

PREDECISIONAL ENFORCEMENT CONFERENCE SUMMARY

Licensee: Qal-Tek Associates, LLC

Facility: Office in Idaho Falls, Idaho

License No.: 11-27610-01

Docket No.: 030-34866

EA-17-101

PREDECISIONAL ENFORCEMENT CONFERENCE SUMMARY

On November 9, 2017, representatives of Qal-Tek Associates, LLC met with Nuclear Regulatory Commission (NRC) personnel in the Region IV office in Arlington, Texas, to discuss the apparent violations identified in NRC Inspection Report Number 030-34866/2017-001. The conference was held at the request of the licensee.

The licensee presented a summary of the direct, contributing and root causes for the apparent violations and their corrective actions. The corrective actions discussed during the conference included: 1) an immediate temporary ban on radioactive material shipments; 2) initiation of an investigation into the transportation event; 3) revising and improving procedures in and beyond transportation activities that are found to be lacking necessary granularity in details for licensee employees to adequately execute; 4) retraining personnel to stop work and seek guidance when procedure guidance was non-existent or was unclear; 5) greater oversight and review by licensee management of packages offered for shipment; and 6) allocation of additional resources and personnel for the purpose of management oversight, including a global procedural review to identify potential inadequacies in existing procedures, or to identify tasks where appropriate procedures don't exist.

The attendance list and the licensee's Power Point presentation are attached to this summary. In accordance with Title 10 of the Code of Federal Regulation 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this summary and its attachments will be made available electronically for public inspection in the NRC Public Document room or in the NRC's Agencywide Documents Access and Management System, accessible from the NRC Web site at

<http://www.nrc.gov/reading-rm/adams.html>.

Attachments:

1. Attendance List
2. Licensee Presentation
3. NRC Enforcement Program

ATTENDANCE LIST

PREDECISIONAL ENFORCEMENT CONFERENCE

Qal-Tek Associates, LLC

November 9, 2017

Full Name (printed)

Organization, Title

<i>Full Name (printed)</i>	<i>Organization, Title</i>
Travis Snowden	Qal-Tek Associates, CEO
Michael Albanese	Qal-Tek Associates, RSO
Jason von Ehr	NRC, RIV MLIB
Casey Aldrege	NRC RIV ACES
Thomas J Lynch	US DOT / PHMSA / OHSFS D
JUDITH WEAVER	NRC, RIV, Allegation coord. / inv. specialist ^{specialist}
SCOTT MORRIS	NRC - DRA
G. MICHAEL VASQUEZ	NRC RIV / Team Ldr ACES
ALAN S. CARBON	USDOT PHMSA
Michael C. Hay	US NRC
Linda Howell	US NRC
Michelle Burgess (telephonic)	NRC Headquarters - NMSS
Sophie Holiday (telephonic)	NRC Headquarters - NMSS
Susanne Woods (telephonic)	NRC Headquarters - OE
Bryce Rich (telephonic)	Qal-Tek Associates, RSC Chair
Christopher Hair (telephonic)	NRC Headquarters - OGC

Qal-Tek PEC

Licensee Opening Remarks

EA-17-101

Presenting Travis Snowder

Qal-Tek Position

- We are not disputing the incident, proposed violations, or the root causation as determined by the NRC but hope to provide clarification.
- We wanted to take this opportunity to provide assurance of our commitment to ensure improvement.

Qal-Tek's Background

- Small Business in Idaho Falls, ID
- Founded in 1998 (Dale Snowder/Bryce L. Rich)
- Service Licensee with broad-scope flexibility
- Employs 39 employees
- Provides gauge/instrument calibration and repair, disposition, training and consulting services
- Bryce Rich, performs as RSC Chairman

Recent History

- Transitioned to Travis Snowder in March 2015.
- Dale Snowder passed away unexpectedly in May 2015.
- In June of 2015, discovered an internal plot to destroy Qal-Tek, steal its business and financial resources by members of the management team.
- Rebuilt entire management team and replaced approximately 30 of the now 39 employees.
- Since 2015, we have worked hard to create a positive, safety and quality minded culture but unfortunately it has taken a great deal of hard work and has required operational involvement from our QA and Safety expertise.

