

## LLNL CATEGORICAL EXCLUSION DETERMINATION FORM

<b>ESPM LOG No:</b> 17-14543	<b>NNSA/LFO LOG No:</b> NA-17-02
<b>1. PROJECT/ACTIVITY TITLE:</b> Greenhouse Installation and Operation	<b>DATE:</b> March 2017
<p><b>2. PROJECT DESCRIPTION:</b></p> <p>DOE/NNSA has a need to conduct studies on plant-microbe interactions for sustainable cellulosic bioenergy. This work is ongoing through partnerships with UC Berkeley and Northern Arizona University. The purpose of this project is to enable this ongoing work to be performed at the Livermore Site.</p> <p>The proposed project would install and operate a new, pre-engineered 30 by 60-foot greenhouse in a previously disturbed and developed area north of Building 282 (B282).</p> <p>Installation of the greenhouse would involve scarification and compaction of the area, pouring concrete footings for steel support posts, connecting to existing electrical power, water, natural gas, and sanitary sewer utilities, and erecting the pre-engineered steel structure and translucent roof and wall panels. Placing a building slab would not be required for this project. The greenhouse would be labeled in accordance with LLNL procedures with appropriate building identification signs visible from directions of approach.</p> <p>Operation of the greenhouse would involve use of grow lights, heating and cooling, exhaust fans and vents, a motorized shade system, an irrigation system and a utility sink. Ongoing research involving native grasses and clean soils would be conducted in the greenhouse for the life of the facility.</p>	
<p><b>3. Categorical Exclusion(s) Applied:</b></p> <p>B1.15 Support Buildings</p> <p>B3.8 Outdoor Terrestrial Ecological and Environmental Research</p>	

\*-For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, see Subpart D of 10 CFR 1021

This action would not: threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including DOE and/or Executive Orders; require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities, but may include such categorically excluded facilities; 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; or adversely affect environmentally sensitive resources (including but not limited to those listed in paragraph B.(4)) of Appendix B to Subpart D of 10 CFR 1021). Furthermore, there are no extraordinary circumstances related to this action that may affect the significance of the environmental effects of the action; this action is not "connected" to other actions with potentially significant impacts, is not related to other proposed actions with cumulatively significant impacts, and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211.

Based on my review of information conveyed to me and in my possession (or attached) concerning 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:



Date Determined:

