



HEALTH PHYSICS SOCIETY

“Specialists in Radiation Safety”

Kevin L. Nelson, PhD, CHP

President

Mayo Clinic Jacksonville

Mayo Bldg 1-185N

4500 San Pablo Road

Jacksonville, FL 32224

Telephone: (904) 953-8978

Fax: (904) 953-1010

Email: nelson.kevin2@mayo.edu

September 17, 2007

James L. Joyce

Document Manager

Office of Regulatory Compliance (EM-10)

U.S. Department of Energy

1000 Independence Avenue, SW

Washington, D.C. 20585-0119

Subject: Comments on Notice of Intent To Prepare an Environmental Impact Statement for the Disposal of Greater-Than-Class-C (GTCC) Low-Level Radioactive Waste

The Health Physics Society¹ (HPS) is pleased to provide public comment on the scope of the subject Environmental Impact Statement (EIS) as published in the Notice of Intent in Federal Register/Vol. 72, No. 140/Monday, July 23, 2007 page 40135 as corrected.

The HPS has two comments. Comment 1: The HPS supports the scope of the subject EIS as described in the Notice of Intent for GTCC and Department of Energy “GTCC-like” waste with the caveat that there be clear stakeholder involvement in the decision-making process that would allow disposal of waste streams not originally destined for the Waste Isolation Pilot Project (WIPP). Comment 2: The HPS requests that the DOE take the actions necessary to allow it to expand the scope of the EIS to also include non-GTCC Class B and Class C radioactive waste, which may not have an identified path to disposal, at each of the alternative sites evaluated in the scope of the subject EIS. These two comments are discussed below.

¹ The Health Physics Society is a nonprofit scientific professional organization whose mission is excellence in the science and practice of radiation safety. Since its formation in 1956, the Society has grown to approximately 6,000 scientists, physicians, engineers, lawyers, and other professionals representing academia, industry, government, national laboratories, the Department of Defense, and other organizations. Society activities include encouraging research in radiation science, developing standards, and disseminating radiation safety information. Society members are involved in understanding, evaluating, and controlling the potential risks from radiation relative to the benefits. Official position statements are prepared and adopted in accordance with standard policies and procedures of the Society. The Society may be contacted at 1313 Dolley Madison Blvd., Suite 402, McLean, VA 22101; phone: 703-790-1745; fax: 703-790-2672; email: HPS@BurkInc.com.

Comment 1 Discussion: Recommendation 4 of “Low-Level Radioactive Waste Management Needs a Complete and Coordinated Overhaul,” a position statement of the Health Physics Society (http://hps.org/documents/lowlevelwaste_ps009-2.pdf), states

“we strongly support [the Department of Energy (DOE)] efforts to prepare an Environmental Impact Statement under the National Environmental Policy Act to evaluate additional alternatives for disposal of greater-than-Class C wastes. These include deep geological disposal facilities, existing LLRW disposal facilities (both commercial and federal), and new facilities (both commercial and federal) at federal sites or on private land.”

The scope of the subject EIS is consistent with this recommendation.

Regarding consideration of WIPP in the scope of the EIS, the HPS paper “Background Information on ‘Low Level Radioactive Waste Management Needs a Complete and Coordinated Overhaul’,” http://hps.org/documents/lowlevelwaste_background_bi009-0.pdf, states

“We are very sensitive to the fact that the WIPP was initially approved with a clear understanding it would not be made available for non-defense-related waste and that a reversal of that promise to the people of New Mexico should not be done lightly. However, the great national need for a safe and timely disposal option for this most highly radioactive category of LLRW calls for an evaluation of all options. Therefore, *we recommend stakeholder involvement in the decision-making process to consider allowing disposal of waste streams not originally destined for WIPP under the National Environmental Policy Act of 1969*” (emphasis added).

Thus, our caveat in Comment 1 regarding the stakeholder involvement in the evaluation of WIPP.

Comment 2 Discussion: Recommendation 5 of our position statement states

“we urge Congress to direct federal action to ensure that disposal options and capacity for Class B and Class C waste will exist for all states in the future. This can be achieved by use of commercial or private facilities on federal or private lands to mitigate significant adverse consequences to generators of these wastes.”

Despite our urging, Congress has not taken action to ensure disposal options exist for Class B and Class C (Class B/C) waste.

Due to the actions of the state of South Carolina, generators of Class B/C waste that do not belong to the Atlantic Compact and all licensees that currently possess sealed sources will no longer have access to the Energy *Solutions* facility in Barnwell, SC after July 2008. The HPS believes that an alternative that should be fully explored for the long-term is exploring the feasibility of allowing disposal of Class B/C waste at the facility that will be developed by DOE for disposal of GTCC. We understand that the subject EIS is being performed as directed by the Energy Policy Act of 2005, which requires this EIS for GTCC LLW. Although the Energy Policy Act of 2005 does not require the inclusion of Class B/C waste, it does not appear that the Act precludes including this category in the study. I do not believe that inclusion of Class B/C waste in the EIS would establish any legal responsibilities for DOE to dispose of this class of waste. However, it would establish a basis for Congress to consider whether or not this is an option for managing the waste once a disposal pathway no longer exists.

The HPS feels that DOE could obtain the agreements it needs from Congress and other federal agencies, such as the NRC, to include Class B/C waste in the EIS without violating the law while providing Congress the option of evaluating this as one pathway for control and disposal of this waste stream. This is consistent with DOE including "GTCC-like" waste in the scope of the EIS since both GTCC-like waste and Class B/C waste are wastes that may not have a path for disposal.

Furthermore, the subject EIS includes an evaluation of "disposal of GTCC LLW and GTCC-like waste in a new intermediate depth borehole facility and enhanced-near surface facility at existing DOE sites and generic commercial locations." Presumably, these facilities will already be designed or licensed to accept Class B/C waste so the final configuration under evaluation will be a site with a combination GTCC and Class B/C wastes. It is only appropriate that all alternatives be evaluated for this same final configuration of waste inventory.

The Government Accountability Office (GAO) report "DOE Needs Better Information to Guide Its Expanded Recovery of Sealed Sources, GAO-05-967 (September 2005)," which is one of the referenced GAO reports in the subject Notice of Intent, cites the Health Physics Society's concern that

"that the lack of a GTCC and non-GTCC waste disposal option for unwanted sealed radiological sources that pose security and public health concerns will continue to increase the number of orphan sources."

The non-GTCC waste reference in this statement is specifically to Class B and Class C sources. The HPS continues to have this concern, which the

reason for recommending the EIS be expanded to include Class B and Class C waste.

The HPS does not believe the evaluation of including Class B and Class C waste in all alternatives will be onerous or will drastically change the conclusions of the EIS considering the projected total activity of GTCC and GTCC-like waste through 2062 is about seven times more than Class A, B and C waste.²

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Nelson". The signature is fluid and cursive, with the first name "Kevin" and last name "Nelson" clearly distinguishable.

Kevin L. Nelson, PhD, CHP

² Greater-Than-Class C Low-Level Radioactive Waste, Volume and Activity of Wastes Addressed in the EIS, An online public information and involvement resource, <http://www.gtceis.anl.gov/guide/gtccquant/index.cfm>. Last accessed 9/14/07.