

February 12, 2009

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

Dear Mr. McCracken:

Recommendation on Alternatives to Memorialize the K-25 Building at East Tennessee Technology Park

At our February 11, 2009, meeting, the Oak Ridge Site Specific Advisory Board approved the enclosed recommendation.

We appreciate your consideration of this recommendation and look forward to receiving your response by May 11, 2009.

Sincerely,

Steven Dixon, Chair

Enclosure

cc/enc: Dave Adler, DOE-ORO

Cate Brennan, DOE-HQ

Mike Farmer, Roane County Mayor

Pat Halsey, DOE-ORO Gary Hartman, 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

Katatra Vasquez, DOE-ORO



Oak Ridge Site Specific Advisory Board Recommendation 176: Recommendation on Alternatives to Memorialize the K-25 Building at East Tennessee Technology Park

Background

The K-25 Building at East Tennessee Technology Park (ETTP) on the Oak Ridge Reservation (ORR) played a vital role in our nation's defense and energy infrastructure by enriching uranium for use in early atomic weapons and nuclear power plants.

The incredibly complex building, constructed in only about 18 months, was completed in 1945 as part of the Manhattan Project, the massive effort to develop the first atomic bomb. It was constructed on four levels in a U shape and was a mile long from end to end. It was the largest building in the world at the time. It operated until 1964.

In 1989 the ORR was placed on the Comprehensive Environmental Response, Compensation and Liability Act National Priorities List to have land and buildings remediated or removed to rid the reservation of contamination resulting from years of work in weapons and energy research. Part of that cleanup effort included the decontamination and decommissioning and eventual demolition of the K-25 Building.

But there are many who believe the K-25 Building should be either preserved in part or memorialized in some way to recognize the importance of the building to our nation's history.

In response to calls to preserve at least a portion of K-25 for historic purposes, in March 2005 the Department of Energy-Oak Ridge Office (DOE-ORO) signed a memorandum of agreement (MOA) with the Tennessee Historic Preservation Office, the Advisory Council on Historic Preservation, the City of Oak Ridge, and the Oak Ridge Heritage and Preservation Association to retain the North Tower of K-25 that connected the two 'legs' of the building. The MOA called for the footprint of the to-be-demolished legs to be marked and to retain the upper 10 feet of the inner basement walls between the legs. The resulting walls could be used for murals or other visual displays.

Within a couple of years of signing the MOA concerns began to arise about the structural integrity of the building, including the North Tower. In November 2007 DOE-ORO solicited the advice of the Oak Ridge Site Specific Advisory Board (ORSSAB) as well as a cross section of the community asking for input on how to commemorate and preserve the historical significance of K-25.

In February 2008 ORSSAB and the Local Oversight Committee sponsored a public meeting to gather input to the decision making process of historic preservation of the K-25 Building North Tower. Information gathered at the public meeting through live comments and questionnaires were provided to DOE-ORO.

Based on information gathered at the public meeting and from presentations provided by the Partnership for K-25 Preservation (PKP) outlining different options to preserve the North Tower, ORSSAB, in March 2008, forwarded to DOE Recommendation 167: Recommendation on Historic Preservation of the K-25 Building at ETTP, dealing with the historic preservation of a portion of the K-25 Building and other associated preservation measures.

ORSSAB recommended that DOE-ORO preserve the North Tower and gaseous diffusion equipment where possible. ORSSAB also recommended that DOE-ORO implement a PKP suggestion known as Option D which would:

- Retain the entire building shell and re-roof the North Tower
- Install two-hour fire walls on each floor at simplest building junctures to seal approximately
 40 percent occupied space from the empty 60 percent of the building
- Clean out the west half of the North Tower down to the cell floor, which will remain, but seal it
 off under a new roof.
- Utilize the east half for interpreting history with the essentials on each floor
- MOA modification to remove all 276 north end compressors and 138 converters
- MOA modification to replace the operations floor
- Decontaminate the interior of K-25 North Tower with a cleanup goal of free release
- Replace transite siding
- MOA modification of modified mural wall of approximately 200 feet

But support for the recommendation by the board was not unanimous. The recommendation was accompanied by a minority opinion, which itemized concerns held by its authors, as well as some general recommendations. These recommendations differed to some degree from those of the main recommendation, primarily recommending that the north end of the building be razed.

