

# 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		Air Contaminant		<u>Emission Rates *</u>	
	Name (2)	Name (3)	lb/hr	TPY		
CRH22	Crusher Baghouse		PM		0.26	0.05
PST23	Storage Hopper Baghouse		PM		0.04	0.08
PST24	Blender Conveyor Baghouse		PM		0.04	0.05
PMTH60	PM Stack Conveyor		PM		0.17	0.69
PMST61	PM Stack Conveyor		PM		0.07	0.27
BBV26	Blender Fill Baghouse		PM		0.01	0.005
SFS38	FM Stack		PM		0.14	0.55
MM1-29	PS1 Mix Baghouse		PM		0.01	0.03
PS1TH30	PS1 Conveyor Baghouse		PM		0.04	0.08
RM1-31	PS1 Sizer Baghouse		PM		0.01	0.03
MM2BV33	PS2 Mixer Baghouse		PM		0.01	0.03
RM2-34	PS2 Sizer Baghouse		PM		0.01	0.03
JSTH37	PS3 Conveyor Baghouse		PM		0.04	0.06
PPAMFH42	PP Conveyor Baghouse		PM		0.03	0.01
SFH44	Sizer Baghouse		PM		0.06	0.25
PPPP48	Bulk Fill Baghouse		PM		<0.01	0.02
MTS39	Conveyor Baghouse		PM		0.04	0.01

PPB2-41	PP Area Baghouse	PM	0.03	0.14
PPB1-40	Storage Baghouse	PM	0.02	0.03
ACMD46	Sizer Baghouse	PM	0.12	0.24

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Emission Point No. (1)	Source		Air Contaminant		<u>Emission Rates *</u>	
	Name (2)	Name (3)	lb/hr	TPY		
TPU10	Oxidizer			VOC	0.06	0.12
				PM	<0.01	0.003
				NO <sub>x</sub>	0.02	0.07
				SO <sub>2</sub>	<0.01	0.0004
				CO	<0.01	0.014
S1DC36	S1 Baghouse			PM	1.57	6.07
S1MT51	Storage Hopper Baghouse			PM	0.13	0.54
BFK1-13	Bake Furnace K-1			NO <sub>x</sub>	1.0	1.8
				CO	1.4	6.1
				VOC	0.4	1.0
				H <sub>2</sub> S	<0.01	0.005
				SO <sub>2</sub>	0.7	0.66
				SO <sub>3</sub>	0.06	0.08
				COS	0.22	0.37
BFK2-14	Bake Furnace K-2			NO <sub>x</sub>	1.0	1.8
				CO	1.4	6.1
				VOC	0.4	1.0
				H <sub>2</sub> S	<0.01	0.005
				SO <sub>2</sub>	0.7	0.66
				SO <sub>3</sub>	0.06	0.08
				COS	0.22	0.37
BFK3-15	Bake Furnace K-3			NO <sub>x</sub>	1.0	1.8
				CO	1.4	6.1
				VOC	0.4	1.0
				H <sub>2</sub> S	<0.01	0.005
				SO <sub>2</sub>	0.7	0.66
				SO <sub>3</sub>	0.06	0.08
				COS	0.22	0.37
BFK4-16	Bake Furnace K-4			NO <sub>x</sub>	1.0	1.8
				CO	1.4	6.1

VOC	0.4	1.0
H <sub>2</sub> S	<0.01	0.005
SO <sub>2</sub>	0.7	0.66
SO <sub>3</sub>	0.06	0.08
COS	0.22	0.37

