



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

November 14, 2002

Mr. David Allen
DOE Oak Ridge Operations
P.O. Box 2001, SE-30
Oak Ridge, TN 37831

Comments on the Environmental Assessment for Proposed Changes to the Sanitary Biosolids Land Application Program on the Oak Ridge Reservation, DOE/EA-1356

The Oak Ridge Site Specific Advisory Board (ORSSAB) has reviewed the subject environmental assessment. We offer the following comments and questions, which should be addressed in determining whether an environmental impact statement will be prepared or a Finding of No Significant Impact will be issued to proceed with the proposed action:

1. More information is needed on the soil hydraulic conductivity and other physical properties of the soils for the six active sites, which total 329 acres.
2. The map on page 1-6 needs to be revised and enlarged to show soils (i.e., recent soils map showing soil application series).
3. The map should have corresponding tables and legends, which identify the six active sites with data that incorporate estimates of exposure under worst scenario antecedent moisture conditions and lowest hydraulic conductivity.
4. More history on the six active sites as well as the inactive sites would be helpful in narrative form. Site history should also be taken into account in the estimation of the margin of safety for the maximally exposed individuals.
5. What were the prior uses and proximity of individuals over time to the sites? This information needs to be provided for the other sites: Watson Road, Scarboro Road, Rogers, McCoy, Cottonwood, and Site 8.
6. On page 1-5, the paragraph relating to the city of Oak Ridge's plans, as of the summer 2001, needs to be updated. Some discussion of what has transpired since then is needed. Change the tense from "plans" to "planned."
7. In light of the August 2002 referendum's defeat, the financial status of the city's operations and planned improvements needs to be re-evaluated and discussed. Some cost data on the new system and also on its long-term maintenance are necessary.

8. Please explain the statement on page 1-5 that refers to the city's planned new treatment system, which would "increase solids content and sterilize biosolids ... resulting in more manageable and safer material." What is meant by "more manageable and safer?"
9. The Executive Summary identifies an alternative to the proposed dose rate increase being "to leave the existing Oak Ridge Reservation land application sites altogether in favor of free distribution of the biosolids material to the public." It would seem that this option could be a cheap and easy alternative, and it should be evaluated.
10. How close to the 4 mrem/yr are we actually now? Or does the gamma monitoring not give enough data for this to be calculated?
11. Appendix D is based on a 20-year program, and it is also stated that we have 7 years remaining in that program; this would give a start date of 1989. What does 1989 correspond to, in reference to the Land Application Program started in 1984 and Oak Ridge National Laboratory (ORNL) adding waste in 1999?
12. Europium-155 has a higher limit than uranium (Table D.3). Does this imply that europium is a fairly large contributor? What is its source?
13. Why does the Rogers site have 56.8 percent of the allocated dose, according to Table 4.2?
14. Why are the cesium-137 concentrations in 1999 increased, uranium-235 concentration in 1996 high, and the uranium-238 concentration usually low compared to the limit (Table B.4)?
15. Section 1.0, page 1-1, 2nd paragraph. The ORSSAB presentations and tour of the biosolids land application sites involved the ORSSAB Waste Management Committee, not the full Board, and were informational. ORSSAB has taken no previous position on this proposal.
16. Section 1.1, page 1-2, 3rd paragraph. The 4 mrem/yr limit is coincidentally a drinking water maximum contaminant level for beta particles and photon radioactivity from man-made radionuclides. Use of the descriptor "self-imposed" oversimplifies the issue of setting a standard for radionuclides in sewage sludge and conveys a lack of objectivity in preparation of this environmental assessment.
17. Section 1.2.1, page 1-5, 2nd paragraph. More details on the proposed thermal treatment system need to be provided and the fate of radionuclides undergoing thermal treatment in the proposed system evaluated as part of this environmental assessment.
18. Section 1.2.1, page 1-7, 2nd paragraph. The results of the survey of publicly owned treatment works for baseline radioactivity associated with biosolid products needs to be discussed in this document if available from late 2001.
19. Section 1.2.1, page 1-8, 2nd paragraph. The letter from the Tennessee Department of Environment and Conservation? Division of Radiological Health claimed as approving the increase to 10 mrem/yr appears to only acknowledge concurrence at a planning level. The letter provided in Appendix A does not appear to be personally signed by the past division director.

20. Section 1.2.2, page 1-11, 1st paragraph. According to the *Oak Ridge Reservation Annual Site Environmental Report for 2001*, Outfall 502 (West End Treatment Facility) had zero discharge for the calendar year. Please provide details on what portions of the approximately \$133,000 cost are due to effluent monitoring and treatment process changes, and be clear whether the proposal comparison is based on past or current operations.
21. Section 1.3, page 1-11, 1st paragraph. Why not evaluate additional alternatives, such as retaining the 4 mrem/yr limit with addition of Y-12 West End Treatment Facility discharge and excluding ORNL or East Tennessee Technology Park biosolids or other problematic discharges?

We appreciate the opportunity to provide comments and questions on this environmental assessment and look forward to learning about their resolution.

Sincerely,



David N. Mosby, Chair

cc: Gerald Boyd, DOE-ORO
Martha Crosland, DOE-HQ
Sherry Gibson, DOE-ORO
Pat Halsey, DOE-ORO
Connie Jones, EPA Region 4
John Owsley, TDEC
John Patterson, Bechtel Jacobs