Attachment 2

Qal-Tek Opening summary

- Due to the events of our recent history we have had our Quality and Safety management involved in operational performance, creating some confusion in objectivity.
- We believe we have taken appropriate actions to change this and prevent recurrence of this or other noncompliance issues.
- This was an isolated event, not systemic.
- This is the first time Qal-Tek potentially has above a SL4 NOV
- This is the companies first enforcement conference

Summary

We again hope to provide clarification of our root causes and associated corrective actions in effort to demonstrate our dedication.

Qal-Tek Presentation

EA-17-10

Presenting Michael Albanese
(Corporate Radiation Safety Officer)

Qal-Tek Presentation

- On April 6th, 2017
 - Our Operations manager (trained shipper and packager) and Radiation Technician (in-training shipper and packager) designed and packaged shielded pig for 5 sources (2 Cs-137, 1 Co-60, 1Ra-226, 1 U-238) that were selected for a responder training/capabilities evaluation in NYC.
 - This shielded pig with positive closure devices was shown during the RSC meeting

Qal-Tek Presentation

On April 7th the sources were loaded by the operations manager and in-training RT

- The RSO, while performing a scheduled inspection on QTA's mobile gauge calibration platform, reviewed the shipping pig and found it was consistent with what was reviewed in the RSC meeting, which included a positive closure device.
- This was consistent with our internal practice of reviewing RCA ship plans and paperwork by the RSO prior to leaving for the job and non-NDG shipments from the ID site.

Qal-Tek Presentation

- The operations manager was called to another task and left the relatively new RSO (just over 2yrs.) to finish the drum pack-out with the in-training Rad Tech(RT), thereby breaking the role of oversight and became operationally involved. The pig was packaged in the drum with various pieces of high density foam and wood support to sure the source holders and delivered to the shipper.
- Upon arrival in the shipping area the shipper informed the RSO that the package must be shipped via air to arrive on time and therefore must not exceed 150 lbs.

Qal-Tek Presentation

- The RSO and RT new to the packaging role weren't familiar with the weight limit for air since almost all shipments are performed via ground. The package weighed approx. 165 lbs.
- Knowing the shipment had to go out that day and not knowing when the operations manager would return from the off-site meeting, the RSO and RT returned to repackage the sources into their storage/transfer pigs which had previously shown to meet the dose rate and package weight limit requirements (now 150lbs)

Qal-Tek Presentation

- The RSO placed the 2 Cs and 1 Co source in the storage/transfer pig with the void space filled with a woven paper towel, the U-238 source in a metal can with a positive closure and the Ra-226 rod tip in a pig secured by several layers of adhesive tape into the same drum using high density foam and a piece of wood between the foam from the drum lid and the storage/transfer pig lid to prevent vertical movement of the storage/transfer pig and the lid of the transfer pig from shifting.
- The drum was closed and returned to the in-training shipper that the RSO guided through the marking/labeling and paperwork completion before departing to get back to the mobile NDG calibration lab inspection.

Return Shipment

- During the return trip from the off-site training the GA RSO did not identify the lack of a positive closure device on the source holder, and returned it in a similar fashion.

Qal-Tek Presentation

- During the special inspection it was asked if the shipping ID RSO was third-party trained on packaging instructions that pointed out the requirement to have a positive closure on the source shield as part of a Type A packaging requirement. The third party course curriculum was presented to the special inspectors, and it did not include any training on packaging instruction. The RSO recalled the performance requirements of: the Hazmat contents cannot be released from the package and the radiation field cannot increase by more than 20%, but not a mention of the positive closure.

Qal-Tek Presentation

- When the RSO trains the HAZMAT employees for Qal-Tek in the past the training followed the external trainings performance perspective but not specifically the positive closure requirement. As a result, Qal-Tek's shipper training and shipping procedure OP-PRO-152 did not include packaging instructions that called-out the requirement to use a positive closure device.
- This aspect of the training was left to the experienced packager to apply. During the time of this shipment the only experience packager was the operations manager. Both of the previous RT's that we relied on as experienced packagers were either let go or left and their replacement was still in the process of being trained.

Qal-Tek Presentation

- This was a unique shipment (eg. number of sources with varying shapes, small drum via air) and neither shippers, ID RSO and GA RSO, were experienced packagers and operating without experienced oversight, packaging instructions or source holders with positive closures resulting in the use of a piece of wood to prevent the source shield lid from separating from the body and the shield pig from moving vertically in the outer package.

Public Dose Impacts

- The on-contact and 1 foot measurements originally made during our receipt investigation where corrected by a factor of 1.91 applying the IAEA SSG-26 guidance.
- After extensive conversations with multiple parties of the common carrier we (QTA and NRC) were able to obtain useful info. to arrive at a similar maximum credible dose of 20-26 mrem, approximately ¼ of the public annual limit.
- It was also confirmed by how the common carrier stores and handles hazardous materials throughout the distribution chain that the 2 mrem in any one hour was not exceeded.

Qal-Tek Presentation

- NRC root causes: Causal Analysis (5 Whys, Barrier, Management Oversight and Risk Tree Analysis)
 - Inadequate management oversight
 - Management did not ensure staff knew to stop and raise concerns when challenges were encountered
- QTA root causes: 5 Whys
 - Lack of specific training on packaging instructions and lack of detailed packaging instructions.
 - Additional CA identified in June of 2017, which connect the NRC's root cause analysis to ours.

Qal-Tek Presentation

- RSO Job Tasking
 - ID RSO involvement during the 2 year learning curve of a service license, company history and culture consisted of;
 - operational involved in radiological consulting services,
 - internal/external dispositioning functions,
 - emergency responder training,
 - classroom training,
 - process improvements,
 - licensing actions,
 - waste compact interactions
 - regulator interactions across QTA NRC and three agreement state licenses supporting training, programming, procedures, calibrations, transportation for all licensed services
 - Also provided oversight and technical review capacity for almost all programs across the licensed activities for all four QTA licenses.
- As a result, before completing my first year at Qal-Tek it became apparent the RSO function needed more resource support and executive management appointed a full time assistance in Oct. 2015.

Qal-Tek Presentation

- Executive Management, the RSC Chair and the ID RSO identified the need to enhance the RSC members and staff awareness of the regulatory environment we operate in, their role and the consequences if procedures are not followed by scheduling bi-monthly company wide meetings and an enhanced discipline policy.
- In December of 2016, Executive Management decided not to fill the Radiological Services Manager position shifting the work to the Sales Manager, RSO and consulting services staff.

Qal-Tek Presentation

- During this resource constrained timeframe (December 2016-June 2017) management was drawn into operations and lost adequate objectivity in performing the work. In this context, we agree with the NRC root causes. However, I want to assure you that our management, the RSC, our QA function and I were not idle as evident by our CA history and RSC minutes. Additionally, I want to make clear all personnel were well aware of reporting non-conforming issues as stated in multiple company wide bi-monthly meetings and throughout our procedures.
- This situation is not acceptable and we strive to always be better. However, there is also an abundance of instances, proving a more accurate reflection of our culture, where items were raised to management and appropriate actions were taken.
- We don't feel we have completed our pursuit of a perfect program, but we have and will always pursue our gaps to improve.

Qal-Tek Presentation

- Following this event, and after continued evaluation, Executive management recognized how resource constrained we were and that this had potential for other gaps if not remedied. Therefore in the 2nd Qtr. 2017 and another CA was issued to resolve the resource limitations.
- The requirement of this CA was to provide objectivity to the RSO and QA manager to provide time and resources to continually improve our safety and compliance culture.
- The actions taken to allow this included the hiring of a Qualified and experienced QA manager, Qualified and experienced RSM manager, and later promoted the operations manager to COO and replaced him with our experienced TX office manager. The full implementation will be complete in Dec. 2017 with the final move of the TX office manager.

Qal-Tek Presentation

- **Emergency Corrective Actions**
 - April 13:
 - Self-identified and documented at time of event, launching root cause investigation
 - Contacted common carrier to notify of elevated readings
 - Notified management and RSC about event
 - Reported event to NRC Ops. Center
 - RSC meet same day to ban all source shipments
 - CEO launched immediate complete shipping program audit

Qal-Tek Presentation

- Corrective Actions:
- Following notification to NRC Operations Center:
 - Fully cooperated with NRC special inspectors with integrity, candor and timeliness throughout the process
 - Developed and implemented reproducible robust inner packaging solution for source shipments focused on preventing the release and/or movement of sources in their shielding and within the shipping container
 - Improved shipping procedure to raise concerns to management when deviations occurred, added QA program elements to identify unacceptable packages for reuse and added packaging instructions to clearly show an acceptable mechanical positive closure device and the assembly of the rigid inner packaging.

Qal-Tek Presentation

- Retrained all shippers via OJT to notify management of deviations, new Type 7A quality assurance assessment program and inner packaging instructions before they can start shipping again.
- Each source shipment now requires an objective and uninvolved oversight by a member of management who is a trained shipper, prior to being offered.


Qal-Tek Presentation

- Corrective Action measures above and beyond the minimum:
 - Extra packaging design to prevent source shield from opening and movement within the container
 - Have a trained shipper (manager) review each shipment before being offered until each shipper has proven they are consistent and competent in shipping in accordance with regulations and procedure

Qal-Tek Presentation

We hold ourselves to a higher standard than this unique event in time, we are better than this. This threshold event has caused pause in our management team to reflect on how this happened and where we need to focus to prevent resource compromises, raise regulatory awareness to become fully aligned with the Principles of a Nuclear Safety Culture and ensure procedure deviations trigger stop work notifications.


We feel our past track record with the NRC and the critical quality service we provide to the licensee community to protect the public and security of materials coupled with our ability to identify, report and respond to violations in a responsible and timely manner in accordance with the enforcement policy severity (e.g. no member of the public approached the public dose limit) and penalty evaluation tree merits two severity level 3's without penalty.



NRC Enforcement Program


Predecisional Enforcement Conference

Qal-Tek Associates, LLC.
November 9, 2017
Arlington, Texas



FOR TODAY'S MEETING

1. No Final Decision Yet
2. We Want **Your Perspective**
 - Whether violations occurred
 - Significance of the violations
 - Enforcement actions (if any)



SIGNIFICANCE = "Severity Level"

SEVERITY LEVEL - I
(most significant regulatory concern)


SEVERITY LEVEL - II
(very significant regulatory concern)

SEVERITY LEVEL - III
(significant regulatory concern)

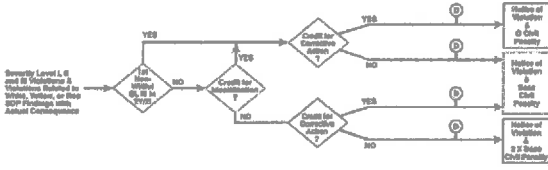
↑ (Escalated Enforcement) ↓

(Non-Escalated Enforcement)

SEVERITY LEVEL - IV
(less significant concern, but more than minor)




CP: WHEN & HOW MUCH?



Primary Considerations:

1. How the violation was identified
2. The promptness and completeness of any corrective actions




WHAT IS A BASE CP?

- c. All other fuel fabricators, including facilities under construction, authorized to possess Category III quantities of SNM, industrial processors,²⁰ independent spent fuel and monitored retrievable storage installations, mills, gas centrifuge and laser uranium enrichment facilities..... \$70,000
- d. Test reactors, contractors, waste disposal licensees, industrial radiographers, and other large material users..... **\$28,000**
- e. Research reactors, academic, medical, or other small material users²¹..... \$14,000

TABLE B

Severity Level	Base Civil Penalty Amount (Percent of amount listed in Table A)
I	100%
II	50%
III	25%



POSSIBLE OUTCOMES

1. No Action
2. Notice of Violation (NOV)
3. NOV with Civil Penalty (\$)
4. Order



PUBLIC INFORMATION

1. If NRC takes enforcement action, it is generally **Publicly Available** on NRC's website. Security-related information will not be publicly available.
2. In the event a civil penalty or an Order is issued, normally, a Press Release will be issued.



APPEAL RIGHTS

1. Any NRC action may be challenged
2. Civil Penalties and Orders provide hearing rights



Any questions?

PREDECISIONAL ENFORCEMENT CONFERENCE SUMMARY, QAL-TEK ASSOCIATES, LLC - DATED DECEMBER 6, 2017.

ADAMS ACCESSION NUMBER: ML17325B595

X SUNSI Review
By: JEV

ADAMS:
X Yes No

Non-Publicly Available
X Publicly Available

X Non-Sensitive
 Sensitive

Keyword:
NRC-002

OFFICE	RIV:MLIB	RIV:C:MLIB	RIV:TL:ACES	RIV:DD:DNMS	
NAME	JEvonEhr	MCHay	GMVasquez	LLHowell	
SIGNATURE	/RA/	/RA/	/RA/	/RA/	
DATE	11/17/17	11/21/17	11/21/17	12/6/17	

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