB12)/Stack S010
Spray Pelletizer No. 4	SD04	Visible	Outlet of the Spray Pelletizer No. 4 Baghouses (SB13, SB14, SB15 and SB16)/Stack S011
Kiln No. 3	KLN3	Visible	Outlet of the Kiln No. 3 Baghouses (KBH9, KB10, KB11 and KB12)/Stack S020
Kiln No. 4	KLN4	Visible	Outlet of the Kiln No. 4 Baghouses (KB13, KB14, KB15 and KB16)/Stack S027
Spray Pelletizer No. 5	SD05	Visible	Outlet of the Spray Pelletizer No. 5 Baghouses (SB17, SB18, SB19 and SB20)/Stack S017
Spray Pelletizer No. 6	SD06	Visible	Outlet of the Spray Pelletizer No. 6 Baghouses (SB21, SB22, SB23 and SB24)/Stack S018
Spray Pelletizer No. 7	SD07	Visible	Outlet of the Spray Pelletizer No. 7 Baghouses (SB25, SB26, SB27 and SB28)/Stack S024
Spray Pelletizer No. 8	SD08	Visible	Outlet of the Spray Pelletizer No. 8 Baghouses (SB29, SB30, SB31 and SB32)/Stack S025

These emissions units/sources shall be maintained such that the average opacity for any 6-minute period does not exceed the visible emission limit in Condition 3.3.2 or 3.3.3. If the average opacity for any 6-minute period exceeds any of the opacity limits in these conditions, this shall constitute a violation of the visible emission standard.

5.2.2 The Permittee shall install a device to continuously monitor the temperature at the inlet of baghouses that receive gases at a temperature higher than ambient air and record the time and date of each incident when the temperature exceeds the filter bag design temperature. The Permittee shall record the filter bag design temperature or the equivalent filter bag design temperature for each baghouse listed. Such records and any supporting calculations shall be made available for inspection.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

5.2.3 The Permittee shall perform a check of visible emissions from all baghouses (including process baghouses) controlling emissions from sources listed in Subpart 3.1 of this permit, and from sources added or replaced in accordance with this permit and Rule 391-3-1-.03. Emission units monitored using COMS are exempt from this condition. Baghouses controlling emissions from silos with dedicated bin vents, wet screening operations, bucket elevators, screw conveyors, bagging operations, and pneumatic conveyors are exempt from this condition. The Permittee shall retain a record in a daily visible emissions (VE) log suitable for inspection or submittal. The check shall be conducted at least once for each day or portion of each day of operation using procedures a through d below except when atmospheric conditions or sun positioning prevents any opportunity to perform the daily VE check. Any operational day when atmospheric conditions or sun position prevents a daily reading shall be reported as monitor downtime in the report required by Condition 6.1.4. The Permittee shall schedule a daily VE check only when an emission unit is in operation.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

a. Determine, in accordance with the procedures specified in paragraph d. of this condition, if visible emissions are present at the discharge point to the atmosphere from each of the sources and record the results in the daily VE log. For sources that exhibit visible emissions, the Permittee shall comply with paragraph b. or c. of this condition.

b. For each source determined to be emitting visible emissions, the Permittee shall determine whether the emissions equal or exceed the opacity action level using the procedure specified in paragraph d. of this condition, except that the person performing the determination shall have received additional training acceptable to the Division to recognize the appropriate opacity level and the determination shall cover a period of 3 minutes. The opacity action level is 5 percent. The results shall be recorded in the daily VE log. For sources that exhibit visible emissions of greater than or equal to the opacity action level, the Permittee shall comply with paragraph c. of this condition.

c. For each source that requires action in accordance with paragraphs a. or b. of this condition, the Permittee shall determine the cause of the visible emissions and correct the problem in the most expedient manner possible. The Permittee shall note the cause of the visible emissions, the pressure drop, any other pertinent operating parameters, and the corrective action taken in the maintenance log.

d. The person performing the determination shall stand at a distance of at least 15 feet, which is sufficient to provide a clear view of the plume against a contrasting background with the sun in the 140° sector at his/her back. Consistent with this requirement, determination shall be made from a position such that the line of vision is approximately perpendicular to the plume direction. Only one plume shall be in the line of sight at any time when multiple stacks are in proximity to each other.

e. When a quarterly 30-minute visible emissions inspection required by Condition 5.2.8 has been conducted on any affected baghouse during the day, no daily VE check on the same baghouse is necessary for that day.

5.2.4 The Permittee shall develop and implement a Preventive Maintenance Program for the baghouses specified in Condition 5.2.3 to assure that the provisions of Condition 8.17.1 are met. The program shall be subject to review and modification by the Division and shall include the pressure drop ranges that indicate proper operation for each baghouse. At a minimum, the following operation and maintenance checks shall be made on at least a weekly basis, and a record of the findings and corrective actions taken shall be kept in a maintenance log:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

a. Record the pressure drop across each baghouse and ensure that it is within the appropriate range.

b. For baghouses equipped with compressed air cleaning systems, check the system for proper operation. This may include checking for low pressure, leaks, proper lubrication, and proper operation of timer and valves.

c. For baghouses equipped with reverse air cleaning systems, check the system for proper operation. This may include checking damper, bypass, and isolation valves for proper operation.

d. For baghouses equipped with shaker cleaning systems, check the system for proper operation. This may include checking shaker mechanism for loose or worn bearings, drive components, mountings, proper operation of outlet/isolation valves, and proper lubrication.

e. Check dust collector hoppers and conveying systems for proper operation.

5.2.5 Once each day or portion of each day of operation, the Permittee shall inspect all stack emission points from the emission units listed in Subpart 3.1 for which no air pollution control device (APCD) is utilized and all emission points from emission units added or replaced in accordance with the provisions of Condition 7.2.1 for which no APCD is

utilized. Boilers, wet processes, stationary engines, and emission units monitored in accordance with Condition 5.2.3 or 5.2.1 are exempt from this condition. The inspection shall be conducted by performing a walkthrough of the facility and noting the occurrence of the following in a daily VE log:

a. Any visible emissions.

b. Any mechanical failure or malfunction that results in increased air emissions.

For each emission point noted with visible emissions, mechanical problems or malfunctions, the Permittee shall take corrective action in the most expedient manner possible and re-inspect the unit within 24 hours to verify that no visible emissions exist. Failure to eliminate the visible emissions or to correct the mechanical failure or malfunction specified in paragraph a. and paragraph b. within 24 hours shall constitute an excursion.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

5.2.6 When controlling fugitive dust via weekly cleaning, the use of a vacuum street sweeper(s) or a truck washing station(s) as specified in Condition 3.2.4, the Permittee shall keep operation records of the control equipment involved. Description of inspection, maintenance, malfunction and corrections taken shall be included with the records.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

5.2.7 Each of the stationary emergency diesel generators/engines Nos. 1, 2, 3 and 4 (Emissions Unit ID Nos. EDG1, EDG2, EDG3 and EDG4) shall be equipped with a non-resettable hour meter to track the number of hours operated during any type of operation and during each calendar month. The Permittee shall record the time of operation and the reason the engine/generator was in operation during that time.
[40 CFR 60.4209(c), 60.4214(b) and 40 CFR 52.21]

5.2.8 The Permittee shall conduct quarterly 30-minute visible emissions inspections using EPA Method 22 for any affected facility that is subject to 40 CFR Part 60, Subpart OOO, constructed, modified, or reconstructed on or after April 22, 2008, and uses a baghouse to control emissions. The Method 22 test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed. If any visible emissions are observed, the Permittee shall initiate corrective action within 24 hours to return the baghouse to normal operation. The Permittee shall record each Method 22 test, including the date and any corrective actions taken, in the logbook required under 40 CFR 60.676(b).
The Permittee may establish a different baghouse-specific success level for the visible emissions test (other than no visible emissions) by conducting a PM performance test according to Condition 4.2.4 per 40 CFR 60.675(b) simultaneously with a Method 22 to determine what constitutes normal visible emissions from that affected facility's baghouse when it is in compliance with the applicable PM concentration limit in Condition 3.3.9 per Table 2 of 40 CFR Part 60, Subpart OOO as amended on April 28, 2009. Once established, the revised visible emissions success level shall be incorporated into the permit for the affected facility.

As an alternative to the quarterly Method 22 inspections, the Permittee may use a bag leak detection system that is installed, operated, and maintained according to 40 CFR 60.674(d). [40 CFR 60.674(c) and (d)]

5.2.9 The Permittee shall monitor emissions of nitrogen oxides from the exhaust gases from each kiln stack for each week or portion of week of operation of each kiln using the following procedures:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

a. The Permittee shall conduct measurements of NO_x and oxygen (O_2) concentration in the exhaust gas of each existing kiln. The measurement periods shall consist of one (1) test run thirty minutes in duration.

b. Measurements of NO_x and O_2 shall be conducted using the procedures of the American Society for Testing and Materials Standard (ASTM) Test Method for Determination of NO_x, Carbon Monoxide(CO), and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, ASTM D 6522; or procedures of Gas Research Institute Method GRI-96/0008, EPA/EMC Conditional Test Method (CTM-30) Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers and Process Heaters Using Portable Analyzers, or Procedures of EPA Reference Methods 7E and 3A.

c. NO_x emissions rate (pounds per hour) for all emissions units shall be determined using the following equation:

where:

$$E = K \times C_d \times Q_{std}$$

E = Mass emissions of nitrogen oxides (lb/hr);

K = Conversion factor for NO_x = 1.194 x 10^{-7} ([lb/scf]/ppm)

C_d = Concentration of NO_x (ppm by volume, dry basis)

Q_{std} = Standard hourly flow rate from kiln exhaust as measured by Method 2, dscfh

(Note: In lieu of a standard hourly flow rate from the kiln exhaust measured by Method 2, data from a continuous flow monitor, installed as per Condition 5.2.10 of this permit, taken concurrently with the NO_x measurements can be used).

d. The Permittee shall conduct a measurement each calendar week or portion of calendar week for each kiln. Weekly measurements shall continue until three (3) consecutive weekly measurements are each less than 90 lbs/hr. Following three (3) consecutive weekly measurements that are each less than 90 lbs/hr, the measurements may be performed at a frequency of one per calendar quarter (quarters ending March 31, June 30, September 30, and December 31).

e. Following any quarterly measurement that is greater than 90 lbs/hr, the Permittee shall conduct a new measurement within one-unit operating day. Following this measurement, subsequent measurements shall be conducted weekly and quarterly measurements may be resumed as prescribed by Condition 5.2.9.d.

f. A record of NO_x monitoring shall be kept in a form suitable for inspection or submittal for a period of five (5) years. The record shall at a minimum contain the cause and corrective action for all excursions and, for each test run, the mass emission rate and concentration of NO_x, the concentration of oxygen, measured stack gas flow rate.

g. A unit operating day shall be defined as any day that the unit is operated for more than 30 minutes between 12:00 midnight and the following midnight.

h. Any measured NO_x emissions exceeding 121 lbs./hr. shall be reported to the Division in writing with(in) 15 working days of measurement. The report shall include kiln exhaust flow rate and kiln feed rate during the NO_x measurement.

