

January 10, 2018

Regional Administrator,  
U.S. Nuclear Regulatory Commission Region IV  
1600 E. Lamar Blvd.  
Arlington, TX 76011

Subject: Reply to a Notice of Violation, (EA-17-101)

### **10CFR2.201 response regarding violations 49CFR173.412(d)**

#### **Reason for violations**

The ID facility RSO that ultimately performed the final packaging of the sources in questions left his oversight role and became operationally involved in a packaging task when it was determined the package exceeded the weight for a particular common carrier. The RSO performed the unanticipated packaging task due to a shortage of authorized packaging personnel on the day the shipment needed to leave the facility to arrive at its destination on time. The RSO did not have prior HazMat training that covered the positive closure requirement and it was not part of the shipping procedure.

The RSO at the off-site location overseeing the use of RAM for the training was a HazMat shipper internally trained by the ID RSO. This was his second Class 7 shipment after almost one year of employment. The RSO was involved in his first one of a kind drone training exercise while being inspected by the state regulator. The RSO upon unpackaging the sources in question for training noticed they were not secured in the pig with a positive closure but failed to stop work, notify management and correct prior to offering for shipment back to the ID facility. As a result, the sources came out of their primary containment resulting in elevated reading on the outside of the package.

#### **Corrective steps and results achieved**

As a result of this event immediate and long-term action was taken by management to prevent recurrence by;

- 1) Immediately initiated an investigation and root cause evaluation
  - a. Result: determined training and procedures did not inform packager of requirements and stop work to ask questions was not exercised when something unusual was encountered.
- 2) Banned all source shipments
  - a. Result: No source shipments were performed until corrective actions approved by NRC were in place
- 3) Collected statement of event from all Individuals involved
  - a. Result: Reflected need to improve training and guidance documents and emphasize significance to stop work and asking questions

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- 4) Conducted a shipping audit and inspection of all shipping activities to identify gaps.
  - a. Result: Identified root causes and additional areas of improvement
- 5) A company-wide meeting was presented by the CEO emphasizing the importance of stop-work and ask questions when things do not feel or seem correct and to follow procedures and ask when unsure. Since the PEC, Qal-Tek executive team has implemented a cyclical company-wide training program to specifically emphasize safety related procedural, regulatory and stop work requirements and authorizations. This training is conducted consistently and frequently.
  - a. Result: Elevated the importance of stopping work and asking questions when work deviated from procedures or was not addressed. Key staff responded with an increased rate of questioning things from the ID RSO perspective.
- 6) The QTA performed audit, identified gaps which were corrected in the shipper training and guidance procedures to clearly communicate what was required to properly package a Type 7A package to meet the performance requirements during normal transportation.
  - a. Result: Training via OJT and procedure more explicitly outlined what is the proper packaging to prevent recurrence.
- 7) Pre-job shipping plan reviews by the RSO and upon receipt checklists were updated to emphasize positive closure device.
  - a. Result: Reviews and checklists specifically called out need for "mechanical" positive closure
- 8) New solid inner packaging system was designed to confine the inner containment system. Inner containment systems with a positive closure device were designated and made immediately fully functional.
  - a. Result: Improved flexible inner packaging systems created closure redundancy and a larger selection of mechanical positive closure devices were identified to meet the requirements.
- 9) Each shipper regardless of their role in the shipping process was retrained by on-the-job training (OJT) to ensure they understand the requirements and procedure.
  - a. Result: Each shipper read the new guidance document, understood and showed competency during the OJT evaluation ensuring a more reproducible package.
- 10) Upon successful completion of the OJT conducted by the ID RSO and reporting to the RSC Chairman the shippers were authorized to resume shipping.
  - a. Result: Shippers clearly understood what was expected in future shipments and management was reaffirmed significance of proper shipping.
- 11) All shippers of sources and gauges, in addition to submitting their shipping plan (classification/packaging/marketing/labeling and paperwork/carrier-modality to the RSO for review) must forward pictures of each shipments positive closure device, pack-out, marking/labeling and paperwork prior to offering, for review and for tracking and trending.
  - a. Result: Shippers were made keenly aware of significance of and detail of shipping plan and pre-shipment reviews to ensure full compliance and tracking and trending of their performance for accountability.
- 12) Both RSO's involved in the shipments were disciplined and given performance improvement objectives. Specific focus was placed on their prior failure to perform a stop work and to identify operations that required objective oversight by the RSO.

- 13) A company-wide training on NRC safety culture was presented by the ID RSO and safety culture attributes were posted at company-wide facilities where licensed activities occur.
  - a. Result: All employees were trained on NRC and company expectation to uphold the tenants of the NRC safety culture.
- 14) The need to provide management with additional resources and time focus independently on safety was actually identified prior to the event and initial actions taken to reduce workload and operational involvement from safety personnel. After the event a Quality Assurance Manager, Radiological Services Manager, administrative staff, and a Chief Operating Officer were hired to provide experience and a more focused management plan to improve management oversight.
  - a. Result: The additional personnel resources will allow the ID RSO to better focus on QTA safety and compliance oversight while reinforcing safe work and scope work authorizations into everyday operations. This shift in priorities will allow the RSO enhanced objectivity and prevent his involvement in operational performance.

**Date when full compliance will be achieved**

Full compliance has been in place since June 2017 (packaging, procedures and training)

Full program implementation (personnel roles and culture elements) to further prevent recurrence will be in place by end of March 2018.

**10CFR2.201 response regarding violation 49CFR173.441(a)**

**Reason for violations**

Primary containment device did not employ a positive closure device, therefore releasing the sources and violating the performance standard. See full response to 49CFR173.412(d) above.

**Corrective steps and results achieved**

See response to 49CFR173.412(d) above

**Corrective steps that will be taken**

See response to 49CFR173.412(d) above

**Date when full compliance will be achieved**

See response to 49CFR173.412(d) above

Sincerely,

A handwritten signature in cursive script that reads "Travis Snowder".

Travis Snowder, President/CEO

A handwritten signature in cursive script that reads "Bryce To Rich".

Bryce Rich, CHP, RSC Chair

A handwritten signature in cursive script that reads "Michael Albanese".

Michael Albanese, Corporate RSO