2. **RADIOGRAPHY OF EXPLOSIVE SAMPLES B321C**

### 2. PROJECT DESCRIPTION:

This proposed project would use existing radiography systems located in B321C to provide useful, non-destructive, three dimensional imaging and characterization of explosive samples. Current B321C operations include non-destructive evaluations of up to 10 mg of explosive samples.

Storage and use of explosives are controlled to ensure that the facility limits are within the definitions of a LS1 hazard classification. The total building inventory of explosives shall not exceed 200 grams for all types of explosives except for Hazard Division 1.4S materials meeting the conditions stated below. The room inventory shall be limited to:

- no more than 1 gram of primary high explosives;
- no more than 10 grams of secondary high explosives that are classified as Hazard Division 1.1, 1.5, & 1.6;
- no more than 200 grams of Hazard Division 1.3 or 1.4 materials (except Hazard Division 1.4S materials are allowed unlimited quantities if they are placed in segregated and specifically designated areas). NOTE: powder-actuated tools are 1.4 materials;
- no Hazard Division 1.2 materials are allowed.

Where explosives of different types or hazard classes are present in the same room, the lowest mass limit shown above is the explosives room inventory limit for this facility classification. For example, if Hazard Division 1.1 secondary explosives and Hazard Division 1.3 explosives are in the same room, the amount of explosives present in a room must be limited to 10 grams total of both materials. Room inventories shall be managed such that the minimum inventory consistent with efficient operations is maintained and the DOE Explosives Safety Manual 3M rule is observed.

These controls are as defined in the ES&H Manual and evaluated through the B321C Safety Basis Document.

Loosely-packed explosive samples would be hand-carried from Building 191 (B191) to B321C where it would be evaluated in non-destructive radiography systems. At the end of each evaluation, the samples would be hand carried back to B191. Controls would be in place to ensure the explosives would have no direct contact with depleted uranium, other radioactive materials, chemicals, and any other hazardous material.

Any change in activity or inventory would be reviewed for NEPA.

### 3. Categorical Exclusion(s) Applied:

Appendix B to Subpart D of Part 1021—Categorical Exclusions Applicable to Specific Agency Actions B3.6 Categorical Exclusions Applicable to Site Characterization, Monitoring, and General Research, Small-scale research and development, laboratory operations, and pilot projects.

*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 1505.1 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 451.18), 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:

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**LLNL NEPA Categorical Exclusion Form: Revision 1, February 4, 2010**