5.2.10 In lieu of the exhaust flow rate measured by Method 2 for each kiln as per Condition 5.2.9, the Permittee may install, calibrate, maintain, and operate according to all applicable performance specifications a flow monitor to continuously measure the exhaust from each kiln.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

5.2.11 To demonstrate continuous compliance with the applicable work practice standards in Table 3 to 40 CFR Part 63, Subpart DDDDD, the Permittee shall conduct tune-ups every two (2) or five years (5), as applicable, on each of the natural gas-fired boiler Nos. BLR1, BLR2, BLR3 and BLR4, and keep records of the tune-ups. The Permittee shall conduct the tune-ups while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provide the majority of the heat input to the boiler over the 12 months prior to the tune-up. Each biennial tune-up or 5-year tune-up shall be conducted no more than 25 months or 61 months, respectively, after the previous tune-up and in accordance with the following procedure:
[40 CFR 63.7515(d), 63.7540(a)(10), (11), (12) & (13)]

a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The burner inspection may be delayed until the next scheduled unit shutdown. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The inspection may be delayed until the next scheduled boiler shutdown;

d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the boiler is subject;

e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer;

f. Maintain on-site and submit, if requested by the Division, a report containing the following information:

i. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler;

ii. A description of any corrective actions taken as a part of the tune-up of the boiler; and

iii. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the boiler was physically and legally capable of using more than one type of fuel during that period. Boilers sharing a fuel meter may estimate the fuel use by each unit.

g. For any of the boilers equipped with a continuous oxygen trim system that maintains an optimum air-to-fuel ratio, the Permittee shall conduct a tune-up of the boiler every 5 years as specified in paragraphs a. through f. of this condition to demonstrate continuous compliance. The burner inspection may be delayed until the next scheduled or unscheduled boiler shutdown, but the inspection of each burner must be conducted at least once every 72 months.

h. If the boiler is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 days of startup.

5.2.12 To demonstrate compliance with the applicable work practice standards in Table 3 to 40 CFR Part 63, Subpart DDDDD, the Permittee shall have a qualified energy assessor(s) as defined in 40 CFR 63.11237 to complete a one-time energy assessment of each of the boiler Nos. BLR1 and BLR2 within 180 days after the boiler(s) resumes its normal operation as stated in Condition 3.3.13. Each energy assessment shall include the following items with the extent of the evaluation for items **a.** to **e.** appropriate for the on-site technical hours listed in 40 CFR 63.7575. A signed certification that the energy assessment has been completed according to Table 3 to 40 CFR Part 63, Subpart DDDDD and that it is an

accurate depiction of the facility shall be submitted with the Notice of Compliance Status report as required by Condition 6.2.19.
[40 CFR 63.7530(e) & Table 3 to 40 CFR Part 63, Subpart DDDDD]

a. A visual inspection of each boiler system;

b. An evaluation of operating characteristics of the affected boiler systems, specifications of energy-using systems, operating and maintenance procedures, and unusual operating constraints;

c. An inventory of major energy use systems consuming energy from the affected boilers which are under control of the Permittee;

d. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage;

e. A review of the facility's energy management practices and recommendations for improvements consistent with the definition of energy management practices, if identified;

f. A list of cost-effective energy conservation measures that are within the facility's control;

g. A list of the energy savings potential of the energy conservation measures identified; and

h. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in Table 3 to 40 CFR Part 63, Subpart DDDDD satisfies the energy assessment requirement. A facility that operates under an energy management program compatible with ISO 50001 that includes the affected boilers also satisfies the energy assessment requirement.

5.2.13 To demonstrate initial compliance with the applicable work practice standards in Table 3 to 40 CFR Part 63, Subpart DDDDD, the Permittee shall conduct an initial performance tune-up on each of the boiler Nos. BLR1 and BLR2 according to the applicable procedures and/or requirements specified Condition 5.2.11 within 180 days after the boiler(s) resumes its normal operation. The Permittee shall submit a signed statement that indicates the initial tune-up has been conducted with the Notice of Compliance Status report as required by Condition 6.2.18.
[40 CFR 63.7510(e)]

5.2.14 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated parameters on the following equipment. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

a. The exhaust air stream temperature (°F) at the inlet of the baghouse serving each kiln (3-hour block average);

b. Sorbent injection rate (lb./hr.) into the exhaust duct of each kiln (3-hour block average); and

c. Process weight input rate/kiln feed input rate (ton/hr.) to each kiln (3-hour block average).

PART 6.0 RECORD KEEPING AND REPORTING REQUIREMENTS

6.1 General Record Keeping and Reporting Requirements

6.1.1 Unless otherwise specified, all records required to be maintained by this Permit shall be recorded in a permanent form suitable for inspection and submission to the Division and to EPA. The records shall be retained for at least five (5) years following the date of entry. [391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)]

6.1.2 In addition to any other reporting requirements of this Permit, the Permittee shall report to the Division in writing, within seven (7) days, any deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning, or emissions control equipment for a period of four hours or more which results in excessive emissions.

The Permittee shall submit a written report that shall contain the probable cause of the deviation(s), duration of the deviation(s), and any corrective actions or preventive measures taken.
[391-3-1-.02(6)(b)1(iv), 391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(iii)(B)]

6.1.3 The Permittee shall submit written reports of any failure to meet an applicable emission limitation or standard contained in this permit and/or any failure to comply with or complete a work practice standard or requirement contained in this permit which are not otherwise reported in accordance with Conditions 6.1.4 or 6.1.2. Such failures shall be determined through observation, data from any monitoring protocol, or by any other monitoring which is required by this permit. The reports shall cover each semiannual period ending June 30 and December 31 of each year, shall be postmarked by August 29 and February 28, respectively following each reporting period, and shall contain the probable cause of the failure(s), duration of the failure(s), and any corrective actions or preventive measures taken.
[391-3-1-.03(10)(d)1.(i) and 40 CFR 70.6(a)(3)(iii)(B)]

6.1.4 The Permittee shall submit a written report containing any excess emissions, exceedances, and/or excursions as described in this permit and any monitor malfunctions for each semiannual period ending June 30 and December 31 of each year. All reports shall be postmarked by August 29 and February 28, respectively following each reporting period. In the event that there have not been any excess emissions, exceedances, excursions or malfunctions during a reporting period, the report should state so. Otherwise, the contents of each report shall be as specified by the Division's Procedures for Testing and Monitoring Sources of Air Pollutants and shall contain the following:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(iii)(A)]

a. A summary report of excess emissions, exceedances and excursions, and monitor downtime, in accordance with Section 1.5(c) and (d) of the above referenced document, including any failure to follow required work practice procedures.

b. Total process operating time during each reporting period.

c. The magnitude of all excess emissions, exceedances and excursions computed in accordance with the applicable definitions as determined by the Director, and any conversion factors used, and the date and time of the commencement and completion of each time period of occurrence.

d. Specific identification of each period of such excess emissions, exceedances, and excursions that occur during startups, shutdowns, or malfunctions of the affected facility. Include the nature and cause of any malfunction (if known), the corrective action taken, or preventive measures adopted.

e. The date and time identifying each period during which any required monitoring system or device was inoperative (including periods of malfunction) except for zero and span checks, and the nature of the repairs, adjustments, or replacement. When the monitoring system or device has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

f. Certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

6.1.5 Where applicable, the Permittee shall keep the following records:
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(ii)(A)]

a. The date, place, and time of sampling or measurement;

b. The date(s) analyses were performed;

c. The company or entity that performed the analysis;

d. The analytical techniques or methods used;

e. The results of such analyses; and

f. The operating conditions exist at the time of sampling or measurement.

6.1.6 The Permittee shall maintain files of all required measurements, including continuous monitoring systems, monitoring devices, and performance testing measurements; all continuous monitoring system or monitoring device calibration checks; and adjustments and maintenance performed on these systems or devices. These files shall be kept in a permanent form suitable for inspection and shall be maintained for a period of at least five (5) years following the date of such measurements, reports, maintenance and records.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6 (a)(3)(ii)(B)]

6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(iii)]

a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)

None required to be reported in accordance with Condition 6.1.4.

b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)

i. Each exceedance of the SO_2 emission standard/limit in Condition 3.3.3 for kilns as determined via Condition 6.2.15.

ii. Each exceedance of visible emission standard/limit of 10% opacity in Condition 3.3.3 for kilns and spray pelletizers, as indicated by the Method 9 observation required by Condition 5.2.1.

iii. Firing any of the boilers, spray pelletizers and kilns with fuel(s) other than natural gas and propane.

iv. Any 12-month rolling total of VOC emissions from Process Line Nos. 1 and 2 combined or from Process Line Nos. 3 and 4 combined that equals or exceeds the 40 tons limit in Condition 3.2.2.

v. Any 12-month rolling total of methanol emissions from any of the Process Line No. 1, 2, 3 or 4 that exceeds the 10.04 tons limit in Condition 3.3.8.

vi. Any monthly average of methanol emissions from any of the Process Line No. 1, 2, 3 or 4 that exceeds the 0.12 lbs./ton of kiln feed limit in Condition 3.3.8.

