

CBP0011

NRC FORM 7 (5-2003) 10 CFR 119		U.S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB: NO. 3150-0027		EXPIRES: 05/31/2008	
APPLICATION FOR LICENSE TO EXPORT NUCLEAR MATERIAL AND EQUIPMENT				Estimated burden per response to comply with this mandatory collection request: 2.4 hours. This submittal is reviewed to ensure that the applicable statutory, regulatory, and policy considerations are satisfied. Send comments regarding burden estimate to the Records Management Branch (T-6 EB), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet e-mail to <a href="mailto:infocollect@nrc.gov">infocollect@nrc.gov</a> , and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0027), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.			
<i>(See Instructions on Reverse)</i>							
1. APPLICANT'S USE		a. DATE OF APPLICATION 27 May 2005		b. APPLICANT'S REFERENCE		2. NRC USE	
3. APPLICANT'S NAME AND ADDRESS				4. SUPPLIER'S NAME AND ADDRESS <i>(Complete if applicant is not supplier)</i>			
a. NAME AEA Technology QSA, Inc				a. NAME			
b. STREET ADDRESS <i>(Facility Site)</i> 40 North Avenue				b. STREET ADDRESS			
c. CITY Burlington		d. STATE MA	e. ZIP CODE 01803	b. STREET ADDRESS			
f. TELEPHONE NUMBER (781) 505-8210		g. FAX (781) 359-9191		h. E-MAIL		c. CITY	
d. STATE MA		e. ZIP CODE 01803		d. STATE		e. ZIP CODE	
5. FIRST SHIPMENT SCHEDULED 01/01/2006		6. FINAL SHIPMENT SCHEDULED 01/01/2026		7. APPLICANT'S CONTRACTUAL DELIVERY DATE		8. PROPOSED LICENSE EXPIRATION DATE 01/01/2026	
9. CONTRACT NO.							
10. ULTIMATE FOREIGN CONSIGNEE				11. ULTIMATE END USE <i>(Include plant or facility name)</i>			
a. NAME see country list				Sources for use in Industrial Radiography or Oil Well logging at permanent and temporary job sites as indicated on the user's license.			
b. STREET ADDRESS <i>(Facility Site)</i>				11a. DATE REQUIRED			
c. CITY		d. COUNTRY		12. INTERMEDIATE FOREIGN CONSIGNEE			
12. INTERMEDIATE FOREIGN CONSIGNEE				13. INTERMEDIATE END USE			
a. NAME NA				NA			
b. STREET ADDRESS <i>(Facility Site)</i>				13a. DATE REQUIRED			
c. CITY		d. COUNTRY		14. INTERMEDIATE FOREIGN CONSIGNEE			
14. INTERMEDIATE FOREIGN CONSIGNEE				15. INTERMEDIATE END USE			
a. NAME NA				NA			
b. STREET ADDRESS <i>(Facility Site)</i>				15a. DATE REQUIRED			
c. CITY		d. COUNTRY		16. INTERMEDIATE FOREIGN CONSIGNEE			
16. INTERMEDIATE FOREIGN CONSIGNEE				17. INTERMEDIATE END USE			
a. NAME NA				NA			
b. STREET ADDRESS <i>(Facility Site)</i>				17a. DATE REQUIRED			
c. CITY		d. COUNTRY		18. COM CODE			
17. DESCRIPTION <i>(Include chemical and physical form of nuclear material; give dollar value of nuclear equipment and components)</i>				18. MAX. ELEMENT WEIGHT		19. MAX. WT. %	
Sealed sources of Ir-192, Se-75, Co-60 and AmBe shipped in Type A or Type B shipping packages.				NA		NA	
				20. MAX. ISOTOPE WEIGHT		21. UNIT	
22. FOREIGN OBLIGATIONS BY COUNTRY AND PERCENTAGE <i>(Use separate sheet if necessary)</i>							
NA							
23. ADDITIONAL INFORMATION ON CONSIGNEES, END USES, AND PRODUCT DESCRIPTION <i>(Use separate sheet if necessary)</i>							
Sources used in Industrial radiography and oil well logging, approved as special form under US DoT.							
24. The applicant certifies that this application is prepared in conformity with Title 10, Code of Federal Regulations; and that all information in this application is correct to the best of his/her knowledge.							
25. AUTHORIZED OFFICIAL		a. SIGNATURE <i>William R. ...</i>			b. TITLE Director, Regulatory Affairs and Quality Assurance		

