LLNL CATEGORICAL EXCLUSION DETERMINATION FORM

ESPM LOG NO: 15-7705	NNSA/LSO Log No: NA-15-03
1. PROJECT/ACTIVITY TITLE: Ground-Based Laser Field Experiments	DATE: April 2015

2. PROJECT DESCRIPTION:

DOE has a need to perform outdoor tests on lasers for the development and reliability of equipment in support of ongoing national security work.

DOE/NNSA proposes to test and operate a commercially available Class IIIa HeNe laser and an LLNL-built Class IV laser system on the North Perimeter Road, which runs between Arroyo las Positas and the North Buffer Zone from the north side of Building 196 eastward to the security fence parallel to Greenville Road, at the LLNL Livermore Site. Outdoor testing would involve moving the portable laser systems to the location, setting up associated equipment, establishing the target location (on site) and defining the beam path, installing necessary access controls, and taking diagnostic measurements. During normal operation, the cart containing the laser system would be enclosed except for the input/output port. Engineered controls for the laser systems would include at a minimum, a barricade or aperture to prevent the laser beam from emanating greater than 5 degrees off axis, a startup-shutdown checklist, and spotters with radios to exclude entry into the Nominal Ocular Hazard Zone (106 meters extending from the laser source). All Engineered and Administrative Controls are implemented prior to emitting the laser beam outside of the trailer.

3. Categorical Exclusion(s) Applied:

B3.11 Outdoor test and experiments on materials and equipment components

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:

KC K

Date Determined:

4/16/2015

^{*-}For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, see Subpart D of 10 CFR10 21