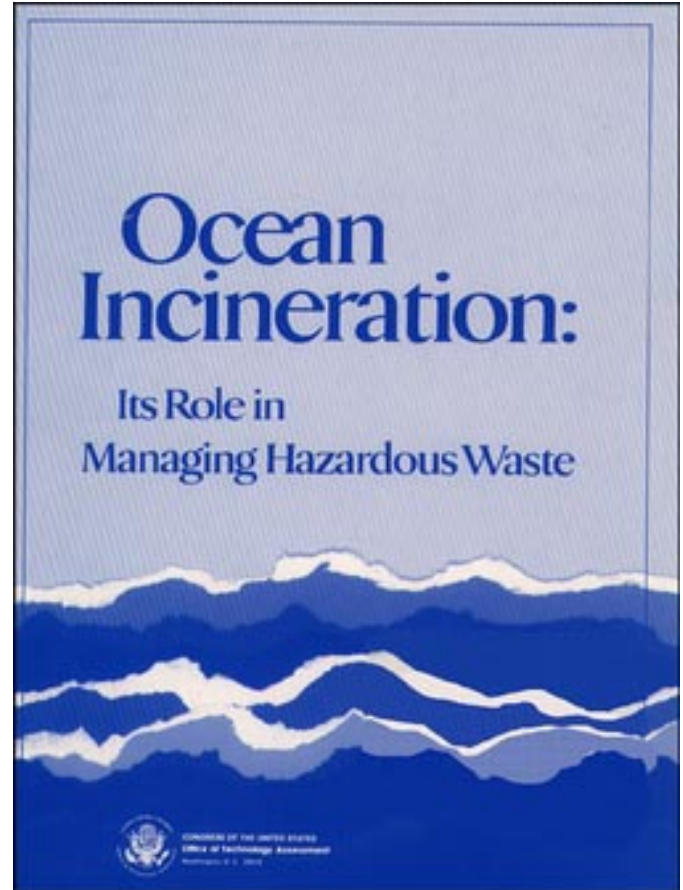


*Ocean Incineration: Its Role in Managing  
Hazardous Waste*

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## Foreword


The American approach to managing hazardous wastes is undergoing rapid change. A decade ago Congress passed the Resource Conservation and Recovery Act (RCRA), formally recognizing the costs of past, indiscriminate land disposal. The Nation now is moving with some urgency toward development and greater utilization of methods that destroy, treat, recycle, or reduce the generation of hazardous wastes.

Within this context of change, one of the many distinct technologies for managing hazardous wastes—ocean incineration—has received an extraordinary degree of attention. Is ocean incineration part of the solution to, or simply a repetition of, the mistakes of the past? By burning hazardous wastes far from land, are we reducing risks to human health or simply shipping our problems out to sea? Is the small but real risk of a catastrophic spill worth the benefit of actually destroying most of the wastes? These and other questions have been the focus of considerable public attention over the last several years, and various congressional committees have responded by holding half a dozen hearings since 1983.

In 1984, two congressional committees—the House Committees on Merchant Marine and Fisheries and on Public Works and Transportation—requested the Office of Technology Assessment to undertake a broad study of wastes in marine environments, including an examination of ocean incineration. At that time, the Senate Committee on Commerce, Science, and Transportation endorsed the study. More recently, the original requesting committees and the House Committee on Science and Technology asked OTA to prepare a full report on ocean incineration. In response to the latter request, this assessment, *Ocean Incineration: Its Role in Managing Hazardous Waste*, provides a comprehensive examination of ocean incineration technology. A second assessment responding to the initial request is in preparation.

This assessment of ocean incineration includes consideration of the adequacy of regulations; risks to human health and the marine environment relative to the risks of comparable activities; existing and emerging alternatives; the capabilities and limitations of ocean incineration in managing hazardous wastes; and how its use might affect efforts to develop superior waste treatment and reduction practices. Particular attention is addressed to areas of intense public concern over the use of this technology. This report is offered to aid Congress in its deliberation of the fate and design of the ocean incineration program.

Many individuals in government, industry, the public interest and environmental communities, and academia contributed to the effort represented by this report. In particular, OTA wishes to thank the advisory panel and the many reviewers who devoted time and energy to this undertaking. Their involvement does not necessarily indicate endorsement of the report or agreement with its findings: OTA bears sole responsibility.



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NOTE: OTA appreciates and is grateful for the valuable assistance and thoughtful critiques provided by the advisory panel members. The panel does not, however, necessarily approve, disapprove, or endorse this report. OTA assumes full responsibility for the report and the accuracy of its contents.

### Related OTA Reports

- ***Wastes in Marine Environments.*** In preparation.
- ***Serious Reduction of Hazardous Waste for Pollution Prevention and Industrial Efficiency.*** *In press.*
- ***Transportation of Hazardous Materials. OTA-SET-304;*** July 1986. GPO stock #052 -O03-O1042-9; \$13.00.
- ***Superfund Strategy. OTA-ITE-252;*** April 1985. GPO stock #052 -O03-O0994-3; \$10.00.
- ***Protecting the Nation Groundwater From Contamination. OTA-O-233;*** October 1984. GPO stock #052 -O03-O0966-8; \$7.50.
- ***Acid Rain and Transported Air Pollutants: Implications for Public Policy. OTA-O-204;*** June 1984. GPO stock #052 -O03-O0956-1 ; \$9.50
- ***Technologies and Management Strategies for Hazardous Waste Control. OTA-M-196;*** March 1983. NTIS order #PB 83-189241.

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