

Rachel's Environment & Health News

#243 - Citizens Develop New Tactics To Drive Toxics Out Of Cement Kilns

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The fastest-growing sector of the hazardous waste "management" industry is cement kilns that "recycle" hazardous waste by blending it with fuel and burning it for heat to make cement. The trade magazine *Waste Age* reported results of a survey conducted by the Portland Cement Association [Skokie, IL; (312) 966-6200] in February, 1990 (pg. 146), showing that 24 out of 116 U.S. cement plants were burning hazardous waste. A survey published four months later in June, 1990, in *EI DIGEST* (pgs. 14-23) revealed that the number had jumped 25% to 30 kilns burning waste. It seems very likely that the number is considerably higher today, a year later. Today somewhere between 1.0 and 1.8 million tons of hazardous waste is entering cement kilns each year.

Citizens are naturally concerned about this trend. Air emissions from cement kilns burning hazardous waste are substantially larger than those of cement kilns not burning hazardous waste. Toxic residues from a hazardous waste incinerator must legally be sent to a hazardous waste landfill where someone must watch them into the foreseeable future. On the other hand, toxic residues from hazardous wastes burned in a cement kiln can legally be mixed into the cement and thus distributed into the environment, liability-free. A 1989 Greenpeace report estimated that cement kilns that year released 14 million pounds of unburned hazardous waste and two million pounds of toxic heavy metals into the environment via the smoke stack. The same report estimated that hazardous residues from hazardous waste combustion in cement kilns in 1989 totaled 6.7 billion pounds of ash, containing as much as 18.6 million pounds of toxic heavy metals.[1] These toxins went into the cement.

According to government insiders, the Combustion Section of the Office of Solid Waste within U.S. EPA [Environmental Protection Agency] has gone out of its way to assist the cement industry as it developed a new sideline: helping make the nation's its hazardous waste problem "go away."

An EPA employee, Hugh B. Kaufman, wrote a letter Dec. 7, 1990, to EPA Administrator William Reilly pointing out that "The Agency [EPA] appears to be engaged in a pattern and practice of accommodating the regulated cement kiln hazardous waste incineration industry with nonexistent, or at best loose, regulation.... As a direct result of the lack of RCRA [Resource Conservation and Recovery Act] regulations, many sectors of the cement kiln industry have been transformed into major commercial hazardous waste disposal companies. The public and the environment have not been protected from the adverse consequences of these incineration activities during this time," Kaufman charged.[2]

What Can Citizens Do?

Consultant Edward W. Kleppinger, Ph.D., has suggested several things citizens could do if they became concerned about a local cement kiln. [3]

- 1) If your local kiln is not presently burning hazardous waste, ask them to sign a pledge not to do it.
- 2) Contact your local Congressperson. Express your concerns and ask for public hearings on the matter.
- 3) Check whether your local kiln is violating its Clean Air Act permit.
- 4) Check whether your local kiln has a wastewater discharge (NPDES) permit and whether the kiln is in compliance or not.
- 5) Ask whether the kiln's hazardous waste operations are reflected in your fire department's fire and catastrophe plans? Adequately reflected? Has the fire department inspected the kiln?
- 6) If hazardous wastes are being trucked or shipped by rail to the kiln, the community could create transport controls, such as: no travel past schools during school hours, or on narrow roads without

a police escort.

7) Is the kiln's landfill properly permitted? Is it (yet) impacting local groundwater?

8) Is the kiln complying with any mining permits it holds?

New Tactics Developing

The newest tactic for opposing cement kiln incineration of hazardous waste has developed among a community of people who are asking, "What is this doing to the quality of the cement?"

The City Council of Fort Collins, Colorado May 7, 1991, passed a resolution opposing a plan by a major cement company (Holnam, Inc.) to burn hazardous waste in its Boettcher Plant. [Holnam was already burning hazardous waste in its cement kilns at Santee, SC, and Clarksville, MO.] The Council went on record opposing Holnam's proposal and directed the city staff to develop a plan for opposing Holnam. Most importantly, the Council formally outlawed the use of cement from cement kilns burning hazardous waste on any cityfunded projects in Fort Collins.

