

VALPARAISO UNIVERSITY

Department of Physics & Astronomy

November 01, 2017

Frank Tran
NRC License Officer
NRC Office
2443 Warrenville Road
Lisle, IL 60532-4352

Dear Frank

RE: APPLICATION FOR AMMENDMENT TO THE NRC LICENSE (13-06711-01)

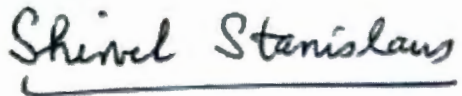
Thanks for your email requesting additional information. The information you requested are as follows:

1. The source will be removed by: Technical Alternatives, 4220 Varsity Drive, Suite C, Ann Arbor, MI. Their license number is: 21-35058-01. I have already sent you a copy of their license.
2. The lot number for the source is E1035. I have sent you a copy of the sticker relating to the source.
3. Authorized users will be: Shirvel Stanislaus and Donald Koetke.

Please let me know if you need any further information.

Thanks You.

Sincerely,



Dr. Shirvel Stanislaus,
Professor of Physics and RSO



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, ILLINOIS 60532-4352

JUL 08 2013

David Westfall
Radiation Safety Officer
Technical Alternatives
4220 Varsity Drive
Suite C
Ann Arbor, MI 48108

Dear Mr. Westfall:

Enclosed is your NRC Material License No. 21-35058-01 in accordance with your request.

Please review the enclosed document carefully and be sure that you understand all conditions. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region III office at (630) 829-9887 so that we can provide appropriate corrections and answers.

Please be advised that your license expires at the end of the day, in the month, and year stated in the license. Unless your license has been terminated, you must conduct your program involving byproduct materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

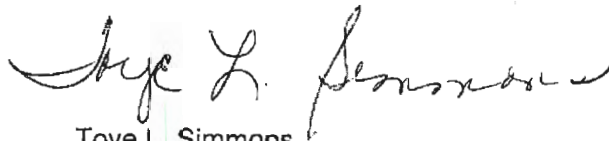
1. Operate in accordance with NRC regulations 10 Code of Federal Regulations (CFR) Part 19, "Notices, Instructions and Reports to Workers; Inspections," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Notify NRC, in writing, within 30 days:
 - a. When the Radiation Safety Officer permanently discontinues performance of duties under the license or has a name change; or
 - b. When the mailing address listed on the license changes.
3. In accordance with 10 CFR 30.36(d) and/or license condition, notify NRC, promptly, in writing, and request termination of the license:
 - a. When you decide to terminate all activities involving materials authorized under the license; or
 - b. If you decide not to complete the facility, acquire equipment, or possess and use authorized material.

4. Request and obtain a license amendment before you:
 - a. Order byproduct material in excess of the amount, or radionuclide, or form different than authorized on the license;
 - b. Add or change the areas of use or address or addresses of use identified in the license application or on the license; or
 - c. Change ownership of your organization.

You will be periodically inspected by NRC. Failure to conduct your program in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in enforcement action against you. This could include issuance of a notice of violation, or imposition of a civil penalty, or an order suspending, modifying or revoking your license as specified in the General Statement of Policy and Procedure for NRC Enforcement Actions. Since serious consequences to employees and the public can result from failure to comply with NRC requirements, prompt and vigorous enforcement action will be taken when dealing with licensees who do not achieve the necessary meticulous attention to detail and the high standard of compliance which NRC expects of its licensees.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Sincerely,



Toye L. Simmons
Health Physicist
Materials Licensing Branch

License No. 21-35058-01
Docket No. 030-38635

Enclosures: 1. License No. 21-35058-01
2. New License Package

U.S. NUCLEAR REGULATORY COMMISSION

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee	
1. Technical Alternatives	3. License number 21-35058-01
2. 4220 Varsity Dr. Suite C Ann Arbor, MI 48108	4. Expiration date July 31, 2023
	5. Docket No. 030-38635 Reference No

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
A. Cesium-137	A. Sealed Sources	A. No single source to exceed 40 microcuries. 800 microcuries total
B. Barium-133	B. Sealed Sources	B. No single source to exceed 20 microcuries. 400 microcuries total
C. Europium-152	C. Sealed Sources	C. No single source to exceed 20 microcuries. 400 microcuries total
D. Radium-226	D. Sealed Sources	D. No single source to exceed 20 microcuries. 400 microcuries total

9. Authorized use:

A. Through D. For use and/or possession incident to:

- (1) Installation into or removal from liquid scintillation counters or gamma counters manufactured by Beckman Coulter Instruments, Packard Instrument Company, Perkin Elmer Life Sciences and Wallac Instruments.
- (2) redistribution of liquid scintillation counters and gamma counters containing sealed sources manufactured by Beckman Coulter Instruments, Packard Instrument Company, Perkin Elmer Life Sciences and Wallac Instruments to specific licensees.
- (3) Repair, refurbishing, testing and calibration of liquid scintillation counters or gamma counters containing sealed sources manufactured by Beckman Coulter Instruments, Packard Instrument Company, Perkin Elmer Life Sciences and Wallac Instruments.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
21-35058-01Docket or Reference Number
030-38635CONDITIONS

