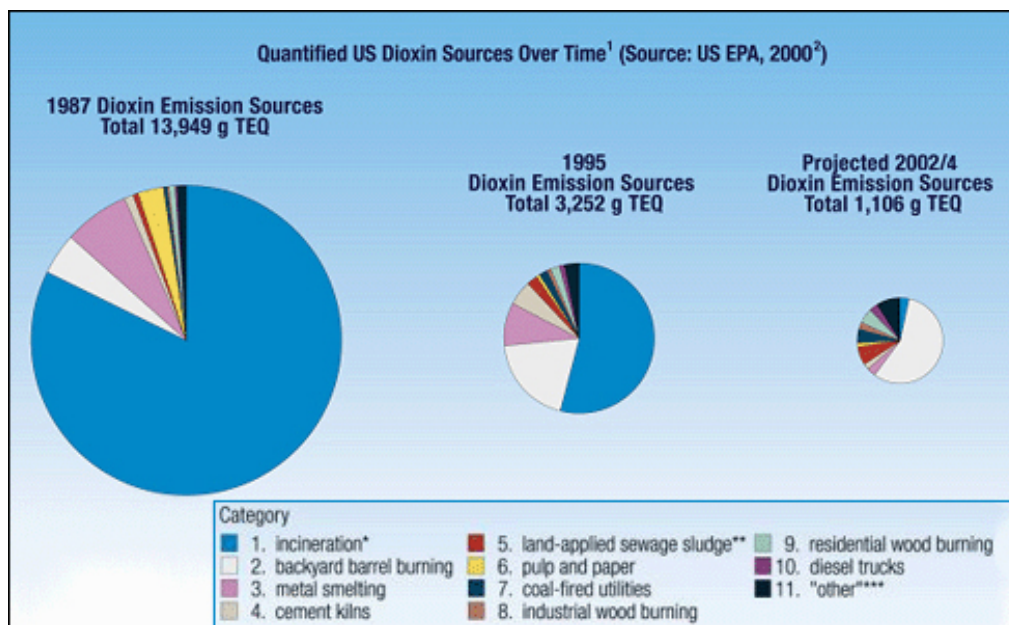


Sources

Backyard Burning of Trash is now the #1 Dioxin Source!



* Includes incineration of municipal solid waste, sewage sludge, and hazardous waste.

** The US EPA will be issuing a new projection for dioxin emission from land-applied sewage sludge for 2002/2004 based on surveys to begin in Spring, 2001. The US EPA expects that the new projection will be lower than the value previously projected and here graphically displayed.

*** Other category includes: leaded and unleaded gasoline, land-applied 2,4-D, iron ore sintering, oil-fired utilities, EDC/vinyl chloride, lightweight aggregate kilns that combust hazardous waste, petroleum refined catalyst regeneration, cigarette smoke, boilers/industrial furnaces, crematoria, and drum reclamation.

Dioxin Emission Sources Over Time (g-TEQ) ¹						
Category	1987	% Total	1995	% Total	2002/4	% Total
1-Incineration of:						
<i>Municipal solid waste</i>	8,877	77	1,250	71	12	32

<i>Medical waste</i>	2,590	22	488	27	7	18
<i>Sewage sludge</i>	6	0.05	14	0.84	14	39
<i>Hazardous waste</i>	5	0.04	5	0.33	3	9
Total incineration	11,478	82	1,758	54	37	3
2-Backyard barrel burning	604	4	628	19	628	56
3-Metal smelting	955	6	301	9	35	3
4-Cement kilns	131	0.94	173	5	25	2
5-Land-appl'd sewage sludge	76	0.55	76	2	76	6
6-Pulp & paper	372	2.67	23	0.71	15	1
7-Coal-fired utilities	50	0.36	60	1	60	5
8-Industrial wood burning	26	0.19	27	0.85	27	2
9-Residential wood burning	89	0.64	62	1	62	5
10-Diesel trucks	27	0.20	35	1	35	3
11-Other	137	0.98	103	3	100	9
TOTAL	13,949	100	3,252	100	1,106	100

- Dioxin emissions in the United States declined 77% between 1987 and 1995. US EPA data show that they are projected to decline an additional 66% between 1995 and 2002/2004, resulting in a total decline from 1987 to 2002/2004 of 92%.
- Declining levels of environmental dioxins are characterized by a changing pattern of emission sources over time. Industry and regulatory controls on waste incineration have resulted in a significantly lower contribution of dioxins from this source since 1987.
- As dioxin emissions from industry decline, unregulated sources such as backyard barrel burning of garbage and residential wood burning rise in significance as contributors to dioxin emissions.
- The combined dioxin emissions from ethylene dichloride (EDC) and vinyl chloride manufacture, included in the "other" category, contributed 12.3 g-TEQ, or 0.088% of the total amount, of 1995 dioxin emissions. This amount is approximately one-fifth of the emissions from residential wood burning in 1995.

¹ Data for 1987 and 1995 are from the "US Environmental Protection Agency Inventory of Sources of Dioxin-Like Compounds in the United States-1987 and 1995" <http://cfpub.epa.gov/ncea/cfm/dioxindb.cfm?ActType=default>. The 2002/4 data are based on EPA projections assuming full compliance with regulatory levels by this period and the closure of a copper smelter (personal communication, Dwain Winters, US EPA, 9-9-02).

² Charts for 1987 and 1995 are based on data from the "US Environmental Protection Agency Inventory of Sources of Dioxin-Like Compounds in the United States-1987 and 1995" <http://cfpub.epa.gov/ncea/cfm/dioxindb.cfm?ActType=default>. The 2002/4

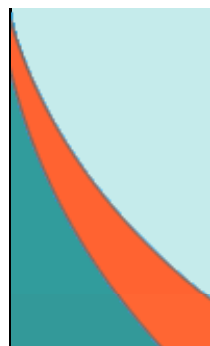


chart is based on EPA projections assuming full compliance with regulatory levels by this period and the closure of a copper smelter (personal communication, Dwain Winters, US EPA, 9-9-02).

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