

USING NNSA SUPPLEMENTAL GUIDANCE ON DOE-STD-1027 FOR SCREENING RADIOACTIVE MATERIALS

QUESTION: Is it acceptable to use the values and methodology for Hazard Category 3 threshold quantities presented in the NNSA Supplemental Guidance, NA-1 SD G 1027, “Guidance on Using Release Fraction and Modern Dosimetric Information Consistently with DOE STD 1027-92 . . .” in the emergency management hazardous material screening process for radiological materials as an alternative to the Category 3 values given in Attachment 1, Table A.1 of DOE-STD-1027-92, as required by DOE Order 151.1C? Many sites, both NNSA and non-NNSA, are converting to these numbers for safety analyses and there can be efficiencies gained by intra-site consistency.

ANSWER: The NNSA Supplemental Guidance, NA-1 SD G 1027, provides a consistent approach and facilitates the use of updated dosimetry and release fractions in establishing the hazard category for a nuclear facility, as required in 10 C.F.R. 830, Subpart B, *Nuclear Safety Management, Safety Basis Requirements*, Section 202 (b)(3). DOE O 151.1C requires that a hazardous material screening process identify all hazardous materials in a facility/activity that require further analysis. Specifically, radioactive hazardous materials that require further analysis in an Emergency Planning Hazards Assessment (EPHA) include the “. . . radioactive materials listed in DOE-STD-1027-92 in quantities greater than the Category 3 values given in Attachment 1, Table A.1., of that Standard.” Utilizing the Category 3 thresholds for both purposes has the effect of correlating the classification of Category 1, 2, and 3 with the need for an EPHA.

The substitution of the Hazard Category 3 threshold quantities presented in the Supplemental Guidance for the Category 3 values referenced in DOE O 151.1C for hazardous materials screening is acceptable for all organizations included in NA-1 SD G 1027, paragraph 3, under the conditions specified. Except for the specified exclusions (Naval Reactors Program and activities regulated by an NRC license), the document defines the Applicability/Scope of the guidance as follows:

- All NNSA personnel and to all NNSA nuclear facilities as defined in 10 C.F.R. 830 that will be operating after January 1, 2016.
- Non-NNSA organizations may use this guidance at the discretion of the responsible Secretarial Officer.
- Contractors may use this guidance if authorized by the responsible safety basis approval authority.

The Category 3 threshold values from NNSA Supplemental Guidance, NA-1 SD G 1027, are acceptable for emergency management screening purposes if the Applicability/Scope of the guidance is satisfied.