RECEIVED OIP

2005 NOV 21 PM 2:49

CBP0012

NRC FORM 7 (5-2003) 10 CFR 110	U.S. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB: NO. 3150-0027	EXPIRES: 05/12/06
APPLICATION FOR LICENSE TO EXPORT NUCLEAR MATERIAL AND EQUIPMENT		Estimated burden per response to comply with this mandatory collection request 24 hours. This submittal is reviewed to ensure that the applicable statutory, regulatory, and policy considerations are satisfied. Send comments regarding burden estimate to the Records Management Branch (T-8 E8), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet e-mail to <a href="mailto:infocollcts@nrc.gov">infocollcts@nrc.gov</a> , and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0027), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.	
(See Instructions on Reverse)			

1. APPLICANT'S USE	a. DATE OF APPLICATION 5/27/05	b. APPLICANT'S REFERENCE	2. NRC USE	DOC#	LIC#
--------------------	-----------------------------------	--------------------------	------------	------	------

3. APPLICANT'S NAME AND ADDRESS			4. SUPPLIER'S NAME AND ADDRESS (Complete if applicant is not supplier)		
a. NAME AEA Technology QSA, Inc			a. NAME see attachment 1		
b. STREET ADDRESS (Facility Site) 40 North Avenue			b. STREET ADDRESS		
c. CITY Burlington	d. STATE MA	e. ZIP CODE 01803	b. STREET ADDRESS		
f. TELEPHONE NUMBER (781) 505-8210	g. FAX (781) 359-9191	h. E-MAIL	c. CITY	d. STATE	e. ZIP CODE

5. FIRST SHIPMENT SCHEDULED 01/01/2006	6. FINAL SHIPMENT SCHEDULED 01/01/2026	7. APPLICANT'S CONTRACTUAL DELIVERY DATE	8. PROPOSED LICENSE EXPIRATION DATE 01/01/2026	9. CONTRACT NO.
---	---	--	---	-----------------

10. ULTIMATE FOREIGN CONSIGNEE		11. ULTIMATE END USE (include plant or facility name)	
a. NAME see attachment 1		Bulk radiolotopes delivered to AEA Technology QSA, Inc for incorporation into sealed sources for distribution.	
b. STREET ADDRESS (Facility Site)		11a. DATE REQUIRED	
c. CITY	d. COUNTRY	2005 NOV 21 PM 2:40	

12. INTERMEDIATE FOREIGN CONSIGNEE		13. INTERMEDIATE END USE	
a. NAME NA		13a. DATE REQUIRED	
b. STREET ADDRESS (Facility Site)			
c. CITY	d. COUNTRY		

14. INTERMEDIATE FOREIGN CONSIGNEE		15. INTERMEDIATE END USE	
a. NAME NA		15a. DATE REQUIRED	
b. STREET ADDRESS (Facility Site)			
c. CITY	d. COUNTRY		

16. COM CODE	17. DESCRIPTION (include chemical and physical form of nuclear material; give dollar value of nuclear equipment and components)	18. MAX. ELEMENT WEIGHT	19. MAX. WT. %	20. MAX. ISOTOPE WEIGHT	21. UNT
	Bulk radiolotopes for delivery to AEA Technology QSA Inc for incorporation into smaller activity sealed sources for distribution for use in industrial radiography, calibration and oil well logging.				

