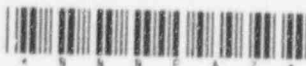


MATERIALS LICENSE

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		In accordance with letter dated November 21, 1996	
1. Alaska Radiological Pharmacy Ltd.		3. License Number 50-29096-01MD is amended in its entirety to read as follows:	
2. 2000 W. International Airport Road Suite A-11 Anchorage, Alaska 99502		4. Expiration Date	April 30, 2001
		5. Docket or Reference No.	030-34015
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. Any byproduct material listed in 8.A. which is initially distributed in accordance with a specific license issued pursuant to 10 CFR 32.72 or equivalent Agreement State regulations	A. Unsealed	A. Molybdenum-99 35.0 Ci Technetium-99m 35.0 Ci Xenon-133 1.0 Ci Strontium-89 495.0 mCi Phosphorus-32 50.0 mCi Rhenium-186 500.0 mCi Iodine-131 1.0 Ci	
B. Technetium-99m	B. Unsealed	B. 35 curies	
C. Strontium-89	C. Unsealed	C. 50 millicuries	
D. Phosphorus-32	D. Unsealed	D. 50 millicuries	
E. Rhenium-186	E. Unsealed	E. 100 millicuries	
F. Any byproduct material listed in 10 CFR 31.11(a)	F. Prepackaged units for <u>in vitro</u> diagnostic tests	F. 50 millicuries	

150015

9705150187 970501
PDR ADOCK 03034015
C PDR

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

50-29096-01MD

Docket or Reference Number

030-34015

Amendment No. 1

G. Any byproduct material
authorized under 10 CFR
35.57(a)

G. Any sealed source
listed in 35.57(a)
that has been
manufactured,
labeled, packaged,
and distributed in
accordance with a
specific license
issued pursuant to
10 CFR 32.74 or
equivalent
regulations of any
Agreement State

G. 50 millicuries

H. Any byproduct material
listed in Sections
35.400 and 35.500 of
10 CFR Part 35

H. Any sealed source
that has been
manufactured,
labeled, packaged,
and distributed in
accordance with a
specific license
issued pursuant to
10 CFR 32.74 or
equivalent
Agreement State
regulations

H. 500 millicuries

I. Uranium (Depleted in
the isotope
Uranium-235)

I. Metal encased in
stainless steel

I. 180 kilograms

9. Authorized use:

A. through E.

Preparation and distribution of radioactive drugs and
redistribution of Mo99/Tc99m generators to authorized
recipients.

F. Redistribution to specific licensees or general licensees pursuant to 10 CFR
31.11 provided the packaging and labeling remain unchanged.

G. Instrument calibration. Redistribution of sources to specifically authorized
recipients. Pursuant to 10 CFR 32.74, the licensee is authorized to
redistribute sources to persons licensed pursuant to 10 CFR 35.57(a) or under
equivalent licenses of Agreement States.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

50-29096-01MD

Docket or Reference Number

030-34015

Amendment No. 1

9. Authorized use (Continued):

- H. Redistribution of sealed sources as received from the manufacturer in the manufacturer's original packaging and shielding and accompanied by the manufacturer's approved instructions to authorized recipients for use and storage.
- I. As shielding for molybdenum-99/technetium-99m generators.

Pursuant to 10 CFR 32.71, 32.72, 32.74, the licensee is authorized to distribute the byproduct material described in Items 6 and 7 and prepared in accordance with this license to persons licensed pursuant to Section 10 CFR 31.11, or Sections 35.57, 35.100, 35.200, 35.300, 35.400, and 35.500 of 10 CFR Part 35, or under equivalent Agreement State licenses.

CONDITIONS

10. Licensed material shall be used only at the licensee's facility located at 2000 W. International Airport Road, Suite A-11, Anchorage, Alaska.
11. A. Licensed material shall be used by, or under the supervision of:
- 1) authorized nuclear pharmacists: Peter C. Iverslie, R.Ph.; Steven C. Dragotakes, R.Ph.; Jeffery S. Cone, R.Ph.; Kathleen M. Taylor, R.Ph.; or Ronald J. Callahan, R.Ph.; Yunga Vercelline, R.Ph.
 - 2) a pharmacist working or designated as an authorized nuclear pharmacist in accordance with 10 CFR 32.72(b)(2) and (4).
- B. The Radiation Safety Officer for this license is Peter Iverslie, R.Ph.
12. Sealed sources containing licensed material shall not be opened or sources removed from source holders by the licensee.
13. A. Sealed sources 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.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

50-29096-01MD

Docket or Reference Number

030-34015

Amendment No. 1

13. (Continued)

- 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 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 material; 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 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(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 IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, ATTN: Director, Division of Nuclear Materials Safety. 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.
14. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license.
15. 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."

