Permit Number 7711A

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.

Emission	Source	Air Contaminant		Emission Rates *	
Point No. (1)	Name (2)		Name (3)	lb/hr	TPY**
STILLYARD OPERA	TION				
HTR3	T-1 Laminating Adhesive Bulk Storage Tank Heater Vent	PM ₁₀ CO VOC	NO _x SO ₂ 0.01 0.04 0.01	0.05 0.01 0.02 0.18 0.01	0.22 0.01
CECO1	T-1 and T-2 Laminating Adhes Tanks CECO Filter Vent	sive	VOC PM ₁₀	0.03 0.01	0.17 0.02
HTR4	T-2 Laminating Adhesive Bulk Storage Tank Heater Vent	PM ₁₀ CO VOC	NO _x SO ₂ 0.01 0.04 0.01	0.05 0.01 0.02 0.18 0.01	0.22 0.01
HTR 5	Asphalt Heater for T-14 and T Coating Asphalt Storage Tar Coating Asphalt Loop Feed	nk and	NO _x SO ₂ PM ₁₀ 0.08 0.01	0.10 0.01 0.01 0.36 0.02	0.43 0.01 0.03
BLR5	Standby Boiler Vent	SO ₂ PM ₁₀ CO VOC	NO _x 0.02 0.28 3.13 0.21	3.73 0.09 1.23 13.71 0.92	16.34

Emission	Source A	Air Contaminant	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
8	Boiler and Thermal Oxidizer Vent Controlling Tanks T-8, T-9, T-10, T-14, T-15, T-110, T-120, and Blowstills T-13 and T-26	NO _x SO ₂ PM ₁₀ CO C 0.09	1.75 0.73 5.00 1.28 0.40	7.70 3.20 21.90 5.60
COMMON TO LINE	1 AND LINE 3			
34	Electrostatic Precipitator (for Line 1 and 3) Stack	VOC PM ₁₀	3.20 3.43	14.94 15.02
98	Rail 2 Stack	PM ₁₀ C 0.51	4.63 0.51	4.59
LINE No. 1 OPERA	TION			
1-1	Line 1 Stabilizer Storage and Heater Baghouse Stack	PM ₁₀	0.23	1.01
1-3	Line 1 Stabilizer Use Bin Baghouse Stack	PM ₁₀	0.03	0.13
1-4	Line 1 (Surfacing Section) Dust Collector Stack No. 1	PM ₁₀	0.59	2.58
1-5	Line 1 (Surfacing Section) Dust Collector Stack No. 2	PM ₁₀	0.59	2.58
1-6	Line 1 (Surfacing Section) Dust Collector Stack No. 3	PM ₁₀	0.59	2.58
HTR1	Line 1 Stabilizer Thermal Fluid	NO _x	0.20	0.86

Emission	Source	Air	Contaminant	Emission	Rates *
Point No. (1)	Name (2)		Name (3)	lb/hr	TPY**
	Heater Vent	PM ₁₀ CO VOC	0.17	0.01 0.07 0.72 0.05	0.01
HTR2	Line 1 Thermal Fluid Heater V	rent SO ₂ PM ₁₀ CO VOC	NO _x 0.01 0.02 0.17 0.01	0.20 0.01 0.07 0.72 0.05	0.86
COOL1(total 3 stks)	Line No. 1 Cooling Section Exhaust		VOC PM ₁₀	2.22 4.00	9.73 17.52
LINE 3 OPERATION	I				
25	Sand Application Baghouse S	tack	PM ₁₀	3.86	16.91
26A	Stabilizer Storage Baghouse S	Stack	PM ₁₀	0.15	0.70
26B	Stabilizer Storage Baghouse S	Stack	PM ₁₀	0.29	1.26
27	Stabilizer Heater Baghouse S	tack	PM ₁₀	0.09	0.40
28	Asphalt Heater Vent	SO ₂ PM ₁₀ CO VOC	NO _x <0.01 0.04 0.50 0.03	0.59 0.02 0.20 2.20 0.10	2.60
30	Hot Oil Heater Vent		NO _x	0.27	1.20

Emission	Source	Air	Contaminant	ant <u>Emission Rates *</u>	
Point No. (1)	Name (2)		Name (3)	lb/hr	TPY**
	(Thermal Fluid Heater)		SO_2	<0.01	0.01
		PM_{10}	0.02	0.10	
		CO	0.23	1.00	
		VOC	0.01	0.04	
FUG1	Plantwide Fugitive Emissions (4)	VOC	0.43	1.88
		PM_{10}	0.91	3.97	
COOL3 (total 3 stks)	Line 3 Cooling Section (3 Exha	ıust)	VOC	3.38	14.80
,	Fumes from Asphalt Coater	·	PM_{10}	6.00	26.30
HTR6	Line 3 Stabilizer Thermal Fluid		NO _x	0.60	2.58
	Heater Vent		SO ₂	< 0.01	0.02
	reacer vent	PM_{10}	0.05	0.20	0.02
		CO	0.49	2.16	
		VOC	0.03	0.14	

- (1) Emission point identification either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an area name or fugitive source name.
- (3) NO_x total oxides of nitrogen
 - SO₂ sulfur dioxide
 - PM₁₀ particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
 - CO carbon monoxide
 - VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

(4)	Fugitive emissions are an estimate only.		
*	Emission rates are based on and the facilities are limited by the following maximum operatin schedule:		
	24_Hrs/day7_Days/week52_Weeks/year or _8,760_Hrs/year		
**	Compliance with annual emission limits is based on a rolling 12-month period.		
	Maximum allowable Asphalt Throughput Rate: Line 1 at 24,886 lbs/hour Line 3 at 41,472 lbs/hour		
shir	Maximum Allowable Production Rate (Line 1 plus Line 3): 171 tons/hour of finished		

Dated October 21, 2004

1,498,000 tons/year of

finished shingles