
RESOURCES & ENVIRONMENT

*Where Will All
The Garbage Go?*

"The Case for Ocean Waste Disposal" by William Lahey and Michael Connor, in *Technology Review* (Aug.-Sept. 1983), Room 10-140, Massachusetts Institute of Technology, Cambridge, Mass. 02139.

New York's Love Canal, Missouri's Times Beach, and other toxic waste dumpsites gone bad are making the oceans look better than they did 10 years ago as places to dispose of industrial by-products, municipal sewage sludge, and plain garbage.

Lahey and Connor, of the Woods Hole Oceanographic Institute and the Harvard School of Public Health, respectively, argue that the reassessment is not all bad.

In 1972, Congress passed a series of laws designed to curb ocean dumping, then largely unregulated. The volume of U.S. industrial wastes disposed at sea dropped from 4.8 million tons in 1973 to 2.5 million tons in 1980. Congress also required towns and cities to subject their sewage to costly secondary treatment before piping it into the nation's waterways. Preferably, processed sewage sludge was to be used as landfill or as fertilizer—or be incinerated. The U.S. Environmental Protection Agency (EPA) set 1981 as the target date for ending ocean dumping of all sewage and factory wastes.

The high cost of disposal on land (two to 10 times the cost of ocean dumping) and its health hazards have spurred a re-evaluation. In a controversial move, the EPA did not appeal a 1981 federal district court decision canceling the deadline set for that year. Applications for ocean dumping permits are inching upwards; some seven million tons of sludge were deep-sixed in 1982.

An increase in such dumping is practically inevitable, the authors suggest, so now is the time to take a new approach. "The ocean," they write, "is not as fragile as we once believed." Researchers have found that dumping in *some* offshore sites is relatively safe. At one deep-water site in use for 15 years 106 miles off New York City, industrial wastes are quickly dispersed by ocean currents, but a dump in shallow water only 12 miles southeast of New York takes a high toll of fish and other sea life. But some wastes, such as PCBs and dioxin, cannot be dumped safely anywhere and should be incinerated.

To rationalize the system, Lahey and Connor propose a sliding fee for ocean dumping permits varying according to the type and amount of waste. Biodegradable cannery leftovers, for example, would be assessed a low fee. Permits for dumping toxic chemicals would be costly. If ocean dumping of the most dangerous wastes were made as expensive as on-shore disposal, the authors believe, businesses might try harder to find ways to cut back on their output of such pollutants.