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

50-29096-01MD

Docket or Reference Number

030-34015

Amendment No. 1

16. Radioactive waste may be picked up from the licensee's customers and disposed of in accordance with the procedures, statements, and representations in application dated March 14, 1996.
17. The licensee is authorized to hold radioactive material with a physical half-life of less than 65 days 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 ordinary trash, byproduct material shall be surveyed at the container surface with the appropriate meter set on its most sensitive scale and with no interposed shielding to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.
 - C. Generator columns shall be segregated so that they may be monitored separately to ensure decay to background levels prior to disposal.
 - D. A record of each disposal permitted under this License Condition shall be retained for 3 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.
18. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d) and 40.36(b) for establishing decommissioning financial assurance.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

50-29096-01MD

Docket or Reference Number

030-34015

Amendment No. 1

19. 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. Product labels submitted with application dated November 21, 1995
- B. Application dated March 14, 1996
- C. Letter dated March 25, 1996
- D. Telefacsimile received March 29, 1996
- E. Facility diagram received April 2, 1996
- F. Letter dated November 21, 1996
- G. Facsimile dated February 10, 1997
- H. Facsimile dated April 11, 1997

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date MAY - 1 1997

By

James L. Montgomery
Materials Branch
Region IV, WCFO
Walnut Creek, California 94596

(FOR LFMS USE)
INFORMATION FROM LTS

BETWEEN:

License Fee Management Branch, ARM
and
Regional Licensing Sections

Program Code: 02500
Status Code: 0
Fee Category: 3C 2B
Exp. Date: 20010430
Fee Comments:
Decom Fin Assur Req'd: N

LICENSE FEE TRANSMITTAL

A. REGION II

1. APPLICATION ATTACHED

Applicant/Licensee: ALASKA RADIOLOGICAL PHARMACY LTD.
Received Date: 961202
Docket No.: 3034015
Control No.: 572434
License No.: 50-29096-01MD
Action Type: Amendment

2. FEE ATTACHED

Amount: 550.00
Check No.: 2171

3. COMMENTS

Signed
Date

Jan Garcia
12-3-96

B. LICENSE FEE MANAGEMENT BRANCH (Check wh: milestone 03 is entered ✓)

1. Fee Category and Amount: 3C 2B \$520

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

Amendment ✓
Renewal
License

3. OTHER

Signed
Date

Rita Massier
12/10/96

1996 DEC 10 PM 1:47

Log	<u>Doc 1 WCF0</u>
Remitter	
Check No.	<u>2171</u>
Amount	<u>\$550</u> (\$30.00)
Fee Category	<u>3C 2B</u>
Type of Fee	<u>Amnd</u>
Date Check Rec'd.	
Date Completed	<u>12/10/96</u>
By:	<u>Rm</u>

(Refunded)

DIVISION OF ACCOUNTING AND FINANCE REQUEST FOR REFUND TO EMPLOYEE/VENDOR

THE EMPLOYEE/VENDOR IDENTIFIED BELOW HAS OVERPAID THE NUCLEAR REGULATORY COMMISSION FOR GOODS AND/OR SERVICES PROVIDED AND IS DUE A REFUND

EMPLOYEE/VENDOR/PAYEE CODE: _____

NAME: Alaska Radiological Pharmacy, Ltd

ADDRESS: Attn: Peter Iverslie, R.Ph.

ADDRESS: 2000 W. Int'l Airport Road, Suite A 11

CITY: Anchorage STATE: AK ZIP: 99502

TRANS CODE: PX

TRANS TYPE: FE FUND: X5280 JOB CODE: _____ AMOUNT: \$30.00

TRANS TYPE: IR FUND: R1435 JOB CODE: INTR AMOUNT: _____

TRANS TYPE: IR FUND: R1099 JOB CODE: ADCH AMOUNT: _____

TRANS TYPE: IR FUND: R1099 JOB CODE: FINE AMOUNT: _____

TOTAL REFUND AMOUNT: \$30.00

COMMENTS: Airport Amd Fee Lic 50-29096-01(M)
CK 2171

(limit comments to 40 characters, including spaces)

