

QSA GLOBAL

29 August 2022

Ms. Yoira K. Diaz-Sanabria, Chief
Storage and Transportation Licensing Branch
Division of Fuel Management
U.S. Nuclear Regulatory Commission
Office of Nuclear Material Safety and Safeguards
11555 Rockville Pike
One White Flint
Rockville, MD 20852

71-9371

RE: Renewal Request for CoC number USA/9371/B(U)-96 Revision 3 (Model 360 Series)

Dear Ms. Diaz-Sanabria:

QSA Global, Inc. requests renewal of the certificate referenced above for the Model 360 Series Type B(U) container. The current certificate expires on August 31, 2023. This application includes minor changes/updates to the package approvals as described and assessed in the summary change tables included with this letter. The majority of changes to the Safety Analysis Report (SAR) are associated with minor formatting, editorial or clarification revisions with no significant impact on the package performance or continued Type B transport compliance.

Enclosed is Revision 6 of the SAR. Also enclosed are SAR and drawing change tables that identify specific changes and their impact on package compliance. Please see the attached CD for copies of all application enclosures. A hard copy of the full application is being submitted separately to the Document Control Desk.

Should you have any additional questions, or wish to discuss the renewal request, please feel free to contact me.

Sincerely,

E-SIGNED by Mary Flanigan
on 2022-08-29 14:46:43 GMT

Mary Flanigan
Regulatory Affairs Associate
Ph: (781) 505-8266
Email: mary.flanigan@qsa-global.com

E-SIGNED by Lori Podolak
on 2022-08-30 11:36:01 GMT

RA/QA Approval

August 30, 2022

Date

E-SIGNED by Paul Benson
on 2022-08-29 14:51:55 GMT

Engineering Approval

August 29, 2022

Date

Enclosures on CD:

- Attachment 1: Affidavit Pursuant to 10 CFR §2.390
- Attachment 2: Proprietary Documents
- Attachment 3: Non-Proprietary documents

NMSSD1
NMSS

cc: ATTN: Document Control Desk
Director, Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
One White Flint
Rockville, MD 20852

Mr. Bernard White
Senior Project Manager
Division of Fuel Management
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
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Attachment 1: Affidavit Pursuant to 10 CFR §2.390

AFFIDAVIT Pursuant to 10 CFR §2.390

I, Lori Podolak, Senior RA/QA Specialist of QSA Global, Inc. hereby affirm and state:

1. I have been specifically delegated the function of reviewing the information sought to be withheld and am authorized to apply for its withholding on behalf of QSA Global, Inc.
2. QSA Global, Inc. is providing NRC with a detailed drawing (R36000 Rev H) and technical details, specifications and product related information as parts of the SAR Revision 6 for the Model 360 Series transport packages. These documents contain proprietary commercial information.
3. The information sought to be withheld pursuant to the provisions of 10 CFR §2.390(a)(4) are marked as follows in Attachment 2 of our application letter "Proprietary information submitted under 10 CFR §2.390 to be withheld from public disclosure".
4. These documents should be held in confidence by the NRC per 10 CFR §2.390(a)(4) based on the following justifications:
 - a. This information is owned and been held in confidence by QSA Global, Inc.
 - b. This information is of a type that QSA Global, Inc. has determined should be held in confidence since its release for public disclosure could result in a loss of an existing or potential competitive advantage as follows:
 - i. The information reveals the distinguishing aspects of the design and the prevention of its use by QSA Global, Inc. competitors gives QSA Global, Inc. a competitive economic advantage.
 - ii. The information, if used by a competitor, is likely to reduce the competitor's expenditure of resources or improve their advantage in design, quality, and manufacture of a similar product.
 - c. This information is being transmitted to the NRC voluntarily and in confidence for use in evaluation and approval of these package designs for Type B(U) transport certification.
 - d. This information is not available in public sources.
 - e. Public disclosure of this information is likely to cause substantial harm to the competitive position of QSA Global, Inc. because of the reasons outlined below:
 - i. Similar products are manufactured and sold by competitors of QSA Global, Inc.
 - ii. The development of this information by QSA Global, Inc., including test/evaluation documentation supporting these package designs, is the result of significant expenditure of staff effort and a considerable amount of money. It is our belief that a competitor would have to undertake similar effort and expense to generate equivalent information.

- iii. In order to generate such information, a competitor would also require considerable time (e.g., in excess of 1 year).
 - iv. If a competitor used this information and did not have to undertake the work required to generate this information, they are likely to have lower overall costs and so are likely to have an unfair economic advantage over QSA Global, Inc. in offering a similar product to the market.
5. QSA Global has spent considerable commercial and technical resources to design and build this innovative family of source changers that is unique in its ability to store and transport a wide range of industrial radiography sources that are used worldwide. Access to the technical information for this unique design would give a competitor an unfair advantage in expanding their domestic and international market without having to perform their own research and development of the market needs and the ideal configuration of the transport package to meet a wide variety of customer needs. Accordingly, QSA Global, Inc. requests that the designated information be withheld from public disclosure pursuant to 10 CFR §2.390.