vii. Any 12-month rolling total of HCl emissions from any of the Kiln Nos. 1, 2, 3 or 4 that exceeds the 8.70 tons limit in Condition 3.3.8.

viii. Any 12-month rolling total of HF emissions from any of the Kiln Nos. 1, 2, 3 or 4 that exceeds the 37.92 tons limit in Condition 3.3.8.

ix. Any instance of firing any of the stationary emergency diesel generators/engines subject to Condition 3.3.6 with diesel fuel that contains more than 0.0015% sulfur by weight; contains either more than 35% by volume of aromatic content **or** has a cetane index of less than 40.

x. Any instance of operating any of the stationary emergency diesel generators/engines for more than 500 hours during any period of 12 rolling/consecutive months as limited by Condition 3.2.5.

xi. Any 12-month rolling total of H_2SO_4 emissions that exceed the 7-ton limit in Condition 2.1.1 as determined via Condition 6.2.15.

c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)

i Any 3-hour rolling average temperature at the inlet of any baghouse specified in Condition 5.2.2 that exceeds the filter bag design temperature or the equivalent filter bag design temperature, as recorded in accordance with Condition 5.2.2.

ii. For the sources specified in Condition 5.2.3, any two consecutive required daily determinations of visible emissions from the same source for which visible emissions are equal to or exceed the opacity action level.

iii Any visible emissions or mechanical failure or malfunction discovered by the walk through described in Condition 5.2.5 that are not eliminated or corrected within 24 hours of first discovering the visible emissions or mechanical failure or malfunction.

iv. Each event that the quarterly 30-minute visible emissions inspection required by Condition 5.2.8 was not conducted.

v. Any three-hour (block) period of kiln operation/production during which the average temperature at the inlet of any kiln baghouse dropped below 275°F.

vi. Any three-hour (block) period of kiln operation/production during which the average sorbent injection rate to any kiln was more than 10% by weight below the corresponding current sorbent injection rate for the kiln as determined in Condition 6.2.22.

d. In addition to the excess emissions, exceedances and excursions specified above, the following should also be included with the report required in Condition 6.1.4:

i. The results of all NO_x monitoring conducted per Condition 5.2.9 during the quarterly reporting period

6.2 Specific Record Keeping and Reporting Requirements

6.2.1 The Permittee shall comply with the general provisions of 40 CFR, Part 60, *"Standards of Performance for New Stationary Sources (NSPS)*." In particular, for sources subject to NSPS, the Permittee shall comply with the reporting and record keeping requirements of 40 CFR, Part 60, Subpart A (unless otherwise directed in another applicable Subpart) and furnish the Division written notification as follows:
[40 CFR 60.7(a)(1) thru (4) & 60.676(g) & (h)]

a. A notification of the date construction or reconstruction of NSPS equipment is commenced postmarked no later than 30 days after such date.

b. A notification of the actual date of initial startup of NSPS equipment postmarked within 15 days after such date.

c. A notification of any physical or operational change to existing NSPS equipment which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted in the applicable Subpart of 40 CFR, Part 60. 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 equipment before and after the change, and the expected completion date of the change. The Division may request additional relevant information subsequent to this notice.

6.2.2 The Permittee shall comply with the detailed reporting and recordkeeping provisions of 40 CFR, Part 60, Subpart OOO, *"Standards of Performance for Nonmetallic Mineral Processing Plants"* when replacing existing equipment with a new piece of equipment of equal or smaller size that has the same function. The new equipment used to replace the existing equipment is deferred from having to comply with the NSPS emission limits and testing requirements until all of the existing equipment in a production line has been replaced. The Permittee shall submit the following information about the existing equipment being replaced and the replacement piece of equipment:
[40 CFR 60.670(d)]

a. For a crusher, bagging operation, or enclosed truck or railcar loading station:

i. the rated capacity in tons per hour of the existing equipment being replaced and

ii. the rated capacity in tons per hour of replacement equipment.

b. For a screening operation:

i. the total surface area of the top screen of the existing screening operation being replaced and

ii. the total surface area of the top screen of the replacement screening operation.

c. For a conveyor belt:

i. the width of the existing belt being replaced and

ii. the width of the replacement conveyor belt.

d. For a storage bin:

i. the rated capacity in tons of the existing storage bin being replaced and

ii. the rated capacity in tons of replacement storage bin.

e. For all equipment being replaced in accordance with this condition, the Permittee shall provide a certification that the equipment being replaced is existing equipment with a statement of the original construction date for each piece of equipment being replaced. The Permittee shall provide a certification that there is at least one piece of existing equipment in the relevant production line that has not been replaced along with a statement of the oldest piece of existing equipment remaining in that process line.

f. When the last piece of existing equipment in the process line is replaced, the Permittee shall submit a test plan identifying all of the existing equipment within that process line, which has been replaced within 30 days after the final replacement.

For this condition, "existing equipment" is any crusher, grinding mill, screening operation, bucket elevator, belt conveyor bagging operation, storage bin, enclosed truck or railcar loading station constructed on or before August 31, 1983, which has not been modified as described in §60.14 or reconstructed as described in §60.673 and §60.15.

6.2.3 The Permittee shall maintain a record of all actions taken in accordance with Conditions 3.2.4 and/or Section 8.22.1 to control fugitive dust from roads, storage piles, or any other source of fugitive dust. Such a record shall include, but not to be limited to, the following information if applicable:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

a. Inspection and maintenance activities taken;

b. Daily operating log of each of the dust/fugitive control systems;

c. The sources (e.g. sections of the roads) that were controlled;

d. Ambient conditions (dry, wet, precipitation, temperature, etc.).

6.2.4 To demonstrate compliance with the limitations specified in this permit, the Permittee shall maintain the following records on site:
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

a. Daily and monthly kiln feed input rates for each of the kilns.

b. Monthly usage rate of additive(s)/chemical(s) containing methanol and/or VOC compounds used for each of the Process Line Nos. 1, 2, 3, and 4. Such records shall also include MSDS, Product Data Certification Sheet or other manufacturer/supplier certified records indicating the methanol and/or VOC content(s) of the additive(s) or chemical(s) used.

c. Daily and monthly operating hours of each process line.

Unless otherwise specified, all records required above shall be recorded in a permanent form suitable for inspection and submission to the Division and to the EPA. The records shall be retained for at least five (5) years following the date of entry.

6.2.5 The Permittee shall utilize the appropriate records in Condition 6.2.4 and mass balance to calculate the methanol emission rates for each of the Process Line Nos. 1, 2, 3, and 4 during each calendar month. For the purpose of this condition, 100% of the methanol contained in the chemicals added to the raw materials slurry is assumed to be emitted into the atmosphere from the spray pelletizers. The Permittee shall notify the Division in writing if any monthly average methanol emission rate exceeds 0.12 lbs./ton of kiln feed or any monthly total methanol emissions exceed the notification level of 0.84 tons, i.e. 1/12 of the annual emission limit in Condition 3.3.8. This notification shall be postmarked by the 15th day of the following month and shall include an explanation of how the Permittee intends to attain or maintain compliance with the emission limit.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)]

6.2.6 The Permittee shall use the monthly methanol emission data in Condition 6.2.5 to calculate the 12-month rolling total of methanol emissions from each of the Process Line Nos. 1, 2, 3, and 4. The Permittee shall notify the Division in writing if any 12-month rolling total exceeds the annual methanol emission limit of 10.04 tons in Condition 3.3.8. This notification shall be postmarked by the 15th day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with the annual emission limit involved.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)]

6.2.7 The Permittee shall utilize the appropriate records in Condition 6.2.4 and mass balance to calculate the monthly total of VOC emissions from Process Line Nos. 1 and 2 combined and from Process Line Nos. 3 and 4 combined during each calendar month. For this condition, 100% of the VOC compounds contained in the additive(s) or chemical(s) added to the raw materials slurry are assumed to be emitted into the atmosphere from the spray pelletizers. The emission calculation shall sum up the VOC emissions from the use of all VOC-containing chemicals and from the fuel combustion. All the emission calculations, including any Division-approved emission factors used, shall be kept as part of the records required in Condition 6.2.4. The Permittee shall notify the Division in writing if any monthly total exceeds the notification level of 3.33 tons, i.e. 1/12 of the annual emission limit of 40 tons in Condition 3.2.2. This notification shall be postmarked by the 15th day of the following month and shall include an explanation of how the Permittee intends to maintain compliance with the emission limit specified in Condition 3.2.2.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)]

6.2.8 The Permittee shall use the monthly VOC emission data in Condition 6.2.7 to calculate total VOC emissions from Process Line Nos. 1 and 2 combined and from Process Line Nos. 3 and 4 combined for each period of 12 consecutive months. The Permittee shall notify the Division in writing if any 12-month rolling total exceeds any of the annual VOC emission limit(s) in Condition 3.2.2. This notification shall be postmarked by the 15th day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with the annual emission limit.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)]

6.2.9 The Permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the applicable NSPS Subpart OOO standards in Condition 3.3.1 or 3.3.9 per 40 CFR 60.672, including reports of opacity observations made using Method 9 or Method 22 to demonstrate compliance with Condition 3.3.1.
[40 CFR 60.676(f)]

6.2.10 [Reserved]

6.2.11 The Permittee shall maintain monthly operating records of each of the stationary emergency diesel generators/engines Nos. 1, 2, 3 and 4 (Emissions Unit ID Nos. EDG1, EDG2, EDG3 and EDG4) subject to Conditions 3.3.10 and/or 3.2.5, including operating hours and reasons of the operation, e.g., emergency power generation and/or fire distinguishing, readiness testing and/or maintenance check. These records shall be kept available for inspection or submittal for 5 years from the date of record.
[40 CFR 60.4211(e), 40 CFR 52.21 – PSD/BACT and 391-3-1-.03(6)(b)(11)(v)(1)]

6.2.12 The Permittee shall use monthly operating time records required by Condition 6.2.11 to calculate the 12-month rolling total of the operating and/or maintenance check and readiness testing time for each generator/engine specified in Condition 6.2.11 for each calendar month. All the calculations shall be kept as part of the records required in Condition 6.2.11. The Permittee shall notify the Division in writing if any of the 12-month rolling total of maintenance check and readiness testing time or operating time exceeds 100 or 500 hours. This notification shall be postmarked by the 15th day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with Condition 3.3.10 or 3.2.5.
[40 CFR 60.4211(e), 40 CFR 52.21 – PSD/BACT and 391-3-1-.03(6)(b)(11)(v)(1)]

