

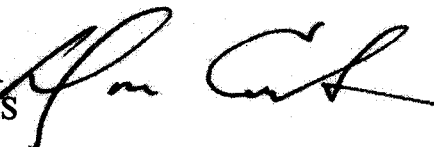


Department of Energy
National Nuclear Security Administration
Washington, DC 20585



APR 17 2012

MEMORANDUM FOR THE NEVADA SITE OFFICE MANAGER

FROM: DONALD L. COOK
DEPUTY ADMINISTRATOR
FOR DEFENSE PROGRAMS 

SUBJECT: Approval of the Request for Exemption from Automatic
Suppression Requirements in the DOE Facility Safety Order for
U12u Underground at the Nevada National Security Site

REFERENCES: (1) Memorandum, S. Mellington to D. Cook, *Request for
Permanent Exemption from the Department of Energy
(DOE) O 420.1B Requirement to Provide Automatic Fire
Suppression in the U12u Underground*, dated August 8, 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 (HSS); no objections were noted. Additionally, the Central Technical Authority has concurred since this is a radiological facility.

CIRCUMSTANCES

DOE O 420.1B, Chapter II, ¶ 3.c (4) requires automatic suppression throughout facilities where the fire loss potential exceeds limits defined by DOE. However, the cost to install automatic suppression, water supplies and drains at U12u Underground at the Nevada National Security Site (NNSS) far exceeds the dollar value of the facility.

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, and administrative measures help to ensure the safety of workers at U12u. Operating conditions for U12u include limited access to the facility.



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*
U12u 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.*
In the current stage of the project (construction), the cost to be fully compliant with the Order exceeds the replacement cost of the facility. 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 exemption shall remain valid for the life of the current mission of the U12u tunnel. Changes to mission invalidate the exemption and require a new request.

Prior to commencing operations at U12u, the following terms and conditions of approval shall be met:

1. The Nevada Site Office (NSO) must verify that the fire detection and alarm system with local and remote annunciations in U12u complies with the National Fire Alarm Code (NFPA 72).
2. NSO will verify that issues pertaining to emergency lighting illumination (as identified in the Fire Hazards Analysis) are addressed.
3. NNSS will document facility-specific fire prevention controls in the facility fire protection program. This includes controls for hot work, housekeeping, storage and use of flammable and combustible materials, and control of electrical sources.
4. A firefighting pre-plan detailing a baseline firefighting approach or plan of attack shall be documented.
5. The contractor equivalency request for the Life Safety Code (NFPA 101) shall be approved with all NSO review or rejection comments satisfactorily addressed.
6. A control to maintain facility occupancy levels at less than or equal to 50 personnel shall be implemented.

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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