

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS
WASHINGTON, DC 20555-0001

December 26, 2017

**NRC REGULATORY ISSUE SUMMARY 2005-31, REVISION 1
CONTROL OF SECURITY-RELATED SENSITIVE UNCLASSIFIED NONSAFEGUARDS
INFORMATION HANDLED BY INDIVIDUALS, FIRMS, AND ENTITIES SUBJECT TO NRC
REGULATION OF THE USE OF SOURCE, BYPRODUCT,
AND SPECIAL NUCLEAR MATERIAL**

ADDRESSEES

All radiation control program directors and State liaison officers.

All licensees, certificate holders, applicants, and other entities (hereafter referred to as "licensees and others") subject to regulation by the U.S. Nuclear Regulatory Commission (NRC) for the use of source, byproduct, and special nuclear material, excluding the following:

- All holders of and applicants for an operating license or construction permit under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," and those licensees that have permanently ceased operations and have submitted certifications under 10 CFR 50.82(a)(1) or have submitted applications for license termination under 10 CFR 50.82(b)(1).
- All holders of and applicants for a power reactor early site permit, combined license, standard design approval, or manufacturing license under 10 CFR Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants." All applicants for a standard design certification, including such applicants after initial issuance of a design certification rule.
- All holders of and applicants for certificates for reactor designs.

INTENT

The NRC is issuing this regulatory issue summary (RIS) to accomplish the following:

- Inform licensees and others of the screening criteria that the NRC uses to identify and protect security-related sensitive information in documents generated by the NRC and in documents developed by licensees and others, particularly those received by the NRC. (Enclosure 2)
- Encourage licensees and others to identify security-related sensitive information in documents submitted to the NRC by using the marking procedures in Enclosure 1 and the screening criteria in Enclosure 2.

- Encourage licensees and others that may possess security-related sensitive information to control the information in order to limit the risk that the information might fall into the hands of those who would use it for malevolent acts.

No specific action or written response is required.

BACKGROUND INFORMATION

The NRC traditionally has given the public access to a significant amount of information about the facilities and materials the agency regulates. Openness has been and remains a cornerstone of the NRC's regulatory philosophy. The Atomic Energy Act of 1954, as amended; subsequent legislation; and various NRC regulations have given the public the right to participate in the licensing and oversight process for NRC licensees. To participate in a meaningful way, the public must have access to information about the design and operation of regulated facilities and use of nuclear materials. However, the NRC and other Government agencies have always withheld some information from public disclosure for reasons of security, personal privacy, or designation as proprietary information (commercial or trade secret protection).

In the post-September 11, 2001, environment, the NRC has found it necessary to be more judicious in determining what information to voluntarily release so that it does not inadvertently provide assistance to those who might use certain information for malevolent acts. The NRC has issued orders, advisories, and rules; taken specific actions on the security of its licensed facilities; and assessed and revised its policies and practices for making information available to the public. As one such action, the NRC temporarily suspended public access to documents in its electronic Agencywide Documents Access and Management System (ADAMS) on October 25, 2004. Subsequently, the NRC screened those documents to determine whether they contained security-related sensitive information. Based on this screening, the NRC returned a large number of documents to public access in ADAMS. This screening process continues as requests for specific documents are received and as new documents are created by the NRC and received from licensees and other entities.

The NRC has continued to presumptively withhold some categories of documents from routine public release. In SECY-04-0191, "Withholding Sensitive Unclassified Information Concerning Nuclear Power Reactors from Public Disclosure," dated October 19, 2004 (ADAMS Accession No. ML043140175), and SECY-05-0101, "Withholding from Public Disclosure Sensitive Unclassified Information Concerning Materials Licensees and Certification Holders," dated October 7, 2005, (ADAMS Accession No. ML051040407) (non-public) the staff proposed to withhold certain information on fire protection and emergency planning and response to ensure that information that could reasonably be expected to be useful to a potential adversary was not made public. The Commission approved the initial withholding of this information and the review of the information for release in response to requests such as those made under the Freedom of Information Act (FOIA). See Staff Requirements Memorandum SECY-04-0191 dated Nov. 9, 2004 and Staff Requirements Memorandum SECY-05-0101 dated October 7, 2005. In SECY-15-0032, "Reviewing Documents for Public Release Using Sensitive Unclassified Non-Safeguards Information Guidance," dated March 6, 2015 (ADAMS Accession No. ML14352A172), the staff proposed to discontinue this policy and instead apply the NRC's sensitive unclassified nonsafeguards information (SUNSI) policy to review, release, and withhold fire protection and emergency preparedness documents. The Commission approved this proposal in its staff requirements memorandum to SECY-15-0032, dated June 15, 2015 (ADAMS Accession No. ML15167A090). The advice in this RIS reflects that change.

To facilitate the screening process for the public release of information, the NRC developed screening criteria and issued two RISs that pertain to nuclear reactors for conducting its reviews. On November 7, 2005, the NRC issued RIS 2005-26, "Control of Sensitive Unclassified Nonsafeguards Information Related to Nuclear Power Reactors," (ADAMS Accession No. ML051430228) for assessing whether documents associated with reactor licensees should be made publicly available. On December 23, 2015, the NRC issued RIS 2015-17, "Review and Submission of Updates to Final Safety Analysis Reports, Emergency Preparedness Documents, and Fire Protection Documents," (ADAMS Accession No. ML15321A400) to remind licensees of the review and submission requirements of 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding," on information that may be withheld from public disclosure.

As part of related efforts in the nonreactor arena, the NRC has developed the enclosed criteria for identifying security-related sensitive information that the staff encourages licensees to screen out or to mark and protect as sensitive information, particularly before those licensees that handle source, byproduct, or special nuclear material submit documents to the NRC.

The advice in this RIS and its enclosures does not apply to classified information, Safeguards Information, or Safeguards Information—Modified Handling, which by law must be withheld from the public.

SUMMARY OF ISSUE

SUNSI includes information that, if lost, misused, or modified, can reasonably be foreseen to harm the public interest, the commercial or financial interests of an entity, the conduct of NRC and Federal programs, or the personal privacy of individuals. It also includes security-related information. If practical, licensees and others that submit documents to the NRC should avoid including any security-related sensitive information to permit the release of the document to the public in its entirety. However, if that is not practical, the following steps will help ensure that sensitive information is not released:

(1) Screening of Licensee-Generated Documents

To ensure that any security-related sensitive information in submitted documents is not made publicly available in ADAMS, the NRC is encouraging licensees and other entities to screen submittals in accordance with the criteria in Enclosure 2. In addition, to ensure that licensees and other entities identify and control security-related sensitive information in their documents, the NRC is encouraging them to develop implementing procedures to screen documents that might have sensitive security-related information in order to identify and control the information appropriately. The goal is to limit the risk that the information might fall into the hands of those who would use it for malevolent acts.

