

RULE 54. DUST AND FUMES (Rev. Effective 1/22/97)

(a) **APPLICABILITY**

Except as provided in section (b), the provisions of this rule are applicable to:

(1) Any operation that is comprised of one or more processes as defined in this Rule. This includes operations where solid fuels are introduced.

(2) Only equipment that is required to obtain an Authority to Construct, Permit to Operate or Registration in accordance with these Rules and Regulations.

(b) **EXEMPTIONS**

The provisions of this rule shall not apply to operations comprised exclusively of a combustion process where liquid fuels, gaseous fuels and corresponding combustion air are introduced.

(c) **DEFINITIONS**

(1) **"Process"** means any method, reaction, or operation wherein materials are handled or whereby materials undergo physical change (i.e., the size, shape, appearance, temperature, state or other physical property of the materials is altered) or chemical change (i.e., a substance or substances with different chemical composition or properties are formed or created). A process includes all the equipment and facilities necessary for the handling of materials or the completion of the transformation of the materials to produce a physical or chemical change. There may be several processes in series or in parallel necessary to the manufacture of a product.

(2) **"Process Line"** means one or more pieces of equipment linked by the process flow and producing a product or performing a service such that the product cannot be produced or the service cannot be performed if any piece of equipment is removed or not functioning.

(3) **"Process Weight"** means the total weight of all materials introduced into any specific process which process may cause any discharge of air contaminants into the atmosphere. Solid fuels introduced will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not.

(4) **"Process Weight Per Hour"** means the value 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 the equipment is idle.

(d) **STANDARDS**

A person shall not discharge in any one hour into the atmosphere from any source dust or fumes, including lead and lead compounds, in excess of the amounts shown in the following table.

To use the following table, take the process weight per hour as defined above. This figure is then found on the table, opposite which is the maximum number of pounds of contaminants which may be discharged into the atmosphere in any one hour. As an example, if A is a process which emits contaminants into the atmosphere and which process takes 3 hours to complete, the weight of all materials in the specific process, in this example 1,500 lbs., is divided by 3, giving a process weight per hour of 500 lbs. The table shows that A may not discharge more than 1.77 lbs. in any one hour during the process. Where the process weight per hour falls between figures in the left hand column, the exact weight of permitted discharge may be interpolated. To convert from pounds to grams, multiply pounds by 454; to convert from pounds to kilograms, multiply pounds by 0.454.

TABLE
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Process Wt/Hr (lbs)	Maximum Weight Disch/Hr (lbs)	Process Wt/Hr (lbs)	Maximum Weight Disch/Hr (lbs)
50	1.00	3500	5.52
100	1.00	3600	5.61
150	1.00	3700	5.69
200	1.00	3800	5.77
250	1.03	3900	5.85
300	1.20	4000	5.93
350	1.35	4100	6.01
400	1.50	4200	6.08
450	1.63	4300	6.15
500	1.77	4400	6.22
550	1.89	4500	6.30
600	2.01	4600	6.37
650	2.12	4700	6.45
700	2.24	4800	6.52
750	2.34	4900	6.60
800	2.43	5000	6.67
850	2.53	5500	7.03
950	2.72	6500	7.71
1000	2.80	7000	8.05
1100	2.97	7500	8.39
1200	3.12	8000	8.71
1300	3.26	8500	9.03
1400	3.40	9000	9.36
1500	3.54	9500	9.67

TABLE - continued
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Process Wt/Hr (lbs)	Maximum Weight Disch/Hr (lbs)	Process Wt/Hr (lbs)	Maximum Weight Disch/Hr (lbs)
1600	3.66	10000	10.00
1700	3.79	11000	10.63
1800	3.91	12000	11.28
1900	4.03	13000	11.89
2000	4.14	14000	12.50
2100	4.24	15000	13.13
2200	4.34	16000	13.74
2300	4.44	17000	14.36
2400	4.55	18000	14.97
2500	4.64	19000	15.58
2600	4.74	20000	16.19
2700	4.84	30000	22.22
2800	4.92	40000	28.30
2900	5.02	50000	34.30
3000	5.10	60000	40.00
3100	5.18		
3200	5.27	or	
3300	5.36	more	
3400	5.44		