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FOR HAZARDOUS WASTE POLICY, WASHINGTON IS THE REAL HAZARD

INTRODUCTION

The safe disposal of hazardous waste is now America's most critical environmental problem. Americans generate over 250 million tons of hazardous waste each year to add to the several billion tons produced by earlier industrial growth. Industry and government currently spend close to \$5 billion annually on the problem and according to government estimates, this could soar to \$12 billion (in constant 1981 dollars) by 1990.

Two issues must be confronted. First, priority hazardous waste dump sites, as recognized by EPA, threaten groundwater contamination and carcinogenic exposure, and must be cleaned up quickly. Second, the U.S. must ensure that new waste is processed in a manner that minimizes environmental degradation.

Two principal federal laws deal with hazardous waste: the 1976 Resources Conservation and Recovery Act (RCRA) and the 1980 Comprehensive Emergency Response, Compensation and Liability Act (CERCLA), known as Superfund.

Enacted as an amendment to the Solid Waste Disposal Act, RCRA provides a regulatory framework for the disposal of all solid and hazardous wastes. The law was designed to regulate all processing of hazardous waste. The House Energy and Commerce Committee recently approved a bill (H.R. 2867) to widen EPA regulation, by including small-quantity generators. The measure would also prohibit landfill dumping of liquid and dangerous toxic wastes, and outlaw underground injection of hazardous wastes near ground water supplies. The Senate began hearings on its reauthorization bill (S. 757) on June 9th.

Superfund expires in September 1985. The \$1.6 billion program provides for the cleanup of hazardous spills from old

dumpsites when no responsible party can be found. Superfund also imposes retroactive liability on any company found to be responsible for a hazardous waste site.

It is in the interest of all Americans to resolve the hazardous waste situation as soon as possible.

Liberals generally favor a national environmental policy undertaken by strong centralized government agencies. The existing environmental legislation broadly reflects this view. Implicit in this philosophy, however, is the assumption that the American people and their local representatives cannot be trusted to determine the appropriate level of environmental protection for their communities, given the tradeoff that exists between jobs and environmental quality.

Conservatives, on the other hand, urge the decentralization of regulatory power, wherever possible, to state and local governments, so that the responsibility for action lies with those closest to the scene, not with faraway bureaucrats. In pressing for decentralization, conservatives maintain that it will also mean the increased use of environmentally safe and cost-effective private sector solutions to environmental problems.

Congress should reform the law in a way that encourages local disposal and clean-up efforts using the most efficient means available. It should resist demands for tighter federal control.

Current Environmental Protection Agency regulations, for instance, exempt roughly 700,000 so-called small-quantity generators, such as gasoline stations. Congress should ignore attempts to bring these under RCRA and leave regulation to state and local governments.

On the other hand, Congress should immediately ban the landfilling of all hazardous waste, since the evidence indicates that the practice is unsafe. Congress also needs to find a quick resolution to the "toxic tort" liability question. Businesses, consumers, and potential third-party litigants need to know their rights and liabilities regarding toxic contamination.

Intrastate hazardous waste oversight responsibilities should be returned to the states, where they belong. Once the responsibility for hazardous waste has been shifted to state officials, these same officials can no longer blame Washington if dumpsites are operated negligently or ignored by local officials.

THE ISSUES

Small-Quantity Generators

One of the most controversial portions of this year's reauthorization bill is a proposed amendment, authorizing EPA

regulation of facilities that generate only small quantities of hazardous wastes, such as gas stations, dry cleaners and school science labs. Currently, these are not subject to EPA regulations. About 90 percent of all hazardous waste generators fall into this category, producing approximately 5 percent of all toxic waste.¹ Under current law, small generators can dump waste at landfills or municipal dumps without monitoring.

The question is which level of government should regulate such generators. State and local governments should take the lead. If a community decides that it should be as close to 100 percent free of hazardous waste as possible, then it should be the responsibility of state and local officials to make and enforce whatever laws are needed.

