



*Many Voices Working for the Community*

# Oak Ridge Site Specific Advisory Board

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October 12, 2006

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 150 on the Proposed Method of Accomplishment for Decontamination and Decommissioning of Buildings K-25 and K-27 at East Tennessee Technology Park**

At our October 11, 2006, meeting, the Oak Ridge Site Specific Advisory Board approved the enclosed recommendation.

We appreciate your consideration of these comments and look forward to receiving your written response.

Sincerely,

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

Lance Mezga, Chair

Enclosure

cc/enc: Dave Adler, DOE-ORO  
Mike Farmer, Roane County Mayor  
Doug Frost, 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 150**

### **Oak Ridge Site Specific Advisory Board**

### **Recommendation on the Proposed Method of Accomplishment**

### **for Decontamination and Decommissioning of Buildings K-25**

### **and K-27 at East Tennessee Technology Park**

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#### **BACKGROUND**

The Oak Ridge Gaseous Diffusion Plant began operations during World War II as part of the Manhattan Project. Its original mission was to produce enriched uranium for use in atomic weapons. The plant produced enriched uranium from 1945 to 1985. Five buildings were used over that period to produce enriched uranium: K-25, K-27, K-29, K-31, and K-33. K-31 and K-33 were decontaminated and decommissioned (D&D). Plans are to lease those buildings to private enterprise. K-29 was deemed structurally unsound and has been demolished.

Buildings K-25 and K-27 have also been declared structurally unsound and are currently undergoing D&D for eventual demolition. However, events involving the deteriorating condition of K-25, the oldest of the five buildings, have led the K-25/K-27 D&D Project Team to revise the project's method of accomplishment. While there is a proposal to change the method of accomplishment, the scope of work described in the *Action Memorandum for the Decontamination and Decommissioning of the K-25 and K-27 Buildings, East Tennessee Technology Park, Oak Ridge, Tennessee* (DOE/OR/01-1988&D2) remains the same.

The Project Team has re-emphasized the goal of protecting workers from building deterioration by reducing the number of workers in the buildings and reducing the time they must spend in the buildings. Previously a large pool of workers was to be used to remove compressors, converters, and process piping by hand prior to demolition.

In the proposed technical approach, the number of workers and the time they spend in the buildings will be significantly reduced. High-risk equipment will be removed and low-risk equipment will be foamed in place. The motors and compressors will be unbolted to facilitate retrieval following demolition, and the buildings will be demolished using heavy equipment with shears and grappling equipment. Motors and compressors will be removed from the debris once the buildings are down.

Most of the waste will be disposed at the Comprehensive Environmental Response, Compensation and Liability Act waste cell in Bear Creek Valley on the Oak Ridge Reservation. Waste that does not meet the waste acceptance criteria for the on-site waste cell will be disposed off-site, most likely at the Nevada Test Site.

#### **DISCUSSION**

On July 19, 2006, Department of Energy officials provided a summary of the proposed change in D&D strategy at the Environmental Management Committee meeting of the Oak Ridge Site Specific Advisory Board. This presentation acted as a public meeting for the community on the proposed D&D strategy change.

At the meeting DOE reviewed the scope of work for the D&D of K-25 and K-27 and status of each part of the demolition process (Attachment 1). It explained in detail the proposed strategy, the schedule to complete the work, the technical challenges involved, and change in cost to complete the project, which is estimated to be about \$8 million less than the original plan.

**RECOMMENDATION**

The Oak Ridge Site Specific Advisory Board thanks the Department of Energy for presenting the proposed alternate D&D strategy to the Environmental Management Committee meeting and for answering the numerous questions asked by the attendees.

The Board recommends that DOE implement the new strategy. The Board recognizes that when changes are made to strategy, new hazards or problems can be introduced. Some of the most significant hazards associated with this D&D are worker safety issues, including criticality and fire safety. The Board encourages DOE to utilize independent experts in the review of safety planning and waste deposition documents prior to execution, and we would like access to those documents.

The Board is not entirely convinced the new strategy will result in a cost savings to complete the project. We ask that DOE representatives provide the Board monthly status updates on the new D&D strategy, including quarterly costs, beginning in November 2006.