(2) Cover Letter

If a cover letter that does not itself contain sensitive information is used to transmit a document(s) that contains security-related sensitive information, the cover letter should clearly state this. Furthermore, the cover letter should have a statement that indicates that once its sensitive attachments are removed, the cover letter itself may be handled as an uncontrolled document. However, if the cover letter itself contains security-related sensitive information, it cannot be decontrolled.

(3) Marking Documents That Contain Security-Related Sensitive Information

As shown in Section A of Enclosure 1, include the marking “Security-Related Information—Withhold under 10 CFR 2.390” at the top center of every page.

If submitting both a public and a nonpublic version of the same document, licensees and other entities should “black out” the sensitive information in the public version or withhold the sensitive information with a notation that it was withheld on the basis that it is “security-related information.”

Alternately, security-related sensitive information may be segregated from the main body of the document and included only in attachments to the submittal. In this scenario, only the attachments that contain security-related sensitive information would be marked for withholding from public disclosure. If this approach is used, the public version does not need to be marked as containing security-related sensitive information.

Enclosure 1, Section B, contains additional information on suggested handling and methods of submitting security-related sensitive information.

Protection of Security-Related Sensitive Information

Documents that contain security-related sensitive information should be protected from public disclosure using methods similar to those for protecting proprietary information. To the extent practical, any existing documents that contain security-related sensitive information that licensees or other entities have previously made available to the public should be withdrawn from public access. Licensees and other entities should have sufficient internal controls to prevent release of information to limit the risk that sensitive security-related information could be released to someone with malevolent intent. In addition to the points enumerated above, other methods to prevent the inadvertent release of security-related sensitive information include (1) restricting access to electronic recordkeeping systems that contain such information, (2) controlling the reproduction, distribution, and destruction of potentially sensitive records, and (3) releasing sensitive information only to those individuals who have a need to know the information to perform their jobs and who are made aware of the security-related nature of the information.

Certain categories of security-related sensitive information under 10 CFR Part 37, “Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material,” must be protected pursuant to 10 CFR 37.43(d) and 37.77(f), as described in more detail in Section D, “Security Program Information,” of Appendix 3, “Reviews of Medical, Industrial, and Academic Users of Nuclear Materials,” to Enclosure 2.

Much of the NRC’s information is readily available to the public through the NRC’s Web site (<http://www.nrc.gov>) and ADAMS (<http://www.nrc.gov/reading-rm/adams.html>). In addition, the agency may release other information to the public in response to formal or informal requests. Although the NRC developed these security-related sensitive information screening criteria with the principles of FOIA in mind, a review for security-related sensitive information does not substitute for a FOIA review. The NRC will continue to review and process FOIA requests under 10 CFR 2.390(d)(1), independently from the security-related sensitive information review process.

BACKFIT DISCUSSION

This RIS informs addressees of the screening criteria that the NRC uses to identify and protect security-sensitive information, and to encourage licensees and others to identify and control such information. This RIS requires no action or written response beyond that already required by NRC regulations, and is, therefore, not a backfit under the backfitting provisions of 10 CFR 70.76, 72.62, or 76.76, all titled "Backfitting." Consequently, the NRC staff did not perform a backfit analysis.

FEDERAL REGISTER NOTIFICATION

A notice of opportunity for public comment was not published in the *Federal Register* because this RIS is informational and does not represent a departure from current regulatory requirements and practice.

CONGRESSIONAL REVIEW ACT

This RIS is not a rule for purposes for purposes of the Congressional Review Act, 5 U.S.C. §§ 801-808.

PAPERWORK REDUCTION ACT STATEMENT

This RIS does not request any information collections and, therefore, is not subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.).

CONTACTS

Please direct any questions about this matter to the technical contacts listed below.

/RA Kevin Williams for/

Andrea L. Kock, Acting Director
Division of Material Safety, State, Tribal
and Rulemaking Programs
Office of Nuclear Material Safety
and Safeguards

Technical Contacts:	Paul Goldberg, NMSS/MSTR 301-415-7842 E-mail: Paul.Goldberg@nrc.gov	Raynard Wharton, NMSS/DSFM 301-415-7497 E-mail: Raynard.Wharton@nrc.gov
	Kevin Ramsey, NMSS/FCSE 301-415-7506 E-mail: Kevin.Ramsey@nrc.gov	Zahira Cruz, NMSS/DUWP 301-415-3808 E-mail: Zahira.Cruz@nrc.gov
	Gary Langlie, OIP 301-287-9076 E-mail: Gary.Langlie@nrc.gov	

Enclosures:

1. Suggested Markings and Handling
for Those Subject to NRC Regulation
2. Screening Criteria for Security-Related
Sensitive Unclassified Nonsafeguards
Information

Note: NRC generic communications may be found on the NRC public Web site,
<http://www.nrc.gov>, under NRC Library/Document Collections.

SUBJECT: CONTROL OF SECURITY-RELATED SENSITIVE UNCLASSIFIED NON-SAFEGUARDS INFORMATION HANDLED BY INDIVIDUALS, FIRMS, AND ENTITIES SUBJECT TO NRC REGULATION OF THE USE OF SOURCE, BYPRODUCT, AND SPECIAL NUCLEAR MATERIAL