6.2.13 The Permittee shall comply with all the applicable requirements of the General Provisions of 40 CFR Part 60 as listed in Table 8 to 40 CFR Part 60, Subpart IIII.
[40 CFR 60.4218]

6.2.14 The Permittee shall maintain a record of the operating hours and the daily input rate of kiln feed to each of the kilns (Emission Unit ID Nos. KLN1, KLN2, KLN3, and KLN4). The Permittee shall obtain a representative sample daily from each kaolin clay slurry tank or each kiln's feed stream feeding any kiln and analyze the sample for the sulfur in percent by weight. The Permittee shall also obtain a respective sample daily from each kiln's output product stream and analyze the sample for the sulfur in percent by weight, unless the sulfur content in such product(s) is assumed zero percent by weight in the emission calculations required in Condition 6.2.15. The daily samples shall be acquired and analyzed for sulfur content by methods acceptable to the Division. The sulfur content results shall be used to determine SO_2 emissions as required by Condition 6.2.15.
[391-3-I-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

6.2.15 The Permittee shall use the equations below to estimate the hourly SO_2 emissions and daily H_2SO_4 emissions from each kiln:

$$E_{SO2,i} = \frac{(2)(M_{KF,i})(C_{S,i} - C_{SP,i})(2000)(1 - CE_{SO2,i})}{(100)(T_i)}$$ Equation 6.2.15-1

$$E_{H2SO4,i} = (1.28)(E_{SO2,i})(C_{SO3/SO2})(T_i)$$ Equation 6.2.15-2

where:

$E_{SO2, i}$ = Daily averaged SO_2 emission rate from the i^{th} kiln (assuming 100% of sulfur were converted to SO_2), lbs./hr.;

2 = Mass conversion constant from sulfur to SO_2;

$M_{kf, i}$ = Quantity of the kaolin clay slurry or kiln feed processed by the i^{th} kiln during the calendar day, ton/day;

$C_{S,\,i}$ = Sulfur content of the kaolin slurry or kiln feed processed by the i^{th} kiln during the calendar day, percent by weight;

$C_{SP,\,i}$ = Sulfur content of the kiln product processed by the i^{th} kiln during the calendar day (in lieu of the results from product sulfur content analysis, it can be assumed as zero); percent by weight;

2000 = Conversion constant from ton to pound;

$CE_{SO2,i}$ = SO_2 control efficiency, mass ratio: 0.8 (assuming 80% by weight) or that as determined during the most recent Division-approved performance test for operating any DSI system(s) in accordance with Condition 6.2.22, and zero for not using the DSI system(s);

100 = Conversion constant from mass percentage to mass ratio;

T_i = Total operating time of the i^{th} kiln during the calendar day, hour;

$E_{H2SO4,i}$ = Daily total H_2SO_4 emissions from the i^{th} kiln, lbs./day;

1.28 = Conversion factor from SO_2 to H_2SO_4;

$C_{SO3/SO2}$ = SO_3 to SO_2 mass ratio in the flue gas discharged into the atmosphere (assuming 0.05 unless otherwise determined by the most recent Division-approved performance test);

The Permittee shall use the results of these calculations to further determine the daily total, monthly total and 12-month rolling total of H_2SO_4 emissions from all the kilns combined for each calendar day and calendar month.

The Permittee shall notify the Division in writing if any of the daily average hourly SO_2 emissions exceed 34.25 pounds for any calendar day or if any combined H_2SO_4 emissions from all the kilns for any calendar month exceed 0.58 tons. The notification shall be submitted within 15 working days of the calculations and shall include a plan(s) of how the Permittee intends to attain future compliance with the SO_2 emission limit as specified in Condition 3.3.3 or with the H_2SO_4 emission limit in Condition 2.1.1.
[40 CFR 52.21-PSD/BACT, 391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)]

6.2.16 The Permittee shall utilize the monthly kiln feed input rate records (ton per month) in Condition **Error! Reference source not found.** and the HCl and HF emission factors (pounds of HCl or HF emitted per ton of kiln feed) established during the most recent Division-approved performance tests to calculate the monthly HCl and HF emission rates for each of the Kiln Nos. 1, 2, 3, and 4 during each calendar month. The Permittee shall notify the Division in writing if any monthly HCl or HF emission rate exceeds the notification level of one- twelfth (1/12) of the annual HCl or HF emission limit in Condition 3.3.8. This notification shall be postmarked by the 15^{th} day of the following month and shall include an explanation of how the Permittee intends to attain or maintain compliance with the emission limit.

[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)]

6.2.17 The Permittee shall use the monthly HCl and HF emission data in Condition 6.2.16 to calculate total HCl and HF emissions from each of the Kiln Nos. 1, 2, 3 and 4 during each period of 12 consecutive months. The Permittee shall notify the Division in writing if any 12-month rolling total of the HCl or HF emissions exceed the 8.70 tons or 37.92 tons limit in Condition 3.3.8. This notification shall be postmarked by the 15th day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with the annual HCl or HF emission limit.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)]

6.2.18 The Permittee shall submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii) before the closing of business on the 60th day following the completion of all applicable performance test and/or other initial compliance demonstrations for the boiler Nos. BLR1, BLR2, BLR3 and BLR4 according to 40 CFR 63.10(d)(2). The Notification of Compliance Status report shall include the following information and certification(s) of compliance, as applicable, and signed by a responsible official:
[40 CFR 63.7530(d), 63.7530(e), 63.7530(f) & 63.7545(e)]

a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with this subpart, description of the fuel(s) burned, and justification for the selection of fuel(s) burned during the compliance demonstration.
[63.7545(e)(1)]

b. A description of the deviation, the duration of the deviation, and the corrective action taken if there was a deviation from any emission limit, work practice standard, or operating limit, as applicable.
[63.7545(e)(7)]

c. The following certification(s) of compliance, as applicable, and signed by an official responsible:
[63.7545(e)(8)]

i. "This facility complies with the required initial tune-up according to the procedures in §63.7540(a)(10)(i) through (vi)."

ii. "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)."

6.2.19 The Permittee shall submit biennial or 5-year compliance reports, as applicable, for each of the natural gas-fired boiler Nos. BLR1, BLR2, BLR3 and BLR4 in accordance with the following requirements:
[40 CFR 63.7550(b)(1) through (4) & 63.7550(h)(3)]

a. The first compliance report for boiler Nos. BLR1 and BLR2 must cover the period as stated in 40 CFR 63.7550(b)(1), as applicable, if submitting biennial or 5-year compliance report.

[40 CFR 63.7550(b)(1) & Table 9 to 40 CFR Part 63, Subpart DDDDD]

b. The first compliance report for boiler Nos. BLR1 and BLR2 must be postmarked or submitted as stated in 40 CFR 63.7550(b)(1), as applicable.

c. Each subsequent biennial or 5-year compliance report must cover the applicable 2- or 5-year periods from January 1 to December 31.

d. Each subsequent compliance report must be postmarked or submitted no later than January 31 of the following year.

f. All reports must be submitted electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). If the reporting form specific to 40 CFR Part 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, the report must be submitted to U.S. EPA at the appropriate address listed in 40 CFR 63.13. At the discretion of U.S. EPA, these reports must also be submitted in the format specified by U.S. EPA.

6.2.20 The Compliance reports required in Condition 6.2.19 shall contain the following information:
[40 CFR 63.7550(c)(5), 63.7550(d) & Table 9 to 40 CFR Part 63, Subpart DDDDD]

a. Company and Facility name and address.

b. Process unit information, emissions limitations, and operating parameter limitations, as applicable.

c. Date of report and beginning and ending dates of the reporting period.

d. The total operating time during the reporting period.

e. The date of the most recent tune-up for each boiler. Include the date of the most recent burner inspection if it was not done biennially or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.

f. If there are no deviations from the applicable requirements for work practice standards in Table 3 to 40 CFR Part 63, Subpart DDDDD, a statement that there were no deviations from the work practice standards during the reporting period. For each deviation from the applicable work practice standards during the reporting period:

i A description of the deviation and which emission limit or operating limit from which the boiler deviated.

ii. Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

iii. If the deviation occurred during an annual performance test, provide the date the annual performance test was completed.

g. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

6.2.21 To comply with the reporting requirements of 40 CFR, Part 63, Subpart DDDDD, the Permittee shall maintain the following records for 5 years following the date of each occurrence, report, or record, as applicable, according to 40 CFR 63.10(b)(1) (minimum of 2 years on site and the remaining 3 years may be offsite). The records shall be kept on site, or be accessible from onsite (for example, through a computer network), in a form suitable and readily available for expeditious review upon request.
[40 CFR 63.7555(a)]

a. A copy of each notification and report submitted to comply with 40 CFR, Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or compliance report submitted, according to the requirements in 40 CFR63.10(b)(2)(xiv).

b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

6.2.22 When operating any of the relevant DSI systems, the Permittee shall use the following equation to determine daily the current sorbent injection rate for each kiln, and keep records of the calculation:

$$W_{sorbent,i} = 2000(W_{feed,i})(C_{s,i})(R_i)$$

where:

$W_{sorbent,\ i}$ = Current sorbent input rate for the i^{th} kiln (3-hour block average), pound/hour;

2000 = Conversion constant from ton to pound;

$W_{feed,\ i}$ = Current process weight input rate/kiln feed input rate to the i^{th} kiln (3-hour block average), ton per hour;

$C_{S,\ i}$ = Sulfur content of the kiln feed processed by the i^{th} kiln for the calendar day as determined by Condition 6.2.14, percent by weight; and

R_i = The mass/weight ratio between the sorbent input rate and the sulfur input rate for the i^{th} kiln, as established during the most recently Division-approved performance test.