Proponents of direct federal regulation of small generators claim that EPA can ensure the health and safety of the waste service industry. Advocates also argue that since state and local governments often refuse to accept responsibility for community environmental health, including small quantity generators under RCRA is a necessary step.

Opponents counter that additional controls would not result in any appreciable health benefits, while they would prove costly to small firms already overburdened with regulation. Non-compliance and a marked increase in "midnight dumping" would result. Non-compliance is also possible, of course, under state and local regulation, but the closer the regulators are to the regulated, the more comprehensive and appropriate will be the oversight.

Secondly, claim opponents, inclusion under RCRA of hundreds of thousands of scattered small quantity generators means that EPA would be swamped with paperwork, and totally unable to comply with its statutory assignment.

A compromise is possible, however. Congress should declare that if a state or locality decides that a generator is dangerous enough to warrant oversight, it is up to that government, and ultimately its electors, to determine what action should be undertaken, and what costs should be imposed on local firms and taxpayers, to achieve a desired environmental standard. There is no reason why the federal government should be raiding a community's local service station to see if waste oil has been dumped in the backyard.

Landfills

A second controversial issue involved in the pending reauthorization concerns landfills. Incidents of groundwater contamination

¹ Technologies and Management Strategies for Hazardous Waste Control. A report by the Office of Technology Assessment, U.S. Congress, March 1983, p. 5.

due to leaking hazardous waste landfills have been increasing at an alarming rate.

Scientific evidence supports EPA's current view that landfills can be unsafe repositories for liquid and solid hazardous wastes.² The Princeton University hazardous waste research program, for instance, conducted a study in 1982 on four New Jersey landfills that employed "state of the art" techniques to prevent leakage. Based on the study, the program administrator declared that "the conclusion is inescapable that all landfills [with today's technology] will ultimately leak and fail."

There are alternatives to landfill. Private sector hazardous waste management techniques have progressed at a remarkable rate in recent years. They could soon replace government-funded cleanup projects and landfills. Not only do alternatives exist, but they are applicable to almost every form of hazardous waste. The sooner EPA bans the use of landfills for hazardous waste, the sooner the risk of groundwater contamination and carcinogenic exposure will be reduced.

Toxic Torts Liability

The Superfund Legislation (CERCLA) makes no explicit provision for the recovery of damages in a case of toxic waste exposure. This omission, combined with wide variations in state tort and workmen's compensation laws, has left consumers, industry, government and third-party litigants ignorant of their rights and responsibilities.

Bills designed to rationalize the 32 existing state tort laws with a coherent federal law have been proposed by Senators Robert Kasten (R.-Wisc.), George Mitchell (D.-Me.) and Robert Stafford (R.-Vt.), and by Representative John LaFalce (D.-NY). The Reagan Administration has also come down in favor of a federal law in this area.

By taking the proper action in this issue, Congress can reduce the chances of further legal nightmares like those at Times Beach and Love Canal. In addition, it can provide victims with a means of redress which is equitable to both the consumer and industry. This complex issue will be discussed further in a forthcoming Heritage Foundation study.

PRIVATIZATION

The best hope for cleaning up America's waste problem is to encourage private sector solutions to previously government-funded clean up projects, since these offer the best hope for effective

² "EPA Still Doesn't Know the Dimensions of Nation's Hazardous Waste Problems," The National Journal, April 16, 1983, p. 796.

and economical hazardous waste disposal. Companies and jurisdictions across the country are discovering innovative methods of treating hazardous wastes. The technologies now available include:

Bugs: Sybron Biochemical, of Salem, Virginia, has developed a mutant strain of bacterial bugs which eat some of the most dangerous organic chemicals, breaking them down into their harmless components.³ Once the toxic food source has disappeared, the bacteria fall victim to competition with natural bacteria and die. According to the American Association for the Advancement of Science, other strains have been isolated that can turn even PCBs (polychlorinated biphenyls) into carbon and energy sources.⁴

Toxiflex: The "toxiflex" method, developed by Columbia University, facilitates the conversion of toxic heavy metal slag into high-value building materials.⁵ Coal and municipal wastes can be combined into a fuel for boilers. The toxiflex method adds toxic heavy metals, such as chromium, cadmium and lead to this process, trapping the metals in the residual slag, which can be used safely in road building or construction.

