



*Many Voices Working for the Community*

# Oak Ridge Site Specific Advisory Board

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June 9, 2011

John Eschenberg  
Assistant Manager for Environmental Management  
DOE-Oak Ridge Office  
P.O. Box 2001, EM-90  
Oak Ridge, TN 37831

Dear Mr. Eschenberg:

**Recommendation 200: Recommendation on the Decision Process for Siting a Second CERCLA Waste Disposal Facility**

At our June 8, 2011, meeting the Oak Ridge Site Specific Advisory Board approved the enclosed recommendation regarding the siting of new waste disposal facility on the Oak Ridge Recommendations.

Among other things, the recommendation suggests early involvement of state and local governments and area citizens in the process of selecting a site for an additional waste disposal facility.

We look forward to your response to these recommendations by September 8, 2011.

Sincerely,

A handwritten signature in black ink, appearing to read "Ron Murphree".

Ron Murphree, Chair, PE, CPE  
rm/rsg

Enclosure

cc/enc:

Dave Adler, DOE-ORO  
Fred Butterfield, DOE-HQ  
Cate Brennan, DOE-HQ  
Pat Halsey, DOE-ORO  
Myron Iwanski, Interim Anderson  
County Mayor

Connie Jones, EPA Region 4  
Melissa Nielson, DOE-HQ  
Local Oversight Committee  
John Owsley, TDEC  
Mark Watson, Oak Ridge City Manager  
Ron Woody, Roane County Executive



## **Oak Ridge Site Specific Advisory Board Recommendation 200: Recommendation on the Decision Process for Siting a Second CERCLA Waste Disposal Facility**

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### **Background**

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) waste disposal facility, also known as the Environmental Management Waste Management Facility (EMWMF) was authorized under the 1999 *Record of Decision for the Disposal of Oak Ridge Reservation CERCLA Waste, Oak Ridge, Tennessee*. This was the culmination of an extensive public participation process that involved the Department of Energy (DOE) and its EM contractor meeting with stakeholders and local governmental officials to explain the need for an on-site disposal facility and the financial benefits to the cleanup program.

The EMWMF is a dedicated disposal facility in Bear Creek Valley on the Oak Ridge Reservation (ORR) that receives low-level radioactive waste (LLW), hazardous waste regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), waste regulated under the Toxic Substances Control Act of 1976, and mixed wastes generated from the cleanup programs at the ORR conducted under CERCLA. The EMWMF has been actively accepting ORR CERCLA waste in compliance with the approved EMWMF waste acceptance criteria since May 2002. Three Explanations of Significant Difference (ESDs) have been approved for the waste cell. The first was the addition of DOE security-classified wastes to the description of wastes approved for disposal in the EMWMF in 2001. In 2005 an ESD allowed for construction of a dedicated haul road between the East Tennessee Technology Park and the EMWMF. The 2010 ESD authorized expansion of the EMWMF to its maximum design capacity of approximately 2,200,000 cubic yards.

The *EMWMF 2010 Capacity Assurance Remedial Action Report* expressed the expectation that demolition debris to be generated under the Integrated Facilities Disposition Program (IFDP) will exceed the EMWMF's expanded capacity under the 2010 ESD. IFDP will address unneeded facilities that are often contaminated and/or dilapidated at the Y-12 National Security Complex and Oak Ridge National Laboratory (ORNL).

### **Discussion**

A shortfall of disposal capacity in EMWMF means that additional disposal capacity may be needed. The additional capacity could be obtained by establishing a new onsite disposal cell or by sending waste off site for disposal, presumably to the Nevada National Security Site or to a commercial facility in Texas or Utah. Off-site disposal would represent a significantly greater near-term cost than onsite disposal, which would either increase remediation costs or slow the pace of remedial activities on the ORR. Additionally, possible waste reclassification being discussed by the Nuclear Regulatory Commission and DOE could impact CERCLA off-site waste disposal. However, the additional near-term cleanup costs must be balanced against the reduced long-term effectiveness and permanence, greater long-term stewardship costs, and other impacts of an additional radioactive waste disposal facility on the ORR, including the foreclosure of other potential future land uses and economic losses to the region due to the stigma resulting from the presence of disposal facilities in Oak Ridge.

Siting of a second waste disposal facility is expected to generate significant public interest and possibly opposition. The Federal Facility Agreement parties should engage now with the City of Oak Ridge, Anderson and Roane Counties to brief local officials. EM should conduct broad community outreach on the pending feasibility study. The siting process typically takes several years, and may be subject to

delays and requests for revisions by regulatory authorities. Should such delays occur, future cleanup milestones could be missed or remediation projects subject to costly off-site disposal for lightly contaminated wastes due to lack of sufficient onsite disposal capacity. This has the potential to affect modernization activities at the Y-12 National Security Complex and ORNL.

### **Recommendation**

The Oak Ridge Site Specific Advisory Board recommends that DOE take the following actions regarding the decision process for siting a second CERCLA waste disposal facility:

- Begin public participation opportunities related to acquisition of additional disposal capacity as soon as practical. DOE must reach out to elected local governments of potential host jurisdictions and area stakeholders to ensure that their concerns and preferences are documented and considered.
- Evaluate and propose disposal capacity necessary to support current EM scope and potential additional cleanup waste streams.
- Analyze and compare the lifecycle costs and impacts of off-site disposal of expected waste streams vs. those of a second on-site disposal cell. Lifecycle costs must include all costs to local, state, and federal governments of perpetual long-term stewardship and opportunity costs borne by the community.
- Reevaluate and update the original siting studies. For example, a site in Melton Valley—a DOE-controlled brownfields zone already dedicated to waste disposal—might be more desirable than a greenfield site, a site over karstified carbonate bedrock, or a site with less access control.
- Evaluate the possibility of also obtaining a RCRA permit for a new facility to enable disposal of LLW, hazardous waste, and mixed LLW generated by other missions on the ORR.
- Commit to additional payments to the State of Tennessee for long-term post-closure stewardship if a second facility is built.
- Identify mechanisms for compensating local communities for the economic losses that can be expected to result from hosting additional waste repositories.
- Manage waste segregation wisely to assure capacity in the new disposal facility will be adequate.
- Incorporate recycling strategies into the cleanup program to reduce the waste stream into both the existing and new disposal facilities.