



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

July 15, 2010

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

Dear Mr. Eschenberg:

Recommendation 192: Recommendations and Comments on the Draft 2010 Remediation Effectiveness Report for the U.S. Department of Energy Oak Ridge Reservation

At our July 14, 2010, meeting the Oak Ridge Site Specific Advisory Board approved the enclosed recommendations and comments on the 2010 Remediation Effectiveness Report (D1).

The enclosed recommendations and comments reflect informal submissions by members of our Stewardship Committee to Jason Darby, DOE-ORO, on June 24, however this set of comments may include some more recent submissions. Please review carefully before implementing the final version of the RER.

A response to these comments is requested by August 14, 2010.

Sincerely,

A handwritten signature in black ink, appearing to read "Ron Murphree".

Ron Murphree, Chair, PE, CPE
rm/rsg

Enclosure

cc/enc:

Dave Adler, DOE-ORO
Cate Brennan, DOE-HQ
Mike Farmer, Roane County Mayor
Pat Halsey, DOE-ORO
Connie Jones, EPA Region 4

Local Oversight Committee
Rex Lynch, Anderson County Mayor
Melissa Nielson, DOE-HQ
Gary Cinder, Interim Oak Ridge City Manager
John Owsley, TDEC



Oak Ridge Site Specific Advisory Board Recommendation 192: Recommendations and Comments on the Draft 2010 Remediation Effectiveness Report for the U.S. Department of Energy Oak Ridge Reservation

Background

The Remediation Effectiveness Report (RER) has been published annually since 1996 by the Department of Energy's Oak Ridge Environmental Management Program to assess and document effectiveness, or progress, toward a stated goal, of each completed remedy performed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) on and around the DOE Oak Ridge Reservation. As part of this assessment, compliance with long-term stewardship requirements (e.g., engineering and land use controls) of CERCLA decisions is also evaluated. The RER evaluates the status of ongoing activities, reviews monitoring results for the fiscal year, evaluates effectiveness of remedial actions, reviews stewardship activities, and recommends any changes in monitoring.

The 2010 document reports on data gathered and analyzed during 2009.

Discussion

Jason Darby, RER Project Manager, reviewed some of the high points of the draft 2010 RER at the April 14, 2010, ORSSAB meeting and requested comments on the draft document. The ORSSAB Stewardship Committee reviewed the draft and generated the following recommendations and comments, which were then ratified by the entire board membership. The committee felt the document was generally well done, but there were several areas in which improvements could be made.

Recommendations/Comments

Following are recommendations and comments on the draft that we request be incorporated into the final document:

1. All sections: Acronyms used on a page should be spelled out on the bottom of the page.
2. Bethel Valley section: Consider that we should anticipate 2010 data to be forthcoming from deep wells south of the Clinch River.
3. East Tennessee Technology Park section: There are some spelling and grammatical errors, and we recommend that a copy editor review it carefully.
4. Sect. 1, Page 8: On the rainfall graph, the connecting line between years is meaningless. Please remove it.
5. Sect. 4, Page 43: Uranium Flux Balance for Bear Creek to be the major undertaking for 2010 is as it should be. Quarterly updates should be given to the ORSSAB Stewardship Committee.
6. Sect. 7, Page 11: The elevated mercury in fish tissue is still an issue. Understanding then getting the mercury out of the system should be the number 1 priority for the Lower Watts Bar. Describe offsite mercury sources that may contribute to the mercury in fish tissue.
7. Sect. 4.2.1, Page 10, Table 4.4 Footnote: A statement is made that: "The Phase I Record of Decision (ROD) originally established the cadmium concentration performance standard as 3.9 µg/L. This standard changed to 0.25 µg /L due to change in the promulgated ambient water quality criteria."

With the exception of the Biological Monitoring Program results, the Bear Creek Valley (BCV) section of the RER does not report surface water or groundwater monitoring results for cadmium.

8. Sect. 4.2.2.1.2, Pages 19-20: The release of uranium from the Bear Creek Burial Ground continues to be a major source contributor to the uranium released to Bear Creek and should be recognized as a high priority issue during the identification of priorities and annual allocation of budget.
9. Sect. 4.2.2.1.2, Pages 19-20: A statement is made that: “119 of the 148 kg of uranium are accounted for at monitoring stations.” The sampling conducted at Bear Creek Kilometer-9.2 (BCK) integration point (IP) indicates that in 2009 total uranium released to Bear Creek was 148 kg, which exceeds the BCV Phase 1 ROD goal of less than 34 kg/yr at the BCK 9.2 IP. The uranium contribution measured from North Tributary-8 is approximately 41% (60 kg). Groundwater inflows to Bear Creek from the karst geology is a significant contributor to the uranium flux. The uranium ROD goal at BCK 9.2 has not been met during the sampling period of FY 2001 through 2009. The sampling results underscore the following: 1) the importance of addressing the Bear Creek Burial Grounds contribution to the uranium discharged to Bear Creek, and 2) the uranium contribution to Bear Creek due to karst geology of BCV.
10. Sect. 4.2.2.2, Page 25: We recommend inclusion of a table or graph of groundwater monitoring results for Zone 2 nitrates for sampling years 2000 through 2010 for GW-712, GW-713, and GW-714.
11. Sect. 4.2.2.2, Page 27: A statement is made that: “A scarcity of groundwater monitoring wells in Zone 2 makes it impossible to precisely map and track groundwater contaminant transport pathways in that area.” We recommend that DOE develop a plan to determine the appropriate locations to install additional groundwater monitoring wells in Zone 2 that will facilitate the capability to map and track groundwater contaminant transport pathways in Zone 2.
12. Sect. 4.2.3.1, Page 40: A statement is made that: “S-3 Ponds Pathway 3 is an incomplete action; however, once action is complete, long-term stewardship requirements include control and restricted access. DOE needs to complete the action to install a trench at Pathway 3 for passive in-situ treatment of shallow groundwater.” We recommend that DOE set a high priority for identifying an effective passive in-situ treatment method for shallow groundwater.
13. Sect. 6.1.1, Page 7: We recommend that DOE identify completion of equipment and material removal from the Alpha 5 and Beta 4 buildings, as well as demolition and disposal of the buildings, as a high priority action during the upcoming annual budget allocation and priority identification process. Alpha-4 equipment and material removal should be identified as a priority following completion of the Alpha 5 and Beta 4 demolition.