Radiation: Invented by the Envirokinetics Corporation of New Rochelle, New York, this process uses gamma radiation from nuclear waste to break down other hazardous waste.⁶ The process has two very important benefits: it is a proven method of toxic waste treatment, and it provides a useful and safe repository for nuclear plant by-products.

Biological Incineration: A new land farming technology, known as biological incineration, has led to new strains of microorganisms that thrive under adverse conditions. Researchers at Cornell University, have proposed using large doses of one newly isolated bacterium, that thrives on a diet of pentachlorophenol (PCP), as a treatment for this highly toxic wood treatment chemical.⁷

Spouted-Bed Incineration: Battelle Columbus (Ohio) Laboratories recently developed an incineration process for burning wastes with low heat contents.⁸ Wastes that could be treated in this way include chemical waste liquids, used oils, carbon black gas, and pulping process clarifier sludge.

Mobile Incineration: The Oil and Hazardous Materials Unit of EPA has developed a prototype high temperature mobile incinerator

³ "Va. Firm's Mutant Bugs could be an Answer to Toxic Wastes," The Washington Post - Business Monday, November 29, 1982, p. 44.

⁴ Science Magazine, Vol. 220, No. 4601, (June 3, 1983) p. 1.

⁵ "Finding New Antidotes for Hazardous Wastes," High Technology, November/December 1982, p. 33.

⁶ Ibid., p. 34.

⁷ Ibid.

⁸ Ibid., p. 33.

with a capacity of 100 gallons of liquid waste per hour. The incinerator, built by the I.T. Corporation of Los Angeles, is cheap, efficient, and very portable. It answers the needs of many communities that need to clean up toxic waste dump sites, yet do not want to build a permanent waste treatment plant.⁹ Some companies have already begun producing several of the unit's other inventions, including a mobile chemical treatment plant, a mobile decontamination facility, and a backpack foam spraying system to deal with oil and chemical spills.

Incineration at Sea: Waste Mangement Inc. of Des Plaines, Iowa, incinerates hazardous waste at sea.¹⁰ Since seawater readily absorbs the hydrogen chloride produced in the incineration process, EPA does not require stack gas scrubbers. In 1982, the company's ship attained a 99 percent effective destruction rate of 3.9 million gallons of PCBs. While ocean incineration is an attractive alternative to landfills, however, the technology is still expensive.

Matching and Re-use: Another method of disposing of hazardous waste is to recover those by-products which can be reprocessed and reused. Steel plants, for example, generate large quantities of acids, and these acids can be used to neutralize the alkaline effluent from a nearby chemical plant. A similar process involves blending limestone with acidic chemical factory wastes. Monsanto's adipic acid plant in Pensacola, Florida, places such a mixture in exhaust stacks, where it removes up to 95 percent of the sulphur from the stack gases.

LESSONS FROM ABROAD

America can learn a tremendous amount about safe and effective hazardous waste disposal from England, France, Holland, West Germany and Japan.¹¹

--The British have developed a method of mixing cement with liquid wastes. This permanently encases toxic waste chemicals in solid concrete blocks that can be used safely as a sub-base for highways.

--The French have a complicated system of economic incentives and disincentives to encourage French industry to take wastes to incineration centers, rather than dumping them on company property or in landfills. Some of these incineration facilities have become so proficient at recovering waste metals that they are now selling the metals back to the same companies which brought in the waste.

⁹ Samuel G. Freedman, "Finding New Ways to Destroy Toxic Wastes," New York Times, January 10, 1983, p. 81.

¹⁰ High Technology, November/December 1982, p. 33.