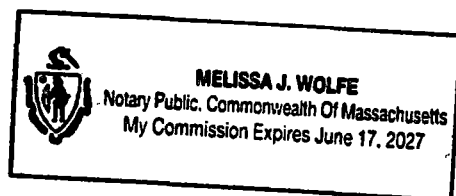
Executed on 8/29/2022

Lori Podolak
Lori Podolak, Senior RA/QA Specialist

Subscribed and sworn to (or affirmed) before me on this 29 day of August 2022, 2022 by Lori Podolak, proved to me on the basis of satisfactory evidence to be the person who appeared before me.

Signature Melissa J. Wolfe Seal

My Commission Expires 17 day of June, 2027.



Revision 6 to the 360 Series SAR updates reference revision information based on document changes and makes other minor editorial or clarification revisions with no significant impact on the package performance or continued compliance for Type B transport. These changes are listed under the SAR Section in Revision 6 where the change occurs.

Section Location	Summary Change	Change Reported Pursuant to 71.95	Impact of Change on Units Previously or Currently in Use under the Certificate	Action Taken By QSA Regarding Affected Units
Various	Revised section headers to reflect new QSA Global branding formatting. Due to the volume of formatting changes, these changes are not denoted by color and change bars in the text of SAR.	No	None. Administrative change only.	None. Not applicable.
Various	References to units revised to list both imperial and SI units.	No	None. Change made to consistently reflect both imperial and SI units throughout the SAR.	None. Not applicable.
Various	References to temperatures revised to reflect Celsius and Fahrenheit equivalent values.	No	None. Change made to consistently reflect both temperature scales throughout the SAR.	None. Not applicable.
Various	References to "mR/hr" units replaced with "mrem/hr" and "R/hr" with "rem/hr" when referencing compliance to regulation limits.	No	None. Change made to reflect applicable units from the regulations. Changes made where applicable throughout the SAR.	None. Not applicable.
Various	Updated SAR throughout to correct grammatical errors and typos.	No.	None. Change made for accuracy.	None. Not applicable.
Contents, List of Table & List of Figures	Updated page numbers. Due to volume of changes in page numbers, these changes are not denoted by color and change bars in the text of SAR.	No	None. Accuracy to reflect changes in page numbers throughout the SAR.	None. Not applicable.
Contents, 2.12.7-2.12.10, 2.12.13, 2.12.14, 3.6.1 &	Updated titles to reflect revision changes, or to correct issue date references in supplementary certificates and reports.	No	Accuracy to reflect referenced document revision levels and issued dates.	None. Not applicable.

Section Location	Summary Change	Change Reported Pursuant to 71.95	Impact of Change on Units Previously or Currently in Use under the Certificate	Action Taken By QSA Regarding Affected Units
3.6.2				
1.2	Revised phrasing of sentence in the first paragraph, fourth sentence.	No	None. Change made for clarity.	None. Not applicable.
1.2	Revised the third paragraph, third sentence to add the words 'maximum' before 'length' and 'optional' before 'protruding handling grips'.	No	Change made for clarity and to reflect the handling grips are optional as noted on drawings in Appendix 1.3.	None. Not applicable.
Table 1.2a & Table 7.1a	Added note 5.	No	None. Change made to specify how to calculate the source capacity in equivalent SI units of TBq.	None. Not applicable.
1.2.1.1	Added option of carbon steel material for lifting provision.	No	None. Change made to allow for option to use carbon steel on future lifting provisions.	None. Changes specified on drawings will not be implemented until accepted under the CoC.
Figure 1.2d	Added '(optional)' under the call out for two grip brackets.	No	None. Change made for clarity that the grip brackets are optional.	None. Not applicable.
Figure 1.2l	Added '(optional)' under the call out for the cable assembly.	No	None. Change made for clarity that the cable assembly is optional.	None. Not applicable.
Table 2.2a	Clarified that the condition for stainless steel alloy group 1, 2 or 3 fasteners is CW1 under ASTM F593.	No	None. Change made for clarification and accuracy based on values listed in the table.	None. Not applicable.
2.6.2	Specified 49 CFR as the applicable regulations.	No	None. Change made to clarify where requirements derive from.	None. Not applicable.
2.6.3	Further specified regulations and removed incorrect reference to 3.6 psi.	No	Change made to clarify where requirements derive from, and to list the current pressure requirement values. No change in	None. Not applicable.