The Permittee shall notify the Division in writing if any 3-hour block average sorbent input rate as recorded per Condition 5.2.14 is more than 10% by weight less than the corresponding current sorbent injection rate $W_{sorbent,\ i}$ as determined by this condition. This notification shall be submitted within 15 working days of the incident and shall include an explanation(s) of how the Permittee intends to attain future compliance with the sulfuric acid (H_2SO_4) emission limit in Condition 2.1.1.

The Permittee may also use alternative sorbents other than the current Division-approved one(s) in trial operations of relevant DSI systems. The duration of the trial operations shall not be any longer than that needed to conduct a feasibility study, to become familiar with the operating requirements and parameters of the alternative sorbents, or to conduct appropriate emission performance tests on the alternative sorbents. The Permittee shall notify the Division of such trial operations in writing 30 days in advance, and if applicable, submit results of the performance tests for Divisions' approval prior to the regular use of the alternative sorbents as the equivalents or substitutions to the current Division-approved sorbent(s).
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)]

PART 7.0 OTHER SPECIFIC REQUIREMENTS

7.1 Operational Flexibility

7.1.1 The Permittee may make Section 502(b)(10) changes as defined in 40 CFR 70.2 without requiring a Permit revision, if the changes are not modifications under any provisions of Title I of the Federal Act and the changes do not exceed the emissions allowable under the Permit (whether expressed therein as a rate of emissions or in terms of total emissions). For each such change, the Permittee shall provide the Division and the EPA with written notification as required below in advance of the proposed changes and shall obtain any Permits required under Rules 391-3-1-.03(1) and (2). The Permittee and the Division shall attach each such notice to their copy of this Permit.
[391-3-1-.03(10)(b)5 and 40 CFR 70.4(b)(12)(i)]

a. For each such change, the Permittee's written notification and application for a construction Permit shall be submitted well in advance of any critical date (typically at least 3 months in advance of any commencement of construction, Permit issuance date, etc.) involved in the change, but no less than seven (7) days in advance of such change and shall include a brief description of the change within the Permitted facility, the date on which the change is proposed to occur, any change in emissions, and any Permit term or condition that is no longer applicable as a result of the change.

b. The Permit shield described in Condition 8.16.1 shall not apply to any change made pursuant to this condition.

7.2 Off-Permit Changes

7.2.1 The Permittee may make changes that are not addressed or prohibited by this Permit, other than those described in Condition 7.2.2 below, without a Permit revision, provided the following requirements are met:
[391-3-1-.03(10)(b)6 and 40 CFR 70.4(b)(14)]

a. Each such change shall meet all applicable requirements and shall not violate any existing Permit term or condition.

b. The Permittee must provide contemporaneous written notice to the Division and to the EPA of each such change, except for changes that qualify as insignificant under Rule 391-3-1-.03(10)(g). Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the Permit shield in Condition 8.16.1.

d. The Permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the Permit, and the emissions resulting from those changes.

7.2.2 The Permittee shall not make, without a Permit revision, any changes that are not addressed or prohibited by this Permit, if such changes are subject to any requirements under Title IV of the Federal Act or are modifications under any provision of Title I of the Federal Act. [Rule 391-3-1-.03(10)(b)7 and 40 CFR 70.4(b)(15)]

7.3 Alternative Requirements
[White Paper #2]

Not Applicable

7.4 Insignificant Activities
(see Attachment B for the list of Insignificant Activities in existence at the facility at the time of permit issuance)

7.5 Temporary Sources
[391-3-1-.03(10)(d)5 and 40 CFR 70.6(e)]

None.

7.6 Short-term Activities

None

7.7 Compliance Schedule/Progress Reports
[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(4)]

None Applicable

7.8 Emissions Trading
[391-3-1-.03(10)(d)1(ii) and 40 CFR 70.6(a)(10)]

Not Applicable

7.9 Acid Rain Requirements

Not Applicable

7.10 Prevention of Accidental Releases (Section 112(r) of the 1990 CAAA)
[391-3-1-.02(10)]

7.10.1 When and if the requirements of 40 CFR Part 68 become applicable, the Permittee shall comply with all applicable requirements of 40 CFR Part 68, including the following.

a. The Permittee shall submit a Risk Management Plan (RMP) as provided in 40 CFR 68.150 through 68.185. The RMP shall include a registration that reflects all covered processes.

b. For processes eligible for Program 1, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1.a. and the following additional requirements:

i. Analyze the worst-case release scenario for the process(es), as provided in 40 CFR 68.25; document that the nearest public receptor is beyond the distance to a toxic or flammable endpoint defined in 40 CFR 68.22(a); and submit in the RMP the worst-case release scenario as provided in 40 CFR 68.165.
ii. Complete the five-year accident history for the process as provided in 40 CFR 68.42 and submit in the RMP as provided in 40 CFR 68.168
iii. Ensure that response actions have been coordinated with local emergency planning and response agencies
iv. Include a certification in the RMP as specified in 40 CFR 68.12(b)(4)

c. For processes subject to Program 2, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1.a., 7.10.1.b. and the following additional requirements:

i. Develop and implement a management system as provided in 40 CFR 68.15
ii. Conduct a hazard assessment as provided in 40 CFR 68.20 through 68.42
iii. Implement the Program 2 prevention steps provided in 40 CFR 68.48 through 68.60 or implement the Program 3 prevention steps provided in 40 CFR 68.65 through 68.87
iv. Develop and implement an emergency response program as provided in 40 CFR 68.90 through 68.95
v. Submit as part of the RMP the data on prevention program elements for Program 2 processes as provided in 40 CFR 68.170

d. For processes subject to Program 3, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1.a., 7.10.1.b. and the following additional requirements:

i. Develop and implement a management system as provided in 40 CFR 68.15
ii. Conduct a hazard assessment as provided in 40 CFR 68.20 through 68.42
iii. Implement the prevention requirements of 40 CFR 68.65 through 68.87
iv. Develop and implement an emergency response program as provided in 40 CFR 68.90 through 68.95
v. Submit as part of the RMP the data on prevention program elements for Program 3 as provided in 40 CFR 68.175

e. All reports and notification required by 40 CFR Part 68 must be submitted electronically using RMP*eSubmit (information for establishing an account can be found at www.epa.gov/rmp/rmpesubmit). Electronic Signature Agreements should be mailed to:

MAIL

Risk Management Program (RMP) Reporting Center
P.O. Box 10162
Fairfax, VA 22038

COURIER & FEDEX

Risk Management Program (RMP) Reporting Center
CGI Federal
12601 Fair Lakes Circle
Fairfax, VA 22033

Compliance with all requirements of this condition, including the registration and submission of the RMP, shall be included as part of the compliance certification submitted in accordance with Condition 8.14.1.

7.11 Stratospheric Ozone Protection Requirements (Title VI of the CAAA of 1990)

7.11.1 If the Permittee performs any of the activities described below or as otherwise defined in 40 CFR Part 82, the Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:

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

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

c. Persons performing maintenance, service, repair, or disposal of appliances must 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 must comply with record keeping requirements pursuant to 40 CFR 82.166.
[Note: "MVAC-like appliance" is defined in 40 CFR 82.152.]

e. Persons owning commercial or industrial process refrigeration equipment must 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 must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

7.11.2 If the Permittee performs a service on motor (fleet) vehicles and if this service involves an ozone-depleting substance (refrigerant) in the MVAC, the Permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include air-tight sealed refrigeration systems used for refrigerated cargo, or air conditioning systems on passenger buses using HCFC-22 refrigerant.

7.12 Revocation of Existing Permits and Amendments

The following Air Quality Permits, Amendments, and 502(b)10 are subsumed by this permit and are hereby revoked:

Air Quality Permit and Amendment Number(s)	Dates of Original Permit or Amendment Issuance
3295-319-0029-V-04-0	February 12, 2020

7.13 Pollution Prevention

Not Applicable

7.14 Specific Conditions

Not Applicable

PART 8.0 GENERAL PROVISIONS

8.1 Terms and References

8.1.1 Terms not otherwise defined in the Permit shall have the meaning assigned to such terms in the referenced regulation.

8.1.2 Where more than one condition in this Permit applies to an emission unit and/or the entire facility, each condition shall apply and the most stringent condition shall take precedence. [391-3-1-.02(2)(a)2]

8.2 EPA Authorities

8.2.1 Except as identified as "State-only enforceable" requirements in this Permit, all terms and conditions contained herein shall be enforceable by the EPA and citizens under the Clean Air Act, as amended, 42 U.S.C. 7401, et seq.
[40 CFR 70.6(b)(1)]

8.2.2 Nothing in this Permit shall alter or affect the authority of the EPA to obtain information pursuant to 42 U.S.C. 7414, "Inspections, Monitoring, and Entry."
[40 CFR 70.6(f)(3)(iv)]

8.2.3 Nothing in this Permit shall alter or affect the authority of the EPA to impose emergency orders pursuant to 42 U.S.C. 7603, "Emergency Powers."
[40 CFR 70.6(f)(3)(i)]

8.3 Duty to Comply

8.3.1 The Permittee shall comply with all conditions of this operating Permit. Any Permit noncompliance constitutes a violation of the Federal Clean Air Act and the Georgia Air Quality Act and/or State rules and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application. Any noncompliance with a Permit condition specifically designated as enforceable only by the State constitutes a violation of the Georgia Air Quality Act and/or State rules only and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(i)]

8.3.2 The Permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the Permitted activity in order to maintain compliance with the conditions of this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(ii)]

8.3.3 Nothing in this Permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of Permit issuance.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(f)(3)(ii)]

8.3.4 Issuance of this Permit does not relieve the Permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Director or any other federal, state, or local agency.
[391-3-1-.03(10)(e)1(iv) and 40 CFR 70.7(a)(6)]

8.4 Fee Assessment and Payment

8.4.1 The Permittee shall calculate and pay an annual Permit fee to the Division. The amount of fee shall be determined each year in accordance with the "Procedures for Calculating Air Permit Fees."
[391-3-1-.03(9)]

8.5 Permit Renewal and Expiration

8.5.1 This Permit shall remain in effect for five (5) years from the issuance date. The Permit shall become null and void after the expiration date unless a timely and complete renewal application has been submitted to the Division at least six (6) months, but no more than eighteen (18) months prior to the expiration date of the Permit.
[391-3-1-.03(10)(d)1(i), (e)2, and (e)3(ii) and 40 CFR 70.5(a)(1)(iii)]

