AK RIDGE RESERVATION

Environmental Management

SITE SPECIFIC ADVISORY BOARD

June 16, 1997

Mr. Rod Nelson
Assistant Manager for Environmental Management
DOE/ORO
P.O. Box 2001
Oak Ridge, TN 37831

Dear Mr. Nelson:

At our June 11, 1997 meeting, the Oak Ridge Reservation Environmental Management Site Specific Advisory Board (ORREMSSAB) reviewed and approved the following recommendation for the End Use for the Surface Impoundment Operable Unit at the Oak Ridge National Laboratory.

We look forward to receiving your written responses to our recommendations. Thank you for your continued support of the ORREMSSAB.

Sincerely,

Randy Gordon, Chair
ORREMSSAB

LUED/RG/sb

Enclosure

cc: Ms. Margaret Wilson, DOE
Mr. John Hankinson, USEPA Region IV
Mr. Earl Leming, TDEC/DOE/ORO
Ms. Susan Gawarecki, LOC
ORREMSSAB Members
EUWG Members

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End Use for the Surface Impoundment Operable Unit at Oak Ridge National Laboratory

The Department of Energy (DOE)/Environmental Management - Oak Ridge Operations is developing a Proposed Plan for remediation of four surface impoundments on the Oak Ridge National Laboratory (ORNL) site in Bethel Valley. The impoundments are located in the south-central part of the main ORNL area, just north of White Oak Creek. The ponds, two lined and two unlined, were used as part of the ORNL waste management system to receive and contain various liquid waste streams containing radiological hazardous constituents. The unlined ponds were built in the early 1940s, the lined ponds in 1964. Their use was discontinued upon completion of the Surge Tank Project in 1996. The estimated radioactivity in the impoundments is about 180 curies, a few percent of which is from radionuclides with long half-lives.

Because the impoundments lie within a busy research, office, and industrial complex and are presently a risk to human health and the environment, early remediation is advised.

The Oak Ridge Reservation Environmental Management Site Specific Advisory Board (ORREMSSAB) submits the following remediation goals for the impoundment area:

1. Reduce risks to human health and the environment;
2. Eliminate releases of contaminated water to White Oak Creek;
3. Eliminate further contamination of groundwater and surrounding soil; and
4. Protect the remediated area from recontamination.

We assume for planning purposes that ORNL will retain its role as a major federally owned laboratory for 50 years or more. Thus, remediation should be done in such a way as to result in a safe, clean surface area suitable for controlled industrial uses (e.g., parking lot, buildings with no basements, open space) and free of restrictions for surface uses. Such an end use requires removal of the contaminated contents of the impoundments, clean fill and restrictions on digging and ground water disturbance. Furthermore, if technically and financially feasible, remediation choices should hasten unrestricted future use of the site.

In summary, the ORREMSSAB recommends that an option be selected for remediation of the surface impoundments that can result in controlled industrial use of the area. This recommendation is consistent with the End Use Working Group's conclusions for the Surface Impoundments and for the ORNL Bethel Valley area.