



**Department of Energy**  
Washington, DC 20585

April 8, 2002

Mr. Luther V. Gibson, Jr.  
Chair  
Oak Ridge Site Specific Advisory Board  
P.O. Box 2001, EM-90  
Oak Ridge, Tennessee 37831


Dear Mr. Gibson:

Thank you for your January 12, 2002, letter and recommendations concerning the Department of Energy (DOE) Toxic Substances Control Act Incinerator (TSCAI) at the Oak Ridge Reservation. In your recommendation, you asked that "a strong argument must be made prior to replacing an available, safe, proven technology." Your recommendations identify many of the topics that should be considered in a decision to cease operation of TSCAI. I have included in the enclosed paper a response to each of the topics you identified.

I agree with you that TSCAI is an important and unique resource for the DOE and for achieving the Office of Environmental Management cleanup mission. Based upon the analysis shared with your Waste Management Committee in December 2001 concerning the need for the type of treatment that TSCAI can provide, I am willing to consider supporting operation of TSCAI beyond the currently planned closure date of 2003. Ms. Helen Belencan, of my staff, will work with you and the Oak Ridge Operations Office to ensure we have adequately addressed your recommendations including sharing this analyses with the public and considering the public input.

I look forward to continuing to work with you and other stakeholders to ensure the success of the cleanup mission at Oak Ridge and at other DOE sites. If you have any further questions, please feel free to contact me at (202) 586-7709, or Ms. Helen Belencan, Program Manager, Technical Program Integration, at (301) 903-7921.

Sincerely,

  
Jessie Hill Roberson  
Assistant Secretary for  
Environmental Management

Enclosure

## Responses to Detailed Questions

### 1. Consider the full life cycle costs of any alternatives to TSCAI:

- *Evaluate the total life cycle costs of development, operation, shipping, packaging, disposal, shut down, and decontamination and decommissioning of any new technology that will perform as well or better than TSCAI in comparison to the costs for these functions relative to the operation of TSCAI.*

*Response:* The Environmental Management program has been looking toward the commercial sector to provide a treatment capability to replace the TSCAI. Consequently, the DOE would not be incurring the costs to develop, operate, shut down, and decontaminate and decommission an alternative. The DOE would incur a per unit cost to have waste treated. Commercial alternatives have not materialized as anticipated, and so we are presently willing to consider operation of the TSCAI beyond 2003. In the future, should such options present themselves, the cost of operating the TSCAI will be compared to the cost for treatment at an alternative facility.

### 2. Fully evaluate the feasibility of implementing viable alternatives to TSCAI:

- *Identify the data and criteria showing there is a feasible alternative that will be in place and operating upon the closure of TSCAI. To date, no proven alternative technology is in place.*
- *Identify the feasibility of shutting down TSCAI permanently in 2003 and implementing an alternative technology for the short period of time that will remain. There is little currently identified demand for TSCAI past 2005.*

*Response:* We agree that no feasible alternatives are likely to be in place by 2003. Figure 1 (attached) illustrates your point that treatment demand exceeds the current operational capacity of TSCAI and other presently available alternatives. Consequently, my willingness to support continued operation of the TSCAI is based on its importance to meeting the closure goals of the Environmental Management program.

### 3. Fully consider the value of the investment in TSCAI and making full utility of its capabilities:

- *Fully explore the complete capabilities of TSCAI and the cost-effectiveness of using it to its full capabilities and capacity. More than \$40M has been invested in TSCAI to date, and a great deal of effort is being made to renew its permits. TSCAI was designed to process solids, and especially soils, but has never been fully utilized for such. Non-PCB mixed waste is generally not sent to TSCAI, though it can handle these materials as well.*
- *Base any conclusion about underutilization of treatment capacity on all facility permit constraints that may limit waste feed rates.*

*Response:* My willingness to support continued operation of the TSCAI is based on its current operating capabilities. As illustrated in Figure 1, the demand far

exceeds the currently available treatment capacity. Consequently, any improvement that could be made to the operational capacity of the TSCAI would be beneficial. We would be willing to discuss with stakeholders and the state regulatory authority opportunities for expanding the utilization of TSCAI for non-PCB wastes as you recommend.

4. Fully consider the impact of TSCAI on equity issues for the Oak Ridge Reservation:

- *Fully consider the equity issues in ensuring that Oak Ridge wastes can be treated and disposed across the complex in a cost-effective, timely manner as DOE and state regulators balance equity issues.*

*Response:* My willingness to support continued operation of TSCAI beyond 2003 does take into consideration that TSCAI treatment provides a balance for the need of Oak Ridge to dispose of some of its waste at other DOE sites.

5. Fully consider the collateral costs and impacts of closing TSCAI:

- *Identify the collateral costs to the East Tennessee Technology Park of closing TSCAI, including decreased utilization of the utility system, the Central Neutralization Facility, and the steam plant.*
- *Identify any economic impacts of closing TSCAI on the Oak Ridge community, its workers, and businesses.*

*Response:* The overwhelming factor behind my willingness to support continuing operations of the TSCAI beyond 2003 was the demand for treatment. Consequently, if the Oak Ridge stakeholders support continued operation, the collateral costs and impacts of closing TSCAI will not be borne by the Oak Ridge Reservation.

Figure 1 : Estimate of Treatment Demand versus Available Capacity