22. FOREIGN OBLIGATIONS BY COUNTRY AND PERCENTAGE (Use separate sheet if necessary)  
NA

23. ADDITIONAL INFORMATION ON CONSIGNEES, END USES, AND PRODUCT DESCRIPTION (Use separate sheet if necessary)

24. The applicant certifies that this application is prepared in conformity with Title 10, Code of Federal Regulations; and that all information in this application is correct to the best of his/her knowledge.

25. AUTHORIZED OFFICIAL	a. SIGNATURE <i>Carsten Romberg</i>	b. TITLE Director, Regulatory Affairs and Quality Assurance
-------------------------	--	--

RECEIVED OIP



AEA Technology  
QSA Inc.  
40 North Avenue  
Burlington, MA 01803  
Telephone (781) 272-2000  
Telephone (800) 815-1383  
Facsimile (781) 273-2216

Ms. Margaret M. Doane, Deputy Director  
Mail Stop O4E21  
US Nuclear Regulatory Commission  
11555 Rockville Pike  
One White Flint  
Rockville, MD 20852

24 Oct 2005

Dear Ms Doane:

Enclosed please find an import/export license request for your review. We had submitted an application in Jun 2005 (prior to final rule publication) in order to allow adequate time for issuance and implementation of the license. We have not received any documented feedback on that application. With the publication of the final rule and recently received (5 Oct 05) guidance from your office, we have modified the original license application.

Please note that AEA Technology QSA Inc has recently changed ownership and the new name is QSA Global Inc. There is no change in the organizational structure or safety/regulatory programs of our facility.

I have reviewed the final rule in 10 CFR 110 and the IAEA Guidance on Import and Export of Radioactive Sources and conclude that this application request meets the requirements specified in these documents.

This letter contains the following requests with the applicable justifications:

- 1) Import/Export license request for Category 1 quantities of Ir-192.
- 2) Import/Export license request for Category 2 quantities of Ir-192, Co-60, Se-75 and AmBe.
- 3) Advance notifications methods for Category 1 shipments - Request for Exemption
- 4) Advance notifications methods for Category 2 shipments - Request for Exemption
- 5) Continued shipment of Category 2 sources to countries not listed on the NRC approved list.

### **Import/Export Category 1 Quantity**

For Category 1 sources, we request an import/export license for the bulk Ir-192 material we receive from reactors. We import packages containing in excess of [REDACTED] of Ir-192, approximately 2-3 times a month from the suppliers listed in Attachment 1. Please note that the supplier information is considered proprietary under 10 CFR 2.390.

Although we do not routinely export quantities of Category 1 back to the supplier, we may potentially need to return these quantities to the supplier, therefore we request that the license cover both the import and export of this material.

### **Import/Export Category 2 Quantities**

For Category 2 sources, we request that an export/import license be issued for the shipment of greater than Category 2 quantities of Ir-192, Co-60, Cs-137, Se-75 and AmBe to the countries listed in Attachment 2 (please note this information is considered proprietary under 10 CFR 2.390). The countries are separated by priority into three groups. The first are the countries where we ship more than [REDACTED] a year, the second is countries where we ship approximately [REDACTED] a year and the last grouping, are countries where we ship a few sources a year.

We request that the export license be issued listing out the countries and not the end users, this is consistent with the guidance given in the IAEA document for Category 2 sources in paragraph 25 in the IAEA Code of Conduct on the Safety and Security of Radioactive Sources and is allowed under the IAEA guidance document under paragraph 11a.

QSA Global will then use the same method as used for shipment to domestic users in US and Canada. We check each user's license prior to every shipment to assure they are authorized for the source and equipment requested. This is a computerized system and can also be double checked manually as we retain a hard copy of all customer licenses issued by the NRC, Agreement States and Canada.

From reviewing copies of foreign licenses we have received, even though they are in the language of the country of origin, it is normally possible to make out the address, isotope, quantity of material and expiration date if given. We request that it is not necessary to have the licenses translated as the important information is readily understood. We can check validity of license by comparing the name of the Regulatory Authority that issued the license against the IAEA contact list. A draft of the revised license verification procedure is enclosed describing the proposed process, Work Instruction R-3105, see section 4.5.5.

