**Department of Energy**
Washington, DC 20585

EXEC-2008-011922

November 3, 2008

MEMORANDUM FOR C.H. ALBRIGHT, JR.
UNDER SECRETARY OF ENERGY

FROM: GLENN S. PODONSKY
CHIEF HEALTH, SAFETY AND SECURITY OFFICER
OFFICE OF HEALTH, SAFETY AND SECURITY

SUBJECT: ACTION: Approval of a Permanent Variance Regarding Fire Safety in Selected Areas of 221-H Canyon at the Savannah River Site (Variance 1017)

ISSUE: This memorandum constitutes the Chief Health, Safety and Security Officer's recommendation that the Under Secretary of Energy approve a permanent variance regarding sprinklers and fire boundaries in selected areas of 221-H Canyon at the Savannah River Site (SRS).

BACKGROUND: Title 10, Code of Federal Regulations (C.F.R.), part 851, "Worker Safety and Health Program" (Rule), requires contractors to comply with consensus standards for fire protection. In situations where verbatim compliance with a standard is not practical, the contractor may request a variance from the provisions of the Rule; however, the contractor must commit to specific alternative means of providing equivalent safety.

Only Under Secretaries are authorized by the Rule to approve variances. The Office of Health, Safety and Security (HSS) and the Office of Environmental Management provide recommendations. There are no provisions for transferring an approved variance to a new contractor; i.e., a simple "rollover" of the variance to the new contractor is not possible. You approved a fire safety variance (Variance 1016) on February 4, 2008, for the SRS contractor under contract at that time. The Department of Energy transitioned to a new contractor for SRS in August 2008. The new contractor has applied for the same variance that the previous contractor received.

JUSTIFICATION: The SRS contractor has identified two fire safety concerns for which it has applied for a permanent variance. One concern is that some areas of H-Canyon do not comply with automatic sprinkler requirements found in applicable national consensus standards because they were built before these standards were adopted. However, these areas are not regularly occupied or are abandoned, and access to these areas is restricted to ensure worker safety. In addition, retrofitting these areas with sprinklers, as was done for the remainder of H-Canyon, would expose construction and maintenance workers to radiation without commensurate safety benefits to the overall workforce. And finally, areas of H-Canyon without sprinklers are generally of noncombustible construction with few combustible contents.

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A second concern is a diesel generator that is not within a required, separate 1-hour fire resistant enclosure. However, the 1-hour enclosure requirement primarily is for minimizing property damage rather than protecting workers, and worker protection is provided because the generator is located in a utility room that is equipped with automatic sprinklers. In addition, the room has adequate means of emergency egress and access for firefighters.

HSS subject matter experts have reviewed this variance application and concluded that the conditions, practices, means, methods, operations, or processes used or proposed to be used would provide workers a place of employment, which is as safe and healthful as would result from compliance with the standard from which the variance is sought, as required by 10 C.F.R. 851.31, "Variance process." HSS, therefore, recommends approval of this variance application.

RECOMMENDATION: That the Under Secretary of Energy approve a permanent variance (Variance 1017) from certain requirements of fire safety standards in selected areas of SRS. This variance is for specific conditions and commitments to provide safe working conditions made by the current SRS contractor and referenced in the attached variance application determination.

APPROVE: _____

DISAPPROVE: _____

DATE: 1-5-09

Attachment

cc w/attachment:
James A. Rispoli, EM-1
Ines R. Triay, EM-1
James M. Owendoff, EM-3
Dae Y. Chung, EM-60
Andrew C. Lawrence, HS-20
Martha S. Thompson, HS-40

VARIANCE APPLICATION DETERMINATION

Pursuant to

TITLE 10, CODE OF FEDERAL REGULATIONS, PART 851,
"WORKER SAFETY AND HEALTH PROGRAM"

ACTION: Under Secretary C.H. Albright, Jr., indicate at the end of this application determination his approval or disapproval of this variance application.

TITLE OF VARIANCE: Permanent Variance Regarding Sprinklers and Fire Boundaries in Selected Areas of 221-H Canyon at the Savannah River Site (SRS) (Variance 1017)

BACKGROUND: This action is in response to the attached September 22, 2008, Office of Environmental Management (EM) request to the Chief Health, Safety and Security Officer to recommend approval of a Savannah River Nuclear Solutions, LLC (SRNS), application for a permanent variance from certain requirements in title 10, Code of Federal Regulations, part 851 (10 C.F.R. 851). The EM request includes an attached September 5, 2008, Savannah River Operations Office (SR) recommendation to approve the application, and attached to the SR memorandum is SRNS' application. The SRNS application consists of an August 26, 2008, letter committing to abide by the variance that Under Secretary Albright approved (Variance 1016, attached) for the SRS predecessor contractor, Washington Savannah River Company, LLC (WSRC), on February 4, 2008, and correspondence documenting required workforce notification. The WSRC variance is identified as Variance 1016 in the HSS electronic system for processing variances.

The 10 C.F.R. 851, appendix A, section 2, requires contractors to meet applicable building codes and National Fire Protection Association (NFPA) codes and standards. The previously approved WSRC permanent variance addresses certain requirements in 10 C.F.R. 851, appendix A, section 2, "Fire Protection." Specifically, the variance provides relief from requirements of NFPA 101, "Life Safety Code," which requires automatic sprinkler protection throughout such structures as 221-H Canyon and NFPA Standard 37, "Combustible Liquids and Gas Turbines," which requires enclosure of diesel generators by fire resistive construction.

We have determined that the conditions and measures to which SRNS is committed by adopting Variance 1016, including its supporting unclassified controlled nuclear information (UCNI) documents, satisfy the requirements of 10 C.F.R. 851.31 for requesting a permanent variance from the requirements of the applicable NFPA standards. Specifically, we find that SRNS has shown that "the conditions, practices, means, methods, operations, or processes used or proposed to be used would provide workers a place of employment that is as safe and healthful as would result from compliance with the standard from which a variance is sought" as required by 10 C.F.R. 851.31(d)(2)(ii). We also find that 10 C.F.R. 851.31(c)(4) and (5) requirements to

notify workers of the application have been satisfied. Therefore, the variance request may be considered.

RECOMMENDATION: The Chief Health, Safety and Security Officer recommends that the Under Secretary of Energy approve a permanent variance (Variance 1017) requested by SRNS from certain requirements of NFPA 101 and NFPA Standard 37. The variance consists of Variance 1016 and its supporting UCNI documents and the attached August 26, 2008 SRNS letter to SRO conveying their variance application.

APPROVE: _____

DISAPPROVE: _____

C.H. ALBRIGHT, JR.
UNDER SECRETARY OF ENERGY

DATE: 12-30-08