

## MATERIALS LICENSE

Amendment No. 03

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.

30/507

Licensee

In accordance with letter dated

June 13, 1996

3. License Number 24-00513-40 is amended in its entirety to read as follows:

4. Expiration Date

August 31, 1997

5. Docket or

Reference No. 030-32692

6. Byproduct, Source, and/or  
Special Nuclear Material7. Chemical and/or Physical  
Form8. Maximum Amount that Licensee  
May Possess at Any One Time  
Under This License

A. Any byproduct material with Atomic Numbers between 1-83, inclusive except as specified below	A. Any	A. 0.5 curie of each radionuclide with a total possession limit of 5 curies
B. Hydrogen-3	B. Any	B. 1 curie
C. Polonium-210	C. Any	C. 1 microcurie
D. Activation products of natural uranium	D. Any	D. 10 millicuries
E. Americium-241	E. Sealed source	E. 0.1 millicuries
F. Cesium-137	F. Sealed source (Ronan, Model X90-SA1-C10)	F. 50 millicuries
G. Americium-241	G. Sealed source (Troxler Model 3440)	G. 40 millicuries

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9610210324 961008  
PDR ADOCK 03032692  
C PDR

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MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License Number

24-00513-40

Docket or Reference Number

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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
H. Cesium-137	H. Sealed source (Troxler Model 3440)	H. 8 millicuries
I. Californium-252	I. Sealed source	I. 1 microgram (520 microcuries)
J. Plutonium-239	J. Sealed source (Mound No. M-169) Pu/Be	J. 76.3 grams
K. Plutonium-239	K. Sealed source (Mound No. 820S38-36B) Pu/Be	K. 85 grams
L. Uranium (Natural)	L. Sub-Critical Slugs in Aluminum Cans	L. 2,540.1 kilograms
M. Thorium	M. Any	M. 3 kilograms
N. Uranium (Natural)	N. Any	N. 3 kilograms
O. Neptunium-237	O. Any	O. 1 nanocurie
P. Uranium-239	P. Any	P. 1 nanocurie
Q. Uranium-235	Q. Any	Q. 1 nanocurie
R. Samarium-151	R. Sealed source	R. 0.5 curies
S. Cobalt-58	S. Any	S. 1.5 curies

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9. Authorized Use:

- A. through B. Research and development as defined in Section 30.4 of 10 CFR Part 30, and student instruction. Instrument calibration.
- C. through E. Research and development as defined in Section 30.4 of 10 CFR Part 30, (excluding animal studies) and student instruction. Instrument calibration.
- F. To be used in density monitor.
- G. and H. To be used in moisture/density gauge registered with the NRC pursuant to Section 32.210 of 10 CFR Part 32 or an Agreement State, for the measurement of moisture/density content of materials.
- I. through K. Research and development as defined in Section 30.4 of 10 CFR Part 30, (excluding animal studies) and student instruction. Instrument calibration.
- L. To be used in sub-critical light-water moderated assembly for student instruction and research.
- M. and N. Research and development as defined in Section 30.4 of 10 CFR Part 30, (excluding animal studies) and student instruction. Instrument calibration.
- O. through Q. Analytical studies and research on ORNL/DOE soil/water samples.
- R. To be used with Mossbauer spectroscopy experiments.
- S. To be used for research and development as defined in Section 30.4 of 10 CFR Part 30, in accordance with letter dated September 17, 1996.

CONDITIONS

- 10. Licensed material may be used at the licensee's facilities located at University of Missouri at Rolla facilities. Licensed material listed in Items 6.F. through 6.H. shall be used at temporary job sites 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 Nick Tsoulfanidis.
- 12. Licensed material in Subitems 6.A. through 6.Q. shall be used by, or under the supervision of, individuals designated by the Radiation Safety Committee. The licensee shall maintain records of individuals designated as users.

