

Health Hazards.

1. Millions of pounds of toxic chemicals are dumped in municipal landfills every year.
2. Hazardous waste from small businesses and households make up 1 to 2 percent of landfill waste. Many are toxic at very low levels and are slowly leaking and poisoning the air and groundwater of surrounding communities.
3. Leaking landfills have polluted drinking water wells with cancer-causing chemicals such as toluene or vinyl chloride and have harmed many communities. Also, as garbage decomposes, methane and toxic gases are released into the air.
 - Under federal regulations, ‘modern’ landfills are built with plastic liners (the thickness of two credit cards) designed to prevent waste from leaking into drinking water.
 - However, the Environmental Protection Agency (EPA) has admitted even with liners, “All landfills will eventually leak” [FR1988]. EPA’s regulations conveniently let landfill operators off the hook for future liability after 30 years—while liner warranties and landfill caps typically last only 20 years.
4. Landfills take a huge toll on our environment, not only because of damage they cause when they are built and operated, but because they remove products from circulation, on average, 71 trash cans’ worth of resources were used to create the products thrown out in each trash can of garbage set out at the curb!

5. Landfills waste valuable resources: for every ton of paper recycled, acres of forest are saved from clear-cutting.
6. Biodegradable garbage rotting in landfill produces methane gas—a ‘greenhouse gas’ that contributes to global warming. Methane is 21 times more potent in its greenhouse effect than from car exhaust. Landfills are the largest man-made source of methane (37% globally).

BE SAFE is coordinated by the Center for Health, Environment & Justice.

SOLID WASTE LANDFILL and HIGH DENSITY POLYETHYLENE LINERS (HDPE) ARE NOT EFFECTIVE BARRIERS TO LANDFILL LEACHATE.

1. Two major classes of chemicals are responsible for HDPE failure. Aromatic hydrocarbons such as benzene and naphthalene, “permeate excessively and cause package deformation,” and halogenated hydrocarbons such as trichlorethylene and methylene chloride can permeate HDPE and cause, “softening, swelling, and part deformation.”

Marlex Polyethylene TIB 2 Packaging Properties, Plastics Division, Phillips 66 Company, Bartlesville, OK 74004

2. The “best demonstrated available technology” for composite liners (clay and plastic) allow leakage rates from .02 to 1.0 gallons per acre per day. This would result in 730 to 36,500 gallons per year from a 100 acre landfill.

Geoservices Inc. Background Document on Bottom Liner Performance in Double-lined landfills and Surface Impoundments, April 1987

LANDFILL CAPS ARE SUBJECT TO NATURAL ELEMENTS AND LEAKAGE.

3. **Lightning bolts striking the ground typically five million volts and 2,500 to 220,000 amperes can bore holes in the ground eight inches in diameter and fifteen feet deep. In western North Carolina, an average number of lightning strikes per hundred acres are 2.96 per year.**

AT&T Telecommunication Electrical Protection, AT&T Technologies, Inc. 1985

4. **Burrowing animals can move 5.3 tons of soil to the surface per acre per year. "Similar activity would have a dramatic impact on landfill cap integrity...synthetic liners, measured in mils are not likely to impede these same animals." Clay presents little barrier to such animals.**

Johnson & Dudderar, WASTE AGE, March 1988, p.108-111

5. **LEAK TESTING OF NEW LANDFILL LINERS REVEALS MAJOR FLAWS**

Tests of the new municipal solid waste liner after burial by an Arizona contractor revealed that even with the most careful construction and quality assurance testing at every stage of emplacement, the liners had holes and punctures.

American City and County, July 1991

6. **EVEN EPA PREDICTS FAILURE OF THE NEW LANDFILL TECHNOLOGY**

"First, even the best liner and leachate collection systems will ultimately fail due to natural deterioration..."

Federal Register p.33345 August 30, 1988

Citizens for Marlboro County

Landfill Facts

Citizens for Marlboro County is a local non-profit organization dedicated to keeping our air, land, and water clean for ourselves and future generations.

Join us in our efforts to stop the proposed Mega Dump in Marlboro County, SC by attending one of our meetings and getting actively involved in saving Marlboro County's land, air, and water quality.

For information on meeting locations, dates and times, call:

**B. Sweatt
843-479-9356**

Or visit our website at: www.no-megadump.com

For more information contact:

BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE

PO Box 88 Glendale Springs, North Carolina 28629 ~ Phone 336-

982-2691 ~ Fax 336-982-2954 ~ Email BREDL@skybest.com

October 2002

www.BREDL.org