

June 7, 2016

Ms. Janet R. Schlueter, Senior Director  
Radiation and Materials Safety  
Nuclear Energy Institute  
1201 F Street NW, Suite 1100  
Washington, DC 20004

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION'S STAFF RESPONSE TO THE  
NUCLEAR ENERGY INSTITUTE'S COMMENTS ON RECORDKEEPING AND  
INVENTORY REQUIREMENTS IN SUBPART B OF TITLE 10 OF THE *CODE OF  
FEDERAL REGULATIONS* PART 74, "MATERIAL CONTROL AND ACCOUNTING  
OF SPECIAL NUCLEAR MATERIAL"

Dear Ms. Schlueter:

The U.S. Nuclear Regulatory Commission (NRC) staff is providing this letter in response to industry comments on the use of the term "all" as it relates to the recordkeeping and inventory requirements in Subpart B of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 74, "Material Control and Accounting of Special Nuclear Material." The NRC staff has held a number of public interactions with industry and the Nuclear Energy Institute (NEI) pertaining to recordkeeping and inventory of special nuclear material (SNM) at power reactors. The NRC has also received written comments from NEI and the industry on this issue as part of the public comment period on the proposed Part 74 rule language (see Docket ID: NRC-2009-0096) and the draft guidance in DG-5057, "Special Nuclear Material Control and Accounting Systems for Non-Fuel Cycle Facilities." (see Docket ID: NRC-2015-0120).

The specific recordkeeping issue raised by power reactor licensees and the NEI concerns the 10 CFR 74.19(a)(1) material control and accounting (MC&A) requirement that a licensee keep records showing the "receipt, inventory (including location and unique identity), acquisition, transfer and disposal of all [SNM] in its possession." The specific inventory issue raised by these stakeholders concerns the 10 CFR 74.19(c) MC&A requirement that a licensee "conduct a physical inventory of all [SNM] in its possession under license at intervals not to exceed 12 months." The industry's concern is that a discrepancy exists between use of the word "all" in 10 CFR 74.19(a)(1) and 10 CFR 74.19(c), and the reportable quantity threshold of 1 gram of SNM used in 10 CFR 74.13 (material status reports) and 10 CFR 74.15 (nuclear material transaction reports). Industry has proposed that the word "all" be interpreted to mean "reportable quantity."

A plain reading of the regulatory language in 10 CFR 74.19(a)(1) and 10 CFR 74.19(c), along with an analysis of the regulatory history regarding these provisions, shows that (A): the recordkeeping requirement covers all SNM in the licensee's possession and (B) all SNM must be inventoried at least once a year. A licensee may use American National Standards Institute (ANSI) standard N15.8-2009, "Special Nuclear Material Control and Accounting Systems for

Nuclear Power Plants,” to establish administrative procedures and controls for performing inventories of SNM. This ANSI standard is endorsed by Regulatory Guide (RG) 5.29, “Special Nuclear Material Control and Accounting Systems for Nuclear Power Plants.” Licensees may not use these administrative procedures to determine that there are *de minimis* quantities of SNM falling outside the scope of either the recordkeeping requirements of 10 CFR 74.19(a)(1), or the inventory requirements of 10 CFR 74.19(c). Thus, the NRC staff does not agree with the industry proposal that the word “all” be interpreted to mean “reportable quantity.” The staff finds that construing the word “all” in 10 CFR 74.19(a)(1) and 10 CFR 74.19(c) as not covering SNM amounts of less than 1 gram would be inconsistent with the plain wording of these recordkeeping and inventory provisions.

However, the NRC staff recognizes that requiring shipment, receipt, inventory, and transfer records be kept for “all” SNM pursuant to 10 CFR 74.19(a)(1), and requiring the inventory of “all” SNM pursuant to 10 CFR 74.19(c), imposes burdens, especially when considering that some of the SNM items subject to these provisions contain very small quantities of licensed material. Accordingly, the staff plans to develop an Enforcement Guidance Memorandum (EGM) for disposition of certain 10 CFR 74.19(a) and (c) violations. In developing this EGM, the staff will determine what constitutes a “very small” quantity of SNM and will make other findings on which the EGM will be based. As stated in the NRC Enforcement Policy, an EGM is used to provide the NRC staff with temporary enforcement guidance, including, in some instances, enforcement discretion, when the criteria specified in the EGM are met. The NRC may choose to exercise discretion and either escalate or mitigate enforcement sanctions or otherwise refrain from taking enforcement action within the Commission’s statutory authority. The exercise of discretion allows the NRC to determine what actions should be taken in a particular case, notwithstanding the guidance contained in the NRC Enforcement Policy. The EGM would be effective until the NRC initiates a rulemaking to revise 10 CFR 74.19(a) and 10 CFR 74.19(c).

