



**Department of Energy**  
**National Nuclear Security Administration**  
 Washington, DC 20585



April 4, 2023

MEMORANDUM FOR THE ASSOCIATE PRINCIPAL DEPUTY ADMINISTRATOR  
 AND CENTRAL TECHNICAL AUTHORITY

THROUGH: AHMAD AL-DAOUK Al-Daouk  
 ASSOCIATE ADMINISTRATOR  
 FOR ENVIRONMENT, SAFETY, AND HEALTH

FROM: KELLI MARKHAM Markham  
 CHIEF OF DEFENSE NUCLEAR SAFETY

Digitally signed by Ahmad M. Al-Daouk  
 Date: 2023.04.04  
 06:54:47 -06'00'

Digitally signed by Kelli A. Markham  
 Date: 2023.04.04  
 08:47:59 -04'00'

SUBJECT: ACTION: Approve Revising DOE-NA-STD-3016-2018, *Hazard Analysis Report for Nuclear Explosive Operations*, and Signing a Memorandum for Distribution to Department of Energy (DOE) and Defense Nuclear Facilities Safety Board (DNFSB) Personnel

**ISSUE:** Revising and replacing DOE-NA-STD-3016-2018, *Hazard Analysis Report for Nuclear Explosive Operations*, with DOE-NA-STD-3016-2023, under the same name. In addition, approval of and signature on a distribution memorandum relaying this information to various Department of Energy (DOE) and Defense Nuclear Facilities Safety Board (DNFSB) personnel.

**BACKGROUND:** The Office of Environment, Safety, and Health, Office of Safety, requests your approval as Central Technical Authority of revisions to DOE-NA-STD-3016-2018, *Hazard Analysis Report for Nuclear Explosive Operations*. Upon approval, the revised version will be titled DOE-NA-STD-3016-2023, *Hazard Analysis Report for Nuclear Explosive Operations*. The proposed revisions clarify implementation requirements for NNSA, Production Office Contractors, and the Design Agencies. The revised Standard also defines “man-made external events” in alignment with DOE-STD-3009-2014, *Preparation of Nonreactor Nuclear Facility Documented Safety Analysis*, and adds “man-made external events” to Section 6.3, *Accident Selection and Analysis*. These changes replace an earlier draft of STD-3016 that proposed edits to the screening threshold. The proposed changes have been coordinated and reviewed by affected stakeholders including the DNFSB and NNSA Production Office.

**SENSITIVITIES:** None.

**POLICY IMPACT:** DOE-NA-STD 3016-2018, is a pre-approved documented safety analysis methodology indicated in Table 2 of 10 CFR 830, *Nuclear Safety Management*. This standard is referenced in DOE O 410.1, *Central Technical Authority Responsibilities Regarding Nuclear Safety Requirements*, thus requiring CTA approval.

Proposed changes to DOE-NA-STD-3016-2018 include safety requirements relevant to Nuclear Explosive Operation through Hazard Analysis Reports preparation. Therefore, it is an appropriate DOE Standard rather than a DOE handbook, consistent with Appendix A, of DOE O 252.1A, *Technical Standards Program*. The proposed revision is to a DOE Standard that is already in the DOE Technical Standards System and no change in document type is proposed or required.

**URGENCY:** The DOE Technical Standards Program has requested these changes as soon as possible.

**RECOMMENDATION:** Approve DOE-NA-STD-3016-2023 and sign the distribution memorandum to DOE and DNFSB personnel.

APPROVE: CM DISAPPROVE: \_\_\_\_\_ NEEDS DISCUSSION: \_\_\_\_\_ DATE: 4/17/2023