DATE: December 26, 2017

ML16196A237**CAC A34010**

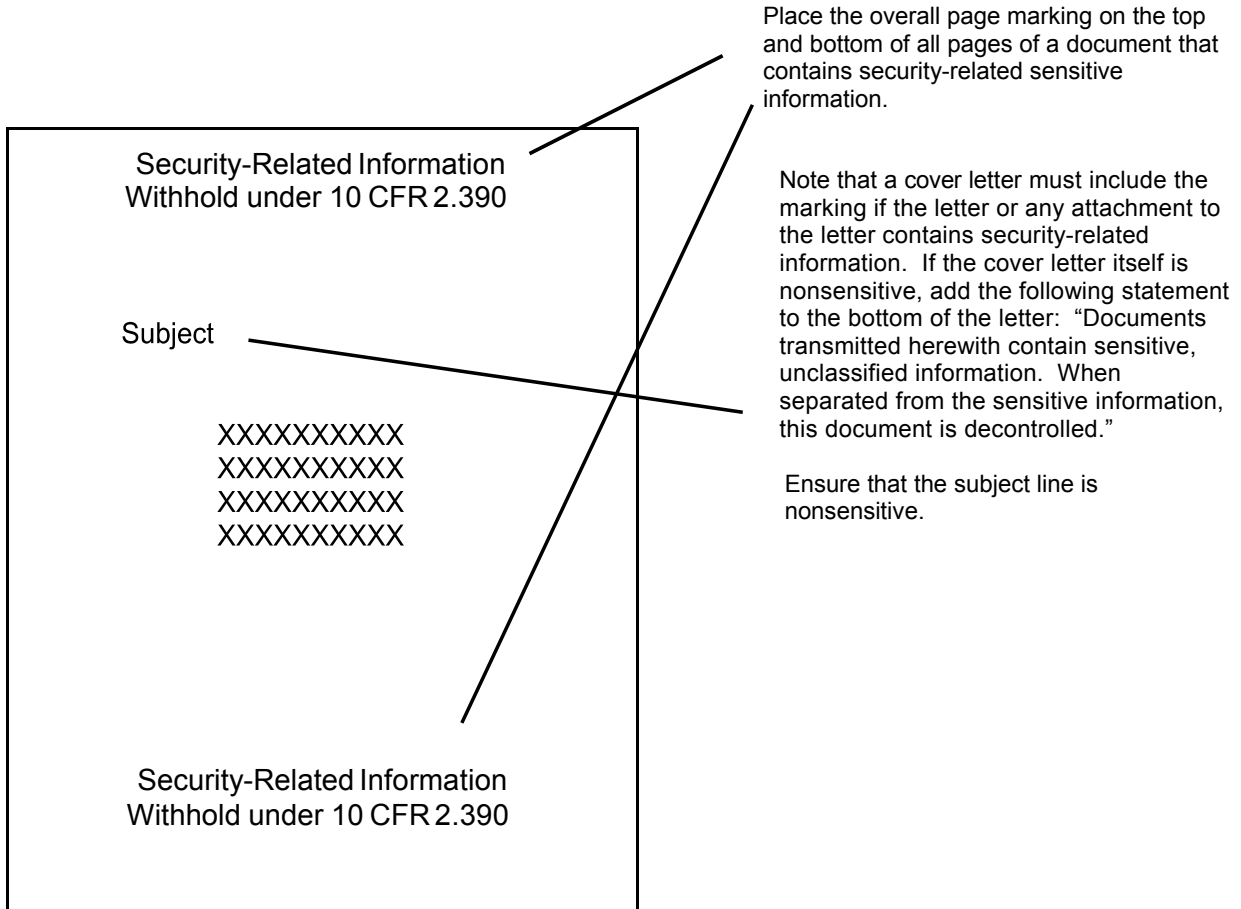
OFC	NMSS/MSTR	NMSS/MSTR	NMSS/MSTR	OGC	OGC	NMSS/FCSE	NMSS/DSFM/ Staff
NAME	PGoldberg	SAtack	AMcIntosh	ACoggins	CSafford	KRamsey	RWharton
DATE	12/15/16	12/5/16	7/15/16	9/12/17	9/18/2017	1/24/17	2/14/17
OFC	NMSS/DUWP	OE	OCIO	OCIO	OIP	NMSS/FSCE	NMSS/DUWP
NAME	ZCruz	DFurst	Via e-mail DCullison	RGagnon	PHabighorst	CErlanger	JTappert
DATE	1/26/17	1/23/17	9/18/17	6/30/16	2/09/17	2/13/17	1/26/17
OFC	NMSS/DSFM	NSIR/DSO	QTE	NMSS/MSTR			
NAME	MLayton	MBailey	CHsu	KWilliams for AKock			
DATE	2/14/17	1/27/17	2/22/17	12/26/17			

OFFICIAL RECORD COPY

SUGGESTED MARKINGS AND HANDLING FOR THOSE SUBJECT TO NRC REGULATION

This enclosure provides information on markings suggested by the U.S. Nuclear Regulatory Commission (NRC) for pages of a document that contains security-related sensitive information (Section A) and suggested handling of such documents (Section B).

Section A: Page Markings



Section B: Appropriate Controls for Handling Documents

- Access: Access is based on “need to know” to perform official licensee, applicant, or other entity functions.
- Storage: Documents can be stored openly within licensee, applicant, or other entity facilities but with electronic or other access controls (e.g., key cards, guards, alarms).
- Mail: Documents should be sent through U.S. Postal Service first class mail, registered mail, express mail, or certified mail in a single opaque envelope with no external markings to indicate contents covered by Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, “Public Inspections, Exemptions, Requests for Withholding.”
- Electronic Transmission: Information can be handled over the telephone if the recipient is confirmed as being authorized to access the information, over facsimile if it is confirmed that a recipient who is authorized to access the information will be present to receive the transmission, or over encrypted computer e-mail (using computer software such as SecureZip).

Note that the NRC uses SecureZip to encrypt electronic information before transmitting security-related sensitive information by e-mail to licensees and other entities. Users will be prompted for a password to access a free download of the reader.

SCREENING CRITERIA FOR SECURITY-RELATED SENSITIVE UNCLASSIFIED NONSAFEGUARDS INFORMATION

December 26, 2017

INTRODUCTION

This enclosure provides the criteria that should be used to determine what information may be disclosed to the public and what information should be withheld to prevent inadvertent assistance to those who might wish to use security-related information for malevolent acts. As a reminder, the advice in this enclosure applies to all security-related information **except for** classified information, Safeguards Information, or Safeguards Information - Modified Handling.

BACKGROUND

Historically, the U.S. Nuclear Regulatory Commission (NRC) has made large amounts of information, more than required by law, routinely available to the public. However, in the post-September 11, 2001, environment, the NRC, like many other agencies, has found it necessary to be more judicious in what it voluntarily releases so that it does not inadvertently provide assistance to those who might use this information for malevolent acts.

The NRC developed guidance in SECY-04-0191, "Withholding Sensitive Unclassified Information Concerning Nuclear Power Reactors from Public Disclosure," dated October 19, 2004, and advised licensees in NRC Regulatory Issue Summary (RIS) 2005-26, "Control of Sensitive Unclassified Non-Safeguards Information Related to Nuclear Power Reactors," dated November 7, 2005, on the conduct of a broad security/sensitivity review to assess whether documents associated with reactor licensees should be made publicly available in the first instance as a matter of administrative discretion. The NRC has now developed the guidance in this enclosure, which addresses the criteria for screening from public disclosure certain types of information associated with various classes of materials licensees, applicants, certificate holders, and other entities.

