



U.S. Department of Energy

Categorical Exclusion Determination Form

Proposed Action Title: Facility for Advanced Accelerator Experimental Tests II (FACET-II) SS-SC-15-03

Program or Field Office: SLAC Site Office

Location(s) (City/County/State): Menlo Park, California

Proposed Action Description:

FACET was approved on May 5, 2009 as a categorical exclusion (SS-SC-09-02). The FACET-II project provides a means to build on the scientific accomplishments of the existing FACET installation. The FACET-II is an upgrade of FACET located in Building 001 and Building 002. This includes the installation of a new photoinjector at sector 10, a new positron damping ring at sector 20, and a "sailboat chicane" at sector 20. The accelerator will have primary beam energy of 10 GeV and an average beam power of 1.5 kW. This meets the power restrictions of the cited categorical exclusion.

Building 001 and Building 002 were constructed between 1964 and 1965. The FACET-II project is primarily involved with scientific equipment configuration within the existing building envelope. There may be minor reconfiguration of small sections of interior walls of the underground accelerator housing in Sector 10 to permit installation of the new damping ring. There will be no modifications to the exterior of the building. DOE has determined there is no adverse effect to historic properties pursuant to 36 CFR Part 800.

During the various phases of construction and operation, there may be incidental use and disposal of industrial chemicals. There also may be radioactive materials removed from the housing during the project. The project will implement proper controls identified in the SLAC Environmental, Safety, and Health Manual.

Categorical Exclusion(s) Applied:

B3.10 - Particle accelerators

Siting, construction, operation, and decommissioning of a particle accelerator, including electron beam accelerator with primary energy less than approximately 100 MeV, and associated beam lines, storage rings, colliders, and detectors for research and medical purposes, within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible, or internal modifications of any accelerator facility regardless of energy that does not increase primary beam energy or current.

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.

I concur that the above description accurately describes the proposed action.

SSO Program Point of Contact: Hannibal Joma **Signature on file**

Date: 7/15/2015

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.

SSO NEPA Coordinator: Marie L. Heard Signature on File

Date:

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.

SSO NEPA Compliance Officer: James L. Elmore Signature on File
7/15/2015

Date Determined: