AP42 Section:	9.7
Background Chapter	4
Reference:	7
Title:	Westfield Gin--PM10 & Total Particulate Testing--Trash Cyclone, BTC Environmental, Inc., Ventura, CA, November 12, 1992.

Section 4
Reference #7

COTTON7.WQ1 WESTFIELD GIN RIVERDALE, CA

D. Emission Data/Mass Flux Rates/Emission Factors

Test ID	Parameter	Units	Values reported			
			Run 1	Run 2	Run 3	Run 4
1	Stack temperature	Deg R	534.1	540.5	549.3	
Trash stockpiler cyclone	Moisture	%	0.7	0.4	0.8	
	Oxygen	%	20.9	20.9	20.9	
	Volumetric flow, actual	acfm	3988	4128	4260	
	Volumetric flow, standard	dscfm	3909	4007	4041	
	Isokinetic variation	%	90.2	90.3	90.2	
Circle: Production or feed rate Capacity:		bales/hr	13.2	13.8	13.2	
	Pollutant concentrations:					
	Total PM	g/dscf	0.0752	0.0773	0.0826	
	Filterable PM	% of total	98.88%	93.69%	99.66%	
	Condensible PM	% of total	1.12%	6.31%	0.34%	
	Pollutant mass flux rates:					
	Total PM	lb/hr	2.52	2.65	2.86	
	Filterable PM	lb/hr	2.49	2.49	2.85	
	Condensible PM	lb/hr	0.0282	0.168	0.00986	
	Emission factors:					
	Total PM	lb/bale	0.19	0.19	0.22	0.20
	Filterable PM	lb/bale	0.19	0.18	0.22	0.20
	Condensible PM	lb/bale	0.0021	0.012	0.00075	0.0050

Condensible PM considered negligible--only report total PM

Multiply single cyclone emission factors by 2 to determine factors for the source

Source is controlled by two 1D-3D cyclones		Run 1	Run 2	Run 3	Average
Total PM emission factor	lb/bale	0.38	0.38	0.43	0.40

Test ID	Parameter	Units	Values reported			
			Run 1	Run 2	Run 3	Run 4
2	Stack temperature	Deg R	534.1	540.5	547.9	
Trash cyclone	Moisture	%	0.7	0.4	0.8	
	Oxygen	%	20.9	20.9	20.9	
	Volumetric flow, actual	acfm	4071	4014	4168	
	Volumetric flow, standard	dscfm	3989	3895	3962	
	Isokinetic variation	%	100.2	100	101.4	
Circle: Production or feed rate Capacity:		bales/hr	13.2	13.8	13.2	
	Pollutant concentrations:					
	PM-10	% of PM	29.04%	33.53%	23.08%	
	Pollutant mass flux rates:					
	PM-10	lb/hr	0.73	0.89	0.66	
	Emission factors:					
	PM-10	lb/bale	0.055	0.065	0.050	0.057

Multiply single cyclone emission factors by 2 to determine factors for the source

Source is controlled by two 1D-3D cyclones		Run 1	Run 2	Run 3	Average
PM-10 emission factor	lb/bale	0.11	0.13	0.10	0.11