




Department of Energy
National Nuclear Security Administration
Washington, DC 20585



APR 17 2012

MEMORANDUM FOR THE LOS ALAMOS SITE OFFICE MANAGER

FROM: DONALD L. COOK
DEPUTY ADMINISTRATOR
FOR DEFENSE PROGRAMS 

SUBJECT: Approval of the Request for Exemption from Automatic Fire Suppression Requirements in the DOE Facility Safety Order for Los Alamos National Laboratory (LANL) Live Fire Range, Building TA-16-1552

REFERENCES: (1) Memorandum, K. Smith to D. Cook, *Request for permanent Exemption Approval to DOE Order 420.1B for Los Alamos National Laboratory (LANL) Building TA-16-1552 Live Fire Range; Omission of an Automatic Fire Extinguishing System*, dated July 25, 2011

(2) Memorandum, J. Blanchard to M. Weber, *Supplemental Information Requested for the OFFICIAL TRANSMITTAL: COR-SO-7.12.2011-362393, Request for permanent Exemption Approval to DOE Order 420.1B for Los Alamos National Laboratory (LANL) Building TA-16-1552 Live Fire Range; Omission of an Automatic Fire Extinguishing System*, dated September 13, 2011

I approve the subject exemption requested in Reference 1, based on evaluation by my staff in the Office of Nuclear Safety and Governance (NA-171). As required by the Department of Energy Order 420.1B (DOE O 420.1B), *Facility Safety*, comments were solicited from the Office of Health, Safety and Security and incorporated in the evaluation.

CIRCUMSTANCES

DOE O 420.1B, Chapter II, ¶ 3.c (4) requires automatic fire suppression throughout facilities where the fire loss potential exceeds limits defined by DOE. However, potential bullet impact and ricochet damage to fire sprinklers would be an on-going maintenance concern and could interrupt use of Building TA-16-1552, Live Fire Range. Given the other fire safety features in TA-16-1552, automatic fire suppression provides minimal additional gains to overall fire safety.



SAFETY ASSURANCE

NA-171 staff evaluated the request in accordance with procedures in DOE O 251.1C, *Departmental Directives Program*, and concluded that a combination of fire detection, fire alarm, grade-level exits, adherence to Life Safety Code requirements and administrative provisions help to ensure the safety of occupants at the Live Fire Range.

APPROVAL CRITERIA

DOE O 251.1C allows exemptions to be granted only if the following criteria are met:

- a) *[it] is not prohibited by law;*
Section 5.b.2 of DOE O 420.1B identifies a responsibility of the DOE Secretarial Officers to review and approve requests for exemptions from requirements of the Order.
- b) *would not present an undue risk to public health and safety, the environment, facility workers, or security; and*
Building TA-16-1552 will have appropriate physical and administrative features which minimize risk to the workers, public, environment, facility and security from potential fires.
- c) *is warranted under the circumstances.*
At this stage of the project (construction), the funds to be fully compliant with the Order are not available. The National Nuclear Security Administration has balanced priorities and determined that the addition of automatic suppression does not significantly increase safety of the worker or public health and safety.

TERMS AND CONDITIONS

The following terms and conditions apply to this approval:

1. The Indoor Firing Range project will provide fire detection in specific locations:
 - a) At or near the face of the bullet trap (area of coverage is roughly 8 feet long by 80 feet wide, across the entire face of the bullet trap, approximately 640 square feet).
 - b) Administrative areas from the front of the building to the shooting booths, through all rooms, classroom, halls, cleaning room, control room, storage and mechanical/electrical rooms (area of coverage is roughly 3560 square feet).
 - c) Fire detectors will be connected to the remotely-monitored fire alarm system
2. Documented administrative controls for the Live Fire Range facility will preclude the use of tracer ammunition.
3. The bullet trap will be maintained per the manufacturer's recommendations.

If you have any questions regarding this approval, please contact Mr. Jim McConnell at (202) 586-4379 or have your staff contact Ms. Sharon Steele at (202) 586-9554.

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