

National Dioxin Emission Inventory (Summary)

(g-TEQ/year)

Sources of dioxin emissions		Total emission of dioxins							
		1997	1998	1999	2000	2001	2002	2003	2004
1	Waste disposal	7,205 - 7,658	3,355 - 3,808	2,562 - 2,893	2,121 - 2,252	1,689 - 1,801	748 - 771	219 - 244	212 - 231
	Water	5.3	5.3	5.3	2.5	1.5	0.87	0.60	0.65
	General waste incinerators	5,000	1,550	1,350	1,019	812	370	71	64
	Water	0.044	0.044	0.035	0.035	0.019	0.008	0.004	0.002
	Industrial waste incinerators	1505	1105	695	558	535	266	75	70
	Water	5.3	5.3	5.3	2.5	1.5	0.86	0.60	0.65
	Small-scale waste incinerators	700 - 1,153	700 - 1,153	517 - 848	544 - 675	342 - 454	112 - 135	73 - 98	78 - 97
2	Industry	470	335	306	268	205	189	149	125
	Water	6.3	5.8	5.8	5.0	1.8	1.2	0.93	1.0
	Electric steel-making furnaces	229	140	142	131	95.3	94.8	80.3	64.0
	Sintering process for steel industry	135	114	101	69.8	65.0	51.1	35.7	30.4
	Facilities for recovering zinc	47.4	25.4	21.8	26.5	9.2	14.7	5.5	8.1
	Water	0.0036	0.0036	0.0036	0.0036	0.0036	0.0026	0.0066	0.0047
	Facilities for manufacturing aluminum base alloy	31.0	28.8	23.1	22.2	19.7	16.3	17.4	13.0
	Water	0.34	0.068	0.093	0.056	0.082	0.024	0.029	0.011
	Facilities for recovering copper	0.053	0.053	0.048	0.038	0.013	0.088	-	-
	Pulping process with bleaching	0.74	0.71	0.74	0.73	0.90	0.65	0.46	0.62
	Water	0.74	0.71	0.74	0.73	0.90	0.65	0.46	0.62
Other facilities	26.5	25.6	17.8	17.9	15.3	11.0	9.9	8.7	
Water	5.2	5.0	5.0	4.2	0.85	0.52	0.44	0.38	
3	Others	4.8 - 7.4	4.9 - 7.6	4.9 - 7.7	4.9 - 7.6	4.7 - 7.5	4.3 - 7.2	4.4 - 7.3	4.1 - 7.0
	Water	1.2	1.2	1.2	1.2	1.0	0.53	0.56	0.37
	Crematoria	2.1 - 4.6	2.2 - 4.8	2.2 - 4.9	2.2 - 4.8	2.2 - 4.9	2.3 - 5.1	2.3 - 5.1	2.3 - 5.1
	Cigarette smoke	0.1 - 0.2	0.1 - 0.2	0.1 - 0.2	0.1 - 0.2	0.1 - 0.2	0.1 - 0.2	0.1 - 0.2	0.1 - 0.2
	Exhaust emission from motor vehicles	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3
	Sewage disposal facilities	1.1	1.1	1.1	1.1	0.99	0.51	0.54	0.36
	Water	1.1	1.1	1.1	1.1	0.99	0.51	0.54	0.36
	Final disposal sites	0.093	0.093	0.093	0.056	0.027	0.021	0.020	0.018
	Water	0.093	0.093	0.093	0.056	0.027	0.021	0.020	0.018
Total		7,680 - 8,135	3,695 - 4,151	2,874 - 3,208	2,394 - 2,527	1,899 - 2,013	941 - 967	372 - 400	341 - 363
	Water	12.8	12.3	12.4	8.7	4.4	2.6	2.1	2.0

Note: Figures in "Water" lines are the total amount of dioxins discharged into water.