

December 14, 1990

Robert Fjeld, Chairman
Education/Information Subcommittee
American Society of Mechanical Engineers
Department of Environmental Systems Engineering
501 Rhodes Engineering Research Center
Clemson University
Clemson, South Carolina 29634-0919

Dear Mr. Fjeld:

This is in response to your November 27, 1990 request for material for inclusion in the American Society of Mechanical Engineers (ASME) newsletter. Enclosed is an article that will appear in the Nuclear Regulatory Commission's, Office of Nuclear Material Safety and Safeguards (NRC/NMSS) NMSS Licensee Newsletter December, 1990 issue. The full citation for this issue of the newsletter will be "NMSS Licensee Newsletter, NUREG/BR-11, 90-04, December 1990." Please feel free to include the article as it is presented. If you wish to make any changes to the article you will need to contact the NRC for approval prior to making the changes. If you have any questions please contact me at (301)492-0560 or Nick Orlando, of my staff, at (301)492-0566.

Sincerely,

JS

John H. Austin, Chief
Regulatory Branch
Division of Low-Level Waste Management
and Decommissioning, NMSS
U.S. Nuclear Regulatory Commission

Enclosure: As Stated

Distribution: Central File# NMSS r/f LLWM r/f JGreeves
RBangart NORlando JAustin EKrauss, Tech. Ed.

PDR YES NO Category: Proprietary or CF Only
ACNW YES NO

SUBJECT ABSTRACT: ASME NEWSLETTER ARTICLE

OFC :LLWM :LLWM :LLWM
NAME: DON Orlando : JAustin : JGreeves
DATE: 12/13/90 : 12/14/90 : 12/14/90

OFFICIAL RECORD COPY

9012200215 901214
PDR WASTE
WM-3 PDR

delete ACNW
406-3.4
WM-3
12/14/90

THE NUCLEAR REGULATORY COMMISSION (NRC) AND
THE ENVIRONMENTAL PROTECTION AGENCY (EPA)
TO DEVELOP NATIONAL MIXED WASTE PROFILE

On May 14, 1990, a letter was forwarded to NRC Chairman Kenneth M. Carr, and EPA Administrator William K. Reilly, by the Host State Technical Coordinating Committee (TCC), requesting the development of a national profile on the volumes and characteristics of commercially generated low-level radioactive mixed waste. Mixed waste is waste that satisfies the definition of low-level radioactive waste in the Low-Level Radioactive Waste Policy Amendments Act of 1990 (LLRWPA), and contains hazardous material that is either: (1) listed as a hazardous waste in Subpart D of 40 CFR Part 261; or (2) causes the waste to exhibit any of the hazardous waste characteristics identified in Subpart C of 40 CFR Part 261. As a result of this letter, and consultations between NRC, EPA, and the Department of Energy (DOE), a contract was awarded to Oak Ridge National Laboratory (ORNL), to compile a national profile on the volumes, characteristics, and treatability of commercially generated low-level radioactive mixed waste. The information that will be compiled by this profile is needed by States, compact officials, private developers, and Federal agencies to assist in the planning and development of treatment and disposal facilities for low-level radioactive mixed waste.

The project has been divided into three phases. Phase one of the project will consist of an evaluation of existing data on mixed waste volumes and characteristics, to determine if these data are adequate to use as the basis for a national mixed waste profile. Phase one will include a literature search for data on mixed waste, focusing primarily on results from past mixed waste survey reports. A summary of the problems encountered and lessons learned from past surveys will also be included. Phase one will also identify the basis for determining the adequacy of the data, identify the data parameters and information configurations for a mixed waste profile, and propose a method of compiling the existing data, if it is determined that the existing data are adequate to meet the stated objectives of the survey.

Phase two of the project will be implemented if it is determined that the data from previous surveys are not adequate to compile a national mixed waste profile. This phase of the project will begin with the development of a plan for the collection of the data needed to compile the mixed waste profile. This plan will consist of a formal statement of the objective and scope of the plan; a description of the approach and method of data collection; an estimate of the impact on the survey population; a description of the computer database; and a description of the data analysis to be performed. Phase two will also include the development and testing of the tool(s) to be used in the collection of the data. Development of the tool(s) will require a proposal of the data parameters and information configuration to be used to conduct the survey as well as the testing of the tool(s) on a limited sample population. Phase two of the project will conclude with the actual collection and analysis of the survey data, if needed.

Phase three of the project will consist of the preparation of a national mixed waste profile report. This report, which will be published in NUREG form, will identify mixed waste volumes and characteristics, treatment technologies, and organizations offering these technologies.

Phase one of the project was initiated on September 17, 1990, and the entire project is expected to be completed between September 1991 and March 1992. NRC licensees may be asked to participate in the profile if it is determined that phase two of the plan should be undertaken.