

NRCREP - comments on RAMQC

From: "Roughan, Kate" <Kate.Roughan@qsa-global.com>  
To: <nrcprep@nrc.gov>  
Date: 02/08/2008 5:32:08 PM  
Subject: comments on RAMQC

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73FR 826

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**Subject:** comments on RAMQC  
**Creation Date** Fri, Feb 8, 2008 5:31 PM  
**From:** "Roughan, Kate" <Kate.Roughan@qsa-global.com>

**Created By:** Kate.Roughan@qsa-global.com

**Recipients**

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<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	652	Friday, February 8, 2008 5:31 PM
TEXT.htm	804	
doc20080208173329.pdf	341328	
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**QSA Global, Inc.**

40 North Avenue

Burlington, MA 01803

Telephone: (781) 272-2000

Toll Free: (800) 815-1383

Facsimile: (781) 273-2216

February 8, 2008

Chief, Rules and Directives Branch  
Division of Administration Services  
Office of Administration  
U.S. Nuclear Regulatory Commission  
Washington, DC  
20555-0001

**SUBJECT:** Transportation of Radioactive Material in Quantities of Concern Request for Comments, 73 FR 826 (January 4, 2008)

Dear Sir:

QSA Global Inc. is a worldwide manufacturer and distributor of industrial radiography equipment and oil well logging sources. Due to the potential significant impact on ourselves and our customers, from the January 4, 2008 Federal Register discussion on the development of the technical basis for rulemaking to revise the security requirements for the transportation of Radioactive Materials of Concern (RAMQC). Many of these comments were also presented at the NRC public workshop on 23 Jan 08. We greatly appreciate the opportunity for early stake holder involvement and look forward to working with NRC and other agencies to assure we can implement effective systems.

There are over 100 shipments a day by common carrier of Category 2 sources, primarily industrial radiography and oil well logging, any regulation has to consider the significant administrative and economic burden on this large quantity of daily shipments. As there has not been adequate time to gather this data for the comment due date, we will be providing more specifics as NRC moves into rulemaking.

We strongly feel that the USDOT has jurisdiction over the shipment in transit and NRC has jurisdiction for the shipment up till the time it gets picked up by the carrier and then again upon receipt at the receiving facility. Carriers are all subject to the requirements of 49 CFR and DOT already has imposed hazardous material transport security regulations (HM-232) and are not subject to 10 CFR. It is very difficult for licensees to impose NRC requirements on non licensees. There have been varying interpretations of what is acceptable from the carrier to show meets these requirements. Federal Express and Roadway which do the majority of the RAMQC shipments have refused to certify that they meet all the requirements for Cat 2 shipments, but yet will certify that they meet the requirements in HM-232, and many licensees have accepted that certification as meeting the specific NRC requirements.

Requiring the carrier to certify that they meet certain conditions as they will only certify to HM-232 (which is appropriate), has greatly reduced the amount of available carriers for shipment of Cat 2 quantities. Many of the larger trucking lines that will certify they meet all the conditions of the order only go point to point (essentially an exclusive use shipment), and don't do several pickups in one trip. Typically Cat 2 shipments are less than truckload (LTL) and are picked up in the course of many other pickups and deliveries. Many of these carriers are small and can't or will not sign that they meet the carrier requirements. For a Cat 2 shipment, to use a point to point carrier would be cost prohibitive. There are very few carriers that currently take radioactive shipments and imposing more stringent requirements will only cause them to stop taking radioactive shipments as it is not worth the additional burden for such a small percentage of their business.

We are greatly concerned about the lack of collaboration between Nuclear Regulatory Commission (NRC) and Department of Transportation (DOT), to prevent conflicting or duplicative regulations. In addition, due to international transportation of radioactive materials the regulations must be implemented to reduce transition into or out of the United States to minimize concerns with other countries and modal organizations in order to ensure effective and efficient compatibility. Further, rulemaking should operate from a common set of definitions and operating principles to maintain equitable trade opportunities.

QSA has worked closely with the Nuclear Sector Coordinating Council – Radionuclides (NSCC-R) on this topic. Please see the recommendations in the Nuclear Sector-Specific Infrastructure Protection Plan. NRC also needs to work more actively with the Government Sector Coordinating Council – Radionuclides (GCC-R) transport working groups to gain greater appreciation for the transportation security issues. To this point, we have been disappointed in the level of progress and failure of the GCC-R to engage both the NRC and DOT. We participate in the industry groups as they allow for us to have additional input to assure what is required can be implemented and is effective in the field and are frustrated at the effort the industry has been putting and not being able to move forward on these identified issues.