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13. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the limits specified in 10 CFR 30.72 which require consideration of the need for an emergency plan for responding to a release of licensed material.
14. A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as specified by the certificate of registration, referred to in 10 CFR 32.210.
- B. Notwithstanding Paragraph A of this condition, sealed sources designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed 3 months.
- C. In the absence of a certificate from a transferor indicating that a test has been made, a sealed source or detector cell received from another person shall not be put into use until tested.
- D. Sealed sources need not be leak tested if:
- (i) they contain only hydrogen 3; or
  - (ii) they contain only a radioactive gas; or
  - (iii) the half-life of the isotope is 30 days or less; or
  - (iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting materials; or
  - (v) they are not designed to emit alpha particles, are in storage, and are not being used. However, when they are removed from storage for use or transferred to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
- E. The leak test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. Records of leak test results shall be kept in units of microcuries and shall be maintained for inspection by the Commission. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission and the source shall be removed from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region III, 801 Warrenville Road, Lisle, Illinois 60532-4351, ATTN: Chief, Nuclear Materials

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Safety Branch. The report shall specify the source involved, the test results, and corrective action taken. Records of leak test results shall be kept in units of microcuries and shall be maintained for inspection by the Commission. Records may be disposed of following Commission inspection.

- F. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically licensed by the Commission or an Agreement State to perform such services.
15. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 5 years from the date of each inventory, and shall include the quantities and kinds of byproduct material, manufacturer's name and model numbers, location of the sources and/or devices, and the date of the inventory.
16. A. Detector cells containing titanium tritide foil shall only be used in conjunction with a properly operating temperature control mechanism which prevents foil temperatures from exceeding that specified by the manufacturer and approved by NRC.
- B. When in use, detector cells containing a titanium tritide foil or a scandium tritide foil shall be vented to the outside.
17. In lieu of using the conventional radiation caution colors (magenta or purple on yellow background) as provided in 10 CFR 20.203(a)(1), the licensee is hereby authorized to label detector cells, containing licensed material and used in gas chromatography devices, with conspicuously etched or stamped radiation caution symbols.
18. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders or detector cells by the licensee.
19. The licensee is authorized to hold radioactive material with a physical half-life of less than 65 days and Sulphur-35 for decay-in-storage before disposal in ordinary trash provided:
- A. Radioactive waste to be disposed of in this manner shall be held for decay a minimum of 10 half-lives.
- B. Before disposal as normal waste, radioactive waste shall be surveyed to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.

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- C. A record of each disposal permitted under this license condition shall be retained for three years. The record must include the date of disposal, the date on which the byproduct material was placed in storage, the radionuclides disposed, the survey instrument used, the background dose rate, the dose rate measured at the surface of each waste container, and the name of the individual who performed the disposal.
- D. Radioactive waste being held for decay shall not be stored for a period greater than 4 years.
20. Radioactive waste other than that specified in Condition 19. shall not be stored for a period greater than 2 years.
21. Radioactive waste currently possessed exceeding the storage provisions of Condition 19.D., and 20. shall be disposed of within one year of the issuance of this license.
22. Experimental animals, or the products from experimental animals, that have been administered licensed materials shall not be used for human consumption.
23. This license does not authorize commercial distribution of licensed material.
24. The licensee shall not use licensed material in or on human beings except as provided otherwise by specific condition of this license.
25. The licensee shall not use licensed material in field applications where activity is released except as provided otherwise by specific condition of this license.
26. The licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
27. The licensee shall maintain records of information important to safe and effective decommissioning at 108 Campus Support Facility, 1807 Miner Circle, University of Missouri, Rolla Missouri per the provisions of 10 CFR 30.35(g) until this license is terminated by the Commission.
28. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of unsealed licensed material or readily dispersible source material to quantities less than  $10^5$  times the applicable limits in Appendix C of 10 CFR Part 20, as specified in 10 CFR 30.35.

