



**SIERRA
CLUB**

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December 10, 2018

DELIVERED VIA EMAIL (John.Japp@orem.doe.gov)

Mr. John Michael Japp
FFA Project Manager
Oak Ridge Environmental Management
U.S. Department of Energy Oak Ridge Operations
P.O. Box 2001
Oak Ridge, TN 37831

RE: Proposed Plan for the Disposal of Oak Ridge Reservation Comprehensive Environmental Response, Compensation, and Liability Act Waste

Dear Mr. Japp:

Thank you for the opportunity to comment on the Proposed Plan for the Disposal of Oak Ridge Reservation Comprehensive Environmental Response, Compensation, and Liability Act Waste (the Proposed Plan)¹ on behalf of the 140,000 members and supporters of the Tennessee Chapter of the Sierra Club.

The Sierra Club does not support the preferred alternative for establishment of a new hazardous/toxic/radioactive waste disposal facility (EMDF) on the Oak Ridge Reservation (the Onsite Disposal Alternative) for the following reasons:

1. DOE has not provided sufficient information on some significant aspects of the analysis of alternatives to allow informed comment by the public. Accordingly, we ask that the public comment period be extended to allow time for DOE to provide information on the following topics and give the public time to review and comment on the new information:
 - a) Details of waste acceptance criteria and requirements for waste characterization prior to acceptance.

¹ Att. ##, U.S. Dep't of Energy, *Proposed Plan for the Disposal of Oak Ridge Reservation Comprehensive Environmental Response, Compensation, and Liability Act Waste* (Sept. 2018) [hereinafter "Proposed Plan"]; Att. ##, U.S. Dep't of Energy, *EMDF Public Comment Period Ends*, Dec. 10, 2018, <https://www.energy.gov/orem/events/emdf-public-comment-period-ends>.

- b) Full details of the comparative analysis of costs for the Onsite and Offsite alternatives.
 - c) The specific waivers of regulatory requirements that would be requested for each of the Onsite options and the rationale for each requested waiver.
 - d) Treatment technologies that have been evaluated or are planned to (1) reduce waste volume in the disposal facility and (2) immobilize any mercury waste prior to disposal.
2. DOE's preferred site in Central Bear Creek Valley (CBCV) and the West Bear Creek Valley (WBCV) option would add to the inventory of contaminated land on the Oak Ridge Reservation by putting waste in a clean area that is a greenfield.
 3. We believe that DOE would not need to be seeking a new landfill at this time if the existing EMWMF had been managed properly. Specifically, if waste had been characterized before disposal to determine the best disposal path, much less waste would have been placed there.
 4. Based on available characterization data (noting that there is not yet enough hydrologic characterization of the CBCV site to support a decision), none of the candidate sites is suitable hydrologically. The presence of abundant surface and ground water would require significant engineering effort to manage, both through the operating period and after closure, relying on diversion structures, gravel drains, pipes, liners, and caps, that can be expected to fail in the long term, with life expectancy only of decades.
 5. Proximity to residential areas would exclude these sites from consideration if the EMDF were being sited as a new radioactive waste disposal facility.
 6. The proposal to establish a landfill on a clean site and call it a "remedial action" is a misapplication of the CERCLA statute. This proposed landfill could not be built if it had to comply with the normal environmental regulations for landfills – even for ordinary municipal landfills. The landfill only becomes possible if DOE can use the special legal rules for CERCLA remedial actions to obtain exemptions from procedural requirements and to seek waivers of some substantive requirements. The special legal provisions of CERCLA were intended to facilitate rapid action to remove wastes from contaminated areas, not to allow establishment of new waste sites that operate for decades without being subject to regulatory oversight.

We therefore offer the following recommendations:

1. More prescriptive rules and guidance from programs that are meant to regulate disposal of radioactive and hazardous waste should be incorporated into the CERCLA decision process.

2. Before an alternative is chosen for on-site disposal, the site to be used for the landfill and the waste to be disposed should be characterized well enough to ensure it can be designed to protect human health and the environment.
3. Credible limits on the amount and concentration of hazardous chemicals and radionuclides that can be disposed in a landfill in Oak Ridge must be established and used to determine the volume of waste that should be buried on-site.

We would support, after consideration and implementation of our recommendations above, the choice of the hybrid alternative rather than the preferred alternative put forth by DOE in this Proposed Plan. The hybrid alternative proposes that a disposal facility be located in Bear Creek Valley adjacent to the Environmental Management Waste Management Facility (EMWMF) between tributaries to Bear Creek. The hybrid alternative also provides for significant quantities of waste to be shipped offsite.

Also, we support and incorporate the comments by Sidney W. Jones, Ph.D., P.E., P.G. and AFORR by reference.

Sincerely,

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