EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 45622

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (5)
KS2	Process Kiln No. 2	PM	73.54	283.20
		PM_{10}	29.14	112.06
		VOC	0.29	1.13
		NO_x	61.81	238.22
		SO_2 (4)	727.31	2353.83
		CO	14.46	63.33
		SO_3 (6)	8.78	28.83
		Pb (6)	0.13	0.55
		HCL	6.38	24.83
		HF	1.52	6.66
KS3	Process Kiln No. 3	PM	126.27	486.38
		PM_{10}	50.15	193.00
		VOC	0.50	1.94
		NO_x	105.95	408.38
		SO_2 (4)	1131.38	3716.60
		CO	24.79	108.57
		SO_3 (6)	15.05	49.43
		Pb (6)	0.22	0.95
		HCL	10.94	42.56
		HF	2.61	11.42

Emission Sources - Maximum Allowable Emission Rates

WHBS3	Kiln No. 3 Waste Heat Boiler	PM	88.20	486.38
		PM_{10}	44.72	193.00
		VOC	0.50	1.94
		NO_x	105.95	408.38
		SO_2 (4)	1131.38	3716.60
		CO	24.79	108.57
		SO_3 (6)	15.05	49.43
		Pb (6)	0.22	0.95
		HCL	10.94	42.56
		HF	2.61	11.42
KS3/WHBS3	Total Kiln No. 3/ Waste Heat Boiler Stacks	PM	-	486.38
		PM_{10}	-	193.00
		VOC	-	1.94
		NO_x	-	408.38
		SO_2 (4)	-	3716.60
		CO	-	108.57
		SO_3 (6)	-	49.43
		Pb (6)	-	0.95
		HCL	-	42.56
		HF	-	11.42
KS4	Process Kiln No. 4	PM	126.86	488.97
		PM_{10}	50.74	195.59
		VOC	0.50	1.94
		NO_x	105.95	408.38
		SO_2 (4)	1131.38	3716.60

Emission Sources - Maximum Allowable Emission Rates

		CO	24.79	108.57
		SO_3 (6)	15.05	49.43
		Pb (6)	0.22	0.95
		HCL	10.94	42.56
		HF	2.61	11.42
WHBS4	Kiln No. 4 Waste Heat Boiler Stack	PM	88.79	488.97
		PM_{10}	45.31	195.59
		VOC	0.50	1.94
		NO_x	105.95	408.38
		SO_2 (4)	1131.38	3716.60
		CO	24.79	108.57
		SO_3 (6)	15.05	49.43
		Pb (6)	0.22	0.95
		HCL	10.94	42.56
		HF	2.61	11.42
KS4/WHBS4	Total Kiln No. 4/ Waste Heat Boiler Stacks	PM	-	488.97
		PM_{10}	-	195.59
		VOC	-	1.94
		NO_x	-	408.38
		SO_2 (4)	-	3716.60
		CO	-	108.57
		SO_3 (6)	-	49.43
		Pb (6)	-	0.95
		HCL	-	42.56
		HF	-	11.42

Emission Sources - Maximum Allowable Emission Rates

CLR3DC	Kiln No. 3 Cooler Baghouse	$PM, PM_{10}, PM_{2.5}$	0.59	2.59
KS5	Process Kiln No. 5 Stack	PM	86.87	380.49
		PM_{10}	42.55	186.33
		VOC	0.50	2.50
		NO_x	164.40	720.00
		SO_2 (4)	1170.00	5120.00
		CO	251.10	1100.00
		SO_3 (6)	15.60	68.33
		Pb (6)	0.31	1.37
		HCL	15.80	61.74
		HF	3.76	16.49
WHBS5	Kiln No. 5 Waste Heat Boiler Stack	PM	86.87	380.49
		PM_{10}	42.55	186.33
		VOC	0.50	2.50
		NO_x	164.40	720.00
		SO_2 (4)	1170.00	5120.00
		CO	251.10	1100.00
		SO_3 (6)	15.60	68.33
		Pb (6)	0.31	1.37
		HCL	15.80	61.74
		HF	3.76	16.49
KS5/WHBS5	Total Kiln No. 5/ Waste Heat Boiler Stacks	PM	86.87	380.49
		PM_{10}	42.55	186.33
		VOC	0.50	2.50

Emission Sources - Maximum Allowable Emission Rates

		NO_x	164.40	720.00
		SO_2 (4)	1170.00	5120.00
		CO	251.10	1100.00
		SO_3 (6)	15.60	68.33
		Pb (6)	0.31	1.37
		HCL	15.80	61.74
		HF	3.76	16.49
SP	Stockpiles (7) (Raw and Calcined)	PM	6.73	27.78
		PM_{10}	0.74	3.22
MTLHDL	Material Handling (7) (Raw and Calcined Coke Conveying)	PM	120.86	47.82
		PM_{10}	3.23	2.07
MTLOAD	Raw Coke Loading (Railcar and Truck Loading with Front-End Loader) (7)	PM	1.15	0.93
		PM_{10}	0.14	0.11
MTLUNLOAD	Raw Coke Unloading Operations (Raw Petcoke Barge and Ship Crane Unloading, Railcar Unloading, and Truck Unloading)	PM	5.62	3.73
		PM_{10}	0.69	0.46
RD-DC2	Kiln RD Building Hi-Vac Dust Collector (D.C.) Stack	PM/PM_{10}	0.07	0.08
SR-DC	Sample Prep Bldg. D.C.	PM/PM_{10}	0.06	0.11
LA-DC	Lab Annex Bldg. D.C.	PM/PM_{10}	0.06	0.01
C&SDTBV	C and S Daytank Bin Vent	PM/PM_{10}	0.07	0.31
SL1-DCL	Ship Loader Spout D.C.	PM/PM_{10}	0.09	0.38
SL1-T1	Ship Loader Transfer Tower No. 1 D.C.	PM/PM_{10}	0.09	0.38
SL1-T2	Ship Loader Transfer Tower No. 2 D.C.	PM/PM_{10}	0.09	0.38
SL1-T3	Ship Loader Transfer Tower	PM/PM_{10}	0.09	0.38

