

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4125

December 21, 2010

Energy Laboratories, Inc.
ATTN: Dee Fairservis
Radiation Safety Officer
P.O. Box 3258
Casper, Wyoming 82602

SUBJECT: NRC INSPECTION REPORT 030-29502/10-001 AND NOTICE OF VIOLATION

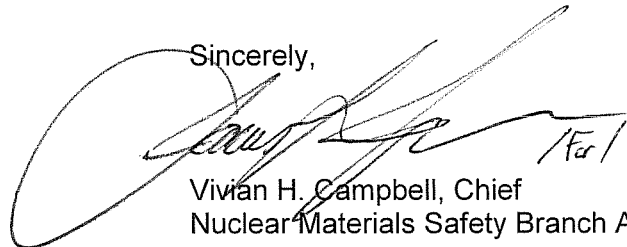
Dear Ms. Fairservis:

Thank you for your letter dated December 13, 2010, in response to the NRC Inspection Report and Notice of Violation, dated November 17, 2010. Your response is currently under review by NRC staff. You will be notified when we have concluded our evaluation.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, and your response, should you choose to make one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction.

Should you have any questions concerning this inspection, please contact Ms. Linda Gersey at 817-860-8299 or the undersigned at 817-860-8287.

Sincerely,

A handwritten signature in black ink, appearing to read "Vivian H. Campbell", with a large loop on the left and a flourish on the right. The signature is written over the typed name and title.

Vivian H. Campbell, Chief
Nuclear Materials Safety Branch A

Docket: 030-29502
License: 49-26846-01

cc w/Response letter dated December 13, 2010:
Wyoming Radiation Control Program Director

Internal distribution via e-mail:

- E. Collins, RA
- R. Caniano, D:DNMS
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- J. Whitten, C:DNMS/NMSB-B
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Hard Copy:

- RIV Materials Docket File
- DNMS Secretarial File

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RIV:DNMS:NMSB-A		C:NMSB-A			
LMGersey;dlf		VHCampbell			
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12/21/10		12/22/10			

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December 13, 2010

DEC 14 2010

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

Elmo Collins, Jr., Regional Administrator
U.S. Nuclear Regulatory Commission, Region IV
Texas Health Resources Tower
612 East Lamar Blvd. Suite 400
Arlington, Texas 76011-4125

RE: Reply to a Notice of Violation

Gentlemen:

This letter is in response to Notice of Violation, Docket: 030-29502, License: 49-26846-01.

In terms of responding to this NOV, Energy Laboratories Inc. (ELI) Casper Branch feels that it would be beneficial to provide background information relevant to our operation.

ELI is a commercial analytical laboratory that specializes in organic, inorganic, trace metals, microbiological and radiochemical analysis of water, waste, soil, air and petroleum product samples. As such, ELI receives samples from clients for the purpose of determining specific constituents/properties that may or may not exist in the samples and to what extent.

ELI currently holds EPA Certification for a number of radiochemical contaminants using recognized EPA methods for analytical determinations. ELI also uses radiochemical methods based on established standards of radiochemical analysis for radionuclides in soil and vegetation. The laboratory also meets the current guidance for analysis of soils as stipulated in US NRC Regulatory Guide 4.14.

When receiving samples for radiochemical analysis, ELI has procedures in place to initially screen samples for activity in order to safeguard employees. When core samples are received for analysis, the composition is generally unknown by both the client and ELI. Raw core samples are often 3" core samples from one-foot intervals. In order to determine the composition, core samples are normally crushed and ground in order to obtain a representative sample from the whole core material provided by the client. A portion of this homogenized material is used in the radiochemical analyses requested by the client.

Section 40.13 part (b) of 10CFR states the following, "(b) Any person is exempt from the regulations in this part and from the requirements for a license set forth in section 62 of the act to the extent that such person receives, possesses, uses, or transfers unrefined and unprocessed ore containing source material; provided, that, except as authorized in a specific license, such person shall not refine or process such ore."