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29. 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 February 10, 1992.
- B. Letters dated July 31, 1992, June 13, 1996 and September 17, 1996.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date

October 8, 1996

By

Cassandra L. Frazier  
Nuclear Materials Licensing Branch, Region III

COPY

BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM  
AND  
REGIONAL LICENSING SECTIONS

(FOR LFMS USE)  
INFORMATION FROM LTS

PROGRAM CODE: 03610  
STATUS CODE: 0  
FEE CATEGORY: EX 3L 1D 2C  
EXP. DATE: 20020831  
FEE COMMENTS: 170.11(A)(4)  
DECOM FIN ASSUR REQD: Y

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED  
APPLICANT/LICENSEE: CURATORS OF THE UNIV. OF MO - ROLLA  
RECEIVED DATE: 960624  
DOCKET NO: 3032692  
CONTROL NO.: 301507  
LICENSE NO.: 24-00513-40  
ACTION TYPE: AMENDMENT

R3

2. FEE ATTACHED

AMOUNT: 0  
CHECK NO.: 0

3. COMMENTS

SIGNED  
DATE

D. Hersey  
7/3/96

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS EXTENDED)

1. FEE CATEGORY AND AMOUNT: EX 3L 2C 1D

2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR:

AMENDMENT  
RENEWAL  
LICENSE

FEE EXEMPT

3. OTHER

SIGNED  
DATE

SC  
7/3/96

RECEIVED

JUL 12 1996

REGION III

Log	July 4 III
Remitter	
Check No.	
Amount	
Fee Category	EX 3L 2C 1D
Type of Fee	AMD
Date Check Rec'd	
Date Completed	7/3/96
By:	SC

1996 JUL - 2 AM 11:00





**University of Missouri-Rolla**  
*Occupational Health & Safety Services*

June 13, 1996

U.S. Nuclear Regulatory Commission  
Region III  
Materials Licensing Section  
801 Warrenville Road  
Lisle, Illinois 60532-4351

ATTENTION: Materials Licensing Section

SUBJECT: License Amendment Request, License No. 24-00513-40

This is a request for an amendment of the University of Missouri-Rolla (UMR) Materials License #24-00513-40 for possession of 1.5 Curie of Cobalt-58.

This isotope will serve as a position source for experiments performed by a physics professor.

The Cobalt-58, provided by INEL, will be plated onto a perforated copper foil.

Please address all correspondence relevant to this matter to the UMR Campus Health Physicist, Ray Bono, at the address and telephone number listed on this letterhead.

Thank you for your assistance with this amendment.

Sincerely,

Nicholas Tsouffanidis, Ph.D.  
Radiation Safety Officer

NT/rab

cc: Dr. Nord Gale, Randy Stoll, Ray Bono

**FEE EXEMPT**  
170.11(A)(4)

c:\office\wpwin\wpdocs\umrc696

108-A Campus Support Facility ♦ 1870 Miner Circle ♦ Rolla, Missouri 65409-0110 ♦ Telephone (314) 341-4305  
FAX (314) 341-6077 ♦ e-mail: OHSS@umr.edu

an equal opportunity institution

**RECEIVED**

**JUN 24 1996**

**REGION III**

JUN 24 1996

301507



**University of Missouri-Rolla**  
*Occupational Health & Safety Services*

September 17, 1996

U.S. Nuclear Regulatory Commission  
Region III  
Materials Licensing Section  
801 Warrenville Road  
Lisle, IL 60532-4351

ATTENTION: Materials Licensing Section - Ms. Frasier

SUBJECT: License Amendment Request, License No. 24-00513-40 (Additional Information)

Dear Ms. Frasier:

This letter is in response to the information you requested in order to continue your review of our license amendment request. Following are the responses to your questions. Also attached is a response to your questions supplied by Benjamin L. Brown, Principal Investigator Positron Laboratory, Mount Holyoke College, MA.

