

## **Department of Energy**

Oak Ridge Operations Office P.O. Box 2001 Oak Ridge, Tennessee 37831—

July 13, 1998

Mr. Willam M. Pardue, Chair
Oak Ridge Reservation Environmental Management
Site Specific Advisory Board
222 Connors Circle
Oak Ridge, Tennessee 37830

Dear Mr. Pardue:

## RESPONSE TO THE OAK RIDGE RESERVATION ENVIRONMENTAL MANAGEMENT SITE SPECIFIC ADVISORY BOARD RECOMMENDATIONS – CHESTNUT RIDGE AND UPPER EAST FORK POPLAR CREEK

Reference is made to the following letter from the Oak Ridge Reservation Environmental Management Site-Specific Advisory Board (SSAB) to the U. S. Department of Energy (DOE) dated June 3, 1998, "End Use Recommendations for the Y-12 Plant, Chestnut Ridge, and Upper East Fork Poplar Creek."

I would like to thank the members of the SSAB and the End Use Working Group for the diligent effort which has been put forth to understand the nature of the environmental problems in the Y-12 Plant area and to draft a set of recommendations for the future use of these areas. These recommendations have been reviewed by my staff and I and found to be quite relevant and useful as we begin the decision-making process for the cleanup of this watershed. We are currently in the process of drafting the Feasibility Study (FS) for this watershed, which will present a number of alternative approaches for cleanup. The specific points raised in this set of recommendations will be very helpful to DOE in further shaping and refining these alternatives for consideration by the general public and regulatory agencies.

In general, DOE finds the recommendations to be quite reasonable and will ensure that they are addressed in the FS for evaluation. For purposes of clarification, specific comments on a few of the recommendations are as follows:

"The western area of the Y-12 Plant is expected to remain controlled industrial property. As opportunity arises, national security activities should be concentrated in the western area to allow for the broadest possible use of the rest of the plant." "The eastern area of the Y-12 Plant should be made suitable for uncontrolled industrial use." DOE has stated that the east end of the Y-12 Plant has the least soil contamination and is therefore the best candidate for future uncontrolled use. It is important to note, however, that the presence of the national security mission at Y-12 may pose restrictions on the reuse of these areas of the plant, regardless of the state of environmental cleanliness.

"The Upper East Fork Poplar Creek, its tributaries, and surface waters on Chestnut Ridge must eventually meet State water quality standards. In the interim, water quality must not pose an unacceptable risk to: a) industrial workers at the Y-12 Plant, and b) residential and commercial users surrounding the Lower East Fork Poplar Creek and its tributaries." Since 1983, DOE has been conducting remediation projects to reduce mercury loading into the Upper East Fork Poplar Creek (UEFPC). The primary contaminant in UEFPC which currently exceed state water quality standards is mercury. As shown on the enclosed graph, mercury discharges to UEFPC have decreased from 170 grams/day in 1983 to approximately 20 grams/day at present. Further remediation of mercury sources will be accomplished through the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process. As part of this process, water quality standards will be established pursuant to CERCLA Section 121 and will meet a risk-based standard that is protective of human health and the environment.

"Contaminated groundwater from the Y-12 Plant and Chestnut Ridge must be controlled by the federal government such that it does not permanently impact the use of currently uncontaminated groundwater." A detailed analysis of the contaminant plume entering Union Valley from the Y-12 facility is currently being conducted which will evaluate options for preventing additional migration of contaminant off Y-12. At this point it would be premature to provide technical assurances of how effectively DOE will be able to address this plume and what type of access restrictions might be necessary as part of the cleanup strategy.

In the event that it becomes necessary to select a remedy that does not include all of your recommendations, DOE will discuss the basis for its decision in a public forum.

Again, thank you for the time that has been invested in providing DOE with early input on the community concerns surrounding the cleanup of the Y-12 facility. These recommendations will be very useful in developing and selecting a cleanup approach that will most closely meet the needs and expectations of stakeholders.

Sincerely,

Rodney R. Nelson Assistant Manager for

Environmental Management

Enclosure

**How Management 4661** Mercury Loading to East Fork Poplar Creek Begins 966L 966L 766L 1993 ا 366 1661 1660 4886 8861 **7861** 9861 986L 786L 1983 120 100 80 60 160 180 140 40 arams/day