

# Rachel's Environment & Health News

## #115 - Landfill Study Finds Low Birth Weight In Babies, Adult Cancers

February 06, 1989

A study of the health of residents living near the nation's No. 1 superfund site--the Lipari landfill in Pitman, NJ--revealed last week that excessive rates of leukemia among adults and low birthweight among newborns have been found in those living closest to the landfill. The leukemia numbers are small (3 cases expected, 6 found), so the study does not prove beyond a doubt that the landfill caused the cancers; such increases could have occurred by pure chance. The low birthweight evidence is stronger and implicates the landfill with statistical significance. When all the facts were judged, the New Jersey Department of Health, which conducted the study, concluded that the need to clean up the site is "bolstered by the suggestive results of this study."

The Lipari study was undertaken at the request of local people. The study reveals some of the problems that can result from such a health study.

### Background

Nick Lipari bought a 15-acre site in Gloucester County, NJ, for a sand and gravel operation in 1958; in the mid-'60s he dumped large amounts of solid and liquid industrial wastes. Up to 1971, the site accepted an estimated 2.9 million gallons of liquid waste plus 12,000 cubic yards of solid waste, much of it toxic. In 1970 the New Jersey Department of Health reported thick brown residues with a "pungent irritating odor" leaking from the site into a nearby stream. In 1971, nearby residents signed an affidavit complaining of intolerable odors, headaches, nausea and inability to breathe. The source of the odors was the landfill itself and a community lake 1500 feet downstream of the landfill. Because of these complaints, the NJ Department of Environmental Protection closed the landfill operation.

For the next eight years, some people in the community used the landfill as if it were a park. Children from the area played on the site and a motocross bike trail developed. Joggers and hikers crisscrossed the area. The lake itself borders on three community parks, so swimmers and picnickers were exposed.

In 1979, NJ state government investigated a nearby marsh and found bis (2-chloroethyl) ether (BCEE) at 120 ppm [parts per million], methyl isobutyl ketone (83 ppm), acetone (51 ppm), phenol (28 ppm), toluene (16 ppm), methyl ethyl ketone (9 ppm). They also found pesticides, lead, arsenic, and other metals and organics. No action resulted from these findings until 1982-83 when the site was fenced off and capped with plastic film.

As awareness of the site grew, people began to ask whether birth defects, miscarriages, and lung cancer could be resulting from the chemical exposures. They also thought school absenteeism might be increasing as a result of children's exposure to the landfill. A citizens group formed, called the Pitman Alcyon Lake Lipari Landfill Community Association (PALLCA). PALLCA became aggressive, demanding a health study.

The New Jersey Department of Health agreed to do a study, but they soon convinced the community that proper data were not available to measure birth defects or miscarriages and, even in those cases where data might exist, it would cost too much to get it. The state has a cancer registry and it has a birth registry, so everyone agreed to study not what the community thought needed to be studied, but what was possible to study cheaply.

Now there is always a delay (called a latency period) between the time a cancer begins and the time it becomes apparent. The latency period for most cancers exceeds 25 years. The longest period of exposure to the Lipari toxics that anyone can find was 1967 to 1984 (18 years) so no cancers with latency periods greater than 18 years could be revealed by such a study. The latency period for leukemia is 17 to 20 years, so it is interesting that 3 excess leukemias were found, even though it proves nothing. It is surprising that the community wanted a cancer study done at all, since everyone knew

from the outset that a cancer study would have to reveal "no problem." It was predestined.

The presence of low birth weight among newborns whose mothers lived within a mile of the site was "statistically significant," meaning the observable decrease in the weight of newborns probably didn't occur by chance. This finding adds to the growing body of scientific knowledge indicating that living near a toxic landfill is not good for humans--a conclusion many people, using common sense, have already reached without needing scientific proof.

Free while they last: A REPORT ON THE HEALTH STUDY OF RESIDENTS LIVING NEAR THE LIPARI LANDFILL (Trenton, NJ: NJ Department of Health, 1989); phone Jackie Solomon at (609) 633-2043.

--Peter Montague

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### FUNDING FOR ENVIRONMENTALISTS

Waste Management, Inc. (WMI), the nation's largest waste hauler, owns and operates at least 115 landfills nationwide. The company owns a part interest in many other dumps. At a time when it is universally recognized that landfills pollute the environment, WMI is our most aggressive and committed landfiller. Many, if not all, WMI landfill sites seem likely to become superfund sites in the future. The U.S. Environmental Protection Agency will then hire a contractor to try to clean up these sites at substantial cost to the taxpayer. One major contractor in the superfund cleanup business is Waste Management, Inc., and they have, in the past, won EPA contracts to clean up sites that they themselves contaminated. In the muddled moral environment of official Washington, such arrangements hardly even raise eyebrows anymore.

On the basis of their landfill operations alone, we believe it is correct to characterize WMI as the nation's largest polluter. A study of the waste hauling industry in 1986 by the Council on Economic Priorities also found that Waste Management is the least law abiding waste hauler in America. They have a record of environmental violations unparalleled among waste haulers.

For the last five years WMI has been conducting a public relations program to blunt efforts by the environmental community to curb the company's worst excesses. WMI's latest endeavor involves direct payments to environmental organizations. Here is a partial list of the groups that applied for, and received, funding from Waste Management, Inc. during 1987 and 1988: National Audubon Society (New York), \$35,000; National Wildlife Federation (Washington, DC), \$35,000; Center for Environmental Education (Washington, DC), \$25,000; California Environmental Trust, \$15,000; Inform, Inc. (New York), \$10,000; General Federation of Women's Clubs (Washington, DC), \$1,000; The Nature Conservancy (Arlington, VA), \$70,000; Sierra Club of California, \$1,500; The Wilderness Society (Washington, DC), \$5,000; Conservation Foundation (Washington, DC), \$10,000; Keystone Center (Keystone, Colorado), \$20,000; Natural Resources Defense Council (New York), \$10,000; Environmental Law Institute (Washington, DC), \$15,000; National Wildlife Federation, \$2,500; World Resources Institute (Washington, DC), \$5,000; Izaak Walton League (Arlington, VA) \$3,000.

--Peter Montague

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Descriptor terms: funders; wmi; foundations; health effects; studies; landfilling; water pollution; health studies; superfund; lipari landfill, nj; nj; leukemia; air pollution; low birth weight; (2- chloroethyl) ether (BCEE); methyl isobutyl ketone; acetone; phenol; toluene;

methyl ethyl ketone; pesticides; lead; arsenic;