Consistent with the Commission's Staff Requirements Guidance on SECY 05-0091, "Task Force Report on Public Disclosure of Security-Related Information," dated June 30, 2005, the screening criteria in these guidelines "...should follow the principles for withholding security-related information under FOIA." Although the NRC developed these security-related sensitive information screening criteria with the principles of the Freedom of Information Act (FOIA) in mind, a review for security-related sensitive information does not substitute for a FOIA review. The NRC will continue to review and process FOIA requests independently from the security-related sensitive information review process.

ORGANIZATION OF THIS ENCLOSURE

Table 1 outlines the contents of this enclosure:

- Section 1 indicates the criteria under which documents may be released to the public without any further screening. However, Section 1 also notes specific requirements for withholding documents in certain cases even if the documents meet the criteria.
- Section 2 contains general criteria for screening documents that do not meet the criteria in Section 1.
- Appendices 1–5 contain guidance, in addition to that in Section 2, for screening documents specific to fuel cycle facilities; decommissioning and low-level waste sites; medical, industrial, and academic uses of nuclear materials; spent fuel/transportation; and export/import, respectively.

Table 1 Stakeholders Using This Guidance and Applicable Sections of the Guidance¹

STAKEHOLDER	APPLICABLE SECTION AND APPENDIX
Fuel cycle facilities, including milling, conversion, enrichment, and fuel fabrication facilities	Sections 1 and 2 for general information and Appendix 1
Decommissioning and low-level waste sites	Sections 1 and 2 for general information and Appendix 2
Medical, industrial, and academic uses of nuclear materials	Sections 1 and 2 for general information and Appendix 3
10 CFR Part 71 certificate holders and registered users	Sections 1 and 2 for general information and Appendix 4, Parts A, B, and E Special attention should be given to the guidance on detailed design drawings and control of the registered users list for transportation packages.

¹ With regard to high-level waste, Subpart J, "Procedures Applicable to Proceedings for the Issuance of Licenses for the Receipt of High-Level Radioactive Waste at a Geologic Repository," of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 2, "Agency Rules of Practice and Procedure," contains requirements that an applicant of the proposed geological repository at Yucca Mountain in Nevada must follow when making information publicly available through the Licensing Support Network.

STAKEHOLDER	APPLICABLE SECTION AND APPENDIX
10 CFR Part 71 quality assurance program (QA) holders	Sections 1 and 2 for general information and Appendix 4, Parts A, B, and E Based on the NRC staff's experience, most QA program holder submittals do not contain sensitive information as defined in this RIS. However, attention should be given to the guidance on detailed design drawings and control of the registered users list for transportation packages.
10 CFR Part 72 certificate holders, general licensees, and specific licensees	Sections 1 and 2 for general information and Appendix 4, Parts A, B, C, D, and E
Export and Import	Sections 1 and 2 for general information and Appendix 5

SECTION 1: GENERAL SCREENING CRITERIA FOR DOCUMENTS TO BE RELEASED TO THE PUBLIC

A. Low-Hazard Information Documents

Documents that meet the following criteria may be released without the need for any further screening, except as specifically noted:

- (1) Documents that specify the quantities of radionuclides located in any single location if those quantities are below the International Atomic Energy Agency's Category 3 quantities (as listed in Table 2 of these guidelines). However, the staff will withhold from public access the exact location of the material even if material levels are below the Category 3 threshold values. Thus, the staff will release a document if it indicates a general location (e.g., in a certain building), but if the document gives the exact location (e.g., "Room 12"), the staff will redact the exact location unless the location is intuitively obvious.
- (2) Documents from licensees (other than fuel cycle licensees) authorized to possess radionuclides that are not listed in Table 2. However, the staff will withhold information on the exact location of this radioactive material.
- (3) Uranium recovery documents describing or discussing yellow cake and mill tailings only.
- (4) Current information on decommissioning materials sites with diffuse contamination only. However, check for other active licenses or radioactive material at the site (e.g., high-activity reactor components and high-activity waste) and screen any related documents separately.
- (5) Documents concerning terminated licenses for which all radioactivity except diffuse contamination has been removed. However, screen old files for operational information that may contain sensitive information.

B. Information Readily Available to the Public Elsewhere (Based on Reactor Criteria Approved by the Commission (SECY-04-0191))

The following criteria apply to information on materials facilities:

- (1) If the information is available from open source literature such as text books, Web sites, or other sources, an NRC decision to withhold the information may decrease the openness of the agency's regulatory programs without obstructing an adversary.
- (2) Information clearly visible from locations accessible to the public, including general (low-resolution) drawings of the site and adjacent areas, is generally released.

SECTION 2: GENERAL SCREENING CRITERIA FOR DOCUMENTS TO BE WITHHELD FROM PUBLIC RELEASE

This section lists the general screening criteria that the NRC staff will use for withholding information from the public, as well as the information that the staff will release.

A. Facilities Where Licensed Material May Be Located

- (1) The NRC staff will withhold the following information related to locations and quantities of radioactive material that equal or exceed the threshold values listed in Table 2:

- (a) information for identifying the exact locations of radioactive material

The staff **will release** a document if it indicates a general location (e.g., in a certain building), but if the document gives the exact location (e.g., "Room 12"), the staff will withhold it unless the location is intuitively obvious.

- (b) information on possession limits or actual inventories of radionuclides
- (c) manufacturers and model numbers of sealed sources and devices
- (d) for fuel cycle facilities, information on possession limits and inventories of enriched uranium and plutonium exceeding a critical mass
- (e) lists of licensees registered to use transportation packages approved by the NRC under 10 CFR Part 71, "Packaging and Transportation of Radioactive Material"

- (2) The NRC staff **will release** the following information:

- (a) identification of radionuclides and form
- (b) 10 CFR Part 71 certificates and information under 10 CFR Part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste, and Reactor-Related Greater Than Class C Waste," related to radionuclide form, content, quantities, model numbers, and locations of independent spent fuel storage installations regardless of the quantities
- (c) event reports involving lost, stolen, abandoned, or found radioactive material, regardless of whether the radioactive material equals or exceeds the quantities specified in Table 2

B. Design of Structures/Equipment

- (1) The NRC staff will withhold the following information for design of structures and equipment (site specific):

- (a) information related to security requirements, information from analyses that could reveal vulnerabilities, reports of specific or predicted failures, and any other information that could reasonably be expected to be useful to potential adversaries
- (b) information related to predicted structural failures that could be useful to potential adversaries (see Appendix 1 for specific guidance on fuel cycle facilities)

(2) The NRC staff **will release** the following information:

Notwithstanding paragraph B(1)(b) above, the NRC staff will release information on the design of structures provided to the NRC, which typically consists of analyses to show that the design feature will withstand the combinations of forces associated with design-basis events and natural hazards. Such analyses do not typically provide realistic information on the failure of structural features and, except for fuel cycle facilities, are not considered sensitive.

