



**QSA GLOBAL**

QSA Global, Inc.

40 North Avenue

Burlington, MA 01803

Telephone: (781) 272-2000

Toll Free: (800) 815-1383

Facsimile: (781) 273-2216

Cindy Bladey  
Office of Administration, Mail Stop: OWFN-12-H08  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

9 March 2017

Response to 9 January 2017 Federal Register Notice –  
Category 3 Source Security and Accountability (Docket ID: NRC-2016-0276)

Dear Ms. Bladey,

QSA Global, Inc. appreciates the opportunity to provide a response to the subject Federal Register Notice. As a manufacturer and distributor of sealed sources for a variety of industrial uses, QSA Global is a high-volume user of both the National Source Tracking System and the License Verification System. Our experience with the Integrated Source Management Portfolio I believe gives us the ability to provide useful input to the NRC with regard to the potential inclusion of Category 3 quantity sealed sources to the NSTS and LVS. QSA Global offers the following:

Responses to general questions related to License Verification:

The License Verification System, when up-to-date, provides a licensee (manufacturer & distributor or other transferor) the access to a controlled original copy of an issued radioactive materials license for ensuring the intended recipient of a sealed source is authorized to possess said source. In theory, extending the use of the LVS / Part 37.71 verification methods to include Category 3 licenses would provide a transferor the insurance that the intended recipient is duly authorized, which could have potentially mitigated the second half of the 2014-2016 GAO 'performance audit'.

If the NRC were to extend the use of LVS and Part 37.71 verification methods to include Category 3 licenses, QSA Global suggests that a graded approach be applied; we see a very small potential security benefit for M&D use of Part 37.71 verifications for Category 3 quantity transfers, but we do not see any security benefit to having a licensee perform a verification when returning a source to a manufacturer/distributor.

Responses to general questions related to the National Source Tracking System:

It is our opinion that the addition of Category 3 sources to the national source tracking system would place a significant additional burden on both industry and the NRC for a questionable / negligible safety and security benefit. With regard to the 2014-2016 GAO performance audit, neither the lack of due diligence by the issuing regulator, nor the modified license used by GAO would have been detected by the inclusion of Category 3 quantities in NSTS.

Due to the high volume of daily transactions that we generate, QSA Global has automated the majority of our NSTS transactions, and even with this automation we expend approximately ½ a Full-Time Equivalent in staff hours on NSTS related issues. If the NSTS role were to be expanded, it is my understanding that there is estimated to be a greater than four-fold increase in sources that would potentially need to be included. We would anticipate a similar increase in staffing effort as a result. The distributed effort to all impacted licensees would likely be proportionate.

Additionally, for industries that currently handle no more than Category 3 quantities (oil well logging industry, for example), the NRC and these licensees would each be burdened with a repeat of the initial inventory upload, registration, and credentialing efforts experienced by Category 1 and 2 licensees at the onset of the NSTS. The additional administrative burden for both regulators and industry, in our opinion, is not justified by the unquantified security benefit.

The current reporting requirements for Category 1 and 2 sources we feel are adequate and do not require an increase in the immediacy of information availability. Category 1 transfers require significant advanced planning and coordination with intermediate authorities and receiving licensees. Domestic transactions for Category 2 sources are primarily with established and vetted customers and manufacturers, and international transactions involving Category 1 and 2 sources already require a minimum of 24 hours (for export) or 7 days (for import) advance notice to the Office of International Programs. We have not been presented with any evidence that suggests a need for more immediate information availability.

Response to specific questions related to License Verification:

Members of QSA Global staff are credentialed for use of LVS, but we still make use of both Form 748 and direct regulatory contact due to the current lag in LVS updates by various Agreement State regulatory agencies. Additionally, as stated earlier, we do not see a safety or security benefit to requiring a transferor to use Part 37.71 verification processes when transferring a source to a manufacturer.

We prefer not to provide transaction volume information; however, our transfer transactions are over 90% Category 2 quantities, whereas our receipts (discounting aggregation) are roughly 75% Category 3 discrete sources.

Response to specific questions related to National Source Tracking System:

Members of QSA Global staff are credentialed for use of NSTS, but our primary interaction with NSTS is in the form of automated batch data uploads. Discrepancies are handled through correspondence with the NSTS Help Desk. On infrequent occasions a staff member will log in to NSTS to enter or modify a transaction.

One improvement that we feel would be beneficial is the ability to provide notifications of Alerts to multiple staff members. We are a multi-license organization; the ability to set up Alert notifications to the respective RSO would alleviate a single point of failure for response.

General response:

QSA Global understands the need for, and absolutely endorses, ensuring the security and safety of radioactive materials. The potential for the mal-use of commercially available radioisotopes is very real. We feel, however, that a blanket approach to applying security measures places undue burden on both regulators and industry with little to no increased benefit, as the relative usefulness of a source for nefarious acts varies widely.

The development of source categorization by the IAEA was based on multiple factors, including use in industry, deterministic effects, chemical and physical form, etc. If a similar approach were used to develop safety and security implementation measures, perhaps a more reasonable program may be realized. As a specific example, if a focus of the safety and security measures is to ensure that radioactive material is not acquired for an end use as a radiological dispersal device, the physical form of the radioactive material should be taken into consideration in addition to the radioactive content. The registered form for encapsulated Ir-192, for example, is either metallic wafers or pellets, neither of which are practical forms for dispersal. As such, tracking and control of Ir-192 sources may not require the same level of diligence as for a Cs-137 sealed source (whereas currently the Category 2 threshold for Ir-192 is lower than that of Cs-137).



QSA Global believes that based on experience currently available data, expansion of the ISMP to encompass Category 3 quantity sealed sources is not warranted; the increased regulatory and industry burden outweighs the perceived threat.

Respectfully yours,

A handwritten signature in blue ink, appearing to read "Michael Fuller", written over a horizontal line.

Michael Fuller, Director,  
Regulatory Affairs/Quality Assurance