

RULE 405 DUST AND CONDENSED FUMES

Adopted 8-1-62

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INDEX

- 100 GENERAL**
 - 101 PURPOSE

- 200 DEFINITIONS**
 - 201 DUSTS
 - 202 CONDENSED FUMES
 - 203 PROCESS WEIGHT PER HOUR

- 300 STANDARDS**
 - 301 LIMITATION

- 400 ADMINISTRATIVE REQUIREMENTS (NOT INCLUDED)**

- 500 MONITORING AND RECORDS (NOT INCLUDED)**

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100 GENERAL

- 101 **PURPOSE:** To limit the discharge of dust and condensed fumes into the atmosphere by establishing emission rates based on process weight.

200 DEFINITIONS

- 201 **DUSTS:** Minute solid particles released into the atmosphere by natural forces or by mechanical processes such as crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, sweeping, etc.
- 202 **CONDENSED FUMES:** Minute solid particles generated by the condensation of vapors from solid matter after volatilization from the molten state, or may be generated by sublimation, distillation, calcination, or chemical reaction, when these processes create airborne particles.
- 203 **PROCESS WEIGHT PER HOUR:** The total weight of all materials introduced into any specific process which process may cause any discharge into the atmosphere. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not. The "process weight per hour" will be derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which equipment handling such process is idle.

300 STANDARDS

- 301 **LIMITATIONS:** A person shall not discharge into the atmosphere in any one hour from any source whatsoever dust or condensed fumes in total quantities in excess of the amount shown in the following table:

To use the following table, take the process weight per hour as such is defined below. Then find this figure on the table, opposite which is the maximum number of kilograms or pounds of contaminants which may be discharged into the atmosphere in any one hour. As an example, if "A" has a process which emits contaminant into the atmosphere and which process takes 3 hours to complete, he will divide the weight of all materials in the specific process, in this example, 7500, by 3, giving a process weight per hour of 2500 kg. The table shows that "A" may not discharge more than 3.13 kg in any hour during the process. Where the process weight per hour falls between figures in the left hand column, the exact weight or permitted discharge may be interpolated.

TABLE FOR PROCESS WEIGHT AND ALLOWABLE DISCHARGE

Process weight per hour		Maximum discharge rate allowed for the solid particulate matter (aggregate discharged from all points of discharge)		Process weight per hour		Maximum discharge rate allowed for the solid particulate matter (aggregate discharged from all points of discharge)	
kg/hr	lb/hr	kg/hr	lb/hr	kg/hr	lb/hr	kg/hr	lb/hr
114	250	.45	1.00	3636	8000	3.95	8.70
136	300	.51	1.12	3864	8500	4.11	9.04
159	350	.56	1.23	4091	9000	4.25	9.36
182	400	.61	1.34	4318	9500	4.40	9.67
205	450	.65	1.44	4545	10000	4.55	10.0
227	500	.70	1.54	5455	12000	4.73	10.4
273	600	.79	1.73	6364	14000	4.91	10.8
318	700	.86	1.90	7273	16000	5.09	11.2
364	800	.94	2.07	8182	18000	5.23	11.5
409	900	1.01	2.22	9091	20000	5.36	11.8
455	1000	1.08	2.38	13636	30000	5.91	13.0
545	1200	1.21	2.66	18182	40000	6.32	13.9
636	1400	1.33	2.93	22727	50000	6.68	14.7
727	1600	1.45	3.19	27273	60000	6.95	15.3
818	1800	1.56	3.43	31818	70000	7.23	15.9
909	2000	1.66	3.66	36364	80000	7.45	16.4
1136	2500	1.91	4.21	40909	90000	7.68	16.9
1364	3000	2.15	4.72	45455	100000	7.86	17.3
1591	3500	2.36	5.19	90909	200000	9.27	20.4
1818	4000	2.56	5.64	136634	300000	10.23	22.5
2045	4500	2.76	6.07	181818	400000	10.95	24.1
2273	5000	2.95	6.49	227273	500000	11.55	25.4
2500	5500	3.13	6.89	272727	600000	12.09	26.6
2727	6000	3.30	7.27	318182	700000	12.55	27.6
2955	6500	3.47	7.64	363636	800000	12.91	28.4
3182	7000	3.64	8.00	409091	900000	13.32	29.3
3409	7500	3.80	8.36	454545	1000000	13.64	30.0
				or more	or more		