C. Nearby Facilities

The NRC staff will withhold information related to nearby facilities if the information might reasonably be helpful to those planning a malevolent act.

D. Design Information: Spent Fuel Casks, Transportation Packages, and Other Information

- (1) The NRC staff will withhold information related to nonsite-specific spent fuel casks, transportation packages, sealed source and device catalog and files, and other such items, including the following types of information:
 - (a) drawings that show detailed design information
 - (b) design/performance information that indicates vulnerabilities that could reasonably be expected to be useful to potential adversaries
- (2) The NRC staff **will release** text information describing how spent fuel casks, transportation packages and devices/sources are constructed.

E. Emergency Planning/Fire Protection Information

- (1) In regard to emergency planning/fire protection information, the NRC staff will withhold the following information:
 - (a) the document in its entirety if it contains site-specific information that would be useful to an adversary in planning a malevolent act

The NRC staff will review any considerations or requests for release on a case-by-case basis. As part of the review, the staff will determine whether the State or local governments are withholding related information as sensitive.

- (b) detailed information describing response capabilities (e.g., personnel and resources available)
- (c) information and drawings identifying the locations of radioactive material and onsite routes and pathways to or from the locations of radioactive material, especially detailed descriptions of areas not normally visible to the public
- (d) information that State or local government agencies have designated as sensitive

F. Security Program Information

Much information related to security programs at fuel cycle facilities and other materials facilities with high risk sources has already been designated to be withheld as classified information, Safeguards Information, or proprietary information. In addition to withholding classified information, Safeguards Information, or proprietary information, the NRC staff will withhold any security information that could reasonably be expected to be useful to potential adversaries. In addition, certain categories of information are protected under 10 CFR Part 37, "Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material."

G. Vulnerability and Security Assessments, Accident Analyses, Safety Analyses, and Risk Assessments

- (1) The NRC staff will withhold the following information:
 - (a) assessments that use a malevolent event as an initial condition (e.g., vulnerability/security analysis)
 - (b) descriptions of structural features related to potential malevolent acts
 - (c) detailed information and drawings describing the specific locations of equipment that is relied upon for safety or security
 - (d) discussions of safety features or mitigation strategies within vulnerability/security assessments
 - (e) any analysis that identifies which events have significant consequences and which events do not
 - (f) information related to security events and any information that could be useful to an adversary as a result of the identification of vulnerabilities
- (2) The NRC staff **will release** typical accident analyses that involve conservative models to demonstrate a facility's ability to respond to design-basis events (i.e., nonsecurity-related events), unless the analysis could reasonably be expected to be useful to an adversary.

APPENDICES 1–5: ADDITIONAL GUIDANCE FOR SECURITY-RELATED SENSITIVE INFORMATION SCREENING REVIEWS

Appendices 1–5 contain additional guidance for screening documents for security-related sensitive information specific to types of facilities and uses of materials. These appendices cover the following topics, respectively:

- (1) fuel cycle facilities, including milling, conversion, enrichment, and fuel fabrication facilities
- (2) decommissioning and low-level waste sites
- (3) medical, industrial, and academic uses of nuclear materials
- (4) spent fuel/transportation (10 CFR Part 71 certificate holders and registered users; 10 CFR Part 71 QA program holders; and 10 CFR Part 72 certificate holders, general licensees, and site-specific licensees)
- (5) export/import licensing

APPENDIX 1 FUEL CYCLE FACILITY REVIEWS

NRC Contact: Division of Fuel Cycle Safety, Safeguards, and Environmental Review, Office of Nuclear Material Safety and Safeguards

A. Descriptions of Facilities Where Licensed Material May Be Located

- (1) Withhold information on the quantity of enriched uranium or plutonium authorized in possession limits, or possessed in actual inventories, when the quantity exceeds a critical mass. Information identifying radionuclides and chemical/physical forms authorized may be released.
- (2) Withhold information related to military contract operations, even if it is publicly available elsewhere.
- (3) Withhold information that identifies the exact locations (e.g., detailed floor plans) of radioactive and hazardous material whose release or theft could allow adversaries to create a diversion for theft of material or result in a significant consequence. Planning a sabotage activity (e.g., bombing a building) would likely require less detailed information than planning a theft, for which exact locations would likely be necessary.
- (4) Withhold information about the design of structures that consists of analyses to show that design features will withstand the forces associated with both security-related scenarios and nonsecurity-related scenarios, such as tornadoes, high winds, and snow loads. Analyses indicating forces associated with nonsecurity regulatory requirements could be useful in planning terrorist activities. For example, information related to seismic loadings could be used to determine blast loads for bombs.
- (5) Withhold detailed design information, including diagrams showing dimensions, material properties, and descriptions of how the facility/equipment is constructed. Additionally, withhold process information that could potentially allow an adversary to access radioactive or hazardous materials or gain knowledge of detailed information or potential weaknesses of systems designed to ensure safe operations (necessary to prevent or mitigate accidents) at fuel cycle facilities.

B. Nonsite-Specific Design Information

There is no additional fuel cycle facility guidance for this category.

C. Emergency Planning/Fire Protection Information

- (1) Withhold site-specific information that would be useful to an adversary planning a malevolent act. This includes detailed information or potential weaknesses of systems designed to ensure safe operations (necessary to prevent or mitigate accidents) at fuel cycle facilities. Withhold detailed information and drawings of areas not normally visible to the public. This includes information identifying routes to or from the locations of radioactive and hazardous material whose release or theft could allow adversaries to achieve their goals.

- (2) Withhold information that State or local government agencies have designated as sensitive.
- (3) Withhold any detailed accident analysis that identifies which accidents have significant consequences and which accidents do not. Accident analysis information can appear in many documents (e.g., an emergency plan, fire protection plan, integrated safety analysis summary, environmental report or assessment). General information may be releasable, but details should be withheld.
- (4) Withhold site-specific emergency action levels used to declare emergencies.
- (5) Withhold detailed information about response capabilities (e.g., personnel and resources available).

