



# U.S. Department of Energy Categorical Exclusion Determination Form

Proposed Action Title: Phase I & Phase II Site Characterization for the Proposed Environmental Management Disposal Facility for Oak Ridge Reservation CERCLA-Generated Wastes – EM-OR-14-01

Program or Field Office: Environmental Management - Oak Ridge

Location(s) (City/County/State): Oak Ridge, Tennessee

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Proposed Action Description:

The U.S. Department of Energy, Oak Ridge Office, is conducting a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remedial investigation/feasibility study (RI/FS) to evaluate alternatives for disposal of future wastes generated by Oak Ridge CERCLA actions. The preferred alternative may be to design, construct, and operate a low-level radioactive and mixed waste landfill, provisionally named Environmental Management Disposal Facility (EMDF), on the Oak Ridge Reservation (ORR). If selected, the landfill alternative would be described in a Proposed Plan for public review and comment. After public comment on the Proposed Plan, a Record of Decision would be prepared to document the process, decision, and conditions that apply to the landfill. The proposed landfill would then be designed, constructed, and operated under CERCLA as administered by the Oak Ridge Federal Facility Agreement.

DOE proposes to conduct two phases of site characterization activities, at an undeveloped site in East Bear Creek Valley just west of the Y-12 Plant and immediately east of the Environmental Management Waste Management Facility (EMWMF), in support of the planning and design of a proposed new landfill to facilitate the cleanup of the ORR.

Phase I Site Characterization would involve installation of five well pairs, one surface water weir, and three additional stream monitoring stations in a forested area, followed by monitoring ground water and surface water for a period of at least 60 days. A number of rock core and soil samples would be collected and analyzed for contaminants and certain geotechnical parameters as part of this effort. Geophysical testing would be conducted in selected wells. Results would be incorporated in the EMDF RI/FS and used to help plan for the more extensive Phase II Site Characterization.

Phase II Site Characterization would install additional wells/well pairs (number to be determined), collect and analyze additional soil and rock samples, conduct additional borehole geophysical tests, conduct geotechnical testing, and conduct surface water and ground water monitoring for a minimum period of one year. Data and interpretations resulting from site characterization studies would be used to provide engineering data to support landfill design, planning, operations, and closure.

All drilling, sampling, logging, and related activities would be planned and conducted safely, and would aim, to the extent practicable, to minimize environmental impacts. Storm water and erosion control methods would comply with the Tennessee General Construction Storm Water Permit TNR10000. It is anticipated that no healthy trees would be disturbed (see note below). A recent survey of plant and animal habitats and species conducted as part of this project and previous surveys conducted in support of the neighboring EMWMF did not identify any threatened or endangered species, or Tennessee "in-need-of-management" species. An extensive cultural resource survey conducted over this and adjacent areas in support of the EMWMF construction did not identify any sites or items of concern. The main natural resources that could be potentially impacted by this project are interior forest and aquatic (stream and wetland) resources. Streams identified as NT-2 and NT-3, associated springs and seeps, and associated wetlands would be avoided and protected, as practicable during characterization.

Access to the site is expected to be via existing roads or trails; however, installation of temporary access roads would likely be necessary for some well locations. New roads would be constructed as indicated in U.S. Forest Service guidance.

Note: The area in which this work would be performed encompasses a part of the area covered by CX-ORR-13-008, Timber Salvage from Pine Ridge Storm Damage.

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Categorical Exclusion(s) Applied:

B3.1 - Site characterization and environmental monitoring

B1.13 - Pathways, short access roads, and rail lines

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For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, including the full text of each categorical exclusion, see Subpart D of [10 CFR Part 1021](#).

Regulatory Requirements in 10 CFR 1021.410(b): (See full text in regulation)

The proposal fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D.

To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal.

The proposal has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

The above description accurately describes the proposed action, which reflects the requirements of the CX cited above. Therefore, I recommend that the proposed action be categorically excluded from further NEPA review and documentation.

**Program Point of Contact:** Jason Darby

**Date Determined:** 2/10/2014

Based on my review of the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

**NEPA Compliance Officer:** Gary S. Hartman

**Date Determined:** 2/10/2014