8.5.2 Permits being renewed are subject to the same procedural requirements, including those for public participation and affected State and EPA review, that apply to initial Permit issuance.
[391-3-1-.03(10)(e)3(i)]

8.5.3 Notwithstanding the provisions in 8.5.1 above, if the Division has received a timely and complete application for renewal, deemed it administratively complete, and failed to reissue the Permit for reasons other than cause, authorization to operate shall continue beyond the expiration date to the point of Permit modification, reissuance, or revocation.
[391-3-1-.03(10)(e)3(iii)]

8.6 Transfer of Ownership or Operation

8.6.1 This Permit is not transferable by the Permittee. Future owners and operators shall obtain a new Permit from the Director. The new Permit may be processed as an administrative amendment if no other change in this Permit is necessary and provided that a written agreement containing a specific date for transfer of Permit responsibility coverage and liability between the current and new Permittee has been submitted to the Division at least thirty (30) days in advance of the transfer.
[391-3-1-.03(4)]

8.7 Property Rights

8.7.1 This Permit shall not convey property rights of any sort, or any exclusive privileges.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(iv)]

8.8 Submissions

8.8.1 Reports, test data, monitoring data, notifications, annual certifications, and requests for revision and renewal shall be submitted to:

Georgia Department of Natural Resources
Environmental Protection Division
Air Protection Branch
Atlanta Tradeport, Suite 120
4244 International Parkway
Atlanta, Georgia 30354-3908

8.8.2 Any records, compliance certifications, and monitoring data required by the provisions in this Permit to be submitted to the EPA shall be sent to:

Air and Radiation Division
Air Planning and Implementation Branch
U. S. EPA Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-3104

8.8.3 Any application form, report, or compliance certification submitted pursuant to this Permit shall contain a certification by a responsible official of its truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
[391-3-1-.03(10)(c)2, 40 CFR 70.5(d) and 40 CFR 70.6(c)(1)]

8.8.4 Unless otherwise specified, all submissions under this permit shall be submitted to the Division only.

8.9 Duty to Provide Information

8.9.1 The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the Permit application, shall promptly submit such supplementary facts or corrected information to the Division.
[391-3-1-.03(10)(c)5]

8.9.2 The Permittee shall furnish the Division, in writing, information that the Division may request 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 Division copies of records that the Permittee is required to keep by this Permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the EPA, if necessary, along with a claim of confidentiality.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(v)]

8.10 Modifications

8.10.1 Prior to any source commencing a modification as defined in 391-3-1-.01(pp) that may result in air pollution and not exempted by 391-3-1-.03(6), the Permittee shall submit a Permit application to the Division. The application shall be submitted sufficiently in advance of any critical date involved to allow adequate time for review, discussion, or revision of plans, if necessary. Such application shall include, but not be limited to, information describing the precise nature of the change, modifications to any emission control system, production capacity of the plant before and after the change, and the anticipated completion date of the change. The application shall be in the form of a Georgia air quality Permit application to construct or modify (otherwise known as a SIP application) and shall be submitted on forms supplied by the Division, unless otherwise notified by the Division.
[391-3-1-.03(1) through (8)]

8.11 Permit Revision, Revocation, Reopening and Termination

8.11.1 This Permit may be revised, revoked, reopened and reissued, or terminated for cause by the Director. The Permit will be reopened for cause and revised accordingly under the following circumstances:
[391-3-1-.03(10)(d)1(i)]

a. If additional applicable requirements become applicable to the source and the remaining Permit term is three (3) or more years. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be 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 under Condition 8.5.3;
[391-3-1-.03(10)(e)6(i)(I)]

b. If any additional applicable requirements of the Acid Rain Program become applicable to the source;
[391-3-1-.03(10)(e)6(i)(II)] (Acid Rain sources only)

c. The Director determines that the Permit contains a material mistake, or inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Permit; or
[391-3-1-.03(10)(e)6(i)(III) and 40 CFR 70.7(f)(1)(iii)]

d. The Director determines that the Permit must be revised or revoked to assure compliance with the applicable requirements.
[391-3-1-.03(10)(e)6(i)(IV) and 40 CFR 70.7(f)(1)(iv)]

8.11.2 Proceedings to reopen and reissue a Permit shall follow the same procedures as applicable to initial Permit issuance and shall affect only those parts of the Permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable.
[391-3-1-.03(10)(e)6(ii)]

8.11.3 Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Director at least thirty (30) days in advance of the date the Permit is to be reopened, except that the Director may provide a shorter time period in the case of an emergency.
[391-3-1-.03(10)(e)6(iii)]

8.11.4 All Permit conditions remain in effect until such time as the Director takes final action. The filing of a request by the Permittee for any Permit revision, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance, shall not stay any Permit condition.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(iii)]

8.11.5 A Permit revision shall not be required for changes that are explicitly authorized by the conditions of this Permit.

8.11.6 A Permit revision shall not be required for changes that are part of an approved economic incentive, marketable Permit, emission trading, or other similar program or process for change which is specifically provided for in this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(8)]

8.12 Severability

8.12.1 Any condition or portion of this Permit which is challenged, becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(5)]

8.13 Excess Emissions Due to an Emergency

8.13.1 An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(1)]

8.13.2 An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the Permittee demonstrates, through properly signed contemporaneous operating logs or other relevant evidence, that:
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(2) and (3)]

a. An emergency occurred and the Permittee can identify the cause(s) of the emergency;

b. The Permitted facility was at the time of the emergency being properly operated;

c. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in the Permit; and

d. The Permittee promptly notified the Division and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

8.13.3 In an enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency shall have the burden of proof.
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(4)]

8.13.4 The emergency conditions listed above are in addition to any emergency or upset provisions contained in any applicable requirement.
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(5)]

8.14 Compliance Requirements

8.14.1 Compliance Certification

The Permittee shall provide written certification to the Division and to the EPA, at least annually, of compliance with the conditions of this Permit. The annual written certification shall be postmarked no later than February 28 of each year and shall be submitted to the Division and to the EPA. The certification shall include, but not be limited to, the following elements:
[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(5)]

a. The identification of each term or condition of the Permit that is the basis of the certification;

b. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent, based on the method or means designated in paragraph c below. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred;

c. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period;

d. Any other information that must be included to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information; and

e. Any additional requirements specified by the Division.

8.14.2 Inspection and Entry

a. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow authorized representatives of the Division to perform the following:
[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(2)]

i. Enter upon the Permittee's premises where a Part 70 source is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this Permit;
ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this Permit; and
iv. Sample or monitor any substances or parameters at any location during operating hours for the purpose of assuring Permit compliance or compliance with applicable requirements as authorized by the Georgia Air Quality Act.

b. No person shall obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for Permit revocation and assessment of civil penalties. [391-3-1-.07 and 40 CFR 70.11(a)(3)(i)]

8.14.3 Schedule of Compliance

a. For applicable requirements with which the Permittee is in compliance, the Permittee shall continue to comply with those requirements.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(A)]

b. For applicable requirements that become effective during the Permit term, the Permittee shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(B)]

c. Any schedule of compliance for applicable requirements with which the source is not in compliance at the time of Permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(C)]

8.14.4 Excess Emissions

a. Excess emissions resulting from startup, shutdown, or malfunction of any source which occur though ordinary diligence is employed shall be allowed provided that:
[391-3-1-.02(2)(a)7(i)]

i. The best operational practices to minimize emissions are adhered to;

ii. All associated air pollution control equipment is operated in a manner consistent with good air pollution control practice for minimizing emissions; and

iii. The duration of excess emissions is minimized.

b. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction are prohibited and are violations of Chapter 391-3-1 of the Georgia Rules for Air Quality Control.
[391-3-1-.02(2)(a)7(ii)]

c. The provisions of this condition and Georgia Rule 391-3-1-.02(2)(a)7 shall apply only to those sources which are not subject to any requirement under Georgia Rule 391-3-1-.02(8) – New Source Performance Standards or any requirement of 40 CFR, Part 60, as amended concerning New Source Performance Standards.
[391-3-1-.02(2)(a)7(iii)]

8.15 Circumvention

State Only Enforceable Condition.

8.15.1 The Permittee shall not build, erect, install, or use any article, machine, equipment or process the use of which conceals an emission which would otherwise constitute a violation of an applicable emission standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of the pollutants in the gases discharged into the atmosphere.
[391-3-1-.03(2)(c)]

8.16 Permit Shield

8.16.1 Compliance with the terms of this Permit shall be deemed compliance with all applicable requirements as of the date of Permit issuance provided that all applicable requirements are included and specifically identified in the Permit.
[391-3-1-.03(10)(d)6]

8.16.2 Any Permit condition identified as “State only enforceable” does not have a Permit shield.

8.17 Operational Practices

8.17.1 At all times, including periods of startup, shutdown, and malfunction, the Permittee shall maintain and operate the source, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on any information available to the Division that may include, but is not limited to, monitoring results, observations of the opacity or other characteristics of emissions, review of operating and maintenance procedures or records, and inspection or surveillance of the source.
[391-3-1-.02(2)(a)10]

State Only Enforceable Condition.

