December 23, 2005

Ms. Lori Podolak
Product Licensing Specialist
QSA Global Inc.
40 North Avenue
Burlington, MA 01803

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR REVIEW OF THE MODEL NO. 680-OP TRANSPORT PACKAGE

Dear Ms. Podolak:

By letter dated August 29, 2005, and supplemented by letter dated October 25, 2005, AEA Technology QSA Inc., submitted a request for the U.S. Nuclear Regulatory Commission to amend Certificate of Compliance (CoC) No. 9035.

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 February 1, 2006. Inform us at your earliest convenience, but no later than January 17, 2006, 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.

Please reference Docket No. 71-9035 and TAC Nos. L23921 and L23897 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, I may be contacted at (301) 415-8531.

Sincerely,

/RA/

Stewart W. Brown, Senior Project Manager
Licensing Section
Spent Fuel Project Office
Office of Nuclear Material Safety
and Safeguards

Docket No. 71-9035
TAC Nos. L23921 and L23897

Enclosure: Request for Additional Information

Ms. Lori Podolak
Product Licensing Specialist
QSA Global Inc.
40 North Avenue
Burlington, MA 01803

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR REVIEW OF THE MODEL NO. 680-OP TRANSPORT PACKAGE

Dear Ms. Podolak:

By letter dated August 29, 2005, and supplemented by letter dated October 25, 2005, AEA Technology QSA Inc., submitted a request for the U.S. Nuclear Regulatory Commission to amend Certificate of Compliance (CoC) No. 9035.

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 February 1, 2006. Inform us at your earliest convenience, but no later than January 17, 2006, 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.

Please reference Docket No. 71-9035 and TAC Nos. L23921 and L23897 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, I may be contacted at (301) 415-8531.

Sincerely,
/RA/
Stewart W. Brown, Senior Project Manager
Licensing Section
Spent Fuel Project Office
Office of Nuclear Material Safety
and Safeguards

Docket No. 71-9035
TAC Nos. L23921 and L23897

Enclosure: Request for Additional Information

DISTRIBUTION:
PUBLIC S. Baggett L. Campbell N. Osgood S. Williams J. Cuadrado J. Caverly M. Rahimi J. Umana
E:\Filenet\ML053610025.wpd

OFC	SFPO	E	SFPO	c	SFPO	E	SFPO		SFPO	
NAME	SBrown		MDeBose		HLee		GBjorkman GPH for		RNelson	
DATE	12/22/05		12/23/05		12/22/05		12/23/05		12/23/05	

C = COVER E = COVER & ENCLOSURE N = NO COPY OFFICIAL RECORD COPY

Request for Additional Information
QSA Global Inc.
Docket No. 71-9035
Certificate of Compliance No. 9035
Model No. 680-OP Transport Package

By letter dated August 29, 2005, and supplemented by letter dated October 25, 2005, AEA Technology QSA Inc., submitted a request for the U.S. Nuclear Regulatory Commission (NRC) to amend Certificate of Compliance No. 9035. This request for additional information (RAI) identifies information needed by the NRC staff in connection with its review of the requested amendment. The requested information is listed by chapter number and title in the applicant's safety analysis report (SAR).

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

Chapter 2 Structural

2-1 Provide more descriptive information of the materials or the material specification for the polyurethane foam, steel, and wood used to construct the Model No. 680-OP Transport Package.

The Model No. 680-OP Transport Package is qualified by extensive testing of prototypical or similar packages. Since the performance of the package depends upon the material properties of the various components, it is important to have substantially similar materials of construction of the production unit and the test article. The application has used density or package weight as the single control of the material. This is an insufficient control to ensure similar material properties. For example, two different types or grades of steel may have very different properties even if the densities are the same. The application should provide more specific information to ensure the production units will have the same capability as those of the test units.

The information is required by the staff to assess compliance with 10 CFR §71.33(a)(5).

2-2 Specify the weight of the steel transport box without the 680-OP projector on Drawing R680-OP.

Based on test reports, the steel transport box has been modified to enhance survivability during the 9 meter drop onto the lid front edge. The modified steel box weighs up to 155 lbs. Drawing R680-OP, Note 6, specifies that maximum package weight is 625 lbs. Since there is no minimum packaging weight specified, there is the possibility of that the steel box weight can be much less than 155 lbs. A substandard steel transport box may have adverse effects on package performance.

This information is required by the staff to assess compliance with 10 CFR §71.73.

2-3 Either revise SAR Section 2.1.4.2 back to the previous wording or provide additional justification, including supporting test results and/or analyses to support the conclusions that welding on either the shell or the cleats of the inner 680 projector are considered not safety critical.

It is the staff's understanding based on the information provided that the welds on both the shell and the cleats of the inner 680 projector are important to safety. The basis for the staff's understanding is that these welds are necessary to keep both the shielding assembly and the source in their designed locations.

This information is required by the staff to assess continued compliance with 10 CFR 71.47.

2-4 Revise Drawing Nos. R68090 and R680-OP to include a note that all welding important to safety must adhere to AWS (or equivalent) standards appropriate to the material and design.

It is the staff's position that if a weld is important to safety, then the welding and welding procedures should be in accordance with an acceptable industry standard.

This information is required by the staff to assess continued compliance with 10 CFR 71.43.

2-5 Either revise Drawing No. R680-OP to clearly indicate placement of a wood bottom support for the packaging, or provide analysis showing the steel box bottom plate with a thickness of 0.06 inches (1.5 millimeters) is adequate to support the 680 projector during lifting operations.

The lifting analysis provided in Section 2.4.1, "Lifting Devices," is based on a box section of the steel box dimensioned between the two feet. However, the weight of the 680 projector is bearing on the bottom plate of the box. Thus, the application must first show that the 0.06 inches thick steel bottom plate is capable of supporting the weight of the 680 projector before the weight of the projector can be transmitted to the box section.

This information is required by the staff to assess compliance with 10 CFR 71.45(a).