

DOE O 420.1C, Facility Safety Impact to Fire Protection

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Sandia National Laboratories is a multi-program laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.

Adopting DOE O 420.1C, *Facility Safety* into Sandia Contract

- DOE O 420.1C ***has not*** yet been incorporated into Sandia Contract
 - Developed crosswalks to identify impact
- Propose partially adopting DOE O 420.1C in accordance with Implementation Plan
 - ECD of IP—March 2014
- Why Partial vs. Whole adoption?
 - Excluding applicability to 19 leased areas and approximately 77 land permits
 - Excluding implementation of actions resulting from Wildland Fire Management Plan

Major DOE O 420.1C

Issues and Resolutions

- **Issue:** Order requires Head of Field Element to fulfill the Authority Having Jurisdiction (AHJ) and Building Official (BO) roles.
 - Historically, Contractor has fulfilled the role of the Building Official/Fire Code/AHJ for adjudicating alternate approaches addressed by the industry codes and standards, and DOE has fulfilled the role of the Building Official/Fire Code Official/AHJ for alternatives to DOE Orders.
 - **Resolution: SFO will delegate authority to Sandia for decisions related to prescriptive code requirements and DOE-STD-1066-2012.**

Major DOE O 420.1C, Attachment 1, *Contractor Requirements Document* Issues and Resolutions

- **Issue:** Order states, “Contractor must satisfy the *requirements* (i.e., mandatory statements) in *DOE technical standards* and industry codes and standards identified as applicable, unless relief is approved in accordance with Section 2.”
 - **Resolution:** Based on VTC w/ HSS, the only technical standards invoked by the Order are 1020, 1189 & 3007. DOE-STD-1066-2012 is listed as an acceptable method for implementing the requirements of the Order.
 - Sandia performed a crosswalk of 1066 and intends to document any deviations from the standard.
- **Issue:** Order requires Contractor to seek approval from Head of Field Element for equivalencies and exemptions to DOE technical standards and industry codes and standards.
 - **Resolution:** SFO will delegate authority to Sandia for decisions related to prescriptive code requirements and DOE-STD-1066-2012.

Major DOE O 420.1C, Attachment 2,

Chapter II. Fire Protection

Issues and Resolutions

- **Issue:** Applicability to leased facilities and land permits is unclear.
 - *NA-00-10 & HS-32 position stated in 11-6-13 Telecom: if a leased facility is offsite and not on federal property, the Order does not apply.*
 - **Resolution: Adoption of DOE 420.1C will exclude applicability to leased or permitted land.**
 - Impact unknown until areas are evaluated on a case-by-case basis. SFO has requested further clarification from HQ.
- **Issue:** Order requires Contractor to develop Wildland Fire Management Plan.
 - Development/maintenance of the Plan is an inherent government function and cannot be delegated to Contractor because it requires agreement with other federal agencies.
 - **Resolution: SFO will retain responsibility for developing/maintaining. Sandia will support. Adoption of DOE 420.1C will exclude implementation of actions resulting from the Wildland Fire Management Plan.**

Fire Protection—Issues and Resolutions

- **Issue:** Standard states, “new facilities and modifications of existing facilities shall meet the applicable parts of the **latest edition** of the International Building Code (IBC), National Fire Protection Association® (NFPA) standards, and other nationally recognized consensus standards for electrical, fire, and life safety.”
 - NM and Sandia have adopted the 2009 IBC; Sandia adopts new editions of the IBC as the Code of Record approximately 6 months after the state adopts.
 - IBC references specific editions of codes/standards which are typically one cycle (3 years) behind.
 - Sandia has also adopted the 2011 NFPA 70 National Electric Code (NEC).
 - **Following the latest published code/standard editions is not feasible and the benefit is not commensurate with the level of effort.**
 - DOE would be creating their own building code structure and would bear the cost of design and construction contractor transition to the latest editions of the code prior to the state adoption (hundreds of required codes/standards would need to be constantly evaluated).
 - **Resolution: Sandia establishes the applicable code of record (adopted version by Sandia per the Contract) consistent with the majority of U.S. building officials, which may not be the latest published.**

QUESTIONS?

Thank you!

Leased and Permitted Land

- DOE O 420.1C applicability to leased facilities & land permits:
 - “This Order applies to...government-owned or **government-leased** facilities and **onsite contractor-leased** facilities used for DOE mission purposes.”
 - “Exemption. This Order does not apply to off-site office facilities that are owned or leased by the GSA.”
 - “For leased facilities that are not nuclear...the design requirements...apply to the extent determined by the field element.”
- DOE-STD-1066-2012 applicability to leased facilities and land permits:
 - “The provisions of this Standard apply to...the purchase and **lease**...of all DOE facilities erected, modified, or renovated after the effective date of this Standard **whether located on or off a DOE site.**”
 - “A **graded approach** should be used in application of fire protection requirements to **leased facilities**...the graded approach should be applied to each leased facility on a **case-by-case basis**...”
 - “Prior to signing any lease agreement, DOE heads of field element should...perform a fire protection assessment...communicate to the owner all fire protection deficiencies...participate with the local jurisdiction’s fire department to develop a pre-incident plan...”
- Leased facilities and land permits require verification.
- Significant resources needed to evaluate on a case-by-case basis.

Delegation of Authority—General

- The industry codes and standards include mandatory statements requiring contractor compliance unless, and until, the contractor has obtained approval for an equivalency or exemption. This approach is typically the case as currently delineated in the Order. However, the industry codes and standards may contain provisions for meeting the intended requirements, and specify what approval is necessary for use of alternate methodology. These provisions afford the contractor with prescribed discretion in determining alternate methods or equivalencies to meet the mandatory requirements. **When the industry codes and standards allow this discretion, the contractor must follow any approval process specified in the provisions of the code and/or standard. Since use of alternate methods specified in the codes and standards, with any specified approvals, constitutes full compliance with the codes and standards, the contractor is not required to seek approval for use of the alternate method or equivalency, but is required to exercise any such discretion reasonably and appropriately, and in accordance with the terms and conditions of its contract.** The contractor is also required to document the alternate method(s)/equivalency(ies) as part of the Program (e.g., Fire Protection Program) implementation.

Delegation of Authority – Fire Protection

- The industry codes and standards include mandatory statements requiring contractor compliance unless, and until, the contractor has obtained approval for a modification, alternative, or equivalency from the Building Official/Fire Code Official/AHJ. **Historically, the Contractor has fulfilled the role of the Building Official/Fire Code/AHJ for adjudicating alternate approaches addressed by the industry codes and standards, and DOE has fulfilled the role of the Building Official/Fire Code Official/AHJ for alternatives to DOE Orders. However, the revised Order requires the contractor to seek approval from the Head of Field Element for using an alternate method or equivalency to both the industry codes and standards and the Order. Use of alternate methods with the appropriate approval as specified, constitutes full compliance with the codes and standards, and it is SFO's position that the contractor does not need to seek additional approval from the Head of Field Element.** The contractor is required to exercise any such discretion reasonably and appropriately, and in accordance with the terms and conditions of its contract. The contractor is also required to document the alternate method(s)/equivalency(ies) as part of the Program (e.g., Fire Protection Program) implementation.