

Bruce Hamilton, Chairman
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DEFENSE NUCLEAR FACILITIES SAFETY BOARD

Washington, DC 20004-2901



March 4, 2020

The Honorable Dan Brouillette
Secretary of Energy
US Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585-1000

Dear Secretary Brouillette:

On December 19, 2018, the Defense Nuclear Facilities Safety Board informed DOE that the Board had selected several standards to review in Fiscal Year 2019, and that it may elect to add reviews of DOE standards as it deems appropriate. The Board did change some of its planned reviews. Below is a summary of the standards that the Board reviewed in Fiscal Year 2019, their statuses, and Board disposition of review results.

- **10 CFR Part 830, *Nuclear Safety Management***—The Board issued an October 5, 2018, letter to the Secretary of Energy transmitting comments for the proposed revision of this regulation. In 2019, the Board identified aspects of DOE’s nuclear safety management rule that either need to be strengthened or changed to ensure adequate protection of public health and safety. The Board has since issued Recommendation 2020-1, *Nuclear Safety Requirements*, on February 21, 2020.
- **DOE Standard 1158-2010, *Self-Assessment Standard for DOE Contractor Criticality Safety Programs***—The Board issued a June 5, 2019, letter to the Secretary of Energy that advised DOE to reinstate this canceled standard and address the identified safety observations. DOE has recently begun work to address these concerns. The Board intends to follow this effort.
- **DOE Standard 3014-2006, *Accident Analysis for Aircraft Crash Into Hazardous Facilities***—The Board issued a November 6, 2019, letter to the Secretary of Energy that advised DOE to revise this standard and address the identified safety observations. The Board is not aware of any DOE plans to revise this standard.
- **Draft DOE Standard 5506, *Preparation of Safety Basis Documents for Transuranic (TRU) Waste Facilities***—This standard provides assumptions, methods and hazard controls to be used when developing safety basis documents for TRU waste facilities in the DOE complex. The Board issued a March 15, 2018, technical report to the Secretary of Energy on the deficiencies in DOE Standard 5506-2007. The Board

discussed with DOE the lack of requirements for evaluating chemical reaction hazards in this standard during the Board's public hearing on June 20, 2019. The Board's staff met with DOE personnel several times to discuss proposed revisions to this standard, and began reviewing early versions of the draft standard. The Board sent a letter to DOE on January 29, 2020, regarding its most pressing concerns with the revisions to the draft standard, and will continue its review into 2020.

- **DOE Standard 1027-2018, *Hazard Categorization of DOE Nuclear Facilities*** – The Board's staff began a review of this revised DOE standard in 2019, and will continue its review into 2020.

In determining which DOE standards and their implementation to review in Fiscal Year 2020, the Board has considered those that have complex-wide effects and/or those that establish controls for high-hazard activities. The Board has selected the standards below to review:

- **DOE Standard 1027-2018, *Hazard Categorization of DOE Nuclear Facilities*,**
- **Draft DOE Standard 5506, *Preparation of Safety Basis Documents for Transuranic (TRU) Waste Facilities*,**
- **DOE Handbook 3010-94, *Airborne Release Fractions/Rates and Respirable Fractions for Nonreactor Nuclear Facilities*,**
- **DOE Standard 1228-2019, *Preparation of Documented Safety Analysis for Hazard Category 3 DOE Nuclear Facilities*,**
- **DOE Standard 1186-2016, *Specific Administrative Controls*,**
- **DOE Guide 423.1-1B, *Implementation Guide for Use in Developing Technical Safety Requirements*,**
- **DOE Order 232.2A, *Occurrence Reporting and Processing of Operations Information*,**
- **DOE Order 226.1B, *Implementation of Department of Energy Oversight Policy*,**
- **DOE Order 426.1A, *Federal Technical Capability Program*, and**
- **DOE Order 426.2, *Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities*.**

The Board may elect to add or change reviews of DOE standards as it deems appropriate.

Yours truly,

A handwritten signature in black ink, appearing to read "Bruce Hamilton". The signature is fluid and cursive, with a large initial "B" and a long, sweeping tail.

Bruce Hamilton
Chairman

c: Mr. Joe Olencz