

H I G H - L E V E L   W A S T E   T E C H N O L O G Y

L. Penberthy, Chairman  
F. Marcus, Scientific Secretary

PUBLIC COMMENTS ON THE DRAFT GENERIC ENVIRONMENTAL  
IMPACT STATEMENT FOR MANAGEMENT OF COMMERCIALY  
GENERATED RADIOACTIVE WASTE

C. M. Unruh, M. R. Kreiter, and R. F. McCallum  
Pacific Northwest Laboratory  
Richland, Washington

INTRODUCTION

The U.S. Department of Energy has the responsibility for developing the technology required for managing commercial radioactive wastes in an environmentally acceptable manner. As part of this responsibility, DOE has prepared a draft environmental impact statement on the management of commercially generated radioactive waste. The draft was issued for public comment in April of 1979; five public hearings were held. The draft GEIS is intended to provide environmental input for the selection of an appropriate program strategy for the permanent isolation of commercially generated high-level and transuranic wastes. The scope of such a strategy includes research and development into alternative treatment processes and emplacement media, site investigations into candidate media, and the examination of advanced waste management technologies.

The draft statement describes the commercial radioactive wastes that would have to be managed for very long periods of time from an assumed nuclear generation scenario of 10,000 GWe-yr of power over a 65-year period ending in 2040. These long-lived wastes, designated as high-level and transuranic-contaminated wastes are those for which DOE will have responsibility for disposal. The management of low-level wastes and uranium mill-tailings, both of which are disposed of by commercial entities under NRC regulation, has been discussed in separate analyses by the Nuclear Regulatory Commission. The generation of

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10,000 GWe-yr corresponds to growth from the present 50 GWe installed capacity to a projected 400 GWe capacity in the year 2000 and the generation of power by these reactors over an assumed 40-year reactor lifetime. The reference installed nuclear generating capacity used in the GEIS is based on DOE's high-growth, high-demand scenario, which provides, of course, an upper bound estimate of the quantity of wastes to be generated. A second, smaller growth rate of 255 GWe capacity in the year 2000, corresponding to 6,300 GWe-yr of total electricity generated is also analyzed. Scaling factors for other levels of nuclear power generation are also described. The installed nuclear capacity is assumed to comprise two-thirds pressurized water reactors (PWR) and one-third boiling water reactors (BWR).

### PUBLIC INVOLVEMENT

The National Environmental Policy Act provides for public involvement by requiring preparation of an environmental impact Statement for major Federal actions. Additionally, Council on Environmental Quality (CEQ) guidelines state that public hearings are necessary if the action is of sufficient interest to the public. DOE solicited public involvement to ensure compliance with NEPA and CEQ guidelines.

On April 20, 1979, a notice was published in the Federal Register announcing the availability of the draft Commercial Waste Management Statement and requesting review and comment by interested public groups and individuals. In the notice a comment period ending July 6, 1979, was identified. Because of requests from several sources, the comment period was extended to October 4, 1979. In a later Federal Register notice, the holding of public hearings in several locations throughout the United States was announced. Each of these approaches has provided valuable and substantive input to the completion of the impact statement on the Management of Commercially Generated Radioactive Waste, DOE/EIS-0046.

#### Written Comments

Written comments upon the draft Statement were received from numerous sources, including individuals, states, industry representatives, and public interest groups. About 220 different groups or individuals were represented by a like number

of letters. Individual comments presented in the letters ranged from one to about 300 for a total of 2000 comments identified in the letters received by the Department of Energy.

Upon receipt, each individual letter was given an identification number. Letters were then examined and substantive comments identified. As shown in Fig. 1, the comments were then categorized into two general areas. The areas included comments directed toward policy and comments directed toward technology. These broad categories were further subdivided into topic areas. In the case of comments on policy, there were some nine individual specific topic areas. In the case of technical comments, there were 17 topic areas. The comments were then gathered together in similar groups and distilled or paraphrased as singular key issues. Key issues were then addressed, and responses are now being prepared for the key issues identified. After review, the issues and responses will be incorporated as modifications to volumes 1 and 2 and will be individually reported in a new volume 3.