D. Security Program Information

- (1) Much information related to security programs at fuel cycle facilities and other materials facilities with high-risk sources has already been designated to be withheld as proprietary information, classified information, or Safeguards Information.
- (2) Withhold information on security equipment and programs, descriptions of equipment and radioactive or hazardous materials, and accident studies that closely resemble programs, equipment, radioactive or hazardous materials, and studies at other active licensee sites if that information would reveal vulnerabilities or would be expected to be useful to adversaries at active licensee sites.

E. Vulnerability and Security Assessments and Accident Analyses

- (1) Withhold detailed information and drawings describing the exact locations of radioactive or hazardous materials or that would allow adversaries to gain knowledge of detailed information or potential weaknesses of systems designed to ensure safe operations (necessary to prevent or mitigate accidents) at fuel cycle facilities.
- (2) Withhold any detailed accident analysis that contains accident sequences, identifies accident consequences, identifies systems and components that are relied upon for safety, or identifies which accidents have significant consequences and which accidents do not. Accident analysis information can appear in many documents (e.g., an emergency plan, fire protection plan, integrated safety analysis summary, environmental assessment). General information may be acceptable, but details should be withheld.

- (3) Withhold information identifying the exact locations (e.g., detailed floor plans) of radioactive and hazardous material whose release or theft could allow adversaries to create a diversion for the theft of material or could result in a significant consequence. Planning a sabotage activity (e.g., bombing a building) would likely require less detailed information than planning a theft, for which exact locations would likely be necessary.

APPENDIX 2 DECOMMISSIONING AND LOW-LEVEL WASTE SITE REVIEW

NRC Contact: Division of Decommissioning, Uranium Recovery, and Waste Programs (DUWP), Office of Nuclear Material Safety and Safeguards

DECOMMISSIONING AND LOW-LEVEL WASTE SITE CRITERIA

Note that U.S. Nuclear Regulatory Commission (NRC) Regulatory Issue Summary 2005-26, "Control of Sensitive Unclassified Nonsafeguards Information Related to Nuclear Power Reactors," dated November 7, 2005, informs licensees of the appropriate handling of sensitive unclassified nonsafeguards information for decommissioning reactors.

The following criteria apply:

- (1) "Diffuse contamination" consists of soil, ground water, and surface contamination on and in buildings, including that which is on equipment, floors, walls, and other surfaces. It also could include volumetrically contaminated materials whose concentrations are sufficiently low.

For determining whether only diffuse contamination is present at a decommissioning site, apply the following information derived from the International Atomic Energy Agency's Code of Conduct on the Safety and Security of Radioactive Sources (Code of Conduct) (ADAMS Accession Number [ML043270621](#)) (see Table 2). Category 3 sources in the Code of Conduct are typically about 1 curie. (The NRC is developing a rulemaking to control the import and export of such sources.) At a concentration of 2,000 picocuries per gram, which is well above the concentrations of plutonium typically found in soil at sites undergoing decommissioning, this equates to approximately 15,000 cubic feet of material, which is well in excess of the amount a terrorist could reasonably use for malevolent purposes. For materials at the Class A limit for plutonium (10 nanocuries per gram) in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste," the volume of waste that would contain the Category 3 activity limit for plutonium would be 3,000 cubic feet, which is also in excess of the amount a terrorist could reasonably use. However, for cobalt-60, the amount of loose material or rubble at the Class A limit (700 curies per cubic meter) containing the Category 3 quantity (about 1 curie) would be less than 0.1 cubic foot, which is an amount that could easily be used for malevolent purposes because of its small volume.

Reviewers should apply values taking into consideration the examples given above in determining whether a decommissioning site is within the threshold values.

GENERAL GUIDANCE FOR DECOMMISSIONING AND LOW-LEVEL WASTE SITES

Most sites undergoing decommissioning are expected to be below the threshold values in Table 2, such that most licensing documents can be released. Sensitivity reviews must be conducted on documents related to low-level waste storage, safety, and security systems and procedures. Reviews should focus on determining whether the information contained in these documents could be useful to an adversary in planning a terrorist act. Examples include the location and security arrangements for high-activity waste, the location of highly activated components, or the transportation security arrangements for high-activity waste or activated components.

For fuel cycle, materials, and spent fuel pool and independent spent fuel storage installation licensees that are undergoing decommissioning, issues that are not unique to decommissioning (e.g., descriptions of plant processes, vulnerability/security assessments) should be reviewed with regard to Appendices 1, 3, and 4, respectively.

A. Descriptions of Facilities Where Licensed Material May Be Located

- (1) Withhold information identifying the exact locations of radioactive material (e.g., detailed drawings or maps of facilities, room numbers and locations, and specific locations of waste storage/processing operations).
- (2) Withhold design information that could reasonably be expected to be useful to potential adversaries. Examples include detailed drawings or maps showing the locations of security measures/operations and infrastructure, locations of critical site infrastructure (electrical or power systems), and the design of facilities that could be useful in developing approaches to breach the facility.
- (3) Withhold procedures for the receipt of low-level waste at a waste facility or processing site.
- (4) For transportation package information provided in connection with decommissioning or low-level waste disposal licensing, consider Appendix 4 for sensitivity of the information.

**APPENDIX 3
REVIEWS OF MEDICAL, INDUSTRIAL, AND ACADEMIC USERS
OF NUCLEAR MATERIALS**

NRC Contact: Division of Material Safety, State, Tribal, and Rulemaking Programs, Office of Nuclear Material Safety and Safeguards

A. Descriptions of Facilities Where Licensed Material May Be Located (Equals or Exceeds the Threshold Values in Table 2)

(1) Copies of Licenses and Mailing Lists

- (a) For copies of licenses, release authorized radionuclides and form. Withhold authorized quantities. Withhold manufacturers and model numbers of sealed sources and devices. Withhold information that identifies buildings or rooms where radioactive material is located. (This may be in the license condition that specifies the authorized location.)
- (b) Withhold mailing lists that are compiled for security purposes or that identify facilities that may have quantities of radioactive material that equals or exceeds the threshold values listed in Table 2 or vulnerable facilities such as those that possess material that equals or exceeds the threshold values in Table 2 but do not aggregate the material.
- (c) Release individual mailing addresses and the street address where material is located (normally included on licenses).