8.17.2 No person owning, leasing, or controlling, the operation of any air contaminant sources shall willfully, negligently or through failure to provide necessary equipment or facilities or to take necessary precautions, cause, permit, or allow the emission from said air contamination source or sources, of such quantities of air contaminants as will cause, or tend to cause, by themselves, or in conjunction with other air contaminants, a condition of air pollution in quantities or characteristics or of a duration which is injurious or which unreasonably interferes with the enjoyment of life or use of property in such area of the State as is affected thereby. Complying with Georgia's Rules for Air Quality Control Chapter 391-3-1 and Conditions in this Permit, shall in no way exempt a person from this provision.
[391-3-1-.02(2)(a)1]

8.18 Visible Emissions

8.18.1 Except as may be provided in other provisions of this Permit, the Permittee shall not cause, let, suffer, permit or allow emissions from any air contaminant source the opacity of which is equal to or greater than forty (40) percent.
[391-3-1-.02(2)(b)1]

8.19 Fuel-burning Equipment

8.19.1 The Permittee shall not cause, let, suffer, permit, or allow the emission of fly ash and/or other particulate matter from any fuel-burning equipment with rated heat input capacity of less than 10 million Btu per hour, in operation or under construction on or before January 1, 1972 in amounts equal to or exceeding 0.7 pounds per million BTU heat input.
[391-3-1-.02(2)(d)]

8.19.2 The Permittee shall not cause, let, suffer, permit, or allow the emission of fly ash and/or other particulate matter from any fuel-burning equipment with rated heat input capacity of less than 10 million Btu per hour, constructed after January 1, 1972 in amounts equal to or exceeding 0.5 pounds per million BTU heat input.
[391-3-1-.02(2)(d)]

8.19.3 The Permittee shall not cause, let, suffer, permit, or allow the emission from any fuel-burning equipment constructed or extensively modified after January 1, 1972, visible emissions the opacity of which is equal to or greater than twenty (20) percent except for one six minute period per hour of not more than twenty-seven (27) percent opacity.
[391-3-1-.02(2)(d)]

8.20 Sulfur Dioxide

8.20.1 Except as may be specified in other provisions of this Permit, the Permittee shall not burn fuel containing more than 2.5 percent sulfur, by weight, in any fuel burning source that has a heat input capacity below 100 million Btu's per hour.
[391-3-1-.02(2)(g)]

8.21 Particulate Emissions

8.21.1 Except as may be specified in other provisions of this Permit, the Permittee shall not cause, let, permit, suffer, or allow the rate of emission from any source, particulate matter in total quantities equal to or exceeding the allowable rates shown below. Equipment in operation, or under construction contract, on or before July 2, 1968, shall be considered existing equipment. All other equipment put in operation or extensively altered after said date is to be considered new equipment.
[391-3-1-.02(2)(e)]

a. The following equations shall be used to calculate the allowable rates of emission from new equipment:

$E = 4.1P^{0.67}$; for process input weight rate up to and including 30 tons per hour.
$E = 55P^{0.11} - 40$; for process input weight rate above 30 tons per hour.

b. The following equation shall be used to calculate the allowable rates of emission from existing equipment:

$E = 4.1P^{0.67}$

In the above equations, E = emission rate in pounds per hour, and
P = process input weight rate in tons per hour.

8.22 Fugitive Dust

[391-3-1-.02(2)(n)]

8.22.1 Except as may be specified in other provisions of this Permit, the Permittee shall take all reasonable precautions to prevent dust from any operation, process, handling, transportation or storage facility from becoming airborne. Reasonable precautions that could be taken to prevent dust from becoming airborne include, but are not limited to, the following:

a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;

b. Application of asphalt, water, or suitable chemicals on dirt roads, materials, stockpiles, and other surfaces that can give rise to airborne dusts;

c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods can be employed during sandblasting or other similar operations;

d. Covering, at all times when in motion, open bodied trucks transporting materials likely to give rise to airborne dusts; and

e. The prompt removal of earth or other material from paved streets onto which earth or other material has been deposited.

8.22.2 The opacity from any fugitive dust source shall not equal or exceed 20 percent.

8.23 Solvent Metal Cleaning

8.23.1 Except as may be specified in other provisions of this Permit, the Permittee shall not cause, suffer, allow, or permit the operation of a cold cleaner degreaser subject to the requirements of Georgia Rule 391-3-1-.02(2)(ff) "Solvent Metal Cleaning" unless the following requirements for control of emissions of the volatile organic compounds are satisfied: [391-3-1-.02(2)(ff)1]

a. The degreaser shall be equipped with a cover to prevent escape of VOC during periods of non-use,

b. The degreaser shall be equipped with a device to drain cleaned parts before removal from the unit,

c. If the solvent volatility is 0.60 psi or greater measured at 100 ºF, or if the solvent is heated above 120 ºF, then one of the following control devices must be used:

i. The degreaser shall be equipped with a freeboard that gives a freeboard ratio of 0.7 or greater, or

ii. The degreaser shall be equipped with a water cover (solvent must be insoluble in and heavier than water), or

iii. The degreaser shall be equipped with a system of equivalent control, including but not limited to, a refrigerated chiller or carbon adsorption system.

d. Any solvent spray utilized by the degreaser must be in the form of a solid, fluid stream (not a fine, atomized or shower type spray) and at a pressure which will not cause excessive splashing, and

e. All waste solvent from the degreaser shall be stored in covered containers and shall not be disposed of by such a method as to allow excessive evaporation into the atmosphere.

8.24 Incinerators

8.24.1 Except as specified in the section dealing with conical burners, no person shall cause, let, suffer, permit, or allow the emissions of fly ash and/or other particulate matter from any incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) "Incinerators", in amounts equal to or exceeding the following:
[391-3-1-.02(2)(c)1-4]

a. Units with charging rates of 500 pounds per hour or less of combustible waste, including water, shall not emit fly ash and/or particulate matter in quantities exceeding 1.0 pound per hour.

b. Units with charging rates in excess of 500 pounds per hour of combustible waste, including water, shall not emit fly ash and/or particulate matter in excess of 0.20 pounds per 100 pounds of charge.

8.24.2 No person shall cause, let, suffer, permit, or allow from any incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) "Incinerators", visible emissions the opacity of which is equal to or greater than twenty (20) percent except for one six minute period per hour of not more than twenty-seven (27) percent opacity.

8.24.3 No person shall cause or allow particles to be emitted from an incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) "Incinerators" which are individually large enough to be visible to the unaided eye.

8.24.4 No person shall operate an existing incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) "Incinerators" unless:

a. It is a multiple chamber incinerator;

b. It is equipped with an auxiliary burner in the primary chamber for the purpose of creating a pre-ignition temperature of 800°F; and

c. It has a secondary burner to control smoke and/or odors and maintain a temperature of at least 1500°F in the secondary chamber.

8.25 Volatile Organic Liquid Handling and Storage

8.25.1 The Permittee shall ensure that each storage tank subject to the requirements of Georgia Rule 391-3-1-.02(2)(vv) "Volatile Organic Liquid Handling and Storage" is equipped with submerged fill pipes. For the purposes of this condition and the permit, a submerged fill pipe is defined as any fill pipe with a discharge opening which is within six inches of the tank bottom.
[391-3-1-.02(2)(vv)(1)]

8.26 Use of Any Credible Evidence or Information

8.26.1 Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit, for the purpose of submission of compliance certifications or establishing whether or not a person has violated or is in violation of any emissions limitation or standard, nothing in this permit or any Emission Limitation or Standard to which it pertains, shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.
[391-3-1-.02(3)(a)]

8.27 Internal Combustion Engines

8.27.1 For diesel-fired internal combustion engine(s) manufactured after April 1, 2006 or modified/reconstructed after July 11, 2005, the Permittee shall comply with all applicable provisions of New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart IIII – "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines." Such requirements include but are not limited to:
[40 CFR 60.4200]

a. Equip all emergency generator engines with non-resettable hour meters in accordance with Subpart IIII.

b. Purchase only diesel fuel with a maximum sulfur content of 15 ppm unless otherwise specified by the Division in accordance with Subpart IIII.

c. Conduct engine maintenance prescribed by the engine manufacturer in accordance with Subpart IIII.

d. Limit non-emergency operation of each emergency generator to 100 hours per year in accordance with Subpart IIII. Non-emergency operation other than maintenance and readiness testing is prohibited for engines qualifying as "emergency generators" for the purposes of Ga Rule 391-3-1-.02(2)(mmm).

e. Maintain any records in accordance with Subpart IIII

f. Maintain a list of engines subject to 40 CFR 60 Subpart IIII, including the date of manufacture.[391-3-1-.02(6)(b)]

8.27.2 The Permittee shall comply with all applicable provisions of New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart JJJJ - "Standards of Performance for Stationary Spark Ignition Internal Combustion Engines," for spark ignition internal combustion engine(s) (gasoline, natural gas, liquefied petroleum gas or propane-fired) manufactured after July 1, 2007 or modified/reconstructed after June 12, 2006.
[40 CFR 60.4230]

8.27.3 The Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR 63 Subpart A - "General Provisions" and 40 CFR 63 Subpart ZZZZ - "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines."

For diesel-fired emergency generator engines defined as "existing" in 40 CFR 63 Subpart ZZZZ (constructed prior to June 12, 2006 for area sources of HAP, constructed prior to June 12, 2006 for ≤500hp engines at major sources, and constructed prior to December 19, 2002 for >500hp engines at major sources of HAP), such requirements (if applicable) include but are not limited to:
[40 CFR 63.6580]

a. Equip all emergency generator engines with non-resettable hour meters in accordance with Subpart ZZZZ.

b. Purchase only diesel fuel with a maximum sulfur content of 15 ppm unless otherwise specified by the Division in accordance with Subpart ZZZZ.

c. Conduct the following in accordance with Subpart ZZZZ.

   i. Change oil and filter every 500 hours of operation or annually, whichever comes first

   ii. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first and replace as necessary

   iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first and replace as necessary.

d. Limit non-emergency operation of each emergency generator to 100 hours per year in accordance with Subpart ZZZZ. Non-emergency operation other than maintenance and readiness testing is prohibited for engines qualifying as "emergency generators" for the purposes of Ga Rule 391-3-1-.02(2)(mmm).

e. Maintain any records in accordance with Subpart ZZZZ

f. Maintain a list of engines subject to 40 CFR 63 Subpart ZZZZ, including the date of manufacture.[391-3-1-.02(6)(b)]

8.28 Boilers and Process Heaters

8.28.1 If the facility/site is an area source of Hazardous Air Pollutants, the Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A - "General Provisions" and 40 CFR 63 Subpart JJJJJJ - "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers."
[40 CFR 63.11193]

8.28.2 If the facility/site is a major source of Hazardous Air Pollutants, the Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A - "General Provisions" and 40 CFR 63 Subpart DDDDD - "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters."
[40 CFR 63.7480]

Attachments

A. List of Standard Abbreviations and List of Permit Specific Abbreviations
B. Insignificant Activities Checklist, Insignificant Activities Based on Emission Levels and Generic Emission Groups
C. List of References

