

*An Evaluation of Options for Managing  
Greater-Than-Class-C Low-Level  
Radioactive Waste*

October 1988

NTIS order #PB89-114250

AN EVALUATION OF OPTIONS FOR MANAGING  
GREATER-THAN-CLASS-C LOW-LEVEL RADIOACTIVE WASTE

Background Paper

October 1988

Congress of the United States  
Office of Technology Assessment  
Washington, D.C. 20510-8025

Recommended Citation:

U.S. Congress, Office of Technology Assessment, An Evaluation of Options for Managing Greater-Than-Class-C Low-Level Radioactive Waste, OTA-BP-O-50, October 1988.

Library of Congress Catalog Card Number 88-600589

## Foreword


This evaluation of management options for greater-than-Class C (GTCC) low-level radioactive waste was undertaken at the request of the Senate Committee on Environment and Public Works. The Committee asked that OTA evaluate existing Federal and non-Federal options for GTCC waste storage and disposal. From its analysis, OTA was to develop an integrated management approach to protect public health and safety in the short- and long-term.

The most significant finding of this study deals with the storage of GTCC waste. Since a disposal facility for GTCC waste will not be available for at least fifteen to twenty years, GTCC waste will have to remain in storage in the meantime. This period of extended storage could be extremely difficult for many GTCC material users and waste generators. OTA has developed a possible approach for addressing these problems.

Other OTA documents covering radioactive waste issues are the reports, Management of the Nation's Commercial High-Level Radioactive Waste (1985), Transportation of Hazardous Materials, (1986), and a staff paper, Subseabed Disposal of High-Level Radioactive Waste, (1986).

This Background Paper on GTCC waste was prepared as part of a broader study on the disposal of Class A, B, and C low-level radioactive waste that will be completed next year. This latter report will also deal with the disposal of mixed wastes that contain both low-level radioactive and hazardous wastes. The management of hazardous wastes has been addressed in several OTA reports, including Technologies and Management Strategies for Hazardous Waste Control, (1983) and Serious Reduction of Hazardous Waste, (1986).

OTA is grateful for the input from the many reviewers of this report; their comments were invaluable. As with all OTA studies, the content of this report is the sole responsibility of OTA.



John H. Gibbons  
Director

## **OTA Project Staff**

John Andelin, Assistant Director, OTA  
Science, Information, and Natural Resources Division

Robert W. Niblock, Oceans and Environment Program Manager

**Gretchen Hund McCabe, Project Director**

William D. Barnard, Senior Analyst

### **Administrative Staff**

Kathleen A. Beil  
Sally Van Aller

## Report Reviewers

Written comments were received from the following technical experts:

Karl Amlauer  
Isotope Products Laboratories

Holmes Brown  
Afton Associates

Dennis Dumas  
Dupont, New England Nuclear

Brian Farrell  
Edison Electric Institute

Joanna Hoelscher  
Citizens for a Better Environment

Edward Jennrich  
Rogers and Associates Engineering Corp.

Margaret Knecht  
EG&G Idaho, Inc.

Donald MacKenzie  
Brookhaven National Laboratory

William Newberry  
EG&G Idaho, Inc.

Alan Rodgers  
EG&G Idaho, Inc.

Gary Roles  
U.S. Nuclear Regulatory Commission

Barry Siskind  
Brookhaven National Laboratory

NOTE: OTA appreciates and is grateful for the valuable assistance and thoughtful critiques provided by all the reviewers of this Background Paper. The reviewers do not, however, necessarily approve, disapprove, or endorse this Background Paper. OTA assumes full responsibility for the Background Paper and the accuracy of its contents.