As all business is now conducted globally, the NRC requirements must be identical to the IAEA Code of Conduct along with the Guidance. The Code of Conduct limits applicability to sealed sources while the NRC regulations/Orders do not differentiate. With respect to Category 1 and 2 applicability and source transport security guidance, the DOT, the national competent authority, appears to understand the distinction while the NRC does not. In addition, due to international transport DOT/DHS needs to develop the security transit regulations to be consistent with global requirements.

For all of the above cited reasons the NRC should not impose any requirements on RAMQC while the shipment is in transit but instead work with DOT/DHS/TSA in establishing consistent requirements for security sensitive materials while in transit.

We strongly feel that if the NRC implements the proposed National Source Tracking Database (NSTD) quickly, many of the gaps the NRC is currently trying to fill will go away.

The NSTD will have the information on all the following:

- details on the actual RAMQC source when it is transferred (shipped) and when it is received
- details on the licensee that the source is transferring to, so validity of licensee can be verified by appropriate regulatory agency if there were a question

Any remaining gaps would be covered by the DoT jurisdiction for security while the RAMQC is in transit. NRC should put the efforts into a long term fix and not stop gap fixes.

We also recommend that NRC review it's current draft order on interim enhancements to the license verification process and assure it is consistent with the proposed RAMQC security requirements. Again, implementation of the NSTD will address many of the issues that this additional license verification order is trying to resolve.

The following correspond to the questions posed in the notice:

*Which part of Title 10 of the Code of Federal Regulations (CFR) should the staff revise to include requirements to enhance security during transportation of RAMQC? At this time, the staff is considering revising either the requirements of 10 CFR 20 or Part 73.*

The requirements to enhance security during transportation of RAMQC should be in 10 CFR 73 which relate to security before and upon completion of the shipment. Any regulations concerning security of RAMQC during transportation should be under the jurisdiction of DOT/DHS/TSA codified in 49 CFR.

*Should the NRC issue these requirements under its authority to protect public health and safety or under its authority to promote the common defense and security?*

The NRC should issue the requirements under common defense and security, this allows for consistent requirements across state lines. States should not be allowed to impose more stringent requirements than the NRC. The industrial radiography and oil well logging industry are both very mobile and need to provide their services all across the US. Without a set of uniform standards the requirements could be quite different in each state and would significantly restrict interstate commerce. This rule is being developed in response to the events of September 11, 2001 which has a direct common defense and security impact.

*What technologies are in use to track the location of sources, packages or vehicles carrying radioactive material in quantities of concern?*

Response:

There is currently technology to track various size packages. There are active and passive devices. An active device sends out a signal, continuously or at a pre-set interval. A passive device requires some form of reader or activator. Both of these devices have limitations. Most of the limitations are range of signal and life time of power supply. In the case of a radioactive source there is no device small enough to be effective in the tracking of the source. It would be limited to tracking the package the source is in, which could be opened and source removed. Global positioning systems can be used to track packages but maybe ineffective under ground

(tunnels) or under water (truck/train runs off bridge, plane crashes, or boat sinks and is submerged in the lake, river, or ocean).

There is no current technology that can successfully track a source or device reliably. This equipment is subject to very harsh environments and usage and any additional external feature would not hold up to being thrown around in a truck and/or jobsite.

Any additional feature put on a device would require research and development, design, testing and licensing to assure the device continues to meet ANSI, ISO, NRC and DoT requirements for devices and transport packages. This is an expensive and time consuming process and will significantly add to the cost of the equipment. End users will be unwilling to pay for this. A cost benefit analysis would need to be performed to determine if it is worth pursuing, based on available and reliable technology. A determination needs to be made if the GPS is active all the time or just activated when a source may be missing.

There are already numerous other effective controls in place for device security and tracking:

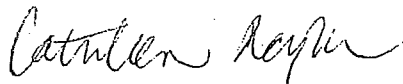
- a. Industrial radiography and oil well logging licensees are already subject to the Increased Controls for security and as such are already required to secure their equipment and vehicles (both in use and when not in use) and have immediate communication capability when transporting the devices.
- b. The NRC national source tracking database (when implemented) will provide information if a source is not received at its destination when expected.

Since the additional controls have already been required without the cost/benefit analysis being performed, need to consider the cost to the industry that has already been made to implement these requirements. Many licensees had to implement new administrative systems resulting in additional time and resources, with the subsequent economic burden. This needs to be quantified and assessed.

International harmonization of the hazardous material transportation regulations, based on the one common set of requirements, such as the United Nations Recommendations on the Transport of Dangerous Goods, is critical to ensure the safe and effective movement of hazardous materials and achieve fair and equitable commerce.

Please contact me if there should be any questions or if any additional information is needed concerning these comments.

Sincerely,



Cathleen Roughan  
Director, Regulatory Affairs/Quality Assurance