EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 2356

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. 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 * lb/hr	TPY
CSTS66	Bunker Conveyor	PM	0.026	0.05
CRH22	Crusher Baghouse	PM	0.129	0.257
PST23	Storage Hopper Baghouse	PM	0.02	0.04
PST24	Blender Conveyor Baghouse	PM	0.04	0.02
PMTH60	PM Stack Conveyor	PM	0.086	0.34
PMST61	PM Stack Conveyor	PM	0.034	0.137
BBV26	Blender Fill Baghouse	PM	0.004	0.003
SFS38	FM Stack	PM	0.069	0.27
PSE73	Stack No. 1 Conveyor	PM	0.069	0.27
PMFH77	PM Stack Conveyor	PM	0.02	0.03
MM1-29	PS1 Mix Baghouse	PM	0.004	0.015
PS1TH30	PS1 Conveyor Baghouse	PM	0.021	0.04
RM1-31	PS1 Sizer Baghouse	PM	0.004	0.017
MM2BV33	PS2 Mixer Baghouse	PM	0.004	0.015
RM2-34	PS2 Sizer Baghouse	PM	0.004	0.017

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JSTH37	PS3 Conveyor Baghouse	PM	0.02	0.03
S5SHA72	PS5 Conveyor	PM	0.02	0.03

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
S5SHB78	PS5 Conveyor	PM	0.02	0.03
S5TH75	PS5 Conveyor	PM	0.029	0.04
S5RH76	PS5 Conveyor	PM	0.018	0.027
CBFA64	Bunker Fugitives	PM	0.062	0.002
CBFB67	Bunker Fugitives	PM	0.052	0.0017
PPAMFH42	PP Conveyor Baghouse	PM	0.013	0.003
SFH44	Sizer Baghouse	PM	0.03	0.123
PPPP48	Bulk Fill Baghouse	PM	0.002	0.008
MTS39	Conveyor Baghouse	PM	0.02	0.043
PPB2-41	PP Area Baghouse	PM	0.017	0.069
PPB1-40	Storage Baghouse	PM	0.021	0.082
ACMD46	Sizer Baghouse	PM	0.06	0.24
TPU10	Oxidizer	VOC	0.001	0.003
		PM	0.033	0.12
		NO_x	0.43	0.36
		SO_2	0.28	0.18
		CO	0.01	0.01
		SO_3	0.01	0.017
TPU80	Oxidizer	VOC	0.001	0.003
		PM	0.059	0.21

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		NO_x	0.77	0.64
		SO_2	0.49	0.31
		CO	0.013	0.014
		SO_3	0.014	0.03

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
TPUBS81	R&D Preconditioner Burner	VOC	0.0005	0.002
		PM	0.0014	0.005
		NO_x	0.012	0.046
		SO_2	0.0001	0.0003
		CO	0.046	0.176
S1DC36	S1 Baghouse	PM	0.76	3.05
S1MT51	Storage Hopper Baghouse	PM	0.068	0.27
BFK1-13	Bake Furnace K-1	NO_x	1.0	1.8
		CO	1.4	6.1
		VOC	0.4	1.0
		H_2S	<0.01	0.005
		SO_2	0.7	0.66
		SO_3	0.06	0.08
		COS	0.22	0.37
		PM_{10}	0.02	0.03
BFK2-14	Bake Furnace K-2	NO_x	1.0	1.8
		CO	1.4	6.1
		VOC	0.4	1.0
		H_2S	<0.01	0.005
		SO_2	0.7	0.66
		SO_3	0.06	0.08
		COS	0.22	0.37
		PM_{10}	0.02	0.03
BFK3-15	Bake Furnace K-3	NO_x	1.0	1.8
		CO	1.4	6.1
		VOC	0.4	1.0

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H_2S	<0.01	0.005
SO_2	0.7	0.66
SO_3	0.06	0.08
COS	0.22	0.37
PM_{10}	0.02	0.03

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
BFK4-16	Bake Furnace K-4	NO_x	1.0	1.8
		CO	1.4	6.1
		VOC	0.4	1.0
		H_2S	<0.01	0.005
		SO_2	0.7	0.66
		SO_3	0.06	0.08
		COS	0.22	0.37
		PM_{10}	0.02	0.03
BFM1-17	Bake Furnace M-1	NO_x	1.0	1.8
		CO	1.4	6.1
		VOC	0.4	1.0
		H_2S	<0.01	0.005
		SO_2	0.7	0.66
		SO_3	0.06	0.08
		COS	0.22	0.37
		PM_{10}	0.02	0.03
BFM2-18	Bake Furnace M-2	NO_x	1.0	1.8
		CO	1.4	6.1
		VOC	0.4	1.0
		H_2S	<0.01	0.005
		SO_2	0.7	0.66
		SO_3	0.06	0.08
		COS	0.22	0.37
		PM_{10}	0.02	0.03
BFM3-19	Bake Furnace M-3	NO_x	1.0	1.8
		CO	1.4	6.1
		VOC	0.4	1.0
		H_2S	<0.01	0.005
		SO_2	0.7	0.66
		SO_3	0.06	0.08
		COS	0.22	0.37
		PM_{10}	0.02	0.03

