



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

November 15, 2007

Mr. Steve McCracken
Assistant Manager for Environmental Management
DOE-Oak Ridge Operations
P.O. Box 2001, EM-90
Oak Ridge, TN 37831

Dear Mr. McCracken:

Recommendation 159: Recommendation on the Notice of Intent to Prepare an Environmental Impact Statement on the Disposal of Greater-Than-Class C Low-level Radioactive Waste

At our November 14, 2007 meeting, the Oak Ridge Site Specific Advisory Board approved the enclosed recommendation. We thank you for considering our recommendation and we look forward to receiving your written response by January 1, 2008.

We appreciate the opportunity to provide input the Notice of Intent to Prepare an Environmental Impact Statement on the Disposal of Greater-Than-Class C Low-Level Radioactive Waste.

While we are not entirely opposed to on-site handling disposal of wastes that have been generated by operations on the Oak Ridge Reservation, we are not convinced Oak Ridge is the proper disposal site for the Greater-Than-Class C wastes discussed in the notice of intent.

We look forward to hearing your response to our recommendation.

Sincerely,

A handwritten signature in black ink, appearing to read "Lance J. Mezga".

Lance J. Mezga, Chair

Enclosure

cc/enc:

Dave Adler, DOE-ORO
Mike Farmer, Roane County Mayor
Doug Frost, DOE-HQ
Christine Gelles, DOE-HQ
Pat Halsey, DOE-ORO

Connie Jones, EPA Region 4
Rex Lynch, Anderson County Mayor
James O'Connor, Oak Ridge City Manager
Melissa Nielson, DOE-HQ
John Owsley, TDEC



Recommendation 159

Oak Ridge Site Specific Advisory Board

Recommendation on the Notice of Intent to Prepare an

Environmental Impact Statement for the Disposal of Greater-

Than-Class C Low-Level Radioactive Waste

Background

The Department of Energy (DOE) plans to prepare an environmental impact statement (EIS) under the National Environmental Policy Act for the disposal of Greater-Than-Class C low-level radioactive waste (GTCC LLW). GTCC LLW is defined by the Nuclear Regulatory Commission (NRC) as low-level radioactive waste that exceeds the concentration limits of radionuclides for Class C waste. GTCC LLW is generated by NRC or state-licensed activities.

DOE proposes to evaluate alternatives for GTCC LLW disposal in a geologic repository; in intermediate depth boreholes; and in enhanced near surface facilities. Locations considered by these disposal sites include the Oak Ridge Reservation (ORR) as well as sites at the Idaho National Laboratory, the Los Alamos National Laboratory, the Waste Isolation Pilot Plant (WIPP) in New Mexico, the Nevada Test Site, the proposed Yucca Mountain repository in Nevada, the Savannah River Site in South Carolina, and the Hanford Site in Washington. DOE will also evaluate commercial facilities in arid and humid locations.

DOE also proposes to include DOE LLW and transuranic waste having characteristics similar to GTCC LLW which may not have an identified path to disposal. This DOE GTCC-like waste is owned or generated by DOE.

Discussion

GTCC LLW may be categorized into three types: sealed sources, activated metals, and other miscellaneous waste.

Sealed sources are typically small, high-activity radioactive materials in closed metal containers. Activated metal wastes are primarily generated in nuclear reactors during facility modifications and decommissioning.

Miscellaneous wastes include all GTCC LLW that is not sealed sources or activated metals, such as contaminated equipment, debris, trash, and scrap metal.

DOE GTCC-like waste includes some sealed sources owned or generated by DOE activities, activated metals, and other miscellaneous waste owned by DOE or generated by DOE activities. Most of the DOE GTCC-like waste consists of transuranic waste that may have originated from non-defense activities and may not be authorized for disposal at WIPP in New Mexico.

DOE estimates a total inventory of 2,600 cubic meters of GTCC LLW and approximately 3,000 cubic meters of GTCC-like waste.

DOE, in its Notice of Intent to Prepare and Environmental Impact Statement for the Disposal of Greater-Than-Class-C Low-Level Radioactive Waste, said the terrorist attacks on the United States on September 11, 2001 and other subsequent threats have heightened concerns that terrorists could gain possession of radiological sealed sources, including GTCC LLW sealed sources, and use them for malevolent purposes.

Since 2003, the Government Accountability Office has issued three reports on matters related to the security of uncontrolled sealed sources, including DOE's progress in developing a GTCC LLW disposal facility.¹ In addition, the Energy Policy Act of 2005 contains several provisions directed at improving the control of sealed sources, including disposal availability.

Section 631 of the Energy Policy Act of 2005 requires the Secretary of Energy to provide Congress with notification of the DOE office with responsibility for completing activities needed to provide for safe disposal of GTCC LLW; submit a report to Congress containing an estimate of the cost and schedule to complete an EIS and record of decision for a permanent disposal facility for GTCC LLW; and prior to making a final decision submit to Congress a report that describes all alternatives considered in the EIS. Thus far, DOE has named the Office of Environmental Management the lead organization having responsibility to develop a GTCC LLW disposal plan. DOE has submitted a report to Congress dated July 2006 on the estimated cost and proposed schedule to complete the EIS

DOE proposes to construct and operate a new facility or facilities, or use an existing facility, for the disposal of GTCC LLW and GTCC-like waste. DOE would then close the facility or facilities at the end of each facility's operational life. A combination of disposal methods and locations may be identified based on the characteristics of the waste and other factors.

The proposal methods DOE proposes to evaluate in the EIS include deep geologic disposal, intermediate depth borehole disposal, and enhanced near surface disposal.

One of the sites considered by DOE for an intermediate depth borehole facility and enhanced near-surface facility is the ORR.

As part of the process to develop the EIS, meetings were held at several locations near proposed disposal sites so members of the public could learn about the scope of the EIS and offer comments on the proposed action. Such a public meeting was held in Oak Ridge on August 22, 2007. Several members of the Oak Ridge Site Specific Advisory Board (ORSSAB) attended the meeting.

Recommendation

The ORSSAB, based on its knowledge of the ORR's geologic and hydrologic limitations in long-term management of radioactive wastes, believes that the ORR is not a viable site for the wide range of GTCC and GTCC-like wastes requiring disposal. While the ORR should be considered for some short-lived or insoluble radioactive waste types as part of a nationwide strategy for GTCC and GTCC-like waste management, the ORSSAB believes that the EIS will demonstrate the extremely limited applicability of the ORR as a disposal site for the high activity, long-lived wastes that make up the majority of the GTCC and GTCC-like inventory.

At this time, there is insufficient information provided as to the scope and nature of the GTCC and GTCC-like waste being considered for disposal at ORR for the ORSSAB to comment further. However, as the EIS has significant implications for environmental management activities at ORR, we ask that DOE include the ORSSAB in any future discussions and technical evaluations conducted as part of the EIS to insure that our concerns, including security and long-term stewardship issues, are adequately addressed.

¹ Nuclear Security: Federal and State Action Needed to Improve Security of Sealed Radiological Sources, GAO-03804 (August 6, 2004); Nuclear Nonproliferation: DOE Action Needed to Ensure Continued Recovery of Unwanted Radioactive Sources, GAO-03-438 (April 15, 2003); Nuclear Security: DOE Needs Better Information to Guide Its Expanded Recovery of Sealed Sources, GAO-05-967 (September 2005). Reports can be found at <http://www.gao.gov/>.