UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS
WASHINGTON, D.C. 20555

February 28, 2005

NRC REGULATORY ISSUE SUMMARY 2005-03
10 CFR PART 40 EXEMPTIONS FOR URANIUM CONTAINED IN AIRCRAFT COUNTERWEIGHTS - STORAGE AND REPAIR

ADDRESSEES

All persons possessing aircraft counterweights containing uranium under the exemption in 10 CFR 40.13(c)(5).

INTENT

The U.S. Nuclear Regulatory Commission (NRC) is issuing this regulatory issue summary (RIS) to emphasize the scope and restrictions of the exemption from licensing requirements in 10 CFR 40.13(c)(5) as applied to counterweights containing uranium. This RIS does not transmit any new requirements or new staff positions. No specific action or written response is required.

BACKGROUND

NRC has received a petition (see Federal Register 65 FR 3394, January 21, 2000) which requests additional rulemaking to define and clarify the responsibilities associated with certain depleted uranium counterweights. In particular, the petitioner focused upon the applicability of the exemption to long-term storage of depleted uranium counterweights. In response to the petitioner's request for immediate notification to advise those organizations holding counterweights under the exemption of their responsibilities to the public, NRC issued RIS 2001-13 on July 20, 2001. RIS 2001-13 primarily discussed disposal alternatives for depleted uranium counterweights held under the exemption in 10 CFR 40.13(c)(5). This RIS responds to the petitioner's request for clarification of issues regarding long-term storage and restoration or repair of plating.

SUMMARY OF ISSUE

Source material includes natural or depleted uranium or thorium, or any combination thereof, in any physical or chemical form. 10 CFR 40.13 describes unimportant quantities of source material, and provides exemptions from the requirements for a license, and from the regulations in Part 40, subject to certain restrictions. One provision, 10 CFR 40.13(c)(5), exempts persons receiving, possessing, using, or transferring the uranium contained in counterweights installed in aircraft, rockets, projectiles, and missiles. These counterweights may also be stored or handled in connection with the installation or removal from such vehicles. The restrictions

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associated with this exemption are: 1) the counterweights must have been manufactured in accordance with a specific license to manufacture and distribute such items; 2) each counterweight must be impressed, legibly, through any plating or covering, with the words "Depleted Uranium;" 3) the counterweight must have durable and legible markings or labels with the identification of the manufacturer, and a statement, "Unauthorized Alteration Prohibited;" and 4) the exemption does not authorize any chemical, physical, or metallurgical treatment or processing of the counterweight, other than repair or restoration of any plating or other covering.

LONG-TERM STORAGE

Because storage is only permitted to the extent the storage is incidental to installation or removal of the counterweight, long-term storage of the counterweight is not considered to be covered under this exemption. As a result, when the counterweights are no longer to be used for their intended purposes, the end user should transfer the counterweights as discussed in RIS-01-013.

NRC believes that a period of 24 months is sufficient for a person holding a counterweight not installed in an aircraft to either reinstall the counterweight in an aircraft or dispose of the counterweight using an alternative provided in RIS-01-013. After a period of 24 months in storage, the counterweights should be deemed to no longer be stored incidental to installation or removal and the holder should apply for a specific license per 10 CFR 40.31 in order to continue to store the counterweights. Storage for a period of greater than 24 months may be considered allowable under the exemption if: (1) the person storing the counterweight can clearly show an intent to re-use the counterweight in an aircraft, (2) the counterweight has a part tag or some other means of indicating where the counterweight came from per the carrier's maintenance program, and (3) the counterweight is periodically inspected to ensure that the counterweight remains in proper condition (i.e., the plating remains intact) for use in an aircraft.

Similarly, counterweights stored in an aircraft, projectile, rocket, or missile that is no longer planned to be operated should be removed and disposed of using an alternative provided in RIS-01-013. Removal of the counterweights must be accomplished in a manner that does not disturb the integrity of the counterweight. If an aircraft is held for possible future use, but not operated, the holder should maintain the aircraft per its maintenance plan and minimally inspect the counterweights every 5 years to ensure the counterweight remains in proper condition (i.e., the plating remains intact). If the aircraft is transferred to a new owner, the new owner should be notified of the existence of the depleted uranium counterweights installed in the aircraft and the applicability of 10 CFR 40.13(c)(5).

REPAIR AND RESTORATION

In order to maintain the counterweight, 10 CFR 40.13(c)(5)(iv) allows repair or restoration of the plating or covering. However, the exemption does not allow any repair or restoration process that would disturb the integrity of the underlying uranium within the counterweight; such processes would require a specific license. Examples of restoration or repair processes that would not fall under the exemption include acid baths or electroplating, both of which may chemically or metallurgically impact the underlying uranium in the counterweight. Allowable

restoration techniques may include painting or placing a new covering over the counterweight (to the extent that the process for installing the new covering does not result in chemical, physical, or metallurgical interactions with the underlying uranium). In addition, any repair or restoration must also maintain the legibility of the impressings, labels, and markings on the counterweight required under 10 CFR 40.13(c)(5)(ii) and (iii).

FEDERAL REGISTER NOTIFICATION

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

SMALL BUSINESS REGULATORY ENFORCEMENT FAIRNESS ACT

The NRC has determined that this action is not subject to the Small Business Regulatory Enforcement Fairness Act of 1996.

PAPERWORK REDUCTION ACT STATEMENT

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

This RIS requires no specific action nor written response. If you have any questions about this summary, please contact the technical contact listed below or the appropriate regional office.

/RA/

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List of Recently Issued NMSS Generic Communications

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Recently Issued NMSS Generic Communications

Date	GC No.	Subject	Addressees
12/16/2004	RIS-04-020	NRC Regulatory Issue Summary 2004-20: Lessons Learned from Review of 10 CFR Parts 71 and 72 Applications	All holders of, and applicants for, a (1) 10 CFR Part 71 certificate of compliance for a radioactive material transportation package; (2) 10 CFR Part 72 certificate of compliance for a spent fuel storage cask; and (3) 10 CFR Part 72 specific license for an independent spent fuel storage installation (ISFSI).
12/01/2004	RIS-04-018	NRC Regulatory Issue Summary 2004-18: Expiration Date for 10 CFR Part 71 Quality Assurance Program Approvals	All holders of U.S. Nuclear Regulatory Commission (NRC) - approved 10 CFR Part 71 Quality Assurance Programs (QAPs).
11/23/2004	RIS-04-017	NRC Regulatory Issue Summary 2004-17: Revised Decay-in-Storage Provisions for the Storage of Radioactive Waste Containing Byproduct Material	All licensees regulated under 10 CFR Parts 30, 32, 33, and 50.
10/26/2004	IN-04-018	Recent Safety-Related Event at Panoramic Wet-Source-Storage Irradiator	All licensees authorized to possess and use sealed sources in panoramic wet-source-storage irradiators, and irradiator vendors.
07/19/2004	IN-04-014	Use of less than Optimal Bounding Assumptions in Criticality Safety Analysis at Fuel Cycle Facilities	All licensees authorized to possess a critical mass of special nuclear material.

Note: NRC generic communications may be found on the NRC public website, http://www.nrc.gov, under Electronic Reading Room/Document Collections.

Attachment