The activity of the sources that we ship are typically [REDACTED] of Ir-192, most are returned at below [REDACTED] as the half life is only 74 days. We currently receive sources back from approximately 12 countries that are above a Category 2 quantity, however if a customer

has a problem with a source they will need to return it to QSA Global expeditiously and can not wait for it to decay to below [REDACTED]. Therefore we request that the import license be combined with the export license and authorize import from any country that we are authorized to export to.

In addition to the radioactive materials license check, we still also have to ensure we meet all the US Customs requirements. This involves checking the Customs website and denied entity list and other sources of information. This ensures another level of security in assuring the recipient is valid and appropriately authorized.

If the NRC can not issue the import/export license by country we request that the listing of our current distributors in Attachment 3 be authorized (please note this information is considered proprietary under 10 CFR 2.390). This is a listing of distributors and includes a couple of larger customers and is not a complete list of all end users, as customers change frequently. Copies of licenses are attached.

Although we primarily ship to distributors, there are many times we have to ship direct to their customers or to a new customer. We will not know of this need until close to time of the shipment, so it is impossible to list all known end users in this current license application. This will necessitate frequent amendment requests to be processed on an expeditious basis by both QSA and the NRC, creating additional administrative burden.

To avoid this burden, we request approval for the following alternative:

As long as the customer is located in a country on the approved list, we will obtain a copy of the license and verify validity. If license is valid, we will ship and provide required notification to NRC and receiving country. The name of customer and copy of license will be sent in to NRC as an administrative update to license, however we do not have to wait to have license formally amended.

This alternative provides adequate safety and security of shipment, as the country is already approved. In addition as long as license is valid, the end user is appropriately authorized. This will save unnecessary work for both QSA and NRC.

### **Advance Notification Category 1 Quantities**

Although not specifically part of the license application process, we would like to propose methods to comply with the advance notification requirements specified in 10 CFR 110. For the imports of material above Category 1, we are currently required to report these shipments to the NRC Operations Center under an NRC issued security order. I would propose that this notification remains in place and it is accepted as meeting the new requirement in 10 CFR 110.

## **Advance Notification Category 2 Quantities**

We request an exemption to 10 CFR 110.50(b)(4) for advance notification of at least 24 hours. We do not typically have the specific details on the source being shipped until the day it is built and subsequently shipped, which is usually the same day. In most cases it will not be possible to give 24 hours advance notice.

For advance notifications on exports of Category 2 sources, we propose notification via an email system to both NRC and the importing country upon shipment of the source. At that point in time we would have the specific details of the shipment, ie model numbers, serial numbers and actual activities along with any tracking information. This would provide much more useful information if an investigation had to be performed, if there were a problem.

We request an exemption to 10 CFR 110.50(b)(i)(H) so that we are not required to forward a copy of the foreign recipient's license to the NRC and receiving country. This is not required under the IAEA guidance and adds an administrative burden on each shipment. It is not clear what value this adds, this practice is not currently done for domestic shipments. All checks of licenses prior to shipment are done in accordance with established procedures under our radioactive materials license and QA program. This process is audited during routine inspections to assure compliance that adequate licenses are on file and proper license review is performed prior to release of radioactive material shipments.

We request an exemption to 10 CFR 110.50(b)(7) for submitting the required advance notification information in accordance with 10 CFR 2.390. This would require a signed affidavit for each transmittal of the information required. This will be a daily occurrence for QSA due to the number of export shipments. This is a huge administrative and financial burden, as each affidavit has to be notarized. If the intent is to keep the information as "Official Use Only", this can be done with appropriate statements on the transmittal. This is consistent with what is currently done on other notifications required under security orders. This is also consistent with the proposed rulemaking for information that is to be entered into the National Source Tracking System. QSA can mark the advance notification information as OOU and meet the current level of security on information.

## **Continued Shipment of Category 2 Sources**

We are very concerned about the potential for disruption of trade after 28 Dec 2005 if some of the countries on our requested export list are not on the NRC approved country list. We have recently been provided guidance (5 Oct 05) from your office on some of the requirements for requesting "exceptional circumstances" licenses if country is not on

approved list. However as there is no list of approved countries at this point in time from NRC we cannot identify those countries which would require an exceptional circumstance license to make our requests.

Once that list is established we would request one license to cover all the current countries that do not appear on the list. We would request that for countries that do not appear on the NRC approved list after 28 Dec 2005, that QSA Global is allowed to continue to ship to distributors and users where there is an established previous business relationship. We have been shipping to these distributors and users for many years without any problems in terms of safety and export control. They have demonstrated the ability to handle the sources safely and have adequate routes for disposal of the sources.

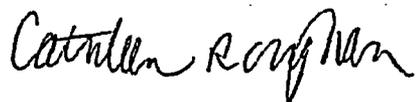
We request that these lists be reviewed as soon as possible and feed back given to AEA on any country that may not be approved by the NRC by end of 2005, so we can try and determine if there are any possible shipping options or breach of contract issues related to in process orders.

#### Summary

I have enclosed a copy of Form 7 and attachments for your review. I appreciate the opportunity to discuss the details of this license application and look forward to resolving any administrative hurdles, so the processing is not an undue burden on the NRC or QSA while still meeting the commitments given in the rule and IAEA guidance.

We request expeditious processing of these requests so we can make some critical operational decisions and start to implement the necessary compliance systems. Once you have had the opportunity to review this information, I would like to discuss your comments and the path forward. Please contact me at 781-505-8210. Thank you for your time.

Sincerely,



Cathleen Roughan  
Director, Regulatory Affairs and Quality Assurance



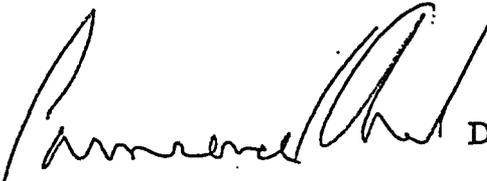
## **AFFIDAVIT OF INFORMATION CONFIDENTIALITY UNDER 10 CFR 2.390**

I hereby certify that the attached information related to suppliers of bulk radioisotopes to QSA Global Inc and the countries that QSA Global, Inc ships product into contains information of a confidential and proprietary nature.

- This information is held confidential by QSA Global, Inc. and is intended for use only by QSA Global, Inc. and its authorized subsidiaries and vendors subsequent to the and distribution of by QSA Global, Inc. Information related to the countries that QSA Global does business with is maintained confidential as this relates directly to QSA Global, Inc's ability to grow and maintain its business interests related to these products.
- This information was transmitted and received by the USNRC in confidence in support of our application for export and import shipments in accordance with 10 CFR 110.
- The information attached to this affidavit (our suppliers, distributors and the countries where we conduct business) is not available in any public sources, therefore, we request that the USNRC maintain the confidentiality of this information during the review and evaluation process for the import and export licenses under 10 CFR 110.
- The knowledge of the countries where we currently export could be used by our competitors to put us at a market disadvantage should they decide to use this information to identify potential countries and customers where and with whom we have already spent considerable money and time in developing relationships. As such QSA Global, Inc. considers this information confidential.



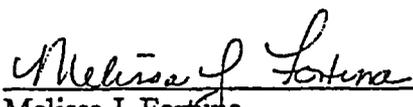
- Release of this information to the general public could put QSA Global, Inc. at a competitive disadvantage from competitors, and therefore, I request that this information be withheld from public disclosure under the provisions of 10 CFR 2.390.

Signed:  Date: 24 OCT 2005

Lawrence K. Swift  
President  
QSA Global Inc.

#### NOTARIZATION

State of Massachusetts, County of Middlesex, ss. Subscribed and sworn to before me this 24th day of October, 2005.

, Notary Public      My Commission Expires 8-11-2006  
Melissa J. Fortuna

MELISSA J. FORTUNA  
NOTARY PUBLIC  
My Commission Expires Aug 11, 2006