



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

February 6, 2015

Ms. Lori Podolak
Regulatory Affairs Department
QSA Global, Inc.
40 North Avenue
Burlington, MA 01803

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR REVIEW OF MODEL NO.
SENTRY

Dear Ms. Podolak:

By letter dated October 22, 2014, QSA Global Inc., submitted an amendment request to the U.S. Nuclear Regulatory Commission for Certificate of Compliance No. 9357 for the Model No. SENTRY transportation package.

In connection with the staff's review, we need the information identified in the enclosure to this letter. We request that you provide this information by March 9, 2015. Inform us at your earliest convenience, but no later than February 23, 2015, if you are not able to provide the information by that date. To assist us in re-scheduling your review, you should include a new proposed submittal date and the reasons for the delay. Discussion of the Request for Additional Information and its response date occurred on January 16, 2015.

Please reference Docket No. 71-9357 and TAC No. L24960 in future correspondence related to this request. The staff is available to clarify these questions, and if necessary to meet and discuss your proposed responses. If you have any questions regarding this matter, please contact me at 301-287-0810.

Sincerely,

/RA/

Bernard H. White IV, Senior Project Manager
Spent Fuel Licensing Branch
Division of Spent Fuel Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 71-9357
TAC No. L24960

Enclosure: Request for Additional Information

Ms. Lori Podolak
Regulatory Affairs Department
QSA Global, Inc.
40 North Avenue
Burlington, MA 01803

February 6, 2015

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR REVIEW OF MODEL NO. SENTRY

Dear Ms. Podolak:

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Enclosure: Request for Additional Information

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ADAMS Package No.: **Ltr-SER:** **CoC:**

OFC	SFM	E	SFM	SFM	SFM	SFM	SFM
NAME	BLee		BWhite		MdeBose (via e-mail)	ARigato	ASotomayor
DATE	01/27/15		02/02/15		01/28/15	01/28/15	01/28/15
OFC	SFM	E	SFM	SFM	SFM	SFM	SFM
NAME	DTarantino		CAraguas (via e-mail)		MRahimi (via e-mail)	ACsontos	MSampson
DATE	01/28/15		01/30/15		01/29/15	02/02/15	02/06/15

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Request for Additional Information
QSA Global, Inc.
Docket No. 71-9357
Certificate of Compliance No. 9357
Model No. SENTRY Package

By application dated October 22, 2014, QSA Global, Inc., requested approval of an amendment for Certificate of Compliance No. 9357 for the Model No. SENTRY. This request for additional information identifies information needed by the U.S. Nuclear Regulatory Commission (NRC) staff in connection with its review of the application. The requested information is listed by chapter number and title in the applicant's safety analysis report. NUREG-1609, "Standard Review Plan for Transportation Packages for Radioactive Materials," was used by the staff in its review of the application.

Each question describes information needed by the NRC staff for it to complete its review of the application and to determine whether the applicant has demonstrated compliance with regulatory requirements.

Section 2. Structural Evaluation

1. Provide calculations supporting the use of ½ -13 tapped threaded holes instead of Rivnuts.

The technical basis of the use of ½ -13 tapped threaded holes was not included in the application.

This information is needed to determine compliance with 10 CFR 71.45.

2. Revise and/or verify that the following inconsistencies on Drawing No. R86000, Revision J, sheet No. 6 of 10, has not occurred on all sheets, or provide supporting calculations and/or clarification for those undocumented changes.

On Drawing No. R86000, Revision J, sheet No. 6 of 10, the objects illustrated appears to have changed relative to those submitted in the previous revision. Specifically, the relative proportions/dimensions of the rear plate appear to have "moved" closer to the dust cover (Sections A6-A6 & B6-B6) while the dust cover itself appears to have changed thickness (among other inconsistencies). Since most object views in the drawing package are related, it is necessary to revise and or verify that these inconsistencies have not occurred on all sheets, or provide supporting calculations and/or clarification for these undocumented changes.

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

3. Provide material description (e.g., specification, chemistry, mechanical properties, etc.) for tape and strap.
 - a) Describe how tape/strap is used to secure the depleted uranium (DU) during addition of foam.
 - b) Discuss potential corrosion/chemical interactions between tape/strap and other materials of construction.

c) Discuss use of referenced drawing notes.

Drawing No. R86000, Revision J, sheet No. 9 of 10, note 6, states that supplemental DU shielding attached to shield by tape or strap and then potted in place with polyurethane fill. The tape and strap are not identified in the bill of materials or is the note 6 referenced/shown on a corresponding drawing detail.

This information is needed to ensure compliance with 10 CFR 71.33(a)(5)(iii), 71.39.

Section 5. Shielding Evaluation

4. Clarify note 6 on Drawing No. R8600, Revision J, sheet No. 9 of 10.

Drawing No. R8600, Revision J, sheet No. 9 of 10, note 6, states that supplemental DU shielding attached to shield by tape or strap and then potted in place with polyurethane fill on shields with initial radiation measurements under 500 mR/hr at the surface and/or 20 mR/hr at 1 meter from the surface. The statement is not clear.

It is necessary to clarify the note to indicate that after fabrication of the primary shielding, if the measured doses exceed the regulatory limits, supplemental shielding will be added to lower the dose rates to ensure compliances with 10 CFR Part 71 limits. In addition, it is necessary to include specifications of the supplemental shielding (i.e., thickness, material type, etc.) to the note and a drawing of the supplemental shielding to the licensing drawings.

This information is needed to determine compliance with 10 CFR 71.51(a)(1).

5. Specify which of the SENTRY Model No. (110, 330, 867) is the one that the applicant is proposing to add the supplemental depleted uranium shield.

In this amendment request, supplemental DU shielding is requested by the applicant in form of tape/or strap to shield possible spot where air bubble voids can be found in some original shield. In the conference call on January 16, 2015, the applicant mentioned that the addition of the DU tape is only for the SENTRY Model No. 867. However, note 6 on Drawing No. R8600, Revision J, sheet No. 9 of 10, does not specify which model is getting the supplemental shielding.

This information is needed to determine compliance with 10 CFR 71.51(a)(1).