Note that the NRC has conducted an internal MC&A seminar training session (held February 18, 2016) with inspectors of power reactors, non-power reactors, and their managers to clarify the goal of MC&A inspections and to aid inspectors in prioritizing their inspection efforts. The training reinforced the need to consistently apply NRC regulations in a risk-informed, performance-based manner. The NRC will continue to hold internal MC&A training sessions and periodic calls with inspectors on these matters.

If you have any further questions or comments on this issue, please contact Mr. Peter Habighorst, Chief, Material Control and Accounting Branch at 301-415-7326 or via e-mail at: [Peter.Habighorst@nrc.gov](mailto:Peter.Habighorst@nrc.gov).

Sincerely,

**/RA PHabighorst for/**

Craig G. Erlanger, Acting Director  
Division of Fuel Cycle Safety, Safeguards  
and Environmental Review  
Office of Nuclear Material Safety  
and Safeguards

Nuclear Power Plants,” to establish administrative procedures and controls for performing inventories of SNM. This ANSI standard is endorsed by Regulatory Guide (RG) 5.29, “Special Nuclear Material Control and Accounting Systems for Nuclear Power Plants.” Licensees may not use these administrative procedures to determine that there are *de minimis* quantities of SNM falling outside the scope of either the recordkeeping requirements of 10 CFR 74.19(a)(1), or the inventory requirements of 10 CFR 74.19(c). Thus, the NRC staff does not agree with the industry proposal that the word “all” be interpreted to mean “reportable quantity.” The staff finds that construing the word “all” in 10 CFR 74.19(a)(1) and 10 CFR 74.19(c) as not covering SNM amounts of less than 1 gram would be inconsistent with the plain wording of these recordkeeping and inventory provisions.

However, the NRC staff recognizes that requiring shipment, receipt, inventory, and transfer records be kept for “all” SNM pursuant to 10 CFR 74.19(a)(1), and requiring the inventory of “all” SNM pursuant to 10 CFR 74.19(c), imposes burdens, especially when considering that some of the SNM items subject to these provisions contain very small quantities of licensed material. Accordingly, the staff plans to develop an Enforcement Guidance Memorandum (EGM) for disposition of certain 10 CFR 74.19(a) and (c) violations. In developing this EGM, the staff will determine what constitutes a “very small” quantity of SNM and will make other findings on which the EGM will be based. As stated in the NRC Enforcement Policy, an EGM is used to provide the NRC staff with temporary enforcement guidance, including, in some instances, enforcement discretion, when the criteria specified in the EGM are met. The NRC may choose to exercise discretion and either escalate or mitigate enforcement sanctions or otherwise refrain from taking enforcement action within the Commission’s statutory authority. The exercise of discretion allows the NRC to determine what actions should be taken in a particular case, notwithstanding the guidance contained in the NRC Enforcement Policy. The EGM would be effective until the NRC initiates a rulemaking to revise 10 CFR 74.19(a) and 10 CFR 74.19(c).

Note that the NRC has conducted an internal MC&A seminar training session (held February 18, 2016) with inspectors of power reactors, non-power reactors, and their managers to clarify the goal of MC&A inspections and to aid inspectors in prioritizing their inspection efforts. The training reinforced the need to consistently apply NRC regulations in a risk-informed, performance-based manner. The NRC will continue to hold internal MC&A training sessions and periodic calls with inspectors on these matters.

If you have any further questions or comments on this issue, please contact Mr. Peter Habighorst, Chief, Material Control and Accounting Branch at 301-415-7326 or via e-mail at: [Peter.Habighorst@nrc.gov](mailto:Peter.Habighorst@nrc.gov).

Sincerely,

**/RA PHabighorst for/**

Craig G. Erlanger, Acting Director  
Division of Fuel Cycle Safety, Safeguards  
and Environmental Review  
Office of Nuclear Material Safety  
and Safeguards

DISTRIBUTION: TPham, MCAB    SAni, MCAB    DDitto, MCAB    MRomano, RII    MToth, RII

OFC	FCSE/MCAB	NMSS/FCSE	OE	OGC	NRR	NMSS/FCSE
NAME	PHabighorst	AWalker-Smith	NHilton	JHull <b>via email</b>	SHelton <b>via email</b>	<b>PHabighorst for</b> CErlanger
DATE	03/08/2016	03/17/2016	03/23/2016	05/31/2016	06/3/2016	06/07/2016

OFFICIAL RECORD COPY