10. License material may be used and stored at 4220 Varsity Drive, Ann Arbor, Michigan and may be used at temporary jobsites of the licensee anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
11. The Radiation Safety Officer for this license is David Westfall.
12. Licensed material shall be used by, or under the supervision of David Westfall.
13. Sealed sources containing licensed material shall not be opened.
14. The licensee shall conduct a physical inventory every six months to account for all sealed sources and/or devices received and possessed under this license.
15. This license does not authorize distribution to persons exempt from licensing.
16. The licensee may transport licensed material in accordance with the provisions of 10 CFR Part 71, 'Packaging and Transportation of Radioactive Material'.
17. Licensed material shall not be used in or on human beings.
18. The licensee shall perform repairs and other servicing of devices in accordance with the manufacturer's recommendations.
19. Except for maintaining labeling as required by 10 CFR Part 20, or 71, the licensee shall obtain authorization from the U.S. Nuclear Regulatory Commission before making any changes in the sealed source, device or source device combination that would alter the description or specifications as indicated in the respective certificate of registration issued either by the Commission pursuant to 10 CFR 32.210 or by an Agreement State.

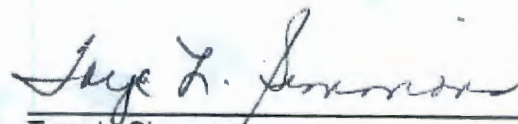
**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
21-35058-01Docket or Reference Number
030-38635

20. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- A. Application dated April 1, 2013; and
 - B. Letter received June 19, 2013.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date JUL 08 2013

By

Toye L. Simmons
Materials Licensing Branch
Region III

Beckman

INSTRUMENTS, INC.



**CAUTION
RADIOACTIVE
MATERIAL**

ONE EACH 40 MICROCURIE
CESIUM-137

DATE 5/19/79

LOT # E1035

REMOVAL OF THIS LABEL IS PROHIBITED
BY REGULATIONS OF THE NRC AND
AGREEMENT STATES.

Liquid Scintillation Spectrometer generally licensed pursuant to California Administrative Code, Title 17, Section 30192(c) (1) has been manufactured and distributed pursuant to California License No. GL-1313-30 by Beckman Instruments, Inc.

CONTAINS RADIOACTIVE MATERIAL. One 40 microcuries, cesium-137 source. Receipt, possession, use and transfer of this Beckman Instruments, Inc. Model 1650, 1660, 1670, 1680 or 1690 Liquid Scintillation Spectrometer and its 590,000 to 700,000 Liquid Scintillation Spectrometers are subject to a Federal license or equivalent and the regulations of the USNRC or of an agreement state (a state with which the NRC has entered into an agreement for the exercise of regulatory authority.) This device shall not be transferred, loaned or disposed of except by transfer to a person specifically licensed by the NRC or an agreement state.

In the event there is any indication of a possible failure of, or damage to, the containment of the radioactive material, Beckman Instruments, Inc. shall be notified immediately, and operation of this Liquid Scintillation Spectrometer shall be immediately suspended until any necessary repairs have been made.

Maintenance or repair of this Liquid Scintillation Spectrometer which involves radioactive material contained therein, or its containment, shall be performed only by Beckman Instruments, Inc. or other person holding a specific license to perform such services from the NRC or from an agreement state.

The radioactive source in this Liquid Scintillation Spectrometer is not required to be leak tested provided the background radiation indicated by the spectrometer remains normal. Any background radiation abnormality not otherwise explained shall be treated as a failure of containment of the radioactive material.

Beckman Instruments, Inc., Fullerton, CA 92634

Printed in U.S.A.

Tran, Frank

From: Shirvel Stanislaus <shirvel.stanislaus@valpo.edu>
Sent: Thursday, November 02, 2017 12:00 PM
To: Tran, Frank
Cc: Shirvel Stanislaus
Subject: [External_Sender] Re: Request for additional information re NRC License No. 13-06711-01
Attachments: NRC License Document.PDF; ATT00001.htm; Cs-137_sticker.jpg; ATT00002.htm

Dear Frank,

Thanks for your email requesting additional information. The information you requested:

1. The source will be removed by: Technical Alternatives, 4220 Varsity Drive, Suite C, Ann Arbor, MI. Their license number is: 21-35058-01. I am also attaching a copy of their license.
2. The lot number for the source is E1035. I am attaching the sticker relating to the source.
3. Authorized users will be: Shirvel Stanislaus and Donald Koetke.

Thanks,
Dr. Stanislaus

Tran, Frank

From: Shirvel Stanislaus <shirvel.stanislaus@valpo.edu>
Sent: Thursday, November 02, 2017 5:44 PM
To: Tran, Frank
Cc: Shirvel Stanislaus
Subject: [External_Sender] Re: Request for additional information re NRC License No. 13-06711-01
Attachments: NRC_Ammendment_Cs2.pdf; ATT00001.htm

Dear Frank,

I am attaching a signed response to your request.

Thanks,
Dr. Stanislaus