RESOURCES & ENVIRONMENT

What to Do about Toxic Wastes

"Beyond Dumping: The Surprising Solution to the Love Canal Problem" by Bruce Piasecki, in *The Washington Monthly* (Jan. 1983), 2712 Ontario Rd. N.W., Washington, D.C. 20009.

After the 1978 Love Canal scandal in Niagara Falls, New York, federal and state agencies hastened to tighten regulation of toxic-waste dumps. Yet some Western European countries have discovered that detoxifying chemical by-products makes more sense than dumping them.

American industry generates some 77 billion pounds of toxic waste—sulfuric acid, mercury, cyanide—every year. Eighty percent of this poison is simply dumped into landfills, pits, and ponds, notes Piasecki, who teaches humanities at Clarkson College. Less than 20 percent is treated at all; and incineration, the most common method, merely releases the poisons into the atmosphere.

In West Germany, by contrast, 15 plants detoxify 85 percent of the nation's wastes; in Denmark, a single plant transforms virtually all of the country's deadly industrial by-products into harmless chemicals.

Detoxification technology is readily available. Chlorinolysis, used in one West German plant, converts chlorinated hydrocarbons such as PCBs, pesticides, and kepone to useful substances. A technique developed by Lockheed scientist L. J. Bailin in 1978, microwave plasma detoxification, breaks down heavy metals into their marketable components. And a new generation of genetically engineered "superbug" bacteria devours benzene, herbicides such as Agent Orange, and even cyanide.

Cost poses no great barrier to wider use of such techniques, Piasecki argues. Subjecting hazardous wastes to chlorinolysis, the Environmental Protection Agency (EPA) estimates, would increase manufacturers' costs by less than one percent. In California, new state dumping regulations will boost the affected industries'disposal costs from \$17 million this year to \$30 million in 1985. The bill for detoxification: only \$50 million annually.

But industry will have to be prodded to adapt the new technology, Piasecki says. In 1978, Congress tightened regulation of dumping by 65,000 major waste producers, but largely exempted 695,000 "small" producers who together account for 6.5 billion pounds of hazardous wastes annually. President Jimmy Carter's EPA planned to ask Congress to close the loophole, but the Reagan EPA is sitting tight. Indeed, it has *eased* some dumping regulations and delayed implementation of others.

Ignoring the intent of Congress in this way is one thing, says Piasecki, but flouting the laws of nature is another. The nation's dump capacity will be exhausted by the year 2000. It won't be enough, he warns, to "cross our fingers and hope for the best."