

Note: This is a reference cited in AP 42, *Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources*. AP42 is located on the EPA web site at [www.epa.gov/ttn/chief/ap42/](http://www.epa.gov/ttn/chief/ap42/)

The file name refers to the reference number, the AP42 chapter and section. The file name "ref02\_c01s02.pdf" would mean the reference is from AP42 chapter 1 section 2. The reference may be from a previous version of the section and no longer cited. The primary source should always be checked.

<b>AP42 Section:</b>	<b>9.7</b>
<b>Background Chapter</b>	<b>4</b>
<b>Reference:</b>	<b>5</b>
<b>Title:</b>	<b>Source Emission Testing--County Line Gin, BTC Environmental, Inc., Ventura, CA, December 3-4, 1990.</b>

Source category: Cotton COTTON5 Date: 02/15/95  
 Plant name : County Line Gin Location: Hanford, CA  
 Test date : Dec 3-4, 1990 Ref. No.:  
 Process : Basis for process rate :

Source	Type of control	Pollutant	Run No.	Emission rate, lb/hr	Number of cyclones	Process rate, bales/hr	Emission factor		
							kg/bale	lb/bale	
Motes	2 60" 2D-2D cyclones	Total PM	1	4.14	2	18.20	0.21	0.45	
		Total PM	2	14.80	2	18.20	0.74	1.6	
		AVERAGE						0.47	1.0
		PM-10	1	1.010	2	18.20	0.050	0.11	
		PM-10	2	4.51	2	18.20	0.23	0.50	
		AVERAGE						0.14	0.30
Lint trap	Sixteen 38" 2D-2D cyclones	Total PM	1	2.32	16	18.50	0.91	2.0	
		Total PM	2	2.92	16	18.50	1.1	2.5	
		AVERAGE						1.0	2.3
		PM-10	1	0.819	16	18.50	0.32	0.71	
		PM-10	2	1.33	16	18.50	0.52	1.2	
		AVERAGE						0.42	0.93
Suction cyclone	Four 34" 2D-2D cyclones	Total PM	1	1.15	4	21.90	0.095	0.21	
		Total PM	2	1.26	4	21.90	0.10	0.23	
		AVERAGE						0.10	0.22
		PM-10	1	1.15	4	21.90	0.095	0.21	
		PM-10	2	1.25	4	21.90	0.10	0.23	
		AVERAGE						0.10	0.22
No. 1 dryer cyclone	Six 38" 2D-2D cyclones	Total PM	1	0.98	6	18.40	0.15	0.32	
		Total PM	2	2.36	6	18.40	0.35	0.77	
		AVERAGE						0.25	0.54
		PM-10	1	0.413	6	18.40	0.061	0.13	
		PM-10	2	0.880	6	18.40	0.13	0.29	
		AVERAGE						0.096	0.21

Filename: DEC90GIN.WQ1

DATA ARE A RE-CALCULATION OF REPORT RESULTS PER A MEMO FROM ECKLEY ENGINEERING STATING THAT THE DUCT SIZE OF 19" USED IN THE CALCULATION WAS INCORRECT. THE ACTUAL SIZE WAS 28". THEREFORE, FLOW RATES WERE MULTIPLIED BY  $(28/19)^2$ .

D. Emission Data/Mass Flux Rates/Emission Factors

Test ID	Parameter	Units	Values reported		
			Run 1	Run 2	Average
1	Stack temperature	Deg F	60.4	74.3	
MOTES CYCLONE	Pressure	in. HG	30.21	30.21	
	Moisture	%	0.9	0.7	
	Oxygen	%	20.9	20.9	
	Volumetric flow, actual	acfm	10555	10691	
	Volumetric flow, standard*	dscfm	10553	10432	
	Isokinetic variation	%	95.4	95.1	
Circle: Production or feed rate		bales/hr	9.1	9.1	
Capacity:					
Pollutant concentrations:					
Total PM		G/dscf	0.0458	0.1653	
PM-10		% of PM	24.3%	30.5%	
Pollutant mass flux rates:					
Total PM		lb/hr	4.14	14.8	9.46
PM-10		lb/hr	1.01	4.5	2.76
Emission factors (ENGLISH UNITS):					AVERAGE
Total PM		lb/bale	0.455	1.62	1.04
PM-10		lb/bale	0.111	0.495	0.303

\*DSCFM BASED ON A STANDARD TEMPERATURE OF 60 DEGREES FAHRENHEIT