



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON NUCLEAR WASTE  
WASHINGTON, D.C. 20555

July 14, 1989

ACNWS-0012  
PDR 8/11/89

The Honorable Kenneth M. Carr  
Chairman  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Dear Chairman Carr:

SUBJECT: TWELFTH MEETING OF THE ADVISORY COMMITTEE ON NUCLEAR WASTE,  
JUNE 28-30, 1989

The Advisory Committee on Nuclear Waste (ACNW) held its 12th meeting in Bethesda, Maryland, on June 28-30, 1989. A summary of actions is presented below.

REPORTS, LETTERS, AND MEMORANDA

1. ACNW Review of NRC Comments on DOE Site Characterization Plan (Letter to you dated July 3, 1989)

The Committee concluded its discussions with the ACNW Consultants, NRC Staff, and representatives of DOE on the NRC draft SCA and other issues. Specific SCA modules discussed were:

Geology/Geophysics  
Materials Engineering/Waste Package  
Geotechnical Engineering  
Hydrology/Geochemistry  
Performance Assessment  
Quality Assurance

2. Reporting Incidents Involving the Management and Disposal of Low-Level Radioactive Wastes (Letter to you dated July 5, 1989)

The Committee was briefed by the NRC staff on the management of solidified wastes and high integrity containers (HICs), e.g. the misuse of HICs, production of unstable cement products, and the failure of HICs. Three approaches to rulemaking were described. The Committee prepared a report on reporting of incidents and abnormal events.

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## OTHER ACTIONS, AGREEMENTS, ASSIGNMENTS AND REQUESTS

3. Low-Level Cementitious Waste Forms

The Committee was briefed by the NRC staff on the Workshop on Cement Solidification of Low-Level Radioactive Wastes sponsored by NRC and NIST from May 31 through June 2, 1989. The meeting participants concluded that cement was a viable stabilization medium. A summary report will be completed by August 1989 and the draft Branch Technical Position will be brought to the Committee as soon as possible. The Committee agreed not to prepare a report on this subject at this time.

4. Performance Assessment for the High-Level Waste Repository

The Committee was briefed by the NRC staff on the relation of performance assessment (PA) to anticipated processes and events (APEs) and unanticipated processes and events (UPEs), PA modeling, and the NRC in-house PA capabilities. Also discussed was the scope of PA, and ongoing research activities to prepare for PA in the licensing proceedings. This briefing was for information only. No Committee action was taken.

5. Research Related to Nuclear Waste Management

The Committee was briefed by the NRC staff on the NRC waste management research organization (RES), their responsibilities and relationship with NMSS. Information was presented regarding the high-level and low-level waste research plans, research strategy structures, research prioritization, and implementation, with specific examples such as hydrology research. The Committee also discussed the role of the Nuclear Safety Research Review Committee (NSRRC) and the regulatory environment for low-level waste research. No Committee action was taken at this time.

6. Future Meeting Schedules

Dr. Moeller announced that he will visit the Agriculture Research Laboratory and will meet with the Commissioner's Technical Assistants on July 6, 1989, to discuss matters of mutual interest.

Dr. Moeller noted that he has been asked to meet with Commission on July 11, 1989, to discuss the Committee report on the NRC comments on the DOE Site Characterization Plan.

The Honorable Kenneth M. Carr

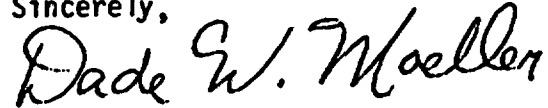
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**FUTURE ACTIVITIES**

Appendix A is the tentative agenda that was proposed to the Committee.

Sincerely,

A handwritten signature in cursive script that reads "Dade W. Moeller". The signature is written in dark ink and is positioned above the printed name and title.