Discussion

To date DOE-ORO has not responded to ORSSAB's Recommendation 167, but it appears likely that DOE will not accept the recommendation. Steve McCracken, the DOE-ORO Assistant Manager for Environmental Management, said at the October 2008 ORSSAB meeting he didn't believe it was feasible to save the North Tower because of cost and safety factors. However, he said he wants to make sure an option is in place for historical interpretation of K-25 and a decision must be made by March 2009. Actual demolition of K-25 began on the southwest leg of the building in December 2008. Demolition is expected to reach the North Tower by March 2009.

In light of those comments and in an attempt to provide Mr. McCracken with another option to commemorate K-25, the authors of the minority opinion on Recommendation 167 were asked to expand and clarify their position. The writers of the minority report, ORSSAB members Bill Bass, Ron Murphree, Bob Olson, and Steve Stow offer the following points:

- PKP has prepared a new proposal for a \$15.7 million museum at the K-25 site in lieu of an interpretive center housed in the North Tower of the K-25 Building. It is important to note that we support the <u>concept</u> proposed in the PKP "Option K," construction of an interpretive center and other actions associated with historic preservation.
- While we support the concept, there are two significant aspects related to the center, as proposed by PKP, that we do not support and that we feel need to be emphasized beyond what was noted in the original minority opinion. These are:
 - 1) For obvious financial reasons, we believe that the interpretive center should be unmanned and less expansive than proposed, thus saving considerable capital and operational costs. This aspect was briefly noted in our original opinion, but not emphasized.
 - 2) Likewise, we suggested that consideration be given to expansion of appropriate exhibits in an interpretive center at the American Museum of Science and Energy (AMSE) (in addition to the unmanned center at the ETTP site), an aspect not included in the PKP proposal. If it is important to have personnel associated with exhibits, such an arrangement would take advantage of existing infrastructure, artifacts, staff, and available space at the AMSE site, as well as the flow of visitors

at AMSE. This arrangement would help consolidate Manhattan Project exhibits, would economically complement the exhibits at the ETTP site, and would foster the success of the overall preservation effort.

• In our original minority opinion we raised several concerns about construction costs, maintenance and operational costs, fund-raising, etc. If DOE proceeds with plans for razing the north end of the building and provides capital money for interpretive center(s) construction, some of these concerns are mitigated (see the following bullet for a question related to this). However, annual operational and maintenance costs, as well as funds for an endowment (if such is planned) are still an issue of concern.

The PKP estimates of 65,000 visitors per year (\$8 per person) and approximately \$1.8 million realized annually from attendance and sales appear to be overly optimistic. It is essential, in our view, that a business and development plan be prepared showing sources and amounts of income, and expenses, for the ETTP facility; such a plan should be detailed enough to support a reasonable expectation of success. Included in the plan would be an analysis of the pros and cons of locating the manned interpretive center at the AMSE site, rather than the ETTP site. If the ETTP facility were unmanned, as suggested above, this plan would be greatly simplified.

• Finally, we raise the question of what organization will be entrusted to own and to operate the ETTP facility once it is operational. While the PKP proposal also raises this issue – but leaves it unanswered – it appears to us that resolution of this needs to be fairly well defined prior to DOE committing to any sort of action at the site. A decision to construct a smaller unmanned interpretive center at ETTP, as well as close coordination with AMSE, may facilitate identifying the responsible organization, reducing liability to that organization and to the community.

Alternatively, DOE may wish to retain ownership of the ETTP facility, rather than transfer it. A decision to keep the facility would eliminate the time and effort needed to find another owner and it would help demonstrate DOE's full commitment to historic preservation at the ETTP site.

Recommendation

Since it appears DOE will not be able to implement ORSSAB's Recommendation 167 and yet Mr. McCracken is still looking for options to commemorate K-25, ORSSAB makes the following recommendations based on the points enumerated by Messrs. Bass, Murphree, Olson, and Stow.

- 1. DOE-ORO should raze the North Tower of K-25 and establish an unmanned interpretive center. The preferred location is in the area of the end of the legs of K-25. The center would contain displays, photographs, artifacts, representations, etc., that explain the history of the Manhattan Project, as well as the history and role of K-25.
- 2. DOE should determine who will own and maintain an ETTP interpretive center prior to committing to any actions to build a center. DOE should consider retaining possession of the center and maintaining it itself.
- 3. Related Manhattan Project exhibits at AMSE should be expanded to include a manned interpretive center that makes use of AMSE personnel and takes advantage of existing infrastructure, artifacts, and space.
- 4. A business and development plan should be prepared to reasonably forecast income and expenses for the K-25 Interpretive Center at ETTP.