

MATERIALS LICENSE

Amendment No. 07

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.

302261

Licensee

1. Jackson Community College

2. 2111 Emmons Road
Jackson, MI 49201In accordance with letter dated
January 26, 19973. License Number SNM-1171 is amended in its
entirety to read as follows:

4. Expiration Date August 31, 2005

5. Docket or
Reference No. 070-012286. 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. Plutonium-239

A. Sealed PuBe
neutron sources
(Monsanto)

A. 80 grams

B. Cobalt-60

B. Any form

B. 110 microcuries

9. Authorized Use:

A. To be used in a Visiflux I neutron howitzer for laboratory experiments and student instruction.

B. For possession only, incident to transfer/disposal.

CONDITIONS

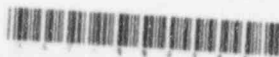
10. Licensed material shall be used only at the licensee's facilities located at Jackson Community College, Physics Department, McDivitt Science Hall, Jackson, Michigan.

11. A. Licensed material shall be used by, or under the supervision and in the physical presence of, Lawrence A. Hitchingham or Chris De Marco.

B. The Radiation Safety Officer for this license is Chris De Marco.

12. 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.

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PDR ADCK 07001228
C PDR

COPY

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

SNM-1171

Docket or Reference Number

070-01228

Amendment No. 07

- 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 leak test has been made within 6 months prior to the transfer, 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 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. 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 in accordance with 10 CFR 30.50(b)(2), and the source shall be removed immediately 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, ATTN: Chief, Nuclear Materials Safety Branch, 801 Warrenville Road, Lisle, Illinois 60532-4351. The report shall specify the source involved, the test results, and corrective action taken.
- 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.
13. Licensed material shall not be used in or on human beings.
14. Sealed sources containing licensed material shall not be opened.
15. Except for plutonium contained in a medical device designed for individual human application, no plutonium, regardless of form, shall be delivered to a carrier for shipment by air transport or transported in an aircraft by the licensee except in packages the design of which the NRC has specifically approved for transport of plutonium by air.

COPY

MATERIALS LICENSE
SUPPLEMENTARY SHEET

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SNM-1171

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16. The licensee shall maintain records of information important to safe and effective decommissioning at Jackson Community College, 2111 Emmons Road, Jackson, Michigan per the provisions of 10 CFR 70.25(g) until this license is terminated by the Commission.
17. 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 U.S. 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 27, 1995, and
- B. Letters dated August 1, 1995, August 14, 1995, and January 26, 1997.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date

MAR 2 1996

By

Loren J. Hunter

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: 22120
Status Code: 0
Fee Category: EX 1D
Exp. Date: 20050831
Fee Comments: 170.11(A)(4)
Decom Fin Assur Req'd: N

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: JACKSON COMMUNITY COLLEGE
Received Date: 970126
Docket No: 7001228
Control No.: 302261
License No.: SNM-1171
Action Type: Amendment

2. FEE ATTACHED

Amount:
Check No.:

3. COMMENTS

Signed D. Hershey
Date 1-30-97

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered / /)

1. Fee Category and Amount: EX 1D / 170.11(A)(4) RLA 3P

2. Correct Fee Paid. Application may be processed for:

Amendment ✓
Renewal
License

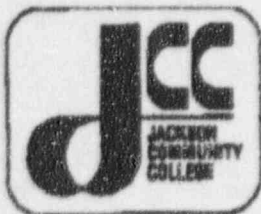
3. OTHER

Signed SC
Date 2/4/97

FEB 10 1997

Log	<u>Feb 2 III</u>
Remitter	<u> </u>
Check No.	<u> </u>
Amount	<u> </u>
Fee Category	<u>EX 1D 3P</u>
Type of Fee	<u>AMD</u>
Date Check Rec'd	<u> </u>
Date Completed	<u>2/4/97</u>
By	<u>SC</u>

1997 FEB - 4 PM 3:17



JACKSON COMMUNITY COLLEGE

2111 Emmens Road • Jackson, Michigan 49201-8399
TEL (517) 787-0800 • FAX (517) 789-1623

January 26, 1997

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

To whom it may concern:

I am writing to request two modifications to Materials License # SNM-1171, currently held by Jackson Community College. The first modification concerns the addition of myself, Prof. Chris J. DeMarco, currently radiation safety officer, to the license as an authorized user. The second modification concerns the addition to the license of a Co-60 source, which is currently being stored, but is not in use, at our facility. Details concerning these two modifications can be found below.

