

BOB N. LEACH
Health Physics Services

137 Pine Street
Brattleboro, VT 05301
Tel. 802-257-7467
Cell 860-966-8962

L-3
MS-16

December 20, 2011

Docket No. 03032526
Control No. 576097

License No. 44-28698-01

Stephen Hammann
Senior Health Physicist
United States Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, Pennsylvania 19406-1415

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REGION I
DEC 23 PM 12:22

SUBJECT: Request for Additional Information (RAI) dated Dec. 9, 2011

Dear Mr. Hammann

In response to your RAI of Dec. 11, 2011, I am forwarding the following information.

Item 1. Regarding Item 7 of your application, it is not clear if you employ ancillary personnel, as described NUREG 1556, "Consolidated Guidance About Materials Licenses," Volume 18, Section 8.7.3. If so, submit a description of the training provided.

Response.

During my last NRC inspection, the inspector stated that the inspection guidelines the inspectors were currently working with requested that one person entities such as myself that maintain a license should indentify, preferably under Item 7, an alternate "responsible individual" such that if the primary "responsible individual" were incapacitated the alternate would fluidly assume responsibility for the license.

In response to that inspector's request, I added my son, Carl Leach, to my license application and included a copy of his resume. He is capable and qualified to assume responsibilities for the license if I am unavailable. He is not currently "ancillary personnel" but if I elect to make him or any other individual "ancillary personnel" classroom training such as described in Appendix H in NUREG-1556, Vol. 18

576097
NMSS/RGN1 MATERIALS-002

"Consolidated Guidance about Materials Licenses:" will be provided before licensed materials are used.

Item 2. Regarding Item 10 of your application, please submit an outline of your radiation safety program for you institution, including update copies of your operation and emergency procedures. You should use NUREG 1556, Vol. 18, section 8.10 and 8.10.6 for your response.

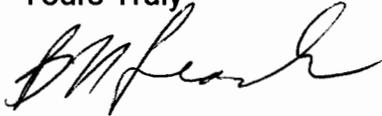
Response.

An outline of my radiation safety program is attached as Appendix A.
A copy of my current operating procedure is attached as Appendix B.

If you have need for additional information, please feel free to contact me at (802) 257-7467, or at the address above.

In hopes this information adequately fulfils your request, I remain;

Yours Truly

A handwritten signature in black ink, appearing to read "Bob N. Leach". The signature is fluid and cursive, with a large initial "B" and "L".

Bob N. Leach
Health Physicist

Appendix

A

Item 10. RADIATION SAFETY PROGRAM

10.1 Radiation Monitoring Instruments

RADIATION DETECTION INSTRUMENTS

Type	Number Available	Radiation Detected	Efficiency
Portable thin-window GM survey meter	3	Beta Alpha Gamma	Moderate Moderate <1%
Stationary thin-window GM Counting system	2	Beta Alpha Gamma	Moderate Moderate <1%
Portable thin-walled GM survey meter	4	Beta Gamma	Moderate <1%
Portable ion-chamber	1	Beta Gamma	NA, exposure rate meter
Portable BF3 neutron instrument	2	Neutrons	Moderate
Portable ion-Chamber x-ray survey system	2	x-rays Gamma	NA, survey of x-ray installations, rate meter

We will use instruments that meet the radiation monitoring instrument specifications above and as published in Appendix J to NUREG-1556, Vol. 18, "Consolidated Guidance about Materials Licenses: Program-Specific Guidance about Service Provider Licenses," dated November 2000. We reserve the right to upgrade our survey instruments as necessary.

10.2 Material Receipt and Accountability

Ordering licensed material and package receipt and opening will follow the model procedures in NUREG-1556, Vol. 18, Appendix K.

10.3 Occupational Exposure

We have done a prospective evaluation and determined that unmonitored individuals are not likely to receive, in one year, a radiation dose in excess of 10% of the allowable limits in 10 CFR 20.

In the event the need arises for dosimetry, NVLAP-accredited dosimetry will be used and processed by a NVLAP-accredited entity. The dosimetry will be exchanged at the frequency specified in Section 8.10.4 of NUREG-1556, Vol. 18.