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Emission Point No. (1)	Source		Air Contaminant		<u>Emission Rates *</u>	
	Name (2)	Name (3)	lb/hr	TPY		
BFM1-17	Bake Furnace M-1			NO <sub>x</sub>	1.0	1.8
				CO	1.4	6.1
				VOC	0.4	1.0
				H <sub>2</sub> S	<0.01	0.005
				SO <sub>2</sub>	0.7	0.66
				SO <sub>3</sub>	0.06	0.08
				COS	0.22	0.37
BFM2-18	Bake Furnace M-2			NO <sub>x</sub>	1.0	1.8
				CO	1.4	6.1
				VOC	0.4	1.0
				H <sub>2</sub> S	<0.01	0.005
				SO <sub>2</sub>	0.7	0.66
				SO <sub>3</sub>	0.06	0.08
				COS	0.22	0.37
BFM3-19	Bake Furnace M-3			NO <sub>x</sub>	1.0	1.8
				CO	1.4	6.1
				VOC	0.4	1.0
				H <sub>2</sub> S	<0.01	0.005
				SO <sub>2</sub>	0.7	0.66
				SO <sub>3</sub>	0.06	0.08
				COS	0.22	0.37
BFM4-20	Bake Furnace M-4			NO <sub>x</sub>	1.3	2.4
				CO	1.9	8.1
				VOC	0.5	1.4
				H <sub>2</sub> S	<0.01	0.007
				SO <sub>2</sub>	0.9	0.88
				SO <sub>3</sub>	0.08	0.10
				COS	0.29	0.49
BFS1-21	Bake Furnace S-1, S-2, and S-3			NO <sub>x</sub>	16.8	29.7
				CO	23.4	101.0
				VOC	6.6	16.6
				H <sub>2</sub> S	0.08	0.083
				SO <sub>2</sub>	11.8	10.94
				SO <sub>3</sub>	1.04	1.31
				COS	3.68	6.12
BGDC4	"A" Graphitizer Baghouse			PM	0.51	0.19

BGTVS5	"A" Graphitizer Hopper Baghouse	PM	0.03	0.003
GSS3	"A" Graphitizer Scrubber	H <sub>2</sub> S	0.11	0.02

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Emission Point No. (1)	Source		Air Contaminant		<u>Emission Rates *</u>	
	Name (2)	Name (3)	lb/hr	TPY		
HGTDC2	"B" Graphitizer Baghouse			PM	0.51	0.26
HGIS6	"B" Graphitizer Oxidizer			PM	<0.01	0.003
				SO <sub>2</sub>	1.5	6.0
				NO <sub>x</sub>	0.02	0.07
				VOC	<0.01	0.004
				CO	<0.01	0.014
				FeSO <sub>4</sub>	1.3	5.2
CGRAPH59	"C" Graphitizer Oxidizer			PM	<0.01	0.008
				SO <sub>2</sub>	2.9	11.6
				NO <sub>x</sub>	0.04	0.17
				VOC	<0.01	0.009
				CO	<0.01	0.03
				FeSO <sub>4</sub>	2.5	10.0
SPC12	SIC and SP Processes Scrubber			Chlorine	0.14	0.14
				HCl	0.02	0.04
BGVH53	BG Hood			VOC	0.02	0.01
VPE54	E2, BG Vacuum Pump			VOC	2.7	0.62
BGDO56	BG Oven			VOC	0.5	1.0
E2VH55	E2 Hood			VOC	0.2	0.01
HBF8	Harper Furnace Oxidizer			P <sub>2</sub> O <sub>5</sub>	2.5	0.42
				HCl	5.1	0.87
				NO <sub>x</sub>	0.12	0.16
				SO <sub>2</sub>	<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	0.64	0.46
				NO <sub>x</sub>	0.10	0.07

SO <sub>2</sub>	<0.01	0.004
PM	0.01	0.004
CO	0.02	0.014

JSDC62	East Baghouse	PM	1.33	5.31
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Emission Point No. (1)	Source		Air Contaminant		<u>Emission Rates *</u>	
	Name (2)	Name (3)	lb/hr	TPY		
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

(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
  - VOC - volatile organic compounds as defined in General Rule 101.1
  - NO<sub>x</sub> - total oxides of nitrogen
  - SO<sub>2</sub> - sulfur dioxide
  - CO - carbon monoxide
  - SO<sub>3</sub> - sulfur trioxide
  - H<sub>2</sub>S - hydrogen sulfide
  - COS - carbonyl sulfide
  - FeSO<sub>4</sub> - ferrous sulfate
  - P<sub>2</sub>O<sub>5</sub> - 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\_\_\_\_\_