



January 26, 2012

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

SUBJECT: REPLY TO NOTICE OF VIOLATION

To Whom it may concern:

I am hereby responding on behalf of the National Institute of Standards and Technology (NIST) to the letter that NIST received from Ms. Judith Joustra of Region 1 dated December 28, 2011 on the subject NRC Inspection Report No. 07000398/2011001 and Notice of Violation.

Background

On September 13, 14, and 29, 2011, Mr. Dennis Lawyer of your office conducted a safety inspection of the NIST SNM-362 license. During the inspection, NIST informed Mr. Lawyer of three self-identified violations of NRC regulations. Based on the information provided by NIST to Mr. Lawyer and the results of his inspection, your office characterized the three self-identified violations as two Severity Level IV Violations and a Non-Cited Violation. We are providing this letter in response to the two Severity Level IV violations.

Violation #1

10 CFR 30.41(c), 10 CFR 40.51(c), and 10 CFR 70.42(c) require that before transferring material to a specific licensee of the Commission or an Agreement State ..., the licensee transferring the material shall verify that the licensee's license authorizes the receipt of the type, form, and quantity of byproduct material to be transferred.

Contrary to the above, between June 27, 2008 and April 19, 2011 the licensee transferring the material, NIST, did not verify, prior to transferring the material, that the recipient's license authorized the receipt of the type, form, and quantity of material to be transferred. Specifically, NIST made 125 transfers of radioactive NIST Standard Reference Materials (SRMs) in which it did not verify that the recipient's license authorized the receipt of the type, form, and quantity of licensed material to be transferred.

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Corrective Actions - Violation #1:

The following corrective actions were taken:

1. All individuals involved in the radioactive SRM ordering and shipping process were promptly advised of (1) the requirement to verify that the recipient's license authorizes the receipt of the type, form, and quantity of licensed material to be transferred, and (2) the applicable requirements of the NIST SNM-362 license.
2. An interdivisional procedure was developed that formalized and clearly defined the specific requirements of the radioactive SRM shipment process and the roles and responsibilities of the NIST personnel involved in that process. The procedure was finalized on May 18, 2011 and communicated to pertinent NIST personnel. Formal training on the procedure was completed on July 8, 2011.

Violation #2

10 CFR 71.5(a) requires each licensee that transports licensed material outside the site of usage, as specified in the NRC license, or where transport is on public highways, or who delivers licensed material to a carrier for transport, shall comply with the applicable requirements of Department of Transportation (DOT) regulations in 49 CFR parts 107, 171 through 180, and 390 through 397, appropriate to the mode of transportation.

49 CFR 173.421(a)(4) requires, in part, that the outside of the inner packaging, or, if there is no inner packaging, the outside of the packaging itself, bears the marking "Radioactive". 49 CFR 173.422(a) additionally requires, in part, that the outside of each package must be marked with the four digit UN identification number for the material preceded by the letters UN as shown in column (4).

Contrary to the above, between the dates of June 1, 2008 and May 14, 2011, the licensee did not comply with the applicable requirements of the DOT regulations in 49 CFR parts 107, 171 through 180, and 390 through 397 appropriate to the mode of transportation when the licensee delivered licensed material to a carrier for transport. Specifically, the licensee offered to a carrier 24 shipments of licensed material for which the outside of the inner packaging or the outside of the packaging itself did not bear the marking "Radioactive" and the outside of each package was not marked with the four digit UN identification number.

Corrective Actions - Violation #2:

The 24 shipments offered were NIST SRMs (produced from naturally-occurring uranium and thorium) that were incorrectly designated as non-radioactive in the NIST SRM catalog and not considered subject to DOT regulations. Corrective actions were promptly initiated to ensure that the remaining units of these SRMs in the NIST inventory were designated and treated as radioactive SRMs subject to the requirements of the interdivisional procedure for radioactive SRM shipments referenced in Corrective Action #2 under Violation #1 above. The catalog

entries for these SRMs were also revised to indicate that the SRMs are radioactive material. These corrective actions were completed on September 15, 2011.

If you have any questions or require additional information, please contact me at 301-975-4502 or at richard.kayser@nist.gov.

Sincerely,



Richard Kayser
Chief Safety Officer

cc: William Dean, Regional Administrator, Region 1
Thomas O'Brien, Chief Radiation Safety Division, NIST