¹¹ James A. Stegenga, "Toxic Waste Disposal - The European Way," Christian Science Monitor, May 24, 1982, p. 23.

--Dutch and German engineers have perfected "at-sea" incinerators that can burn certain wastes with minimal effects on the seawater. This process is similar to the method used by America's Waste Management Inc.

--In Japan, companies that violate toxic waste laws not only pay stiff fines and clean-up costs, but also must pay medical bills and the moving expenses of affected people who wish to relocate.

NEW FEDERALISM AND HAZARDOUS WASTES

The discretion and responsibility for intrastate waste management should be returned to state and local governments. For this, federal law must be interpreted uniformly by the EPA's Regional Officers and the states must be able to fulfill fully their oversight responsibilities.

The effectiveness of the RCRA decentralization process, under current federal law, depends on whether a given state has reached Phase I or Phase II authorization. Phase I authorization (or interim authorization) establishes the administrative framework within which a state can implement RCRA. Phase II authorization (or final authorization) is granted to a state if its program is compatible with and equivalent to the federal program, and if the state has demonstrated adequate enforcement capability. Regulations under Phase II include financial responsibility requirements, technical standards for treatment and storage and disposal facilities, emergency plans, and inspection and monitoring standards.

Progress so far has been mixed. By April 1983, thirty-six states had their administrative Phase I frameworks in place, while eight were in the draft stage. Just ten states, however, had met the full Phase II requirements; another sixteen states have draft plans. Nine states have not even filed a draft Phase I plan.¹² Only Wyoming has elected not to have its own state program.

States and regions face very different problems. Industrial and municipal hazardous waste generators and their toxic by-products are not the same in Maine and Montana. Air, soil, and water conditions also vary considerably from state to state.

The decentralization pace must be accelerated. The faster states create their own hazardous waste oversight procedures and become capable of enforcing their own rules, the faster intrastate hazardous waste generators can be cataloged. Once this process is complete, each state can plan how to best guarantee the safety of its citizens. The federal role should be to set tough federal guidelines from which the states can set their own limits and policies.

¹² Idaho, Alaska, Hawaii, Colorado, South Dakota, Minnesota, Michigan, West Virginia and the Virgin Islands.

CONCLUSION

Congress must remember, as it revises the nation's hazardous waste policy, that the goal should be to clean up waste, not to create a hazardous waste bureaucracy. Moreover, while Congress should protect the environment, legislators should not penalize industry to the degree that non-compliance becomes the rule rather than the exception, due to unreasonably complicated laws.

The federal government should not include small quantity generators under RCRA. It should encourage state and local governments to assume whatever oversight function they deem necessary, possibly including the promulgation of regulations which control such small quantity generators.

Landfill utilization should immediately be made illegal as a means of hazardous waste disposal. A direct relationship exists between landfills and groundwater, air and soil contamination.

The present toxic tort recovery system is extremely confusing. An individual bringing a plenary lawsuit may have to overcome substantial legal and equitable problems, depending on the forum state's law. Congress must provide for an equitable solution to a potentially staggering medical and legal problem.

Congress should also encourage the private sector, which is developing innovative solutions to the hazardous waste problem. These efficient and safe methods must replace dangerous and hazardous practices such as landfilling.

A federal-state dialogue, on the basis of President Reagan's New Federalism proposals, is essential to meeting the objectives of RCRA and Superfund. The federal government should reduce its role in hazardous waste management according to the progress of states in assuming responsibility for intrastate management. Most interstate hazardous waste problems should continue to be under the purview of the federal government, unless a consortium of affected states agrees to take action. International hazardous waste situations should remain the exclusive responsibility of the federal government.

Congress, in its review of RCRA and Superfund, should continue to emphasize the decentralization of hazardous waste management authority and the need for private sector alternatives. Instead of trying to show their concern by outbidding their colleagues in voting more funds for EPA, as though that was some test of their commitment to a clean environment, legislators should recognize at last that Washington, unlike Father, does not necessarily know best.

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