

MEMORANDUM TO: Martin J. Virgilio, Director  
Office of Nuclear Material Safety and Safeguards

April 29, 2004

James E. Dyer, Director  
Office of Nuclear Reactor Regulation

Paul H. Lohaus, Director  
Office of State and Tribal Programs

Roy P. Zimmerman, Director  
Office of Nuclear Security and Incident Response

FROM: Ashok Thadani, Director **/RA/ Signed by Jack Strosnider for:**  
Office of Nuclear Regulatory Research

SUBJECT: NATIONAL COUNCIL ON RADIATION PROTECTION AND  
MEASUREMENTS MEETING SUMMARY AND ANNUAL REPORT

The Office of Nuclear Regulatory Research has received the attached annual report of the National Council on Radiation Protection and Measurements for 2003. This report reviews the development of the various aspects of the Council's program during 2003. The scientific, administrative and financial aspects are covered with emphasis placed on the completion of scientific studies and the identification of areas where new work can make important contributions. The report discusses the Council's effort to serve the public interest by developing and disseminating information and recommendations on matters of radiation protection and measurement. It is being provided for your information and use. The 2003 Annual Meeting is also summarized (Attachment 2).

NRC provides a grant to NCRP to support their scientific program. In 2003 NCRP publications included NCRP Report Number 143, "Management Techniques for Laboratories and Other Small Institutional Generators to Minimize Off-Site Disposal of Low-Level Radioactive Waste," and NCRP Commentary Number 16, "Screening of Humans for Security Purposes Using Ionizing Radiation Scanning Systems." The NRC uses the Council's recommendations as one of the technical bases in developing regulations and guidance documents.

Please contact Sheryl Burrows of my staff (415-6086) if you have any questions regarding this report.

Attachments: As stated

w/attachments  
cc: C. Paperiello, EDO

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DATE	04/27/04*	04/27/04*	04/29/04	04/29/04

### **Summary of 2004 NCRP Annual Meeting**

NRC personnel from various offices including NMSS, NRR, NSIR, OSTP, and RES attended the Fortieth Annual Meeting of the National Council on Radiation Protection and Measurements (NCRP) April 14-15, 2004 at the Crystal City Marriott in Arlington, VA.

The 2004 NCRP Annual Meeting focused on advances in counteracting the threat to human life created by acts of radiological terrorism. International experts involved in planning for this form of terrorism discussed both the current threat and state of preparedness in both the United States and worldwide. Advances in several aspects of preparing for acts of radiological terrorism were described, including new radiation detection technologies, current and future biological dosimetry, advances in the development of chemical protectants and therapeutic agents for mitigating radiation health effects, strategies for identifying and managing the psychological impacts of a radiological terrorism event, and practical and scientifically-based approaches for efficiently cleaning up and restoring sites contaminated as a result of terrorist actions involving the release of radioactive materials.

Wednesday's opening session included the first annual Warren K. Sinclair Keynote Address delivered by John W. Poston, Sr., from Texas A&M University. The address, titled "Current Challenges in Countering Radiological Terrorism" started by discussing the history of terrorism and stressing that it is not a new phenomenon and progressed to discuss the more recent large-scale acts of terrorism. Among the significant conclusions was that one of the highest barriers to preparation and response to such events was the fragmented structure within the federal government and the huge number of agencies with some mandated responsibility to play a role in the response. In addition, trainers and responders must recognize the often-neglected aspect of the "worried well" and their potential impact on the health delivery infrastructure during a large-scale emergency.

Later sessions on Wednesday dealt with medical management of radiological terrorism events including medical resources and requirements, current and future biological dosimetry, hospital management of radiological casualties, and psychological and communication issues. The sessions included medical management of radiological events, medical treatment of radiological casualties, and hospital management of mass radiological casualties. The point was emphasized that an "all-hazards" approach is required and not just radiological response. That is, victims of radiation terrorism require prompt diagnosis and treatment of medical and surgical conditions as well as conditions related to radiation exposure and radiological contamination.

On Wednesday evening Abel Gonzalez, Director of the Radiation and Waste Safety Division, IAEA, presented the Twenty-Eighth Lauriston S. Taylor Lecture entitled, "Radiation Protection in the Aftermath of a Terrorist Attack Involving Exposure to Ionizing Radiation." Mr. Gonzalez described several on-going international activities designed to provide guidance on measures that may be necessary to prepare for, and to respond to a radiological attack. Based upon previous radiological incidents such as the accidental leakage of cesium-137 at Goiania, Brazil, and the recovered strontium-90 radiothermal generators from Georgia, Mr. Gonzalez described lessons-learned concerning basic preparation, response, radiological protection, recovery actions, communications and the psychological effects of potential radiation exposure on the local populace.

The meeting concluded with a Thursday morning session which covered international efforts in countering radiological terrorism, the international knowledge base for cleanup and site restoration after an event involving radiological terrorism, national policy for cleanup and site restoration, and practical and scientifically based approaches to cleanup and site restoration.

OFFICE OF NUCLEAR REGULATORY RESEARCH  
DIVISION OF SYSTEMS ANALYSIS & REGULATORY EFFECTIVENESS  
RADIATION PROTECTION, ENVIRONMENTAL RISK & WASTE MANAGEMENT BRANCH

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ITEM NO:            4#3

ORIGINATOR:        BURROWS, DSARE/RPERWMB

SUBJECT:            NATIONAL COUNCIL ON RADIATION PROTECTION AND  
MEASUREMENTS ANNUAL REPORT

DATE:                04/27/04

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