

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 48786

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 (6)	
			lbs/hour	TPY (4)
S-02	Chip Truck-Loading Cyclone Stack	PM	2.06	9.01
		PM <sub>10</sub>	2.06	9.01
		PM <sub>2.5</sub>	1.03	4.51
S-03	Fuel House Cyclone Stack	PM	1.54	6.76
		PM <sub>10</sub>	1.54	6.76
		PM <sub>2.5</sub>	0.77	3.38
S-06	Boiler 1 Stack (ESP)	VOC*	5.47	23.96
		NO <sub>x</sub> **	20.12	85.17
		SO <sub>2</sub>	4.02	17.62
		PM	16.82	73.65
		PM <sub>10</sub>	13.16	57.62
		PM <sub>2.5</sub>	11.89	52.07
		CO	96.55	422.90
		NH <sub>3</sub>	1.05	4.62
		C <sub>6</sub> H <sub>6</sub>	0.59	2.59
		HCHO	1.40	6.13
		HCl	0.65	2.85
		MeOH	0.26	1.13
		Styrene	0.34	1.48
RCO/RTO	Regenerative Catalytic/Regenerative Thermal	VOC***	32.30	110.43

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		NO <sub>x</sub>	2.43	10.23
		SO <sub>2</sub>	0.01	0.03
		PM	3.15	10.93
		PM <sub>10</sub>	3.15	10.93
		PM <sub>2.5</sub>	3.15	10.93
		CO	5.97	21.25
		Phenol	0.32	1.10
		HAP	0.73	2.54
S-08D-J, S-09D-I, and S-10D-I	Veneer Dryer Nos. 1, 2, and 3 Cooling Zone Stacks	VOC***	3.56	12.17
		PM	3.37	11.52
		PM <sub>10</sub>	3.37	11.52
		PM <sub>2.5</sub>	3.37	11.52
		CO	2.69	9.18
		Acetaldehyde	0.83	2.85
		MeOH	2.50	8.54
		Methyl Isobutyl Ketone	0.34	1.15
		Phenol	0.89	3.03
		HAP	5.00	17.09
V-01, V-02, and V-03	Press Nos. 1, 2, and 3 Vents#	VOC***	26.69	83.00
		PM	7.43	23.11
		PM <sub>10</sub>	7.43	23.11
		PM <sub>2.5</sub>	7.43	23.11
		Acetaldehyde	0.69	2.14
		HCHO	0.62	1.92

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		MeOH	21.36	66.41
		HAP	23.00	71.53
S-11	Sander Baghouse Stack	PM	2.43	10.62
		PM <sub>10</sub>	2.43	10.62
		PM <sub>2.5</sub>	1.10	4.83
S-12	Dry Waste Baghouse Stack	PM	0.57	2.49
		PM <sub>10</sub>	0.57	2.49
		PM <sub>2.5</sub>	0.38	1.66
S-13	Urea Storage Tank	Urea	0.35	0.01
FUG 1	Ring Debarkers (5)	PM	2.00	8.76
		PM <sub>10</sub>	1.16	5.08
		PM <sub>2.5</sub>	0.38	1.66
FUG 4	Log Soaking Vats (5)	VOC*	14.00	61.32
		Acetaldehyde	0.25	1.11
		MeOH	0.40	1.74
		HAP	0.65	2.85
FUG 6	Log Processing Saws (5)	PM	0.41	1.79
		PM <sub>10</sub>	0.15	0.64
		PM <sub>2.5</sub>	0.05	0.20
FUG 7	Spray Glue Line# (5)	VOC##	0.23	0.72
		HAP	0.23	0.72
FUG 8	Shaker Screen (5)	PM	0.05	0.23
		PM <sub>10</sub>	0.03	0.11
		PM <sub>2.5</sub>	<0.01	0.02
FUG 9	Robotic Patch System (5)	VOC##	0.04	0.19