### Public Hearings

Five hearings were held to provide interested groups and individuals the chance to express their ideas on radioactive waste management and to comment on the Statement. These were spaced in both time and location to permit collecting testimony from citizens across the nation. A hearing board, composed of five well-qualified individuals with no current direct connections or program support from DOE, was selected. The hearing board was composed of:

Chairman:  
Professor George Frampton  
College of Law  
University of Illinois

Dr. Clifford Smith  
Vice President for Administration  
Oregon State University

Dr. Dorothy Newman  
Consultant, Lecturer

Dr. Hugh Barnes  
Department of Geosciences  
Pennsylvania State University

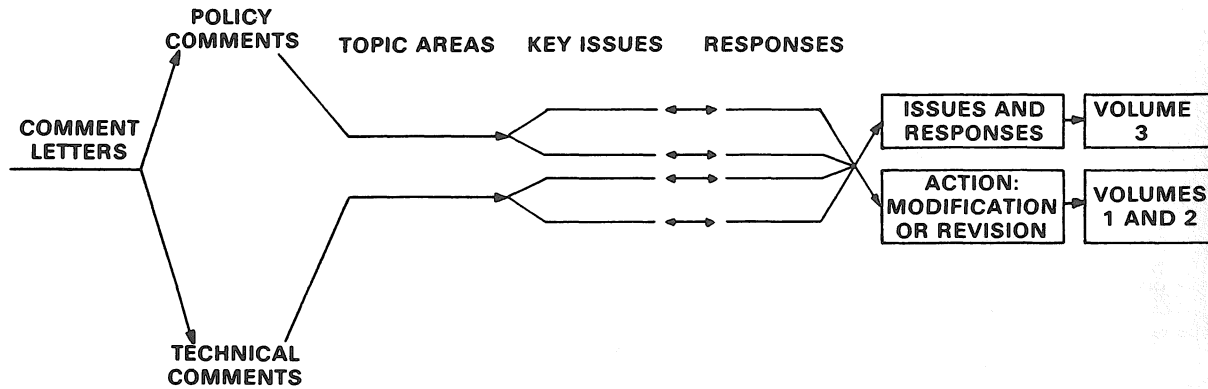


Fig. 1. Process for Handling Public Comment Letters

Dr. Melvin Carter  
Office of Interdisciplinary Programs  
Georgia Institute of Technology

The five hearings were held as follows:

|                   |                 |
|-------------------|-----------------|
| Washington, DC    | June 26-27      |
| Chicago, IL       | August 8-9      |
| Atlanta, GA       | September 25-26 |
| Dallas, TX        | October 2-3     |
| San Francisco, CA | October 8-9     |

The hearing board established the rules of conduct for the meeting, listened to the public meeting participants, and quizzed participants to clarify an understanding of their statements. The hearing board, at the conclusion of the five hearings, prepared a report of the issues developed by this process. In preparing the final Statement, DOE is now considering the hearing board report as well as the comment letters received on the draft Statement.

#### Results of Comments

The comments are reflected in the work now being undertaken to revise portions of the Statement and to include a new volume 3. The new volume will provide a clear and concise statement of the paraphrased key issues plus associated responses. Included also will be a cross-reference system permitting the reader to locate within the text of the Statement the revisions made as a result of a specific comment.

A more positive statement of the proposed Federal action and alternatives to that action has been made in response to numerous comments that the purpose of the impact statement was not clear to the reader. The action proposed by the Federal Government is a research and development program that emphasizes the use of mined geologic repositories capable of accepting wastes from reprocessed and unprocessed spent fuel. This research and development program will be carried forward to allow location of specific sites for construction of the first disposal facilities for high-level waste, which will be mined repositories. An alternative is one of no action, in which the Federal Government would not undertake development of any disposal option but would leave the system as it now exists. A second alternative is one

that would result in a plan to bring to an equal level of knowledge and development alternatives other than disposal in a conventionally mined geologic repository.

As a result of many comments, a new summary is under preparation. This summary will be much shorter than in the draft and will focus on key findings of the environmental analysis reported within the draft Statement. The intention is to better communicate with the public and to assist in the understanding of the enormous amount of data presented within the Commercial Waste Management Statement.