1. The source is completely manufactured at Idaho National Engineering Lab (INEL). The source holders and moderators are made in Massachusetts by Positron Resources, Inc. The moderators are then sent to INEL for assembly of the source. At present this is who the company does the source assembly and manufacture with, but they have told us that could change based on demand.
2. The source is unsealed and therefore is not registered. The manufacturer has stated that the plating integrity is good and that at the time of manufacture the specification is less than 1% removable on a wipe.
3. Co-58 is produced in a nuclear reactor from Ni58 (n,p) Co58.

**RECEIVED**  
**SEP 20 1996**  
**REGION III**

108-A Campus Support Facility ♦ 1870 Miner Circle ♦ Rolla, Missouri 65409-0110 ♦ Telephone (314) 341-4305  
FAX (314) 341-6077 ♦ e-mail: OHSS@umr.edu

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pm 9/18/96

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SEP 20 1996

Ms. Frasier  
Page 2  
September 13, 1996

4. The source is going to be used as a slow positron generator (SPG). The source is mounted in a holder that has the source material facing inward. The positrons are then reflected and moderated out of the source into a vacuum tube. A low-intensity (less than  $10^6$  positrons/sec) positron beam (approximately 2x2 mm in cross sectional area) will be extracted from a shielded 1 Ci Co58 source. This beam will be injected into a stainless steel vacuum chamber (base pressure less than  $10^{-6}$  Torr) where it will interact with a tenuous beam of helium atoms in order to investigate inelastic collisions between positrons and atoms. Known cross sections for ionization and beam densities indicate that a few interaction/second will occur which means that most of the injected positrons will pass through the interaction region and will be collected in a biased Faraday cup. Scattered positrons, due to elastic and inelastic interactions with the helium beam and background gases, will be individually counted by channel-plate electron multipliers. Those not hitting the detector will be stopped by the chamber walls or items contained within the chamber. In addition to counting the scattered positrons, the ionized electrons and recoil helium atoms will be counted by channel-plate multipliers. From the positions and energies of the detected particles, differential information about the atomic interaction dynamics will be extracted.

If there are any more questions concerning this license amendment, please contact me at (573) 341-4305.

Sincerely,



Ray Bono  
Campus Health Physicist  
Director, Occupational Health/Safety Services

GRB/rab

From bbrown@mhc.mtholyoke.edu Mon Sep 2 21:13:24 1996  
Received: from umr.edu (hermes.cc.umn.edu [131.151.1.68]) via ESMTP by hermes.cc.umn.edu (8.7.5/L.4.15) id VAA21456; Mon, 2 Sep 1996 21:13:10 -0500 (CDT)  
Received: from mhc.mtholyoke.edu (mhc.mtholyoke.edu [138.110.1.1]) via ESMTP by hermes.cc.umn.edu (8.7.5/R.4.17) id VAA21453; Mon, 2 Sep 1996 21:13:09 -0500 (CDT)  
Received: (from bbrown@localhost) by mhc.mtholyoke.edu (8.7.5/8.7.3/v960805-01) id WAA25859; Mon, 2 Sep 1996 22:13:08 -0400 (EDT)  
Date: Mon, 2 Sep 1996 22:13:08 -0400 (EDT)  
From: Ben Brown <bbrown@mtholyoke.edu>  
To: Occupational Health and Safety Services <ohss@umn.edu>  
Subject: Re: Co-58 SPG information  
In-Reply-To: <199608222029.PAA17513@saucer.cc.umn.edu>  
Message-ID: <Pine.OSF.3.91.960902214936.24572A-100000@mhc.mtholyoke.edu>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII  
Status: RO

I am very sorry for the delay in replying. We closed the office in the last two weeks of August, and I was camping up in Maine.