Two days later in Dayton, OH, Price Brothers, one of the nation's largest suppliers of cement water mains, announced it was suspending use of cement made at kilns burning hazardous waste until such cement was certified safe by the National Sanitary Foundation.

Clearly, this issue of "cement quality" could become the Achilles heel of cement kilns burning hazardous waste: if the public turns against their cement, they'll think twice about adulterating it with hazardous waste.

An interesting sidelight on the "cement quality" issue: Edward Kleppinger, an engineer, petitioned the American Society for Testing Materials (ASTM) November 19, 1990, to consider whether adulteration of cement with hazardous waste is a violation of ASTM regulation C-150, which states, "The cement covered by [regulation C-150] shall contain no addition except..." followed by a short list of materials that can be added to cement, such as water and calcium sulfate; the list does not include toxic metals or other hazardous waste constituents. Dr. Kleppinger asked the ASTM whether a new standard needs to be developed for waste-free cement vs. waste-containing cement. ASTM has charged a subcommittee of Committee C-1 with developing a response to Dr. Kleppinger.

The ASTM subcommittee is headed by Ron Gebhardt of the New Jersey firm, Cemtech L.P. [limited partnership]. Cemtech L.P. was formed in April, 1991, by a partnership between Holnam cement and Chemical Waste Management, Inc., the hazardous waste subsidiary of Waste Management, Inc., which is the nation's largest and most-often-fined hazardous waste management firm. Cemtech, which became Cemtech L.P. in April, 1991, has its own colorful history; as recently as April, its CEO was Herb Case who was convicted in federal court in 1983 for illegally dumping millions of gallons of toxic chemical wastes into the Lone Pine landfill in Freehold, NJ, and into the Newark, NJ, sewer system, according to United Press International.[4] Mr. Case has recently severed all connections with Cemtech L.P. Mr. Gebhardt has been with Cemtech two years. In an interview, Mr. Gebhardt said Dr. Kleppinger was "raising specious issues." A draft response to Dr. Kleppinger has gone out to subcommittee members for approval or disapproval. The subcommittee has 44 members.

In an interview, ASTM staff member Scott Orthey [1916 Race St., Philadelphia, PA 19103; (215) 2995400] said ASTM would welcome participation of "anyone interested in cement quality issues" in the ASTM's deliberations over hazardous waste residues in cement. He said ASTM's goal was a consensus of "everyone interested, not just producers and users of cement." He said ordinary

citizens concerned about these issues would be welcome in the ASTM's deliberations.

Citizens are now looking for large projects (sports arenas, hospitals, schools) that local politicians can be persuaded to give assurances will only use toxics-free cement. Through publicity, these citizens aim to create two classes of cement in the minds of the public: toxics-free cement and the other kind, made by kilns burning hazardous waste.

--Peter Montague

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[1] Pat Costner and Joe Thornton, SHAM RECYCLERS, PART I: HAZARDOUS WASTE INCINERATION IN CEMENT AND AGGREGATE KILNS (Washington, DC: Greenpeace [1436 U St., NW, Washington, DC 20009; phone (202) 462-1177], November, 1989).

[2] About every two months Dr. Kleppinger publishes a package of information called CEMENT KILN INCINERATION OF HAZARDOUS WASTE. It is distributed free to interested parties. Contact Edward W. Kleppinger c/o EWK Consultants, Inc., 407 N St., SW, Washington, DC 20024-3701; phone (202) 488-1015; fax (202) 484-1207. The Hugh Kaufman letter is reprinted in CEMENT KILN INCINERATION OF HAZARDOUS WASTE Vol. II, No. 1 (February, 1991), the pages of which are not numbered.

[3] See CEMENT KILN INCINERATION OF HAZARDOUS WASTE (March, 1990), pgs. 7-8.

[4] The UPI stories, dated May 23, 1983, May 10, 1983, February 16, 1983, and January 27, 1983, are reproduced verbatim in CEMENT KILN INCINERATION OF HAZARDOUS WASTE Vol. II, No. 3 (June, 1991), the pages of which are not numbered.

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