

CALIFORNIA RADIOACTIVE MATERIALS MANAGEMENT FORUM

Lawrence M. Gibbs, Chair
Associate Vice Provost
Environmental Health and Safety
Stanford University
EH&S – 480 Oak Road
Stanford, California 94305-8007
(650) 723-7403, Fax (650) 725-3468
E-mail: LGibbs@stanford.edu

Philip D. Rutherford, Chair-Elect
Manager of Health, Safety & Radiation Services
Santa Susana Field Laboratory
The Boeing Company
5800 Woolsey Canyon Road
Canoga Park, California 91304-1148
(818) 466-8840, Fax (818) 466-8746
E-mail: philip.d.rutherford@boeing.com

TECHNICAL DIRECTOR
Alan Pasternak, Ph.D.
P.O. Box 1638, Lafayette, CA 94549-1638
(925) 283-5210, Fax (925) 283-5219
E-mail: APasConslt@aol.com

April 3, 2007

Assuring Access to Disposal Facilities For Low-Level Radioactive Waste

“...the low-level waste siting program in this country is not working. Moreover, barring Congressional action, which is unlikely in the near term, the situation is unlikely to change.”

Richard Meserve, Chairman, USNRC, May 14, 2002.

BOARD MEMBERS

MEDICINE.

Carol S. Marcus, Ph.D., M.D.
American College of Nuclear
Physicians, California Chapter

EDUCATION

Kenneth L. Mossman, Ph.D.
Arizona State University

UTILITIES

Mark O. Somerville, Ph.D.
Pacific Gas & Electric Co.

John Closs
Nuclear Management Co., LLC

ENGINEERING & SERVICES

William H. Cromwell
Waste Containment Systems

Thomas A. Gray
Thomas A. Gray & Associates

INDUSTRIAL

Lisa Bonomo
Pfizer, Inc.

Keith E. Asmussen, Ph.D.
General Atomics

AT LARGE

Robert Carretta, M.D.
Tyco Healthcare/Mallinckrodt

Roger Richter
California Healthcare Association

James M. Woolfenden, M.D.
University of Arizona

Donna Earley
Cedars-Sinai Medical Center

Chairman Dale E. Klein and Members
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Dear Chairman Klein and
Commissioners Edward McGaffigan, Jr.,
Jeffrey S. Merrifield, Gregory B. Jaczko, and
Peter B. Lyons:

Cal Rad Forum understands that, from time-to-time, the U.S. Nuclear Regulatory Commission makes recommendations to Congress concerning legislation. We are writing to ask that the Commission urge the committees of jurisdiction in the Senate and House to revisit and amend the Low-Level Radioactive Waste Policy Amendments Act of 1985 (PL 99-240) (Act) to assure access to disposal facilities for organizations that use radioactive materials and generate low-level radioactive waste (LLRW), especially waste classes B and C.

As you know, on July 1, 2008 — pursuant to provisions of the Act, Atlantic Compact law, and South Carolina law — access to the Barnwell, South Carolina disposal facility will be restricted to the three member states of that compact: South Carolina, New Jersey, and Connecticut. At that time, public and private institutions and corporations and all federal and state government agencies, except the U.S. Department of Energy, that use radioactive materials in thirty-four to

thirty-six states,¹ the District of Columbia, and Puerto Rico will have no place to dispose of their Class B and Class C LLRW. (Access to the only other commercial disposal facility accepting waste classes B and C — the Richland, Washington facility — has been restricted to the states of the Northwest and Rocky Mountain Compacts since 1993.) In addition, there will be only one facility, the Energy *Solutions* disposal facility at Clive, Utah, to which organizations that use radioactive materials in these same 34-36 states will be able to send their Class A waste — not including biological wastes or sealed sources. (Please see comments under “Recent Developments” concerning uncertainties in access to the Clive disposal facility.)

The post-July 1, 2008 problem and some suggested solutions are discussed in Cal Rad’s “Response to: Request for Comments on the Nuclear Regulatory Commission’s Low-Level Radioactive Waste Program. Federal Register / Vol. 71, No. 130 / July 7, 2006,” dated August 31, 2006, a copy of which is enclosed. Our recommendations focus on a role for the federal government including use of Department of Energy disposal facilities for the disposal of non-DOE Class B and C LLRW. Our response cites a 2001 DOE Inspector General’s report that notes there is excess capacity at DOE disposal facilities (page 1 of Cal Rad’s Response) and a 2005 GAO report that anticipates interest in using DOE sites for disposal of non-Greater-Than-Class C (non-GTCC) waste (page 2 of the Response).

Loss of access to the Barnwell disposal facility in 2008 for LLRW generated by organizations that use radioactive materials in the 34 states not in the Atlantic, Northwest, Texas, or Atlantic Compacts is a serious matter. These wastes are significant. In 2006, the activity (curies) in LLRW sent to Barnwell from these 34 states accounted for 90 percent of all the activity sent to all three commercial disposal facilities (Barnwell, SC; Richland, WA; and Clive, UT) by non-USDOE users of radioactive materials in all states.

The U.S. Nuclear Regulatory Commission has Commented on the post-July 1, 2008 Class B and C Disposal Problem.

1. May 14, 2002. Speech by Richard Meserve, Chairman, US Nuclear Regulatory Commission, “Providing Certainty in Low-Level Radioactive Waste Disposal: The Continuing Challenge.” Please note the importance Chairman Meserve places on Congressional action. Also, Mr. Meserve was hopeful — as we were — that Enviro-care (now known as Energy *Solutions*) would obtain approval from the State of Utah for disposal of Class B and C wastes. However, a state law, enacted in 2005, prohibits the acceptance of Class B and C wastes for disposal.

