

**Project Justification Statement for Revision to
DOE Standard 5506-2007, Preparation of Safety Basis Documents for
Transuranic (TRU) Waste Facilities**

1. Title: Preparation of Safety Basis Documents for Transuranic (TRU) Waste Facilities

The proposed project is for the revision to DOE Standard (STD) 5506-2007, *Preparation of Safety Basis Documents for Transuranic (TRU) Waste Facilities*. DOE-STD-5506-2007, issued in April 2007, provides standardized methods for developing safety basis documents for TRU Waste Facilities. This proposed revision is part of the normal revision process described in DOE Order 252.1A, *Technical Standards Program*.

2. Organization Name/Code

Office of Safety, Security and Quality Assurance (EM-3.1), within the Office of Environmental Management

3. Author's Name

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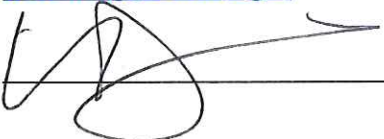
Signature: 

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5. *How will this new or proposed revision to the DOE Standard support the DOE?*

The revision to the Standard will incorporate best practices and lessons learned from implementation and use of this Standard since it was first issued in 2007, and reflect revisions to related requirements for facility safety and safety basis design. This update will preserve and build upon the fundamental philosophy and approach of the current Standard. The most significant changes currently identified for the DOE-STD-5506 revision are the following:

- Reflect best practices and lessons learned since the Standard was originally issued in 2007;
- Reflect pertinent changes to other key DOE documents, such as DOE Order 420.1C, DOE-STD-3009-2014, DOE-STD-1228-2019, and DOE-HDBK-1224-2018, which have been revised since this Standard was issued;
- Reflect lessons learned from the February 2014 event at the Waste Isolation Pilot Plant (WIPP) and April 2018 event at the Waste Management Facility at Idaho.
- Address technical issues raised in DNFSB-TECH 43, *Deficiencies in DOE Standard 5506-2007*, issued in March 2018; and
- Reflect experiences from relevant Operating Experience Reports since 2007.

6. *After conducting a search for Voluntary Consensus Standards, what possible standards could be used in lieu of developing or revising the subject DOE Handbook?*

None. No consensus standards currently exists for providing criteria and acceptable methodology for integrating DOE's unique safety analysis requirements and TRU waste facilities.

7. *Provide reasoning for not using potentially applicable Voluntary Consensus Standards.*

DOE-STD-5506-2007 was developed to specifically address DOE TRU waste nuclear facilities. At this time, no voluntary standards exist that would meet this need.

8. *Will this new or proposed revision to the DOE Technical Standard have an impact on any DOE Directives or a Rule? If so, please list the impacted Directive(s) or Rule(s).*

DOE-STD-5506-2007 is not identified as a required method by any DOE Order or Standard. As such, no changes are required with the issuance of this revision.

DOE-STD-5506-2007 is identified as an acceptable method in DOE-STD-3009-2014 for determining a bounding MAR and damage ratios for TRU waste facilities. This safe harbor standard (DOE-STD-3009-2014) should be reviewed and may need to be revised to update this reference after the DOE-STD-5506 revision is issued.

9. Provide reasoning for selecting document types (DOE Standard, DOE Handbook, DOE Specification).

This Standard provides a standard method and criteria for preparing safety basis documents for TRU waste facilities. As such, it is appropriate as a DOE Standard rather than a DOE Handbook, consistent with Appendix A of DOE Order 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.

10. Provide an anticipated timeline for process milestones.

Milestones	Target Dates
Planned start date for draft Standard revision	July 2019
Planned date for draft Standard revision to start coordination	January 2020
Review and Comment Phase – 60 calendar days	March 2020
Response Package Development – 30 calendar days	April 2020
Response Negotiation – 30 calendar days	May 2020
Final Concurrence – 10 business days	June 2020
Approval and issuance date	July 2020