(2) Locations of Radioactive Material

- (a) Withhold lists of authorized or actual inventories of radionuclides.
- (b) Withhold building numbers and room numbers (other than mailing addresses) or similar information that identifies the locations of material.
- (c) Withhold site drawings that identify individual buildings on the licensee site.
- (d) Withhold building drawings that identify the location of radioactive material or onsite pathways or routes to and from locations of radioactive material.
- (e) Release individual mailing addresses and street addresses.

- (3) Site-Specific Design/Description of Structures, Equipment, and Operating Procedures
 - (a) Most descriptions of structures, equipment, and procedures may be released if they are not security related.
 - (b) Withhold drawings of buildings, rooms, and devices in which radioactive material is located.
 - (c) Withhold manufacturers and model numbers of sealed sources and devices.
 - (d) Withhold information on security programs, guards, access controls, key cards, alarms, barriers, chains, and locks.
- B. Nonsite-Specific Design Information: Sealed Source and Device Catalog
 - (1) Release information on addresses of manufacturers/distributors.
 - (2) Establish a password system for sensitive information for users who have with a valid need to know and who have agreed to protect the information from unauthorized disclosure.
- C. Emergency Planning/Fire Protection Information
 - (1) Release general descriptions of emergency procedures for safety-related events, such as radioactive material spills, releases, contamination, and fires.
 - (2) Withhold information on routes to and from locations of radioactive material.
 - (3) Withhold information related to responses to security events and malevolent events.
 - (4) Withhold information on responses of offsite law enforcement officials.
 - (5) Withhold information designated by State or local governments as sensitive.
- D. Security Program Information
 - (1) For applicable licensees—
 - (a) Under Title 10 of the *Code of Federal Regulations* (10 CFR) 37.43(d), licensees limit access to, and unauthorized disclosure of, their security plan, implementing procedures, and the list of individuals that have been approved for unescorted access.

- (b) Under 10 CFR 37.77(f), individuals who receive schedule information related to shipments of Category 1 material, as identified in Appendix A, "Category 1 and Category 2 Radioactive Materials," to 10 CFR Part 37, "Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material," are required to limit access to, and unauthorized disclosure of, that information.
 - (2) Withhold any security information that is related to malevolent events or suspicious incidents or that could be useful to potential adversaries. Examples include information on guards, access controls, key cards, alarms, barriers, chains, and locks.
- E. Vulnerability and Security Assessments and Accident Analyses

There is no additional guidance for medical, industrial, and academic users of nuclear material for this category.

**APPENDIX 4
SPENT FUEL/TRANSPORTATION REVIEWS**

NRC Contact: Division of Spent Fuel Management, Office of Nuclear Material Safety and Safeguards

A. Descriptions of Facilities Where Licensed Material Is Located

SUBJECT	DISCUSSION AND TYPICAL CONTROLS
<p>10 CFR Part 72 Specific Independent Spent Fuel Storage Installation (ISFSI) Licenses and General Licenses</p> <ul style="list-style-type: none"> - Text descriptions of the following: general description, site characteristics, principal design criteria, storage cask design, operations, waste management, radiation protection, accident analyses, conduct of operations, operating controls and limits, and quality assurance (QA) 	<p>Release—Information provided to the U.S. Nuclear Regulatory Commission (NRC) for specific ISFSI licenses and general licenses that typically consists of analyses to show that the design feature will withstand the combinations of forces associated with design-basis events and natural hazards. The analyses do not typically provide realistic information on the failure of structural features and are not considered sensitive.</p>
<p>10 CFR Part 72 Specific ISFSI Licenses and General Licenses</p> <ul style="list-style-type: none"> - Drawings and locations of related hazards 	<p>Potentially Withhold—Decisions on the control of information that shows the plant site and buildings are dependent on the level of detail. Information on aspects clearly visible from locations accessible to the public near the site is generally released. This includes general (low resolution) layout drawings of the site and adjacent areas. Drawings showing details such as the specific locations of equipment within buildings, doorways, stairways, storage areas, and other such areas are to be withheld under 10 CFR 2.390(d). Drawings showing locations of hazards in relation to the ISFSI are also withheld. A text description of the hazards in relation to the ISFSI is uncontrolled and will not be reviewed.</p>
<p>10 CFR Part 72 Specific ISFSI Licenses and General Licenses</p> <ul style="list-style-type: none"> - Nearby industrial, transportation, and military facilities 	<p>Withhold—Information related to nonnuclear facilities located near the ISFSI such as pipeline data (usually withheld per the U.S. Department of Transportation (DOT)) and chemical facilities (some data withheld per the U.S. Environmental Protection Agency (EPA)) is controlled. Other information may be protected by other Federal agencies (e.g., U.S. Department of Homeland Security, Federal Energy Regulatory Commission, EPA, DOT).</p>
<p>10 CFR Part 72 Specific ISFSI Licenses and General Licenses</p>	<p>Release—Information related to radionuclides, form, and quantities.</p>

B. Nonsite-Specific Design Information: Transportation Packages and Spent Fuel Casks

SUBJECT	DISCUSSION AND TYPICAL CONTROLS
<p>10 CFR Part 71 Transportation Package Descriptions</p> <ul style="list-style-type: none"> - Text descriptions, including radionuclide form, content, and quantity 	<p>Release—Information provided to the NRC typically consists of analyses to show that the design features will withstand the combinations of forces associated with design-basis events and natural hazards. The analyses do not typically provide realistic information on the failure of structural features and are not considered sensitive. Text descriptions on the design of transportation packages do not need to be controlled because (1) 10 CFR Part 71 does not authorize possession of byproduct, source, or special nuclear material, (2) package design information is required for commerce both domestically and internationally, and (3) the information that “could reasonably be expected to be useful to terrorists in planning or executing an attack” for transportation packages containing large quantities of byproduct, source, or special nuclear material is controlled by other means (e.g., route controls, escort requirements, and other means in accordance with the Commission’s orders, interim compensatory measures, or other applicable requirements).</p>
<p>10 CFR Part 71 Drawings</p>	<p>Potentially Withhold—Withhold diagrams showing detailed design information. Do not withhold drawings that have already been made public through Freedom of Information Act (FOIA) requests, hearings, rulemakings, or other public forums.</p>
<p>10 CFR Part 71 Transportation QA Program Plan Descriptions</p>	<p>Release—An entity wishing to use or fabricate an approved transportation package must submit a description of its QA program to the NRC. This submittal is assigned a 10 CFR Part 71 docket and reviewed and approved by the staff. The QA program description typically does not contain the type of information found in the generic criteria that would cause it to be controlled. In addition, filing and approving a QA program description does not authorize possession of byproduct, source, or special nuclear material.</p>