10.4 Surveys

We will survey our facility and maintain contamination levels in accordance with the survey frequencies and contamination levels published in NUREG-1556, Vol. 18, "Program Specific Guidance About Service Provider Licenses," dated November 2000.

10.5 Leak Test

Leak testing will follow the guidelines provided in Appendix O of NUREG-1556, dated November 2000.

We will provide leak test kits as described in the model leak test kit description in Section 8.10.8 of NUREG-1556, Vol. 18, dated November 2000.

10.6 Maintenance

We will implement and maintain procedures for routine maintenance of any licensed devices according to each manufacturer's written recommendations and instructions.

We will have the manufacturer or other person authorized by the NRC or an Agreement State perform non-routine maintenance.

Appendix

B

RADIOACTIVE SOURCE LEAK TEST

PURPOSE

To establish a procedure for the leak testing of radioactive sources.

DISCUSSION

A leak test is required to be performed on any licensed, sealed, non-fissionable source every six months as specified in 10 CFR 30.

If any measurable activity is detected when the source leak test is performed, the source will be considered as leaking. The leaking source will be reported to the individual responsible for the source by telephone as soon as practical. Written notification will follow in a reasonable period of time. The recommendation will be made to immediately remove the leaking source from service, and seal it in its container.

ATTACHMENTS

1. Source Leak Test Certificate

REFERENCES

1. 10 CFR 20
2. 10 CFR 30

PROCEDURE

CAUTION

When testing high intensity sources, take care not to unnecessarily expose yourself to the source.

CAUTION

Wear surgeons gloves while performing the wipe step on the source. Change gloves after each wipe to prevent cross contamination of wipe-samples.

1. For Thickness Gauge sources:
 - a. Fold a smear paper in half three (3) times, creating a triangle.
 - b. Dip the point of the triangle in alcohol then use it (the

center of the smear paper) to wipe the source.

- c. When possible, wipe the entire surface of the source with the smear paper.

CAUTION

When large sources are being leak tested, verify that the source is properly housed by checking the dose rate around the source holder with a dose rate instrument.

2. In the case of high intensity source, wipe the source shield in the area where the source travels. If the source is stored in a sealed container, wipe the nearest accessible surface to the source.
3. Seal the wipe-sample in a plastic bag.
4. Survey the bag with a dose rate instrument, if it reads more than 1 mr/hr take the following actions:
 - a. Notify the owner that the source is leaking badly.
 - b. Recommend to the source owner that the source be immediately removed from service and placed in a sealed container.
 - c. If the source owner has a license (not a general license), notify the RSO of the conditions.
 - d. If the source owner is a general license, Recommend that a professional consultant should be obtained immediately to perform contamination surveys and dose assessments of possibly exposed individuals.
5. When ready to analyze the wipe, remove it from the bag, open the wipe up and place it, contaminated side up, in the counter.
6. Count for two minutes or more with the appropriate detector scaler combination.

NOTE

If the Net cpm is less than three(3) sigma above the background cpm, there is no measurable activity on the smear paper.

7. Calculate the activity as follows:

$$\text{uCi} = \frac{(\text{Net cpm}) (4.5 \text{ E-7 uCi/dpm})}{\text{Counter Efficiency}}$$

8. If the source is not leaking, complete the appropriate information on the Source Leak Test Certificate, and mail it to the source owner, or the owners designated representative.

NOTE:

If the source is larger than 100 uCi (10 uCi Alpha) and the measured activity on the wipe is 0.005 uCi or greater then the source owner shall be informed that the NRC Regional Administrator is to be notified per 10 CFR 31.5.c.5 within 30 days.

9. If the source is leaking, notify the individual responsible for the source by telephone as soon as practical. State that the regulations require the source to be immediately removed from service, and recommend that the source be sealed in its storage container.
10. Send a written notice with the same statement and recommendation to the individual responsible for the source.

ACCEPTANCE CRITERIA

1. All smear results shall be less than minimum detectable for a certificate to be issued.
2. The counting equipment and counting time will be such that minimum detectable activity will be equal to or less than .005 uCi.