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
BFM4-20	Bake Furnace M-4	NO_x	1.3	2.4
		CO	1.9	8.1
		VOC	0.5	1.4
		H_2S	<0.01	0.007
		SO_2	0.9	0.88
		SO_3	0.08	0.10
		COS	0.29	0.49
		PM_{10}	0.025	0.04
BFS1-21	Bake Furnace S-1, S-2, and S-3	NO_x	0.71	1.1
		CO	0.92	1.42
		VOC	0.07	0.11
		H_2S	<0.001	0.004
		SO_2	0.02	0.04
		SO_3	0.16	0.26
		COS	0.002	0.008
		PM_{10}	0.32	0.5
BFOX2-63	Bake Furnace S-6, S-7, and S-8	NO_x	0.80	1.25
		CO	1.10	1.62
		VOC	0.08	0.13
		H_2S	<0.001	0.004
		SO_2	0.03	0.05
		SO_3	0.20	0.30
		COS	0.002	0.008
		PM_{10}	0.36	0.56
BFOX3-74	Bake Furnace S-4 and S-5	NO_x	0.53	0.83
		CO	0.70	1.10
		VOC	0.05	0.08
		H_2S	<0.001	0.004
		SO_2	0.02	0.023
		SO_3	0.12	0.20
		COS	0.002	0.008
		PM_{10}	0.24	0.37

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

BGDC4	"A" Graphitizer Baghouse	PM	0.257	0.096

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY	*
BGTVS5	"A" Graphitizer Hopper Baghouse	PM	0.017	0.001	
GSS3	"A" Graphitizer Scrubber	H_2S	0.11	0.02	
HGTDC2	"B" Graphitizer Baghouse	PM	0.257	0.129	
HGIS6	"B" Graphitizer Oxidizer	PM	3.8	8.4	
		SO_2	3.1	6.9	
		NO_x	0.02	0.07	
		VOC	0.001	0.003	
		CO	0.004	0.014	
		$FeSO_4$	0.033	0.011	
		SO_3	2.1	3.9	
		H_2S	0.029	0.045	
CGRAPH59	"C" Graphitizer Oxidizer	PM	5.0	11.0	
		SO_2	4.0	9.0	
		NO_x	0.04	0.17	
		VOC	0.002	0.006	
		CO	0.009	0.04	
		$FeSO_4$	0.004	0.014	
		SO_3	2.7	5.1	
		H_2S	0.029	0.045	
SPC12	SIC and SP and GC Processes Scrubber	Chlorine	0.14	0.14	
		HCl	0.033	0.043	
BGVH53	BG Hood	VOC	0.02	0.01	
VPE54	E2, BG and GC Vacuum Pump	VOC	3.2	0.64	

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BGDO56	BG Oven	VOC	0.5	1.0
E2VH55	E2 Hood	VOC	0.2	0.01
GCVH68	GC Hood	HCl	0.007	0.001

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
GCDH71	GC Air Dry	VOC	0.50	0.06
GCDO70	GC Oven	VOC	0.96	0.69
GC69	GC Furnace	VOC	0.4	0.012
HBF8	Harper Furnace Oxidizer	P_2O_5	2.5	0.42
		HCl	5.1	0.87
		NO_x	0.12	0.16
		SO_2	<0.01	0.001
		CO	0.02	0.03
		VOC	0.01	0.01
		PM	0.01	0.01
SF9	Stewart Furnace	VOC	0.025	0.013
IF11	SPE Furnace	VOC (methane)	4.6	11.5
FL7	"A" Graphitizer Vent	VOC (methane)	0.64	0.46
		NO_x	0.10	0.07
		SO_2	<0.01	0.004
		PM	0.01	0.004
		CO	0.02	0.014
JSDC62	East Baghouse	PM	1.5	6.2
FESDC35	South Baghouse	PM	0.64	2.6
PPNDC43	PP North Baghouse	PM	0.21	0.21
PPWDC47	PP West Baghouse	PM	0.29	0.29
PPSDC45	PP South Baghouse	PM	0.26	0.26
MSP79	Concrete Storage Pad	PM		0.16

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

(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) PM - particulate matter
PM_{10} - particulate matter less than ten microns in diameter
VOC - volatile organic compounds as defined in General Rule 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
CO - carbon monoxide
SO_3 - sulfur trioxide
H_2S - hydrogen sulfide
COS - carbonyl sulfide
$FeSO_4$ - ferrous sulfate
P_2O_5 - phosphorus pentoxide
HCl - hydrogen chloride

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

Hrs/day 24 Days/week 7 Weeks/year 52 or Hrs/year 8,760

Dated_____