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Instrumentation and Professional Services

28 July 2011

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Subject: REPLY TO A NOTICE OF VIOLATION

Attached is the subject reply as requested by the letter of June 29, 2011; Subject: NRC Inspection Report No. 030-34866/2011-002, from Michael Vasquez, Chief Nuclear Materials Safety Branch A to H. Dale Snowder, President, Qal-Tek Associates, LLC. Qal-Tek Associates has applied all of the suggestions that the NRC has offered for the root-cause analysis of this occurrence.

As addressed in the response, a root-cause analysis was performed on this violation to determine the weakness(s) in the Qal-Tek Associates system. The identified database used to track due dates for performing the necessary leak testing has been corrected and a specific individual has been assigned the responsibility to monitor compliance with this license condition.

Subsequently, retraining of all Qal-Tek technicians to require verification of leak test status prior to use was accomplished on April 13, 2011.

We trust that commitments made in this letter and the attached Reply to Notice of Violation will be adequate for this response.

cc: US NRC Region IV, Regional Administrator, 612 E. Lamar Blvd., Suite 400
Arlington, TX 76011-4125

Sincerely,

A handwritten signature in black ink, appearing to read "Travis Snowder", written over a large, stylized flourish that extends to the right.

Travis Snowder, Vice-President
Qal-Tek Associates, LLC

IE07
RGNIV

Reply to a Notice of Violation

Qal-Tek Associates agrees that the cited Severity Level IV violation, Docket No. 030-34866, NRC Inspection Report No. 030-34866/2011-002, is valid and has conducted a root-cause analysis of the occurrence.

License Condition 15.B: As stated in the violation, the alpha emitting sealed sources were not being leak tested at intervals not to exceed 3 months, as proscribed in the license.

Investigation: Tracking of equipment calibrations within Qal-Tek and for our clients is through a "Recall System" that will automatically flag calibration due dates, and in this case, leak test due dates. Monthly the report is printed and specified activities are scheduled. Over the course of the last few years we have been making iterative and incremental improvements to this software based recall system. It is now apparent that during one of these cycles the leak test requirement was dropped, resulting in the overdue leak tests. This condition went undetected until the NRC Inspector identified the problem during this visit.

The check sources in question have been reloaded in the system and are being monitored to ensure task accomplishment.

Root Cause:

- After several successful software modifications and implementations to the Recall System, less attention was paid to performing a thorough review to ensure no data was lost as a result of the iterative and incremental improvement implementation. This complacency resulted in a loss of data in a system relied upon for calibration and leak test scheduling. With multiple time frames for leak testing sources, 3, 6, or 12 months, based on source application, lack of proper scheduling can be very confusing.

Corrective Actions:

- The check sources in question have been reentered into the Recall System for scheduling and to reduce uncertainty or confusion, all check sources will be managed on a 3 month schedule.
- All technicians have been retrained to verify the currency of the leak test by reviewing the Leak Test Report posted next to the storage cabinet prior to using any source. This corrective action was completed on 14 Apr 2011.
- Since the visit by the NRC Inspector and the identification of this problem we have successfully completed the leak tests on schedule (see attachments 1 & 2). The Recall System is our best tool for managing this process. In addition a specific individual has been assigned responsibility for ensuring the leak tests are performed on-time. This corrective action was completed on 13 April 2011.



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Englewood, CO 80110
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ALPHA RADIOACTIVE SOURCE LEAK TEST REPORT

Company: **Qal-Tek Associates**
Street: **3998 Commerce Dr.**
City/State/Zip: **Idaho Falls, ID 83401**
Phone: **(208) 523-5557**

Fax: **(208) 524-8470**

LT Frequency: **3** Months

TEST INSTRUMENT

Mfg'r:	Ludlum	Model:	3030_2	Serial #:	219696	Cal. Date:	7/22/2010
MDA:	<0.005 µCi	α efficiency:	>36%	β efficiency:	>38%	Det. Type:	ZnS (Ag)

Qal-Tek Associates certify the above instrument has been calibrated using radioactive standards traceable to NIST, or traceable to calibration facilities for other ISO members, or have been derived from acceptable values of natural/physical constraints, or have been derived by ratio type of calibration techniques. Accuracy of the principal radiation calibration sources used is greater than or equal to the required accuracy of the equipment being calibrated. The Qal-Tek Associates calibration system conforms to ANSI N323-1997. All calibrations are performed in accordance with the Qal-Tek Associates Quality Assurance Management Program (QAMP) by QP-PRO-001, which is available by written request.

LEAK TEST RESULTS

Mfg'r	Model #	Source Serial #	Isotope	net α	CPM	net b/g	CPM	pass/fail
Background	n/a	n/a	n/a	0		43		P
		5007-03	Pu-239	3		3		P
		8917	Pu-239	1		0		P
		1998-95	Am-241	6		2		P
		A8-949	Am-241	4		0		P
		4821	Th-230	1		9		P
		4823	Pu-238	6		0		P
		8919	Pu-239	1		9		P
		8918	Pu-239	6		17		P
		LN 876	Am-241	0		4		P
		6352	U-238	1		9		P
		12601	Ra-226	0		10		P
		10027-S	Ra-226	0		5		P
		1997-95	Am-241	3		0		P

Date Sources Leak Tested:
4/13/2011

Next Leak Test Due:
7/13/2011

Qal-Tek Associates certifies that all leak test measurements are performed in accordance with NRC licensee requirements for isotopic detection limits. For this purpose the MDA is below the NRC regulatory limits of <0.005 µCi

Justin Terry

4/13/2011



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TEST INSTRUMENT

Mfg'r:	Ludlum	Model:	3030_2	Serial #:	219695	Cal. Date:	06/03/11
MDA:	<0.005 µCi	α efficiency:	>36%	β efficiency:	>38%	Det. Type:	ZnS (Ag)

Qal-Tek Associates certify the above instrument has been calibrated using radioactive standards traceable to NIST, or traceable to calibration facilities for other ISO members, or have been derived from acceptable values of natural/physical constraints, or have been derived by ratio type of calibration techniques. Accuracy of the principal radiation calibration sources used is greater than or equal to the required accuracy of the equipment being calibrated. The Qal-Tek Associates calibration system conforms to ANSI N323-1997. All calibrations are performed in accordance with the Qal-Tek Associates Quality Assurance Management Program (QAMP) by QP-PRO-001, which is available by written request.

LEAK TEST RESULTS

Mfg'r	Model #	Source Serial #	Isotope	net α CPM	net β/g CPM	pass/fail
Background	n/a	n/a	n/a	0	42	P
		• 5007-03	Pu-239	1	7	P
		• 8917	Pu-239	0	6	P
		• 1998-95	Am-241	3	9	P
		• A8-949	Am-241	0	0	P
		• 4821	Th-230	0	0	P
		• 4823	Pu-238	1	13	P
		• 8919	Pu-239	0	0	P
		• 8918	Pu-239	1	19	P
		• LN 876	Am-241	0	1	P
		• 6352	U-238	1	0	P
		• 12601-3	Ra-226	0	25	P
		• 10027-S	Ra-226	1	6	P
		• 1997-95	Am-241	3	13	P
		• 1489/89	Th-230	3	3	P
		• 12601-2	Ra-226	1	9	P

Date Sources Leak Tested:
07/13/11

Next Leak Test Due:
10/13/11

Qal-Tek Associates certifies that all leak test measurements are performed in accordance with NRC licensee requirements for isotopic detection limits. For this purpose the MDA is below the NRC regulatory limits of <0.005 µCi

Instrument Technician

Monte Pope

07/13/11

Date