

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 898

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 (10)	
			lbs/hour	TPY (4)
01, 02, 03, 04, 05, 06, 07, and 08	Railcar Unloading Baghouse Vents	PM	1.65	7.21
		PM <sub>10</sub>	1.65	7.21
		PM <sub>2.5</sub>	1.65	7.21
09, 10, 11, 12, 13, 14, 15, and 16	Raw Material Silo Baghouse Vents	PM	1.65	7.21
		PM <sub>10</sub>	1.65	7.21
		PM <sub>2.5</sub>	1.65	7.21
17, 25, 34, 35, 39, 40, 41, 42, 43, 44, 45, and 50	Cullet Hood Dust Collector Vents	PM	8.16	35.71
		PM <sub>10</sub>	8.16	35.71
		PM <sub>2.5</sub>	8.16	35.71
18	Mix House Baghouse Vent	PM	0.40	1.75
		PM <sub>10</sub>	0.40	1.75
		PM <sub>2.5</sub>	0.40	1.75
19	Batch Plant Dust Collector Stack	PM	0.01	0.05
		PM <sub>10</sub>	0.01	0.05
		PM <sub>2.5</sub>	0.01	0.05
20	Rouge/Coal Storage Baghouse Vent	PM	0.21	0.90
		PM <sub>10</sub>	0.21	0.90
		PM <sub>2.5</sub>	0.21	0.90
22	Melting Furnace No.1 Stack (9)	PM	71.00	198.49
		PM <sub>10</sub>	71.00	135.31
		PM <sub>2.5</sub>	71.00	135.31

Emission Sources - Maximum Allowable Emission Rates

		VOC	1.16	5.08
		NO <sub>x</sub>	739.00	894.25
		CO	160.00	104.63
		SO <sub>2</sub>	80.00	180.27
23	Melting Furnace No.2 Stack (7)	PM	71.00	291.90
		PM <sub>10</sub>	71.00	269.12
		PM <sub>2.5</sub>	71.00	252.63
		VOC	1.16	5.08
		NO <sub>x</sub>	739.00	2947.49
		CO	160.00	154.83
		SO <sub>2</sub>	80.00	350.40
22 and 23	Melting Furnaces Nos. 1 and 2 Stacks (6)	Cr	0.22	0.96
		Se	45.00	31.00
		Co	0.01	0.04
		Si	19.00	82.00
		Ni	0.02	0.10
		Ce	9.00	39.42
		Ti	2.00	8.80
FUG-1	Furnace Fugitives (5)	PM	6.40	28.00
		PM <sub>10</sub>	6.40	28.00
		PM <sub>2.5</sub>	6.40	28.00
		NO <sub>x</sub>	31.00	135.78
		CO	6.70	29.34
		SO <sub>2</sub>	3.40	14.90
		Trace Metals	0.10	0.44

Emission Sources - Maximum Allowable Emission Rates

28	Solarcool Scrubber/SO <sub>2</sub> Exhaust – Line 1 Stack	PM	4.37	9.57
		PM <sub>10</sub>	4.37	9.57
		PM <sub>2.5</sub>	4.37	9.57
		Co	0.46	2.00
		SO <sub>2</sub> (8)	23.00	75.00
		Cr	0.08	0.35
		Fe	0.50	2.20
29	Solarcool Mix Room Baghouse Vent	PM	0.60	2.63
		PM <sub>10</sub>	0.60	2.63
		PM <sub>2.5</sub>	0.60	2.63
30, 31	Line 2 West and East Stacks	SO <sub>2</sub> (8)	23.00	75.00
32S, 33S	Line 1 West and East Stacks	SO <sub>2</sub> (8)	23.00	75.00
36A, 36B, 37	Process W Line Nos. 1 and 2 Stacks	PM	0.42	0.63
		PM <sub>10</sub>	0.42	0.63
		PM <sub>2.5</sub>	0.42	0.63
38-1	Boiler 1 Stack	PM	0.49	2.15
		PM <sub>10</sub>	0.49	2.15
		PM <sub>2.5</sub>	0.49	2.15
		VOC	0.11	0.49
		NO <sub>x</sub>	2.97	13.02
		CO	1.72	7.55
		SO <sub>2</sub>	6.88	30.12
38-3	Boiler 3 Stack	PM	0.49	2.15
		PM <sub>10</sub>	0.49	2.15
		PM <sub>2.5</sub>	0.49	2.15

Emission Sources - Maximum Allowable Emission Rates

		VOC	0.11	0.49
		NO <sub>x</sub>	2.97	13.02
		CO	1.72	7.55
		SO <sub>2</sub>	6.88	30.12
46, 47, 48, 49, 52, and 52A	Automatic Packing and Tempering Vacuum Transfer Vents	PM	1.20	5.26
		PM <sub>10</sub>	1.20	5.26
		PM <sub>2.5</sub>	1.20	5.26
55, 56, 57, 58, 59, 61, 63, and 68	Storage Tank Vents for Petroleum-Derived Materials	VOC	4.16	0.18
FUG-2	Material Storage and Handling (5)	PM	3.81	16.09
		PM <sub>10</sub>	1.90	8.04
		PM <sub>2.5</sub>	1.90	8.04
		SO <sub>2</sub> (8)	23.00	75.00
		VOC	0.21	0.94
77 and 78	Tin Bath Vent Stack	PM	0.10	0.35
		PM <sub>10</sub>	0.10	0.35
		PM <sub>2.5</sub>	0.10	0.35
		Sn	<0.01	0.02
MSVD	MSVD Vacuum Chamber Vent	VOC	0.09	0.33
TPO	MSVD TPO Process (5)	PM	0.02	0.02
		PM <sub>10</sub>	0.02	0.02
		PM <sub>2.5</sub>	0.02	0.02
		VOC	0.20	0.17
BUFF	MSVD Buff (5)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

SCORING	Glass Scoring Operation (5)	VOC	6.00	5.00
---------	--------------------------------	-----	------	------

- (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<sub>x</sub>
    - total oxides of nitrogen
  - SO<sub>2</sub>
    - sulfur dioxide
  - PM
    - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented
  - PM<sub>10</sub>
    - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
  - PM<sub>2.5</sub>
    - particulate matter equal to or less than 2.5 microns in diameter
  - CO
    - carbon monoxide
  - Cr
    - chromium
  - Se
    - selenium
  - Co
    - cobalt
  - Si
    - amorphous silica
  - Ni
    - nickel
  - Ce
    - cerium
  - Ti
    - titanium
  - Fe
    - iron
  - Sn
    - tin
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) The emission rates shown for Cr, Co, Ni, Si, Se, Ce, and Ti represent total combined emissions for both Furnace Nos. 1 and 2. The individual emissions rate from each stack can vary such that the sum of the emissions from the stacks of Melting Furnace Nos. 1 and 2 shall not exceed the total amount authorized.
- (7) The emissions have been represented and reviewed as the maximum emissions authorized by Air Quality Standard Permit for Pollution Control Project No. 103006.
- (8) The emission rates shown for SO<sub>2</sub> represent total combined emissions for EPNs 28, 30, 31, 32S, 33S, and FUG-2. The individual emission rate from each stack can vary such that the sum of the emissions from EPNs 28, 30, 31, 32S, 33S, and FUG-2 shall not exceed the total amount authorized.
- (9) The emissions have been represented and reviewed as the maximum emissions authorized by Air Quality Standard Permit for Pollution Control Project No. 83132.
- (10) Planned startup and shutdown emissions are included. Maintenance activities are not authorized by this permit.

Date: April 18, 2019