Dade W. Moeller  
Chairman

APPENDIX A  
FUTURE AGENDA

ACNW Meeting on July 26-27, 1989 (CANCELLED)

13th ACNW Meeting on September 13-15, 1989 (tentative agenda)

Center for Nuclear Waste Regulatory Analyses (Open) - The Committee will be briefed on the activities of CNWRA, including recent CNWRA reports on regulatory uncertainty.

Naturally Occurring and Accelerator-Produced Radioactive Materials (NARM) (Open) - The Committee will be briefed on SECY-89-167.

Prototype License Application (Open) - The Committee will be briefed on the prototype license application for low-level waste facilities.

Status of Greater-Than-Class-C Wastes (Open) - The Committee will be briefed by representatives of DOE on GTCC Wastes.

Nuclear Waste Technology Meeting (Open) - The Committee will be briefed by ACNW consultant on the Nuclear Waste Technology Meeting recently held in Las Vegas, NV.

Scoping Study PRA for Yucca Mountain (Open) - The Committee will be briefed by NRC staff, RES, and representatives from Sandia National Laboratory, on the development of a scoping study PRA for Yucca Mountain.

Data Availability (Open) - The committee will invite representatives of DOE and USGS to discuss problems related to delays in obtaining and making data available to enable closure of key issues.

Tectonic Models (Open) - The Committee will be briefed on the Branch Technical Position on tectonic models.

Environmental Monitoring (Open) - The Committee will be briefed on the Branch Technical Position on environmental monitoring.

Pathfinder Reactor (Open) - The Committee will be briefed on the review of the Pathfinder Reactor Dismantlement Plan.

Concrete Bunker Prototype (Open) - The Committee will be briefed on the review of DOE's earth-mounded concrete bunker prototype license application SAR.

Mixed Wastes (Open) - The Committee will be briefed on the EPA criteria for treatment, storage and disposal of mixed radioactive and hazardous wastes.

International Programs on Waste Disposal (Open) - The Committee will meet with Mr. Harold Denton to discuss international programs on waste disposal.

Meeting with Director of Office of Nuclear Reactor Regulation (NRR) (Open) - The Committee will be briefed by NRR on the licensing program for LLW handling systems, fuel compaction, decontamination and decommissioning. The

Committee will discuss any crossover issues with representatives of NMSS and the EDO.

Selection of Nominating Committee - The Chairman will appoint the nominating committee for selection of the 1989 ACNW officers

Status of NRC/DOE Interactions on DOE Quality Assurance (Open)

Committee Activities (Open) - The Committee will discuss anticipated and proposed Committee activities, future meeting agenda, and organizational matters, as appropriate.

14th ACNW Meeting on October 11-13, 1989 (tentative agenda)

Retrievability Demonstration (Open) - The Committee will be briefed on the Technical Position on demonstration of retrievability during site characterization:

- Licensing LLW handling systems
- Fuel compaction
- Decontamination and decommissioning
- Onsite dry cask storage

Earthquake Hazards (Open) - The Committee will be briefed on the Branch Technical Position on earthquake hazards.

Waste Package/Engineered Barrier System Testing (Open) - The Committee will be briefed on the Branch Technical Position on waste package/engineered barrier system testing.

EPA Low Level Waste Standards (Open) - The Committee will be briefed on radionuclide release standards for LLW disposal sites.

Nomination of ACNW Officers (Open/Closed) - The Nominating Committee will present its suggested slate of officers for 1989.

Committee Activities (Open) - The Committee will discuss anticipated and proposed Committee activities, future meeting agenda, and organizational matters, as appropriate.

15th ACNW Meeting on December 27-29, 1989 (tentative agenda)

American Society for Testing Materials (Open) - The Committee will be briefed on the radioactive waste activities of ASTM.

Election of ACNW Officers (Open) - The Committee will vote to select its officers for 1989.

APPENDIX A

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Committee Activities (Open) - The Committee will discuss anticipated and proposed Committee activities, future meeting agenda, and organizational matters, as appropriate.