Section Location	Summary Change	Change Reported Pursuant to 71.95	Impact of Change on Units Previously or Currently in Use under the Certificate	Action Taken By QSA Regarding Affected Units
			pressure conformance.	
2.6.5	Removed 'hex head' screw description from the first paragraph, first sentence.	No	None. Change to allow more flexibility in screw head type. Change does not impact package's performance. The hex head configuration of the screw is not important to its performance on the package, so long as the screw head meets all other requirements on drawing R36000 in Appendix 3.	None. Not applicable.
Figure 2.6i	Added '(optional)' under the call out for the tungsten shield.	No	None. Change made for clarity that the tungsten shield design is optional per drawing R36000 in Appendix 3.	None. Not applicable.
2.6.10	Added reference to the 2009 edition of IAEA TS-R-1 regulation.	No	None. Change made to clarify that the 360 Series also conforms to the 2009 edition of IAEA TS-R-1.	None. Not applicable.
2.7.3.4	Corrected reference from 10 CFR 71.73(c)(2) to 10 CFR 71.73(c)(3).	No	None. Change made for accuracy. No change in puncture test conformance.	None. Not applicable.
Table 3.1a	Changed 343°F to 168°F in first row of table.	No	None. Change made to correct error in conversion of 75.3°C to °F.	None. Not applicable.
3.3.1	Added referral to Section 3.6.	No	None. Change made for accuracy.	None. Not applicable.
3.4.1.1	Revised 'Appendix 3.6.2' to 'Appendix 3.6' under the first paragraph, first sentence.	No	None. Change made for simplicity.	None. Not applicable.
3.4.1.2	Revised 'Appendix 3.6.1' to 'Appendix 3.6' under the first paragraph, first sentence.	No	None. Change made for simplicity.	None. Not applicable.
3.4.1.3	Replaced the word 'minus' with the symbol '-' before 40°C.	No	None. Change made for consistency with how temperatures are specified throughout the SAR.	None. Not applicable.
3.5.1	Replaced the word 'meter' with the abbreviated unit symbol 'm'.	No	None. Change made for consistency with how length measurements are specified throughout the SAR.	None. Not applicable.

Section Location	Summary Change	Change Reported Pursuant to 71.95	Impact of Change on Units Previously or Currently in Use under the Certificate	Action Taken By QSA Regarding Affected Units
4.4 & 8.1.4	Updated references from the 1992 edition of ISO 9978 to the 2020 edition.	No	Change made to reflect current operations. Requirements in both the 1992 and the 2020 editions of ISO 9978 related to performance and analysis of source capsule leak testing are identical. Therefore, there is no adverse impact of referencing the current revision of this standard.	None. Not applicable.
5.1.2	Corrected reference from 'Section 5.5.1.2' to 'Section 5.5.2' within the second sentence. Corrected reference from 'Section 5.5.1.1' to 'Section 5.5.1'.	No	None. Changes made for accuracy.	None. Not applicable.
Table 5.1e & Table 5.1f	Corrected total package surface radiation levels for the top, side and bottom surfaces.	No	None. Change made for accuracy. No changes in surface radiation level conformance.	None. Not applicable.
Table 5.1f	Corrected the total vehicle surface radiation levels for the top, side and bottom surfaces.	No	None. Change made for accuracy. No changes in surface radiation level conformance.	None. Not applicable.
Table 5.1t	Corrected conversion value of 0.05 mrem/h to 5E-4 mSv/hr (previously 5E-5 mSv/hr) for the top surface radiation level.	No.	None. Change made for accuracy. No changes in surface radiation level conformance.	None. Not applicable.
5.3.1	Revised the first table under this section to list values in mrem/hr instead of mR/hr and added table footnote for mR/hr to mrem/hr equivalency.	No	None. Change to mrem/hr made for demonstration of compliance to regulatory limits. Footnote indicating equivalency between mR/hr and mrem/hr as one to one applies conservative conversion factor for table values.	None. Not applicable.
7.1.3.4	Replaced the word 'procedure' with 'requirements'.	No	None. Change made for accuracy.	None. Not applicable.
7.2.1.2.c. &	Included reference to international	No	None. Change in accuracy as these packages may ship	None. Not applicable.

Section Location	Summary Change	Change Reported Pursuant to 71.95	Impact of Change on Units Previously or Currently in Use under the Certificate	Action Taken By QSA Regarding Affected Units
8.1.1.4	regulatory requirements.		internationally.	
7.2.1.2.e.	Updated the word 'source' to 'source(s)'.	No	None. Change made for accuracy and clarification as more than one source may ship in these packages.	None. Not applicable.
7.4.2 & 7.5.1	Updated references to the Emergency Response Guidebook from 2014 to 2020 edition.	No	Updated for accuracy to current guidebook revision and title.	None. Not applicable.