

DOE-ID NEPA CX DETERMINATION IDAHO NATIONAL LABORATORY

DIRECTIONS: Responsible Managers, Project Environmental Lead, and Environmental Support personnel complete this form by following the instructions found at the beginning of each section and submit to Environmental Support & Services (environmental.checklist@inl.gov).

SECTION A. Project Title: CFA and ATR-Complex Analytical and R&D Laboratory Operation (Overarching)

SECTION B. Project Description:

This EC replaces overarching EC INL-05-017 due to changes in the laboratories identified in EC INL-05-017. The proposed action will continue to cover laboratory-based analytical and research and development (R&D) activities in laboratories located at the Central Facility Area (CFA) and the Advanced Test Reactor Complex (ATR-C) at the Idaho National Laboratory (INL). These activities include ongoing and future work related to chemistry, biology, materials science, prototype development, and physical measurements including, but not limited to, radiological work. This EC is an overarching document designed to provide for a wide range of R&D activities.

Project activities will result in chemical and radiological emissions to the atmosphere and generate hazardous, mixed, radioactive, and industrial waste. Project activities may involve samples for analysis or R&D activity from outside the INL or originate at the Site. Project activities may result in excess samples or sample residues that INL personnel may manage or return to the generator.

Work may include analysis of samples with Polychlorinated Biphenyls (PCBs) and/or R&D regarding PCB analysis or destruction technologies. Any materials that contain PCBs at the threshold limit of 50 ppm or greater will be managed in compliance with 40 CFR 761 Subpart D.

Work will take place at various laboratories at CFA and ATR-C, including, but not limited to, CFA-622, CFA-612, CFA-625, TRA-678 and TRA-1627. Building modifications may be required to accommodate changes in lab-related analysis or R&D work. In addition, project personnel may move activities between the different laboratories. Project activities that will modify buildings with potential historical significance must receive a clearance before beginning the activity—see <http://webfiles/ea/nepa/files/CRTable.pdf> for a list of buildings that may be eligible for the National Historic Register or contact the Cultural Resource Management Office. See Section F, Conditions, #2 for additional guidance.

The Focused Review Group reviews all new R&D laboratory projects. During the review process, the principal investigator and program environmental lead (PEL) identify all environmental aspects and identify mitigation and control actions that project personnel are responsible to implement. This overarching EC meets the purposes for the R&D activities, and project personnel may use and reference this EC to perform work described above. However, each individual project must have its own EC, completed and approved by the project manager and reviewed by the R&D PEL to verify that the environmental aspects and work activities fit under this overarching EC. Project managers are responsible to follow appropriate environmental instructions found in LWP-8000 as identified in this EC, and any additional project-specific instructions or permits, as identified by the PEL. Each project approved under this overarching EC must meet the conditions of the CX established under B3.6 “Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions.”

This EC does not cover abandoning or restarting the laboratories at CFA or ATR-Complex. In addition, this EC does not cover individual activities, which, on their own merit, do not qualify for a CX.

SECTION C. Environmental Aspects / Potential Sources of Impact:

Air Emissions – Project activities will generate chemical and radionuclide emissions during laboratory operations. Environmental Compliance must evaluate each project with a potential to emit air pollutants through the air permitting applicability determination (APAD) process. See Section F, Conditions.

Discharge to Surface, Storm, or Groundwater – Project personnel may retain wastewaters from laboratory operations in the laboratory for characterization and management by Waste Generator Services (WGS) or personnel may dispose of the wastewaters to laboratory drain systems in accordance with CFA or ATR-Complex waste acceptance criteria (WAC), and in coordination with WGS and Facility Management.

Disturbing Cultural/Biological Resources – Project activities that will modify buildings with potential historical significance must receive a clearance before beginning the activity—see <http://webfiles/ea/nepa/files/CRTable.pdf> for a list of buildings that may be eligible for the National Historic Register or contact the Cultural Resource Management Office. See Section F, Conditions, #2 for additional guidance.

Generating and Managing Waste – Project activities may generate Industrial, radioactive, PCB, hazardous or mixed waste. Waste Generator Services (WGS) will characterize and manage all solid waste by conducting hazardous waste determinations, as appropriate. Project personnel and WGS will manage hazardous and mixed waste in one or more Satellite Accumulation Areas (SAAs) or a <90-day storage areas before shipping to a treatment, storage, and disposal facility (TSDF).

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Releasing Contaminants – Chemical and/or radioactive contaminants may be released in air emissions or as wastewater contaminants. Releases will be governed under applicable documentation such as APADs, permits, or Waste Acceptance Criteria.

Using, Reusing, and Conserving Natural Resources – Prior to purchasing new chemicals, material, or equipment, requests will be evaluated to determine if these are available from other programs such as the “material exchange program or sharable chemicals in the lab. If not, only the quantity needed will be ordered. Excess chemicals, material, and equipment will be made available to the material exchange program or sharable chemicals, and then recycled to the extent practicable prior to disposal.

SECTION D. Determine the Level of Environmental Review (or Documentation) and Reference(s): Identify the applicable categorical exclusion from 10 CFR 1021, Appendix B, give the appropriate justification and the approval date.

Note: For projects Categorical Exclusion n(CXs) the proposed action must not: 1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, and health, including requirements of DOE orders; 2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities; 3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; 4) adversely affect environmentally sensitive resources. In addition, no extraordinary circumstances related to the proposal exist which would affect the significance of the action, and the action is not “connected” nor “related” (40 CFR 1508.25(a)(1) and (2), respectively) to other actions with potentially or cumulatively significant impacts.

References: B3.6 “ Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions.

Justification: Project personnel will perform ongoing and future R&D activities at laboratories located at CFA and the ATR-Complex. These activities include work related to chemistry, biology, materials science, prototype development, and physical measurements including, but not limited to, radiological work. Categorical Exclusion B3.6, Siting/construction/operation/decommissioning of facilities for bench-scale research, conventional laboratory operations, small-scale research and development and pilot projects, effective August 8, 1996 covers project activities as described in Section B.

The PEL will review each individual project to verify that it falls under the scope and limitations of this EC, and will document this review by completing project-specific ECs approved by the program/project manager and placed in the project files.

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act) Yes No

Approved by Jack Depperschmidt, DOE-ID NEPA Compliance Officer on 5/6/2010.