As an analytical services laboratory we do not "refine or process such ore". Rather we take a small portion of the material received from the client and prepare it for radiochemical analysis. Any residual material is stored (by agreement with the client) at our facility so that if additional radiochemical analyses need to be performed or repeated that a representative sample of the material can still be obtained. It is our belief that under this section, 10CFR40.13 part (b), we are exempt from having this material appear in our license, because it is a sample, and not being used for production or industrial purposes.

In reviewing 10 CFR 171.16, Annual Fees, it is unclear to ELI where analytical laboratories that exceed the "Small Business Not Engaged in Manufacturing" would be categorized. As ELI is neither a manufacturer nor an enrichment facility, we request further evaluation.

With the information provided above, the responses to the NOV follow.

Respectfully,

David N. Poelstra
Casper Branch Manager

CC: Dee Fairservis, RSO
Jim Judge, QA Manager

Attachment

Response to NOV

Source material is defined in 10 CFR 40.4, in part, as uranium or thorium, or any combination thereof, in any physical or chemical form, or ores which contain by weight one twentieth of one percent (0.05%) or more of uranium, thorium, or any combination thereof.

Contrary to the above, on August 23, 2010, Energy Laboratories, Inc. possessed three 55-gallon barrels, which exceeded a total of 15 pounds, of processed (ground) source material without a valid NRC license and was not exempt from the requirements for a general license.

Finding

10 CFR 40.3 requires, in part, that no person shall possess or use any source material after removal from its place of deposit in nature, unless authorized by a specific or general license issued pursuant to Title 10, Part 40, Code of Federal Regulations.

10 CFR 40.22 allows, in part, a general license for commercial use of no more than 15 pounds of source material at any one time.

(1) The reason for the violation or, if contested, the basis for disputing the violation or severity level

ELI Response: It was ELI's understanding, that the current license allowed possession of samples provided by clients that might contain source material, The samples are submitted for analysis, and are not considered to be for commercial use.

The rationale for this lies partly from NUREG 1717 "Systematic Radiological Assessment of Exemptions for Source and Byproduct Materials," USNRC. Section 3.3.2 "In 10 CFR 40.13(b), any person is exempt from the requirements for a license, to the extent that the person receives, possesses, uses or transfers unrefined and unprocessed ore containing source material." While the inspector determined that the drums constituted "processed material," it was ELI's understanding that the procedures for analyzing the samples did not constitute refining or processing as would be done in a commercial enrichment facility.

Prior to the inspection, when it was determined in 2009 that ELI may have exceeded the "Authorized use" amount allowed by the current license, under the assumption that the material was classified as waste according to the definition of 11e.(2), the ELI Casper RSO proactively requested a modification to the license from 68 kg to 1000 kg. In addition, the RSO began researching various disposal alternatives.

With respect to source material limits:

ELI assumes each drum weighs 500 lbs for a total of 1500 lbs.

If there was 0.1% uranium and thorium combined (which is a high estimate), 1500 lbs x 0.1% = 1.5 lbs of source material.

(2) the corrective steps that have been taken and the results achieved,



ELI Response: ELI has contracted with a licensed disposal site to accept the three 55 gallon drums of NORM material. The drums are scheduled for pick-up by the disposal site in February 2011.

(3) the corrective steps that will be taken

ELI Response: ELI will monitor the amount of material on hand at any given time on a quarterly basis. When possible, material that meets the source material criteria will be returned to the client after analysis is completed. If the material cannot be returned to the client, arrangements will be made to dispose of the material at a licensed disposal site as soon as reasonably possible. This may require us to store the samples residuals for up to six (6) months as a result of contractual agreements with clients so that re-analyses may be performed if necessary.

(4) the date when full compliance will be achieved.

ELI Response: It is ELI's goal to be in full compliance with NRC regulations dependent on the resolution of this NOV and in accord with the actions listed above by March 1, 2011.