



# DOE Tech STD-1241-2023, *Implementing Release and Clearance of Property Requirements*

## Environmental Radiological Assistance Directory

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# Standard 1241-2023

- DOE Technical Standard 1241-2023, *Implementing Release and Clearance of Property Requirements*, was published March 1, 2023.
- DOE Technical Standard 1241-2023 supports the requirements in DOE O 458.1, *Radiation Protection of the Public and the Environment*, Chg 4 2020, for release and clearance of property.
- Replaced DOE G 441.1-XX, *Control and Release of Property with Residual Radioactive Material for use with DOE 5400.5, Radiation Protection of the Public and the Environment*, implemented by memorandum April 4, 2002.



# Purpose

- This **Standard provides guidance, consistent with DOE requirements**, for implementing the release and clearance of property that may contain residual radioactive material.
- This guidance is provided for Department and contractor personnel who oversee and perform release and clearance of property that may be contaminated with residual radioactive material and who **must determine the disposition of property** under the requirements in DOE O 458.1, Chg. 4 *Radiation Protection of the Public and the Environment* (DOE, 2020).
- This Standard is applicable to decommissioning, deactivation, decontamination, and remedial action of **property with the potential for residual radioactive contamination**.
- This Standard, unless invoked by Rule, DOE Directive, or contract, **is not a requirements document**, and shall not modify or otherwise add any contractual or regulatory obligations established in Directives or Rules.



# Goals

- Property is evaluated for any actual, likely, or plausible use, radiologically characterized through monitoring and surveys, and, where appropriate, decontaminated before release.
- The level of residual radioactive material in property to be released is as near background levels as is reasonably practicable, as determined through As Low As Reasonably Achievable (ALARA) process requirements, and meets DOE dose constraints.
- All property releases are appropriately documented, verified, approved, and reported; public notification is addressed; and processes are in place to appropriately maintain records.



# Updated References

- DOE O 458.1, Ch. 4, *Radiation Protection of the Public and the Environment*
- DOE STD-1129, 2015, *Tritium Handling and Safe Storage*
- DOE HDBK 1215-2014, *Optimizing Radiation Protection of the Public and the Environment for use with DOE 458.1, ALARA Requirements*
- DOE HDBK 1240-2021, *Institutional Controls Implementation Handbook for Use with Use of Institutional Controls*
- RESRAD family of codes
- MARSSIM, MARSAME, and MARLAP
- ANSI N13.12-2013, *Surface and Volume Radioactivity Standards for Clearance*



# Updates to Technical Standard

- Updated language to reflect current Directives and Technical Standards
- Metal Moratorium, still in effect and no changes
- Included tables of surface and volumetric pre-approved Authorized Limits (ALs)
- Included International System of units along with traditional units



# Updates to Technical Standard (continued)

- Organizational Approvals, emphasized for clarification
- Updated position: Director, Environment, Health, Safety and Security
- Appendix A – Environmental Management Memorandum, 2019: Appendix C, Expected Elements of an Authorized Limits Package
- Appendix B – DOE History of Release and Clearance



# Operating Experience (OE)-3 for Implementation of Volumetric ALs



Office of Environment, Health, Safety and Security  
**Operating Experience Level 3**



OE-3: 2021-01

March 2021

## **Implementation of Pre-Approved Authorized Limits for Release and Clearance of Volumetric Radioactivity of Personal Property at DOE Field Elements**

### **PURPOSE**

This Operating Experience Level 3 (OE-3) document describes a recently issued memorandum from the Department of Energy (DOE) Associate Under Secretary for Environment, Health, Safety, and Security (AU-1), *Pre-Approved Authorized Limits for Release and Clearance of Volumetric Radioactivity of Personal Property at DOE Field Elements*, which may be useful in implementing clearance of personal property in a manner compliant with the requirements of DOE Order (O) 458.1, Chg. 4, *Radiation Protection of the Public and the Environment*.

All authorized limits require justification and DOE approval, including pre-approved, site-specific or material-specific authorized limits. However, the approval authority for implementation of pre-approved limits, as well as the responsibility for ensuring they are used appropriately, is delegated to the DOE Field Element Manager. DOE Headquarters assistance for implementation and application remains available but is not formally required. If pre-approved authorized limits do not meet their needs, sites retain the option to request site-specific authorized limits, illustrating compliance with the dose constraints using site-specific parameters in conjunction with





# Questions?

- Radiation Protection of the Public and the Environment Website:

<https://www.energy.gov/ehss/services/environment/radiation-protection-public-and-environment>

- Radiological Release and Clearance of Real and Personal Property Website:

<https://www.energy.gov/ehss/radiological-release-and-clearance-real-and-personal-property-and-moratorium-and-suspension>

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