



Department of Energy  
National Nuclear Security Administration  
Washington, DC 20585



November 7, 2013

MEMORANDUM FOR STEVE C. ERHART  
MANAGER

NNSA PRODUCTION OFFICE

FROM:

JAMES J. MCCONNELL   
COGNIZANT SECRETARIAL OFFICER

SUBJECT:

Request for Permanent Exemption from Automatic Suppression  
Requirements in Y-12 Buildings 9201-3, 9409-2, and 9409-18.

REFERENCE:

Memorandum, S. Erhart to James McConnell, *Request for  
Permanent Exemption Approval to DOE Order 420.1B for Y-12  
Buildings 9201-3, 9409-2, and 9409-18; Omission of Sprinkler  
and Deluge Protection; and Permanent Exemption to NFPA 13,  
Section 8.1.1(1) for Building 9201-3*, May 21, 2013

I approve the subject exemption request referenced above based on evaluation by my staff in the Office of Environment, Safety and Health (NA-00-10). As required by the Department of Energy (DOE) Order (O) 420.1B, *Facility Safety*, the Office of Health, Safety and Security commented on the request. NA-00-10 satisfactorily addressed HSS comments. In addition, the National Nuclear Security Administration (NNSA) Office of Safety and Health (NA-SH) provided no objections to this action in separate correspondence.

#### **SPECIAL CIRCUMSTANCES**

Relief is granted from the DOE O 420.1B § II 3.c (4) which requires automatic fire suppression "throughout all significant facilities and in all facilities and areas with potential for loss of safety class systems." Relief is granted for three non-nuclear buildings at Y-12 that are either partially sprinklered or have limited automatic suppression capability.

#### **APPROVAL CRITERIA**

DOE O 251.1C, *Departmental Directives Program* allows exemptions to be granted only if the following criteria are met:

- a) *[it] is not prohibited by law;*  
DOE O 420.1B, Section 5.b.2 identifies the DOE Secretarial Officers as responsible for approving requests for relief from requirements of the Order.



- b) *would not present an undue risk to public health and safety, the environment, facility workers, or security; and*

The Cooling Towers (9409-2 and 9409-18) are nearing their end of useful life and present a hazard to workers trying to maintain the sprinkler systems. The towers are inspected for potential fire hazards and fire department personnel are prepared and trained to combat fires that may occur at the cooling towers. Additional fire prevention features in the unsprinklered high bays in 9201-3 ensure the safety of the building.

- c) *is warranted under the circumstances.*

NNSA Production Office (NPO) has prioritized projects so that limited funds can be applied to higher risk efforts at Y-12.

## **TERMS AND CONDITIONS**

The following terms and conditions apply to this exemption:

1. Cooling Towers (Buildings 9409-2 and 9409-18)
  - a. Babcock & Wilcox Technical Services Y-12, LLC (B&W Y-12) shall have an approved contingency plan in place for the loss of these cooling towers and the handling of the immediate cooling tower load with no impact to site operations.
  - b. In the event the Cooling Tower shuts-down, B&W Y-12 shall implement an administrative control that requires immediate actions: disconnection of power to the cooling tower, Fire Department notification, increased fire patrol, placement of the tower into the Site Cold and Dark program.
  - c. NPO shall verify the above contingency plan and administrative control are in-place.
  - d. NPO shall specify the frequencies of inspection and patrol.
2. High bays in Building 9201-3
  - a. B&W Y-12 shall develop a Combustible-Loading Program for Building 9201-3 and implement the program upon NPO review and approval.
  - b. If operations change, NPO and B&W Y-12 shall immediately reevaluate this exemption approval to ensure the hazards are not increased.
  - c. NPO shall specify the frequency of inspection

If you have any questions regarding this approval, please contact me at (202) 586-4379 or have your staff contact Sharon Steele, NA-00-10, at (202) 586-9554.

cc: Don Nichols, NA-SH-1  
James B. O'Brien, HS-30  
James G. Bisker, HS-32