1) The source is completely manufactured in Idaho. The source holders are made here in a local machine shop. The moderators are made here, and prepared for slow positron emission here. The whole slow positron generator (SPG) is made in Idaho. We are not limiting the process to the Idaho facility however. There have been successful sources made in Michigan, and we do not rule out the plating and assembly in Michigan if the Idaho facility is unable for some reason to fill an order.

2) The source is considered to be unsealed. It should be handled carefully. The plating integrity is good, but it should be treated as though some can come off. Dupont's sources have a specification of less than 1% removable on a wipe. We feel that our sources are better than that, but they should be treated with care. Some recommended procedures to be as safe as possible:

1. Always have paper towels, or Kimwipes beneath the path of the source when loading.
2. Do not have any fan or excessive air movement when loading.
3. Check for any loose contamination after loading.
4. Air sampling is probably a good idea, but we have never seen any contamination in the air from sources from Dupont or from our sources. Our plating process is different from theirs, but we both have metallic Cobalt as a result, which does not become airborne unless there is a very strong air flow in the room.



5. After removing the source, check for any loose contamination. Wipe any areas with a Kimwipe with methanol for possible contamination.

6. Do not disassemble the source or try to modify the source in any way. If there are problems it should be sent back to the point of assembly after consulting with Positron Resources.

3) The source is not registered, since the NRC does not require it with an unsealed source.

4) The source is produced in a nuclear reactor from a Ni58 (n,p) Co58 reaction.

Again very sorry for the delay. We will be able to respond quickly to any other questions.

Ben Brown

Thu, 22 Aug 1996, Occupational Health and Safety Services wrote:

> Date: Thu, 22 Aug 1996 15:29:03 -0500 (CDT)  
> From: Occupational Health and Safety Services <ohss@umr.edu>  
> To: bbrown@mhc.mtholyoke.edu  
> Subject: Co-58 SPG information  
>  
>  
> Mr. Brown  
> I need some information about the Co-58 source that Dr. R. Dubois  
> is planning on buying. We are working to get the amendment to our license  
> and need to answer some questions for the amendment process.  
>  
> 1) Is all of the work on the source done at INEL? (ie is it completely  
> manufactured there?)  
>  
> 2) What is the source considered by INEL? sealed, unsealed, etc.  
>  
> 3) Is the source registered? by what process? by whom? how?  
>  
> 4) How is the Co-58 produced?  
>  
> Please answer the questions that you can and if there are some that you  
> can't please let me know of someone to contact to get the information.  
> Thank you for your assistance and any help that you may give us in  
> answering these questions. Thank You.  
>  
> Sincerely,

>  
> David Wells  
> --  
>

\*\*\*\*\*  
\*\*\*\*\*

> Scott Gizzie, Brian Richardson, & David Wells  
>  
> Occupational Health and Safety Services  
> 108 Campus Support Facility  
>  
> E-mail: [ohss@umr.edu](mailto:ohss@umr.edu)  
> WWW: <http://www.umd.edu/~ohss/>  
>

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>

OCT 08 1996

Nicholas Tsoulfanidis, Ph.D.  
Radiation Safety Officer  
The Curators of the University  
of Missouri  
University of Missouri-Rolla  
108 Campus Support Facility  
1870 Miner Circle  
Rolla, MO 65409-0110

Dear Dr. Tsoulfanidis:

Enclosed is Amendment No. 03 to your NRC Material License No. 24-00513-40 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 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 licensee's mailing address changes (no fee is required if the location of byproduct material remains the same).
3. In accordance with 10 CFR 30.36(b) and/or license condition, notify NRC, promptly, in writing, and request termination of the license when you decide to terminate all activities involving materials authorized under the license.
4. Request and obtain a license amendment before you:
  - a. Change Radiation Safety Officers;

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- b. Order byproduct material in excess of the amount, or radionuclide, or form different than authorized on the license;
  - c. Add or change the areas of use or address or addresses of use identified in the license application or on the license; or
  - d. Change ownership of your organization.
5. Submit a complete renewal application with proper fee or termination request at least 30 days before the expiration date of your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of byproduct material after your license expires is a violation of NRC regulations. A license will not normally be renewed, except on a case-by-case basis, in instances where licensed material has never been possessed or used.

