



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

October 11, 2016

Mr. Ahmad M. Al-Daouk, Director
Office of Packaging and Transportation
U.S. Department of Energy
National Nuclear Security Administration
P.O. Box 5400
Albuquerque, NM 87185

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR REVIEW OF THE
CERTIFICATE OF COMPLIANCE NO. 9355, REVISION 1, FOR THE MODEL
NO. 435-B PACKAGING (CAC NO. L25126)

Dear Mr. Al-Daouk:

By application dated June 9, 2016 (Agencywide Document Access and Management System (ADAMS) Accession No. ML16250A245), as supplemented on August 25, 2016 (ADAMS Accession No. ML16246A189), the U.S. Department of Energy, National Nuclear Security Administration (NNSA or the applicant), requested a revision to the Certificate of Compliance (CoC) for the Model No. 435-B packaging. In summary, the applicant proposes the following revisions to the design of the Model No. 435-B:

- 1) Change the called for tempers for aluminum alloy 6061,
- 2) Change the licensing drawings with respect to welds and weld symbols,
- 3) Apply corrections to facilitate manufacturing and operations of the package,
- 4) Expand the description of the material of construction to align with the American Society for Testing and Materials specifications,
- 5) Delete Polonium-210 daughter content and
- 6) Delete Radon-226 from the list of authorized contents.

In connection with our review, we need the information identified in the enclosure to this letter. To assist us in scheduling staff review of your response, we request that you provide this information by November 14, 2016. Inform us at your earliest convenience, but no later than October 28, 2016, if you are not able to provide the information by that date. If you are unable to provide a response by November 14, 2016, our review may be delayed.

A. Al-Daouk

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Please reference Docket No. 71-9355 and CAC No. L25126 in future correspondence related to this request. The staff is available to meet to discuss your proposed responses. If you have any questions regarding this matter, you can contact me at (301) 415-6999.

Sincerely,

/RA/

Norma Garcia Santos, Project Manager
Spent Fuel Licensing Branch
Division of Spent Fuel Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 71-9355
CAC No. L25126

Enclosure:
Request for Additional Information

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Enclosure:
Request for Additional Information

Distribution: SFST r/f

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ADAMS No.: ML16286A053

OFC	DSFM	DSFM	DSFM	DSFM
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DATE	10/7/2016	10/7/2016	10/7/2016	10/7/2016
OFC	DSFM	DSFM	DSFM	DSFM
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DATE	10/7/2016	10/11/2016	10/11/16	

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**Request for Additional Information
U.S. Department of Energy
National Nuclear Security Administration
Docket No. 71-9355
Certificate of Compliance No. 71-9355
Revision 1
Model No. 435-B**

By application dated June 9, 2016 (Agencywide Document Access and Management System(ADAMS) Accession No. ML16250A245), as supplemented on August 25, 2016 (ADAMS Accession No. ML16246A189), the U.S. Department of Energy, National Nuclear Security Administration (NNSA or the applicant), requested a revision to the Certificate of Compliance (CoC) for the Model No. 435-B packaging.

This request for additional information (RAI) identifies information needed by the U.S. Nuclear Regulatory Commission staff (the staff) in connection with its review of the application. NUREG-1609, "Standard Review Plan for Transportation Packages for Radioactive Material," was used by the staff in its review of the application.

This RAI describes information needed by the staff for it to complete its review of the application and to determine whether the applicant has demonstrated compliance with the regulatory requirements of 10 CFR Part 71.

STRUCTURAL AND MATERIALS EVALUATION

1. Provide the material properties and specifications for the ASTM B209, 6061-T6, aluminum used for applications or components requiring a thickness greater than ¼-inch and up to 1¼-inch. Provide at least the following information as part of the response:
 - a) minimum yield strength,
 - b) minimum rupture strain, and
 - c) minimum tensile strength.

Include this information on the engineering drawings and in the safety analysis report (the application). As part of your response, provide the information source(s) to support your response.

The applicant notes on page 1.2-4 of the application that ASTM B209, 6061-T6, will be used for ½-inch thick applications. However, tabulated mechanical properties in ASTM B209, 6061-T6, are not listed for material exceeding ¼-inch.

This information is needed to determine compliance with 10 CFR 71.33(a)(5).

Enclosure