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FUG 10	Briquetter System (5)	PM	<0.01	0.01
		PM <sub>10</sub>	<0.01	0.01
		PM <sub>2.5</sub>	<0.01	<0.01
FUG 11	Sanding Fugitives (5)	VOC ***	13.27	41.25
		MeOH	0.55	1.72
		HAP	0.77	2.39
FUG 12	Sawing Fugitives (5)	VOC ***	6.64	20.65
		MeOH	0.49	1.52
		HAP	0.56	1.73
FUG 13	Green Veneer Staging Area# (5)	VOC##	4.18	18.29
		HAP	0.65	2.85
FUG 14	Chippers (5)	PM	0.09	0.24
		PM <sub>10</sub>	0.05	0.14
		PM <sub>2.5</sub>	0.02	0.05
FUG 15	Green Material Handling (5)	PM	1.11	3.11
		PM <sub>10</sub>	0.52	1.47
		PM <sub>2.5</sub>	0.08	0.22
Standard Permit (SP) sources incorporated by reference. Sources remain authorized by the SP(s) as listed below:				
Standard Permit No. 92897 authorizing the use of natural gas-fired temporary boiler during modification of Boiler 1 (Issued July 26, 2010)				
S-TEMPBLR + MSS	80 MMBtu/hr Temporary Boiler	VOC###	4.74	4.08
		NO <sub>x</sub> ###	10.88	10.37
		SO <sub>2</sub>	2.24	4.84
		PM	0.60	1.29
		PM <sub>10</sub>	0.60	1.29

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		PM <sub>2.5</sub>	0.60	1.29
		CO###	32.52	27.94
FUG-NGTEMP	Temporary Equipment Leak Fugitives (5)	VOC	0.03	0.07
<b>Permit By Rule (PBR) sources incorporated by reference. Sources remain authorized by the PBR(s) as listed below:</b>				
PBR 106.511 authorizing the installation and operation of Diesel Fire Water Pump (EPN FIREPUMP) and Emergency Generator (EPN EMGEN), installed in 2004 and November 2011, respectively.				
FIREPUMP	Diesel Fire Water Pump	VOC	0.49	0.02
		NO <sub>x</sub>	2.66	0.13
		SO <sub>2</sub>	0.33	0.02
		PM	0.13	0.01
		PM <sub>10</sub>	0.13	0.01
		PM <sub>2.5</sub>	0.13	0.01
		CO	1.47	0.07
EMGEN	Propane Emergency Generator	VOC	0.11	0.01
		NO <sub>x</sub>	3.86	0.19
		SO <sub>2</sub>	<0.01	<0.01
		PM	0.05	<0.01
		PM <sub>10</sub>	0.05	<0.01
		PM <sub>2.5</sub>	0.05	<0.01
		CO	3.52	0.18

- (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) Exempt Solvent - Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.
  - 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

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|-------------------------------|---|---|
| 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   |
| HAP                           | - | hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C |
| NH <sub>3</sub>               | - | ammonia   |
| C <sub>6</sub> H <sub>6</sub> | - | benzene   |
| HCHO                          | - | formaldehyde  |
| HCl                           | - | hydrochloric acid   |
| MeOH                          | - | methanol  |
- (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) Planned startup and shutdown emissions are included, as well as planned maintenance activities identified as part of permit alteration issued on April 12, 2013.
- \* VOC emissions presented on as carbon basis.
- \*\* NO<sub>x</sub> short-term compliance demonstration on 3-hour averaging basis.
- \*\*\* VOC emissions presented on as propane basis.
- # Emissions from the presses, glue line, and green veneer staging area also emitted from the North and South Wall Fans in the main production building; therefore, to avoid double-counting, all emissions are reported at EPNs V-01/V-02/V-03, FUG 7, and FUG 13, respectively.
- ## VOC emissions presented on as species basis.
- ### Hourly emissions which are the sum of those from MSS and production operations as follows: VOC (4.31 lb/hr - MSS and 0.43 lb/hr - production); NO<sub>x</sub> (8.00 lb/hr - MSS and 2.88 lb/hr - production); and CO (29.56 lb/hr - MSS and 2.96 lb/hr - production). On a short-term (hourly basis), only the production operation or MSS emission rate is valid. The annual emission rates include production operation and MSS operations.

Date: April 12, 2013