In addition, please note that NRC Form 313 requires the applicant, by his/her signature, to verify that the applicant understands that all statements contained in the application are true and correct to the best of the applicant's knowledge. The signatory for the application should be the licensee or certifying official rather than a consultant.

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 Policy and Procedures 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.

Sincerely,

Original Signed By  
Cassandra Frazier  
Senior Health Physicist  
Nuclear Materials Licensing Branch

License No. 24-00513-40  
Docket No. 030-32692

Enclosure: Amendment No. 03

DOCUMENT NAME: M:\03032692.CL6

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	DNMS/RIII								
NAME	CFRAZIER:sjd								
DATE	10/8/96								

OFFICIAL RECORD COPY



## CONVERSATION RECORD

TIME

DATE

10:00

8/21/96

O VISIT

O CONFERENCE

X TELEPHONE

X TALKING

O LISTENING

NAME OF PERSON(S) CONTACTED OR IN CONTACT

ORGANIZATION OFFICE, DEPT., ETC.

TELEPHONE NO.

Nicholas Tsoulfanidis, Ph.D., RSOUMissouri-Rolla

(573) 314-4305

Ray Bono

(573) 31

AMendment request dated June 13, 1996

## SUMMARY

Licensee requested to have a Cobalt-58 sealed source added to license. I need the following additional information:

1. Is Co-58 produced in an reactor or is it accelerator produced?

Yes Co-58 is produced by reactor.

2. What is the manf. name and model No. of sealed source? Has it been reviewed by NRC or Agreement State?

8/21/96: Idaho National Engineering Lab (INEL) → where they got the sealed source.

Sealed source made + mounted at UOM Rolla.

Licensee will call INEL and call back in a couple of days.

MS 15 8/21/96

## ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION

Cassandra Frazier

SIGNATURE

DATE

C. Frazier

## ACTION TAKEN



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION III  
801 WARRENVILLE ROAD  
LISLE, ILLINOIS 60532-4351

June 27, 1996

Nicholas Tsoulfanidis, Ph.D.  
Radiation Safety Officer  
Curators of the University of  
Missouri - Rolla  
108 Campus Supports Facility  
1870 Miner Circle  
Rolla, MO 65409-0110

Mail Control No. 301507  
License No. 24-00513-40

SUBJECT: ACKNOWLEDGEMENT OF CORRESPONDENCE  
(Letter Dated 06/13/96)

Dear Licensee:

In response to your request, we have completed the initial processing, which is an administrative review of your application for a(n):

- ☐ New License      ☒ Amendment      ☐ Renewal  
☐ Termination      ☐ Auth User (Amendment not required)      ☐ QMP Revision  
☐ Other \_\_\_\_\_

No administrative deficiencies were identified during this initial review. However, it should be noted that a technical review may identify omissions in the submitted information, technical issues that require additional information, or policy/technical issues that require coordination with headquarters or other NRC regional offices.

It appears that your request is routine (see 1-3 below, as applicable) and complete.

1. New and amendment actions are normally processed within 90 days, unless we find major deficiencies, or policy issues requiring central program office assistance.
2. Renewal actions are normally processed within 180 days, however, under timely filing (before expiration), you may continue to operate under your existing license.
3. Termination actions are normally processed within 90 days, unless confirmatory surveys following decontamination/decommissioning activities are involved.

A copy of your correspondence has been forwarded to our Licensing Fee and Debt Collection Branch (301/415-6097) for approval of the fee category and amount.

If you have a compelling safety or business-related reason for requesting expedited review, please contact the Materials Licensing Branch at (708) 829-9887. We will try to complete your request as soon as practicable. Any correspondence about this request should reference the control number.

Nuclear Materials Support Branch