ATTACHMENT A

List Of Standard Abbreviations

AIRS	Aerometric Information Retrieval System
APCD	Air Pollution Control Device
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BTU	British Thermal Unit
CAAA	Clean Air Act Amendments
CEMS	Continuous Emission Monitoring System
CERMS	Continuous Emission Rate Monitoring System
CFR	Code of Federal Regulations
CMS	Continuous Monitoring System(s)
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
dscf/dscm	Dry Standard Cubic Foot / Dry Standard Cubic Meter
EPA	United States Environmental Protection Agency
EPCRA	Emergency Planning and Community Right to Know Act
gr	Grain(s)
GPM (gpm)	Gallons per minute
H_2O (H2O)	Water
HAP	Hazardous Air Pollutant
HCFC	Hydro-chloro-fluorocarbon
MACT	Maximum Achievable Control Technology
MMBtu	Million British Thermal Units
MMBtu/hr	Million British Thermal Units per hour
MVAC	Motor Vehicle Air Conditioner
MW	Megawatt
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x (NOx)	Nitrogen Oxides
NSPS	New Source Performance Standards
OCGA	Official Code of Georgia Annotated

PM	Particulate Matter
PM_{10} (PM10)	Particulate Matter less than 10 micrometers in diameter
PPM (ppm)	Parts per Million
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
RMP	Risk Management Plan
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2 (SO2)	Sulfur Dioxide
USC	United States Code
VE	Visible Emissions
VOC	Volatile Organic Compound

List of Permit Specific Abbreviations

ATTACHMENT B

NOTE: Attachment B contains information regarding insignificant emission units/activities and groups of generic emission units/activities in existence at the facility at the time of Permit issuance. Future modifications or additions of insignificant emission units/activities and equipment that are part of generic emissions groups may not necessarily cause this attachment to be updated.

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Mobile Sources	1. Cleaning and sweeping of streets and paved surfaces	1
Combustion Equipment	1. Fire fighting and similar safety equipment used to train fire fighters or other emergency personnel.	1
	2. Small incinerators that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act and are not considered a "designated facility" as specified in 40 CFR 60.32e of the Federal emissions guidelines for Hospital/Medical/Infectious Waste Incinerators, that are operating as follows: i) Less than 8 million BTU/hr heat input, firing types 0, 1, 2, and/or 3 waste. ii) Less than 8 million BTU/hr heat input with no more than 10% pathological (type 4) waste by weight combined with types 0, 1, 2, and/or 3 waste. iii) Less than 4 million BTU/hr heat input firing type 4 waste. (Refer to 391-3-1-.03(10)(g)2.(ii) for descriptions of waste types)	
	3. Open burning in compliance with Georgia Rule 391-3-1-.02 (5).	
	4. Stationary engines burning: i) Natural gas, LPG, gasoline, dual fuel, or diesel fuel which are used exclusively as emergency generators shall not exceed 500 hours per year or 200 hours per year if subject to Georgia Rule 391-3-1-.02(2)(mmm).7	1
	ii) Natural gas, LPG, and/or diesel fueled generators used for emergency, peaking, and/or standby power generation, where the combined peaking and standby power generation do not exceed 200 hours per year.	
	iii) Natural gas, LPG, and/or diesel fuel used for other purposes, provided that the output of each engine does not exceed 400 horsepower and that no individual engine operates for more than 2,000 hours per year.	
	iv) Gasoline used for other purposes, provided that the output of each engine does not exceed 100 horsepower and that no individual engine operates for more than 500 hours per year.	
Trade Operations	1. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities whose emissions of hazardous air pollutants (HAPs) fall below 1,000 pounds per year.	4
Maintenance, Cleaning, and Housekeeping	1. Blast-cleaning equipment using a suspension of abrasive in water and any exhaust system (or collector) serving them exclusively.	
	2. Portable blast-cleaning equipment.	1
	3. Non-Perchloroethylene Dry-cleaning equipment with a capacity of 100 pounds per hour or less of clothes.	
	4. Cold cleaners having an air/vapor interface of not more than 10 square feet and that do not use a halogenated solvent.	2
	5. Non-routine clean out of tanks and equipment for the purposes of worker entry or in preparation for maintenance or decommissioning.	
	6. Devices used exclusively for cleaning metal parts or surfaces by burning off residual amounts of paint, varnish, or other foreign material, provided that such devices are equipped with afterburners.	
	7. Cleaning operations: Alkaline phosphate cleaners and associated cleaners and burners.	

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Laboratories and Testing	1. Laboratory fume hoods and vents associated with bench-scale laboratory equipment used for physical or chemical analysis.	2
	2. Research and development facilities, quality control testing facilities and/or small pilot projects, where combined daily emissions from all operations are not individually major or are support facilities not making significant contributions to the product of a collocated major manufacturing facility.	1
Pollution Control	1. Sanitary waste water collection and treatment systems, except incineration equipment or equipment subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	1
	2. On site soil or groundwater decontamination units that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	3. Bioremediation operations units that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	4. Landfills that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
Industrial Operations	1. Concrete block and brick plants, concrete products plants, and ready mix concrete plants producing less than 125,000 tons per year.	
	2. Any of the following processes or process equipment which are electrically heated or which fire natural gas, LPG or distillate fuel oil at a maximum total heat input rate of not more than 5 million BTU's per hour: i) Furnaces for heat treating glass or metals, the use of which do not involve molten materials or oil-coated parts.	1
	ii) Porcelain enameling furnaces or porcelain enameling drying ovens.	
	iii) Kilns for firing ceramic ware.	
	iv) Crucible furnaces, pot furnaces, or induction melting and holding furnaces with a capacity of 1,000 pounds or less each, in which sweating or distilling is not conducted and in which fluxing is not conducted utilizing free chlorine, chloride or fluoride derivatives, or ammonium compounds.	
	v) Bakery ovens and confection cookers.	
	vi) Feed mill ovens.	
	vii) Surface coating drying ovens	
	3. Carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, shot blasting, shot peening, or polishing; ceramics, glass, leather, metals, plastics, rubber, concrete, paper stock or wood, also including roll grinding and ground wood pulping stone sharpening, provided that: i) Activity is performed indoors; & ii) No significant fugitive particulate emissions enter the environment; & iii) No visible emissions enter the outdoor atmosphere.	1
	4. Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy (e.g., blueprint activity, photographic developing and microfiche).	
	5. Grain, food, or mineral extrusion processes	
	6. Equipment used exclusively for sintering of glass or metals, but not including equipment used for sintering metal-bearing ores, metal scale, clay, fly ash, or metal compounds.	
	7. Equipment for the mining and screening of uncrushed native sand and gravel.	
	8. Ozonization process or process equipment.	
	9. Electrostatic powder coating booths with an appropriately designed and operated particulate control system.	
	10. Activities involving the application of hot melt adhesives where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	1
	11. Equipment used exclusively for the mixing and blending water-based adhesives and coatings at ambient temperatures.	1
	12. Equipment used for compression, molding and injection of plastics where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	
	13. Ultraviolet curing processes where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Storage Tanks and Equipment	1. All petroleum liquid storage tanks storing a liquid with a true vapor pressure of equal to or less than 0.50 psia as stored.	
	2. All petroleum liquid storage tanks with a capacity of less than 40,000 gallons storing a liquid with a true vapor pressure of equal to or less than 2.0 psia as stored that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	3. All petroleum liquid storage tanks with a capacity of less than 10,000 gallons storing a petroleum liquid.	7
	4. All pressurized vessels designed to operate in excess of 30 psig storing petroleum fuels that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	4
	5. Gasoline storage and handling equipment at loading facilities handling less than 20,000 gallons per day or at vehicle dispensing facilities that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	6. Portable drums, barrels, and totes provided that the volume of each container does not exceed 550 gallons.	30
	7. All chemical storage tanks used to store a chemical with a true vapor pressure of less than or equal to 10 millimeters of mercury (0.19 psia).	6

INSIGNIFICANT ACTIVITIES BASED ON EMISSION LEVELS

Description of Emission Units / Activities	Quantity
Screw Conveyors	56

ATTACHMENT B (continued)

GENERIC EMISSION GROUPS

Emission units/activities appearing in the following table are subject only to one or more of Georgia Rules 391-3-1-.02 (2) (b), (e) &/or (n). Potential emissions of particulate matter, from these sources based on TSP, are less than 25 tons per year per process line or unit in each group. Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

Description of Emissions Units / Activities	Number of Units (if appropriate)	Applicable Rules		
		Opacity Rule (b)	PM from Mfg Process Rule (e)	Fugitive Dust Rule (n)

The following table includes groups of fuel burning equipment subject only to Georgia Rules 391-3-1-.02 (2) (b) & (d).Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

Description of Fuel Burning Equipment	Number of Units
Fuel burning equipment with a rated heat input capacity of less than 10 million BTU/hr burning only natural gas and/or LPG.	4
Fuel burning equipment with a rated heat input capacity of less than 5 million BTU/hr, burning only distillate fuel oil, natural gas and/or LPG.	
Any fuel burning equipment with a rated heat input capacity of 1 million BTU/hr or less.	2

ATTACHMENT C

LIST OF REFERENCES

1. The Georgia Rules for Air Quality Control Chapter 391-3-1. All Rules cited herein which begin with 391-3-1 are State Air Quality Rules.

2. Title 40 of the Code of Federal Regulations; specifically 40 CFR Parts 50, 51, 52, 60, 61, 63, 64, 68, 70, 72, 73, 75, 76 and 82. All rules cited with these parts are Federal Air Quality Rules.

3. ***Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, Procedures for Testing and Monitoring Sources of Air Pollutants.***

4. ***Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, Procedures for Calculating Air Permit Fees***.

5. Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources. This information may be obtained from EPA's TTN web site at *www.epa.gov/ttn/chief/ap42/index.html*.

6. The latest properly functioning version of EPA's **TANKS** emission estimation software. The software may be obtained from EPA's TTN web site at *www.epa.gov/ttn/chief/software/tanks/index.html*.

7. The Clean Air Act (42 U.S.C. 7401 et seq).

8. White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995 (White Paper #1).

9. White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program, March 5, 1996 (White Paper #2).