SUBJECT	DISCUSSION AND TYPICAL CONTROLS
10 CFR Part 71 Package Information (as related to radionuclides and their form and quantities)	Release
10 CFR Part 71 Advance Notification of Shipments of Irradiated Reactor Fuel and Nuclear Waste	Release unless waste shipment is Category 1 material subject to 37.77(f) -- Under 10 CFR 71.97, the NRC requires advance notifications to the governor of a State, or the governor's designee, and to Tribal officials, of certain shipments of high-risk radioactive material. Notification of shipments of irradiated reactor fuel in quantities less than those subject to 73.37(f) has been moved to 73.35, which requires licensees to follow the requirements of Subpart D of Part 37.
10 CFR Part 72 Dry Cask Storage Systems - Certificates of Compliance safety analysis report information	Release—Information provided to the NRC typically consists of analyses to show that the design features will withstand the combinations of forces associated with design-basis events and natural hazards. The analyses do not typically provide realistic information on the failure of structural features and are not considered sensitive. Text information in the safety analysis report, including design information, is not controlled because (1) the design of the casks are simple by nature, and the criteria for which they are designed are widely known, (2) most cask designs involve storage of the casks in open areas on concrete pads that are often readily seen from offsite locations, and (3) this information has been historically released to the public to support rulemaking for approved cask designs and other public outreach efforts.
10 CFR Part 72 Dry Cask Storage Systems - Drawings	Potentially Withhold—Withhold diagrams showing detailed design information. Do not withhold drawings that have already been made public through FOIA requests, hearings, rulemakings, or other public forums.
10 CFR Part 72 Package Information (as related to radionuclides and their form and quantities)	Release

C. Emergency Planning Information

SUBJECT	DISCUSSION AND TYPICAL CONTROLS
10 CFR Part 72 Specific ISFSI Licenses and General Licenses - Emergency planning	Release—Most information related to emergency planning will not need to be designated as sensitive. Special attention is needed to determine whether information relates to the response by a licensee or Government agency to a terrorist attack. Note that some State and local governments consider parts of their emergency plans to be sensitive.

D. Security Program Information

SUBJECT	DISCUSSION AND TYPICAL CONTROLS
10 CFR Part 72 Specific ISFSI Licenses and General Licenses - Security	Potentially Withhold—Information related to security programs is generally designated as Safeguards Information or Safeguards Information—Modified Handling and is protected in a manner similar to classified confidential information. Security-related information within the inspection and oversight program is withheld from public disclosure under 10 CFR 2.390(d).

E. Vulnerability and Security Assessments, Accident Analyses, and Risk Assessments

SUBJECT	DISCUSSION AND TYPICAL CONTROLS
Vulnerability/Security Assessments - 10 CFR Part 71 transportation package designs - 10 CFR Part 72 dry cask storage systems - 10 CFR Part 72 ISFSIs	Withhold—Vulnerability/security assessments used to determine the ability of transportation packages, dry cask storage systems, or ISFSIs to withstand events from malevolent acts have been and will continue to be withheld from public disclosure.

**APPENDIX 5
EXPORT/IMPORT LICENSING**

NRC Contact: Office of International Programs

- (1) On a case-by-case basis that documents compelling reasons, withhold information on authorized quantities or actual inventories of radionuclides that equal or exceed the threshold values in Table 2, mixed-oxide materials, and enriched uranium above 6 percent uranium-235. Release information identifying radionuclides and form.
- (2) For quantities that equal or exceed the threshold values in Table 2, withhold information on projected or actual shipment schedules, delivery dates, date required, mode of transport, storage arrangements, or any other related logistical information provided by the licensee in the application or added by the U.S. Nuclear Regulatory Commission.

Table 2 Radionuclide Screening Threshold Values

RADIONUCLIDE	QUANTITY OF CONCERN¹ (TBq)	QUANTITY OF CONCERN² (Ci)
Am-241	0.06	1.6
Am-241/Be	0.06	1.6
Cf-252	0.02	0.54
Cm-244	0.05	1.4
Co-60	0.03	0.81
Cs-137	0.1	2.7
Gd-153	1	27
Ir-192	0.08	2.2
Pm-147	40	1080
Pu-238	0.06	1.6
Pu-239/Be	0.06	1.6
Ra-226	0.04	1.1
Se-75	0.2	5.4
Sr-90 (Y-90)	1	27
Tm-170	20	540
Yb-169	0.3	8.1
Combinations of radioactive materials listed above ³	See footnote below ⁴	

¹ The activity of multiple aggregated sources should be included when the total activity exceeds the quantity of concern.

² Terabecquerel (TBq) values are the regulatory standard. Curie values are provided for convenience only and have been rounded to two significant figures.

³ Radioactive materials are to be considered "aggregated" if breaching a common physical security barrier (e.g., a locked door at the entrance to a storage room) would allow access to the radioactive material or devices containing the radioactive material. See the definition of "aggregated" in 10 CFR Part 37 and related guidance in NUREG-2155, "Implementation Guidance for 10 CFR Part 37, 'Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material,'" Revision 1, January, 2015.

⁴ For calculations concerning multiple sources or multiple radionuclides, the licensee must use the following sum-of-fractions methodology to evaluate combinations of multiple sources or multiple radionuclides when determining whether a location equals or exceeds the threshold values and, therefore, is subject to the guidance in this document:

- (1) If multiple sources of the same radionuclide or multiple radionuclides are aggregated at a location, the licensee must determine the sum of the ratios of the total activity of each of the radionuclides to verify whether the activity at the location is less than the values in Table 2. If the calculated sum of the ratios, using the equation below, is greater than or equal to 1.0, the applicable recommendations of this RIS apply.
- (2) First, determine the total activity for each radionuclide from Table 2 by adding the activity of each individual source, the material in any device, and any loose or bulk material that contains the radionuclide. Then, use the equation below to calculate the sum of the ratios by inserting the total activity of the applicable radionuclides from Table 2 in the numerator of the equation and the corresponding threshold values from Table 2 in the denominator of the equation. The licensee must perform the calculations in metric values (i.e., TBq); the numerator and denominator values must be given in the same units.

$$\sum_{i=1}^n R_i / AR_i \geq 1.0$$

where:

R_1 = total activity for radionuclide 1
 R_2 = total activity for radionuclide 2
 R_n = total activity for radionuclide n
 AR_1 = threshold value for radionuclide 1
 AR_2 = threshold value for radionuclide 2
 AR_n = activity threshold value for radionuclide n