Page 4 of speech.

“I will now turn to the central focus of this meeting -- low-level radioactive waste disposal. It will not be news to any one here that the low-level waste siting program in this country is not working. Moreover, barring Congressional action, which is unlikely in the near term, the situation is unlikely to change. Access to low-level waste disposal sites

¹ Texas is developing a LLRW disposal facility for the Texas-Vermont Compact. This is the only LLRW disposal facility under development in the U.S.

affects many classes of licensees, including nuclear power plant licensees intending to decommission their plants.”

Pages 4 and 5 of speech.

“Sufficient disposal capacity currently exists to handle today’s disposal needs, particularly in light of the trend towards license renewal of civilian nuclear power plants. (License renewal delays decommissioning and hence postpones the need to dispose of the waste associated with decommissioning.) In addition, waste minimization, volume reduction, and decay-in-place strategies reduce the overall volume of material. Nonetheless, the disposal situation is increasingly uncertain. With the eventual closure of the Barnwell disposal facility to states outside the Atlantic Compact, the absence of progress in other Compacts to site low-level waste disposal facilities, and few other disposal options, access to facilities for the disposal of low-level waste is increasingly constrained. Although Envirocare of Utah may eventually obtain state approval for disposal of Class B and C wastes, the limited options for disposal are likely to keep disposal costs high. There is thus the potential that the decommissioning process for many sites and the medical use of radionuclides will be affected adversely.”

2. June 2004. Comments by the U.S. Nuclear Regulatory Commission on the GAO Report, GAO-04-604, page 49.

“At the same time, the nearly 20 years of experience under the Low-Level Radioactive Waste Policy Amendments Act of 1985 (LLRWPA) has demonstrated the difficulties in siting and licensing a LLRW disposal facility. Not one new facility has been developed in this time under the LLRWPA. Therefore we believe it is in the national interest to begin exploring alternatives identified in Appendix II that would potentially provide a better legal and policy framework for new disposal options for commercial generators of LLRW.” (Quoted in part; emphasis added.)

3. January 11, 2006. Meeting of the Commission with Members of the Advisory Committee on Nuclear Waste.

Please see meeting transcript for comments on the post-July 1, 2008 disposal problem by Commissioners Jaczko (pages 44-45), and Lyons (pages 48-49) and by Commissioner Merrifield on the failure of the Low-Level Waste Policy Act (pages 59-60).

Recent Developments

Disposal of Waste Classes B and C. South Carolina Legislature Rejects Proposal for Barnwell Extension. On February 15, a bill was introduced in the South Carolina Legislature (H. 3545) that would have allowed continued disposal of out-of- [Atlantic] compact waste at the Barnwell disposal facility until 2023, fifteen years beyond the current cut-off date. However, on March 28, the bill was killed by an overwhelming vote in the House Agriculture, Natural Resources and Environmental Affairs Committee.

In evaluating the level of assurance the proposed measure might have provided users of radioactive materials, had it been enacted, it is useful to review the history of operations at the Barnwell disposal facility. Barnwell was closed to waste from outside the Southeast Compact region from July 1, 1994 through June 30, 1995 pursuant to the Policy Act and South Carolina law. At the urging of then-Governor David Beasley, legislation was enacted in South Carolina allowing the facility to accept waste from across the nation beginning July 1, 1995. Beasley was a one-term Governor, defeated by Jim Hodges who made an issue of the reopening of Barnwell in the gubernatorial election campaign. In 1999, then-Governor Hodges announced the formation of a task force whose work led to the current phase-down of volumes accepted for disposal and the banning of waste from outside the Atlantic Compact region as of July 1, 2008. The recently proposed — and defeated — South Carolina legislation is a reminder that users of radioactive materials are subject to political decisions about waste disposal made in other states and therefore lack the necessary assurance of access to disposal facilities. As noted by the NRC in its comments on the GAO report cited above: “...the future availability of disposal capacity and the costs of disposal under the current system remain highly uncertain and LLRW generators need predictability and stability in the national disposal system.” (Emphasis added.)

Disposal of Class A Waste. Earlier this month, the Governor of Utah announced an agreement with EnergySolutions, the operator of the disposal facility at Clive, Utah, which will reduce the total volume of waste that can be disposed of at that facility. This will shorten the years of availability of the facility to users of radioactive materials in 34-36 states for disposal of their Class A waste.

Conclusions

Cal Rad agrees with former Chairman Richard Meserve that “...barring Congressional action...the situation is unlikely to change.” Almost five years have passed since his observation, and the July 1, 2008 cut-off for disposal of Class B and C wastes at Barnwell, SC is less than fifteen months away. Only existing facilities can provide the needed disposal capacity by that date.

We respectfully ask the Commission to recommend to the Congress that it fashion a solution as outlined above and in our August 31, 2006 Response to the Commission’s Request for Comments. In particular, allowing non-Department of Energy organizations to dispose of their low-level waste at existing facilities operated by the USDOE for its own waste should be considered either on a long-term or short-term basis.

Sincerely,

Alan Pasternak

Encl.: Cal Rad Forum, August 31, 2006. “Response to: Request for Comments on the Nuclear Regulatory Commission’s Low-Level Radioactive Waste Program. Federal Register / Vol. 71, No. 130 / July 7, 2006