

# Rachel's Environment & Health News

## #22 - Ash From Trash Incinerators Is Laced With Toxic Heavy Metals; Could Be Defined As 'Hazardous' April 26, 1987

The ash from municipal solid waste (MSW) incinerators contains very high levels of toxic metals, according to a study by the Environmental Defense Fund (EDF), a traditional environmental group based in New York City.

The study provides fuel for a heated debate occurring now in Washington, DC, where federal officials are trying to decide whether to define MSW incinerator ash as a "hazardous waste" or not. If MSW incinerator ash is defined as a hazardous waste, its disposal will be expensive; if it is not defined as a hazardous waste, its disposal will remain cheap. The financial feasibility of incinerating MSW will be heavily impacted by the decision.

Incinerating MSW looks like an extremely lucrative technology and large firms, such as Westinghouse, and pushing their way into the business in hopes of making a killing.

The EDF study shows that MSW incinerator ash contains "very high levels" of lead, arsenic, cadmium and mercury, all of which are toxic metals. EDF gathered data from the federal Environmental Protection Agency (EPA), from five state governments, and from two private firms. The data represented Extraction Procedure (EP) tests conducted on ash resulting from the incineration of municipal solid waste. The EP toxicity test is an official EPA test used to determine whether a substance is legally definable as a "hazardous waste" or not under the Resource Conservation and Recovery Act (RCRA).

MSW ash has two components: it is 10% fly ash and 90% bottom ash. EDF found that "all available results from the testing of MSW incinerator ash indicate the routine presence of very high levels of several toxic metals." Specifically, EDF found that lead and cadmium levels in the fly ash portion of MSW often exceed the limits required for classification of the waste as "hazardous" under Subtitle C of RCRA.

EDF has sent its results with a letter to over 100 MSW incinerator owners/operators, urging them to have EP toxicity tests conducted on their ash residues. EDF will gather the results from these tests, if results are released by the owners/operators, and will issue another report.

For further information, contact Michael Herz, Environmental Defense Fund, 257 Park Avenue South, NY, NY 10010; phone: (212) 686-4191.

--Peter Montague

=====

### CONGRESSIONAL REPORT SAYS EPA DOES NOT KNOW HOW MUCH WASTE U.S. INDUSTRY GENERATES YEARLY

Most hazardous waste in the U.S. is placed in unlined surface impoundments that put no barrier between the waste and the nation's ground water, says the Congressional Research Service (an arm of the U.S. Congress). This despite 10 years of effort by the U.S. Environmental Protection Agency (EPA).

The EPA has not only failed to control the waste problem, it has even failed to define the size of the problem clearly. The EPA has tried nine times since 1973 to estimate the amount of hazardous waste being produced annually by U.S. industries. Here are EPA's nine estimates:

"In short," says the Congressional Research Service (CRS), "it cannot be said with any confidence how much hazardous waste is being generated in the United States. Perhaps more important," says CRS, "lacking time series data using a consistent methodology, it is not known whether the amount is increasing or decreasing."

Why is it important to know how much waste is being created each

year? First, because we need to know how much waste management capacity the nation needs; and second, we can't tell whether "waste reduction" is occurring if we don't know how much waste is being produced this year compared to last year. Careful measurement of the waste problem is an absolute requirement of any waste reduction plan or program.

For further information on these subjects, see James E. McCarthy and Mark E. Anthony Reisch, HAZARDOUS WASTE FACT BOOK [87-56 ENR] (Washington, DC: Congressional Research Service, Jan., 1987). Free from Mr. McCarthy at: (202) 287-7225.

--Peter Montague

=====

### NEW STATE OF CALIFORNIA REPORT DISCUSSES LANDFILL ALTERNATIVES

A California state agency has issued a free report outlining waste management strategies that industry can use to reduce the amount of hazardous waste sent to landfills. The report evaluates source reduction (reducing wastes at the source, or not producing wastes in the first place), recycling and reuse, and waste treatment.

The report notes that source reduction is the "ideal solution" but may prove costly to implement because it may involve big changes in industry. The next-best solution is recycling, but the report says the market for recycled materials may be poor because of competition from low-cost raw materials. Waste treatment has a lot of potential, the report says, but it can sometimes cause pollution of air, land and water.

The report--third in a series--contains a section on waste management strategies and another section summarizing available methods for treatment of landfill leachate, contaminated groundwater, and contaminated soil at hazardous waste sites.

The report, titled THIRD BIENNIAL REPORT ON ALTERNATIVE TECHNOLOGY FOR RECYCLING AND TREATMENT OF HAZARDOUS WASTE, is available free from: Alternative Technology Section, Toxic Substances Control Division, California Department of Health Services, PO Box 942732, Sacramento, CA 94234; phone (916) 324-1807.

--Peter Montague

=====

Descriptor terms: hazardous waste; landfilling; groundwater; congressional research service; epa; waste production statistics; studies; surface impoundments; misfeasance; ash; msw; incineration; studies; edf; federal; hazardous waste; toxic waste; epa; toxicity; rcra; cadmium; lead; ep toxicity test; alternative disposal technologies;