Emission Sources - Maximum Allowable Emission Rates

	No. 3 D.C.			
SL-1	Ship Loader Deck Area D.C.	PM/PM_{10}	0.91	4.00
C-37	C36/37 Conveyor Transfer Chute D.C.	PM/PM_{10}	0.17	0.74
C-38	C37/38 Conveyor Transfer Point D.C.	PM/PM_{10}	0.17	0.76
CS-DV	T1/T2 Pneumatic Conveying System D.C.	PM/PM_{10}	0.33	1.43
CS-1	Calcine Silo No. 1 Bin	PM/PM_{10}	0.84	3.69
CS-2	Calcine Silo No. 2 Bin	PM/PM_{10}	0.70	3.08
CS-3	Calcine Silo No. 3 Bin	PM/PM_{10}	0.70	3.08
CSS4	Calcine Silo No. 4 Bin	PM/PM_{10}	0.49	2.16
CS-CC	Main Calcine Material Handling System D.C.	PM/PM_{10}	2.56	11.22
C35-HV	C35 Hi-Vac D.C.	PM/PM_{10}	0.04	0.15
SL-PIT2-DC STK1	Ship Loading Pit D. C.	PM/PM_{10}	0.28	0.62
SL-PIT2-DC STK2	Ship Loading Pit D. C.	PM/PM_{10}	0.28	0.62
SL-PIT2-DC STK1 and STK2	Total Ship Loading Pit D.C. Stack 1 and Stack 2	PM/PM_{10}	0.28	0.62
PA-PILES	Process Area Short-Term Storage Piles (7)	PM	0.13	0.57
		PM_{10}	0.01	0.06
S1 DC1	Silo 1 Dust Collector 1	PM	0.02	0.09
		PM_{10}	<0.01	0.02
S1 DC2	Silo 1 Dust Collector 2	PM	0.02	0.09
		PM_{10}	<0.01	0.02
S1 DC3	Silo 1 Dust Collector 3	PM	0.02	0.09
		PM_{10}	<0.01	0.02
S1 DC4	Silo 1 Dust Collector 4	PM	0.02	0.09

Emission Sources - Maximum Allowable Emission Rates

		PM_{10}	<0.01	0.02
S2 DC1	Silo 2 Dust Collector 1	PM	0.02	0.09
		PM_{10}	<0.01	0.02
S2 DC2	Silo 2 Dust Collector 2	PM	0.02	0.09
		PM_{10}	<0.01	0.02
S2 DC3	Silo 2 Dust Collector 3	PM	0.02	0.09
		PM_{10}	<0.01	0.02
S3 DC1	Silo 3 Dust Collector 1	PM	0.02	0.09
		PM_{10}	<0.01	0.02
S3 DC2	Silo 3 Dust Collector 2	PM	0.02	0.09
		PM_{10}	<0.01	0.02
S3 DC3	Silo 3 Dust Collector 3	PM	0.02	0.09
		PM_{10}	<0.01	0.02

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (5)
S4 DC1	Silo 4 Dust Collector 1	PM	0.02	0.092
		PM_{10}	<0.01	0.02
S4 DC L44	Silo 4 Dust Collector L44	PM	0.02	0.09
		PM_{10}	<0.01	0.02
L6A DC	Conveyor L6 Insertable Dust Collector 2	PM	0.02	0.09
		PM_{10}	<0.01	0.02
C25 DC	Conveyor 25 Insertable Dust Collector	PM	0.02	0.09
		PM_{10}	<0.01	0.02
L25A DC	Conveyor L25A Insertable Dust Collector	PM	0.02	0.09
		PM_{10}	<0.01	0.02
C31 DC	Conveyor 31 Insertable Dust Collector	PM	0.02	0.09
		PM_{10}	<0.01	0.02
5C2 DC	Conveyor 5C2 Insertable Dust Collector	PM	0.02	0.09
		PM_{10}	<0.01	0.02
L44 DC	Conveyor L44 Insertable Dust Collector	PM	0.04	0.18
		PM_{10}	<0.01	0.04
L6 DC	Conveyor L6 Insertable Dust Collector	PM	0.02	0.09
		PM_{10}	<0.01	0.02
L45 DC	Conveyor L45 Insertable Dust Collector	PM	0.02	0.09
		PM_{10}	<0.01	0.02
C36 DC	Conveyor C36 Insertable Dust Collector	PM	0.04	0.18
		PM_{10}	<0.01	0.04

Emission Sources - Maximum Allowable Emission Rates

CLR 5 DC	Cooler No. 5 Baghouse	PM/PM_{10}	1.49	6.53

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
SO_3 - sulfur trioxide
Pb - lead
HCl - hydrogen chloride
HF - hydrogen fluoride
(4) The hourly emission rate for SO_2 shall be the limit for stack testing purposes. The hourly emission rate for reporting SO_2 compliance with the permit shall be based on a 7-day rolling average from a 24-hour composite analysis of the blended raw feed sulfur content. The annual emission rate for reporting SO_2 compliance with the permit shall be based on a calendar year.
(5) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(6) Emitted as PM and included in the PM and PM_{10} emission rate.
(7) Fugitive emissions are an estimate only.

Date: November 21, 2011