## DISCUSSION

The public hearing process offered an opportunity for all participants who showed up at their designated times to participate. Only at the San Francisco hearing was the full two-day period completely used, and about 5 to 10 speakers, who were not previously scheduled participants but announced their interest during the hearing, were not able to be heard. All scheduled participants were heard at all hearing board meetings. The hearing records were maintained open so that written comments could be submitted to the board for their consideration after completion of the oral hearing process. Complete transcripts were made of each hearing.

Advertising for the public hearings varied widely at different locations in the country. Newspapers, radio ads, official Federal Register notice publications, and letters to known interested individuals and organizations resulted from DOE's major effort to make the hearings completely open and available. At each hearing there were persons who heard of the event only shortly before the hearing itself and who stated that a better job of public involvement and scheduling was needed. It becomes very difficult to determine to what extent public advertising can effectively notify "all" interested individuals of the public hearing process.

The hearing process was effective in collecting well-reasoned and well-developed comments, representing a spectrum of opinions, about the Impact Statement's contents. But the process was also lengthened and confused in part by many who

commented on broader issues than are contained within the Statement's scope. Greater visibility through better public advertisement of the hearings coincided with better communications with public interest groups. The hearing board and DOE repeatedly requested suggestions for improving the public hearing notification process. The suggestions received may be summarized as:

1. Take out sizable, frequent newspaper ads in the hearing city and region well before the hearings, and repeat several times.
2. Take out TV ads.
3. Notify, by letter, known special interest groups and ask them to help inform other groups and individuals who might have an interest.
4. Notify local, state, and government offices by letter.

The most successful hearing occurred when the above notification steps were taken. This type of publicity seemed to reach a good cross-section of interested groups and individuals and resulted in a full commitment of all the available hearing time. Good publicity was effective.

A review of the comments derived from the hearing process shows they fall, generally, into three categories. Many participants were seriously concerned about the Statement and voiced their specific comments, both pro and con, showing they had made a detailed review of the Statement and had studied its contents thoroughly. A second group of participants had received a summary of the Statement, perhaps only a few days before the public hearing process, and provided comments less specific than the first group's. Those who became involved only shortly before the hearings tended to have less detailed contributions, as might be expected. A third group of participants were avidly opposed to nuclear power and based their presentations to the hearing board on that premise. These comments, in general, did not address the content of the Impact Statement and were not in most cases specifically helpful in preparing the final statement. Many of those in this third group had not read the Statement nor the summary, but appeared primarily to use the hearing process as a forum to speak against nuclear power. Basically, for them, the purpose of the hearing was not appropriate and was too narrow in scope to meet their needs.



The hearing board collected the points of issue from the voluminous transcripts and summarized these for use by DOE in preparing the final EIS. Many of the same comments, both pro and con, were made many times by different participants at different times and at different hearings. While some technical comments and data were presented, the comments tended to be more socially-, perspective- and opinion-oriented. The general lack of specific comments was noted.

The value of the public hearing process is difficult to assess. It has widely differing values to different participants. Participants commented on their lack of confidence in the value of the process. Many felt that if their particular comment or opinion was not adopted, then that proved their point: that DOE did not, in fact, want their input. Many came to interact with a DOE board and did not recognize the nature of the independent hearing board composition or its actual assigned functions. The public hearing process was not understood by many participants. Many appeared with essentially no preparation or study of the Statement.

We believe the public involvement process was worthwhile. Participants usually had strong opinions. All comments pertaining to the Statement were welcome and heard by the hearing board and most of the team leaders who prepared the draft Statement. In the final issue of the Statement now being prepared, the exposure to the hearing process and the many comments made at the hearing and in the comment letters to DOE are receiving deliberate consideration. Not all comments will be adopted; not all merit adoption; many were diametrically opposed, preventing such a possibility.

Extensive public response through comments and involvement in hearings provided evidence of the success of DOE's attempt to involve the public. Much remains to be done to improve the understanding of the public participation process. With a wide range of divergent opinions, however, improvements in the process will be slow and difficult. With divergent points of view, not all views can be adopted. Such is the mechanism of the democratic process--all will be heard, the prevailing course of action will be adopted. The minority may elect to acquiesce or may continue to proclaim their positions in another or future forums.