



# U.S. Department of Energy

## Categorical Exclusion Determination Form

Proposed Action Title: **CATEGORICAL EXCLUSION (CX) DETERMINATION FOR VENTILATION ACTIVITIES (CX-GEN-001)**

Program or Field Office: Oak Ridge Office, Oak Ridge, Tennessee

Location(s) (City/County/State): Oak Ridge, TN; Berkeley, CA; Menlo Park, CA; Newport News, VA; and other DOE-operated facilities and ancillary areas associated with these sites, programs, and projects

Proposed Action Description:

The DOE proposes to upgrade, install, and/or modify ventilation systems at its facilities (hereafter referred to as ventilation actions).

Ventilation actions would take place at DOE-owned and/or operated facilities on the DOE Oak Ridge Reservation (ORR) at Oak Ridge, Tennessee; the Lawrence Berkeley National Laboratory (LBNL) at Berkeley, California; the SLAC National Accelerator Laboratory at Menlo Park, California; the Thomas Jefferson National Accelerator Facility at Newport News, Virginia; and other DOE operated facilities and ancillary areas associated with these sites, programs, and projects.

The proposed actions would involve installation of or modification to ventilation systems to (1) enhance workplace habitability (i.e., modifications to or installation of heating/ventilating/air conditioning [HVAC] systems); (2) provide for personnel safety and health enhancement (i.e., installing/improving fume hoods and associated collection and exhaust systems); (3) ensure proper temperature control of buildings and equipment; and (4) provide environmental controls for research and development activities. The proposed actions would also involve replacing air conditioners, chillers, pump towers, and associated piping, electrical, and structural work. Air handling units would be located inside existing facilities, and condenser units would be located either on the roof of existing structures or immediately outside existing facilities on poured concrete pads to be constructed prior to installation. As needed, new duct work would be installed to distribute cooled or heated air. Modifications to existing HVAC control systems would include removing old or deteriorated control systems (e.g., pneumatic temperature controllers, temperature indicators, and temperature transmitters) and installing new control systems (e.g., direct digital controls) and computer systems for new digital control modules. No increase in emissions would occur as a result of the installation of collection and exhaust systems. Modifications would also include cleaning existing components (grills, electric reheat coils, steam coils, etc.) and replacing asbestos-insulated supply ducts with new asbestos-free ducts.

Installing and modifying HVAC systems might involve either adding or removing refrigerants that are considered to be ozone-depleting substances. All actions involving the handling of refrigerants would be conducted only by qualified personnel who are aware of air pollution control rules restricting the release of refrigerants to the atmosphere and who are properly equipped to prevent such releases. All individual decisions to install and/or modify HVAC systems would conform to applicable programs or site-specific policies and plans.

Any planned upgrades, improvements, or modifications that might involve systems related to personnel safety and health (i.e., installing or improving fume hoods and associated collection and exhaust systems) would be reviewed for applicable permitting requirements under the Clean Air Act and/or the National Emission Standards for Hazardous Air Pollutants prior to construction. In addition, modifications to such systems would be reviewed, as required, by appropriate industrial hygiene and other environmental management personnel.

Any wastes (including asbestos-containing material [ACM] wastes and solid waste contaminated with radioactive, hazardous, or mixed materials) generated during ventilation actions would be appropriately characterized and disposed of at existing permitted/approved waste storage, treatment, or disposal facilities. Refer to CX-GEN-008 for disposal of ACM wastes. The proposed action would be evaluated before implementation to identify options to reduce or eliminate generation of waste materials.

The proposed ventilation actions that would take place on the ORR have been reviewed in accordance with the Cultural Resource Management Plan (CRMP) or applicable sections in a ratified Programmatic Agreement document 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 initiate actions specified in procedures set forth in the Advisory Council's regulations in 36 CFR Part 800.

For sites other than the ORR, DOE would follow the Section 106 process and would consult with the respective SHPO, as appropriate.

To ensure that sensitive resources are protected, existing maps and surveys/studies on threatened and endangered species, wetlands and floodplains, and historically sensitive areas would be used to locate these areas. In addition, personnel responsible for identifying these resources would be consulted and, if warranted, additional surveys and walkovers would be conducted to confirm or update available information.

No known extraordinary circumstances would be associated with these actions that might affect the significance of the environmental effects of the proposed action based on past similar actions. These actions would not be connected to other actions with potentially significant impacts or related to other proposed actions with cumulatively significant impacts; they would meet the conditions that are integral elements of the classes of actions which may be categorically excluded from further National Environmental Policy Act (NEPA) documentation. Should the action not meet the conditions for CX consideration, a separate NEPA document would be prepared and submitted to DOE-ORO for review and approval.

Although an action may fall under the category of "installation of or modification to ventilation systems," a separate 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.

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**Categorical Exclusion(s) Applied:**

B1.4 - Air conditioning systems for existing equipment  
B1.16 - Asbestos removal  
B2.1 - Workplace enhancements  
B2.3 - Personnel safety and health equipment

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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.

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: \_\_\_\_\_ Signed by Gary S. Hartman Date Determined: 11/19/2012