I. Addition of Prof. Chris J. DeMarco as an authorized user.

In three letters, dated February 27, August 1, and August 14 (all 1995), Prof. Lawrence A. Hitchingham (currently listed as the sole authorized user) attempted to modify our license in such a manner as to have me included as an authorized user, due to his then-impending retirement. Unfortunately, there appears to have been a misunderstanding; while I was added to the license as radiation safety officer, I was not included as an authorized user.

Prof. Hitchingham's retirement was effective at the end of August 1996, and I am scheduled to perform a lab in which the PuBe source will be used during the first week of February 1997. Prof. Hitchingham still lives in the area, and he has agreed to come in and operate the source for that lab, but the situation is clearly inconvenient for the both of us. I hereby request that I be added to the license as an authorized user as soon as possible. A brief overview of my background was included in Prof. Hitchingham's letter of February 27, 1995, and is reproduced on the next page.

Both Prof. Hitchingham and myself apologize for our part in helping to create this misunderstanding, and we hope that the situation can be rectified as quickly as possible.

170.11(A)(4)
FEE EXEMPT

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Dr. Lee Hurren
College President

RECEIVED

JAN 26 1997

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ASSOCIATION

302261



JACKSON COMMUNITY COLLEGE

2111 Emmens Road • Jackson, Michigan 49201-8399
TEL (517) 787-0800 • FAX (517) 789-1623

BACKGROUND AND TRAINING -- PROF. CHRIS J. DEMARCO

- B.S. in Physics from Arizona State University, 1985; M.S. in Physics from Arizona State University, 1988. I have over 70 semester hours of coursework in Physics, including 15 semester hours of coursework in Modern Physics, X-Ray Physics, and Quantum Physics.
- I was licensed in the use of X-Ray equipment while working as a research assistant at Arizona State University.
- I worked closely with Prof. Hitchingham (currently the authorized user) for seven years, becoming familiar with the safe use and operation of the sources, as well as becoming familiar with monitoring and leak testing procedures. Under Prof. Hitchingham's supervision, I have been using the sources and performing various monitoring tests during this time.
- I have been the radiation safety officer for this license as of July 29, 1996.

II. Addition of Co-60 source to License

During our most recent inspection (1/24/97) the inspection officer, Mr. Mark Mitchell, and myself came across a Co-60 source with a listed activity of 2 mCi as of 7/27/74, making the estimated current activity approximately 100 μ Ci. Neither I nor Prof. Hitchingham have ever used this source, and we are still uncertain as to how it came to be in our possession. Since it is in our possession, however, we will need to modify our license so as to reflect this fact. Again, let me stress that neither I nor Prof. Hitchingham have ever used this source, and I have no intention of doing so in the future. We are requesting only the permission to store it here at our facility. We apologize for our oversight in this matter; I assure you it was not intentional. Also, I would like to point out that the source is, and has been, stored in a safe and appropriate manner.

Thank you for your assistance in these two matters. If you require more information, please feel free to call my office at (517) 796-8583, fax me at (517) 796-8637, or e-mail me at: demarcoc@pilot.msu.edu

Chris J. DeMarco

Prof. Chris J. DeMarco, Physics Department, Jackson Community College

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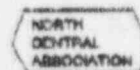
Mark K. Rosenthal
Secretary

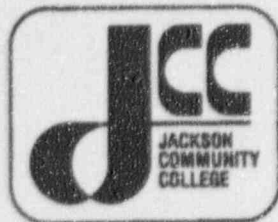
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Dr. Lee Homer
College President





