



U.S. Department of Energy

Categorical Exclusion Determination Form

Proposed Action Title: Categorical Exclusion Determination for Indoor, Small- and Pilot-Scale Research and Development (3767X)

Program or Field Office: Office of Science - ORNL

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

Proposed Action Description:

The U.S. Department of Energy Oak Ridge National Laboratory (ORNL) Site Office (DOE-OSO) proposes to conduct indoor, small- and pilot-scale research and development activities, laboratory operations, and associated transfer, lease, disposition or acquisition of interests in personal or real property involving advanced computing, advanced materials, biological and ecological systems, energy science, manufacturing, nanotechnology, national security, neutron sciences, chemical sciences, and nuclear physics including but not limited to developing, evaluating and testing: materials and their properties; systems; equipment; instrumentation; renewable energy systems; and operating existing particle accelerators; magnetic fusion experiments, and conventional laboratory operation..

This proposed action could involve siting, construction, modification, operation, and decommissioning of facilities at existing DOE-owned and/or operated facilities on the Oak Ridge Reservation (ORR) and other DOE-OSO operated facilities and ancillary areas associated with OSO sites, programs, and projects, and at selected aquatic research facilities for small-scale research and development projects with applicable requirements (such as engineering, worker safety, procedural, and administrative regulations); conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions; however, construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). The proposed actions would be in accordance with applicable requirements in the proposed project area and would incorporate appropriate control technologies and best management practices. Not included in this proposed action are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment. Not included in this proposed action are magnetic fusion experiments involving tritium fuel.

The indoor, small- and pilot-scale research and development proposed actions on the ORR would be reviewed in accordance with the Cultural Resource Management Plan or applicable sections of the ORNL Programmatic Agreement and would not result in an adverse effect to historic properties included or eligible for inclusion in the National Register of Historic Places (National Register). If the proposed ORR actions would have an adverse effect on properties included or eligible for inclusion in the National Register, DOE would consult with the State Historic Preservation Officer (SHPO) and other consulting parties and initiate actions specified in procedures set forth in the Advisory Council's regulations in 36 CFR Part 800. For any proposed actions located off the ORR, DOE would follow the Section 106 process and would consult with the respective SHPO, as appropriate.

Although an action might fall under the category of "indoor, small- and pilot-scale research and development," a separate National Environmental Policy Act (NEPA) review would be performed and documented should the action or related/cumulative effect of the action have the potential to result in an unusual or significant impact to the environment.

Categorical Exclusions (CX) Applied:

A9 - Information gathering, analysis, and dissemination

B1.24 - Property transfers

B3.4 - Transport packaging tests for radioactive or hazardous material

B3.6 - Small-scale research and development, laboratory operations, and pilot projects

B3.10 - Particle accelerators

B3.12 - Microbiological and biomedical facilities

B3.13 - Magnetic fusion experiments

B3.15 - Small-scale indoor research and development projects using nanoscale materials

B5.15 - Small-scale renewable energy research and development and pilot projects

For the complete DOE NEPA regulations regarding categorical exclusions, including the full text of each CX, 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 CX. 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: Mark Belvin, ORNL Site Office

Date Determined: 7/2/2013

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, Oak Ridge Office

Date Determined: 7/3/2013