JACKSON COMMUNITY COLLEGE

2111 Emmons Road • Jackson, Michigan 49201-8399
TEL (517) 787-0800 • FAX (517) 789-1623

January 26, 1997

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

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pm: 3-20-97

BOARD OF TRUSTEES

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Mark K. Rosenfeld
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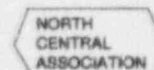
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Trustee

Charles Anderson
Trustee

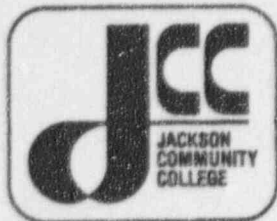
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Trustee

Dr. Lee Howell
College President

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MAR 24 EST



JACKSON COMMUNITY COLLEGE

2111 Emmons Road • Jackson, Michigan 49201-8399
TEL (517) 787-0800 • FAX (517) 789-1623

BACKGROUND AND TRAINING -- PROF. CHRIS J. DEMARCO

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Prof. Chris J. DeMarco, Physics Department, Jackson Community College

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Dr. Lee Howser
College President

NORTH
CENTRAL
ASSOCIATION

MAR 28 1997

Chris De Marco
Radiation Safety Officer
Jackson Community College
2111 Emmons Road
Jackson, MI 49201

Dear Professor De Marco:

Enclosed is Amendment No. 07 to your NRC Material License No. SNM-1171 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.

It is our understanding based on our telecon on March 24, 1997, that you intend to transfer/dispose of the cobalt-60 licensed material within twenty four months and that you will promptly notify us in writing when it is no longer in your possession.

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 mailing address listed on the license 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 a decision is made to terminate all activities involving materials authorized under the license.
4. Request and obtain a license amendment before you:
 - a. Change Radiation Safety Officers;

302261

- 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 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.

Sincerely,
Original Signed By
Loren J. Hueter
Nuclear Materials Licensing Branch

License No.: SNM-1171
Docket No.: 070-01228

Enclosures: 1. Amendment No. 07
2. NRC Form 313

DOCUMENT NAME: M:\07001228.CL7

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	<input checked="" type="checkbox"/>							
NAME	LHUETER:jaw	<input checked="" type="checkbox"/>							
DATE	03/27/97	<input checked="" type="checkbox"/>							

OFFICIAL RECORD COPY

CONVERSATION RECORD

TIME

DATE

3-24-97

☐ VISIT☐ CONFERENCE☒ TELEPHONE☐ INCOMING☒ OUTGOING

NAME OF PERSON(S) CONTACTED OR IN CONTACT

ORGANIZATION (OFFICE, DEPT. ETC.)

TELEPHONE NO.

Prof. Chris De Marco
RSOJackson Community
College517-
796-8583

SUBJECT

CN 302261

SUMMARY

1. Send hard copy of licensee's amendment request letter dated January 26, 1997. We apparently only have FAX copy, will send.
2. Is Prof. Lawrence A. Hitchingham to be retained or deleted as ~~an~~ authorized user in License Condition 11.A.? Retained
3. Discussed that will add Co-60 to license for possession only, incident to transfer/disposal. We agreed to our stating in cover letter that it is our understanding that the licensee will transfer or dispose of the approx. 100 MC of Co-60 within 24 months and notify us in writing when it is no longer in their possession. I told him I would contact Jim Lynch of agreement State program upon his return and if there was any possibility of their being able to transfer the Co-60 to CRCPD who is looking for multi-curies of Co-60, I would call Chris and provide info to him.

ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION

SIGNATURE

DATE

Loren Hunter

3-24-97

ACTION TAKEN

SIGNATURE

TITLE

DATE



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION III
801 WARRENVILLE ROAD
LISLE, ILLINOIS 60532-4351

February 5, 1997

Chris J. DeMarcc, Professor
Radiation Safety Officer
Jackson Community College
2111 Emmons Road
Jackson, MI 49201

SUBJECT: ACKNOWLEDGEMENT OF CORRESPONDENCE
(Letter Dated 01/26/97)

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)
☐ 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.

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

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 required.

If you have a compelling safety or business-related reason for requesting expedited review, please contact the Materials Licensing Branch at (630) 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

Mail Control No. 302261
License No. SNM-1171