PREPARED BY: Rita Messier DATE: 12/10/96

AUTHORIZED BY: Debra Kambury DATE: 12/10/96

ORIGINAL INV. NO: _____ DATE PAID: _____ AMOUNT: _____

REFUND ENTERED INTO COLLECT BY: _____

REFUND DETERMINED BY: _____ DATE: _____

PLEASE ATTACH APPROPRIATE SUPPORTING DOCUMENTATION

3C
AA905 AMD
Dec 12

572434

ck# 2171
dated 11/25/96
for \$550



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV

Walnut Creek Field Office
1450 Maria Lane
Walnut Creek, California 94596-5368

MAY - 1 1997

Alaska Radiological Pharmacy Ltd.
ATTN: Peter Iverslie
Radiation Safety Officer
2000 W. International Airport Road
Anchorage, Alaska 99502

SUBJECT: LICENSE AMENDMENT

Please find enclosed License No. 50-29096-01MD. You should review this license carefully and be sure that you understand all conditions. Regarding your request to add Vivian Foot to your license, we are unable to add her to your license until she has completed the training requirements in 10 CFR Part 35 for a nuclear pharmacist. After she has completed her training, please submit a copy of her training records and refer to control number 572434 and we, without an additional fee, will amend your license to list Ms. Foot as an authorized nuclear pharmacist. If you have any questions, you may contact Kent M. Prendergast at (510) 975-0255.

NRC expects licensees to conduct their programs with meticulous attention to detail and a high standard of compliance. Because of the serious consequences to employees and the public which can result from failure to comply with NRC requirements, you must conduct your program involving radioactive 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: Inspection and Investigations," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Possess radioactive material only in the quantity and form indicated in your license.
3. Use radioactive material only for the purpose(s) indicated in your license.
4. Notify NRC in writing of any change in mailing address (no fee required if the location of radioactive material remains the same).
5. Request and obtain written NRC consent before transferring your license or any right thereunder, either voluntarily or involuntarily, directly or indirectly, through transfer of control of your license to any person or entity. A transfer of control of your license includes not only a total change of ownership, but also a change in the controlling interest in your company whether it is a corporation, partnership, or

(continued)

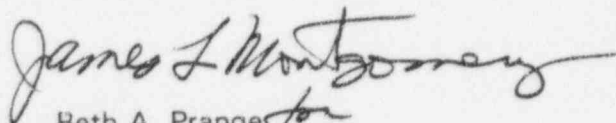
other entity. In addition, appropriate license amendments must be requested and obtained for any other planned changes in your facility or program that are contrary to your license or contrary to representations made in your license application, as well as supplemental correspondence thereto, which are incorporated into your license. A license fee may be charged for the amendments if you are not in a fee-exempt category.

6. Maintain in a single document decommissioning records that have been certified for completeness and accuracy listing all the following items applicable to the license:
 - Onsite areas designated or formerly designated as restricted areas as defined in 10 CFR 20.3(a)(14) or 20.1003.
 - Onsite areas, other than restricted areas, where radioactive materials in quantities greater than amounts listed in Appendix C to 10 CFR 20.1001-20.2401 have been used, possessed, or stored.
 - Onsite areas, other than restricted areas, where spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site have occurred that required reporting pursuant to 10 CFR 30.50(b)(1) or (b)(4), including areas where subsequent cleanup procedures have removed the contamination.
 - Specific locations and radionuclide contents of previous and current burial areas within the site, excluding radioactive material with half-lives of 10 days or less, depleted uranium used only for shielding or as penetrators in unused munitions, or sealed sources authorized for use at temporary job sites.
 - Location and description of all contaminated equipment involved in licensed operations that is to remain onsite after license termination.
7. Submit a complete renewal application with proper fee, or termination request at least 30 days before the expiration date on your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of radioactive material after your license expires is a violation of NRC regulations.
8. Request termination of your license if you plan to permanently discontinue activities involving radioactive material.

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; 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" (Enforcement Policy), 60 FR 34381, June 30, 1995.

Thank you for your cooperation.

Sincerely,

A handwritten signature in dark ink, appearing to read "James I. Montgomery". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Beth A. Prange
Sr. Health Physicist (Licensing)
Materials Branch

Docket: 030-34015
License: 50-29096-01MD
Control: 572434

Enclosures: As stated

bcc:

Docket File

WCFO Inspection File

1FARB, T-9 E10

State of Alaska (License Only)

DOCUMENT NAME: G:\AKRAD 572434

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

RIV:MB		RIV:MB							
K Prendergast	<i>Kmb</i>	<i>John</i>							
04/29/97		5/1/97							

OFFICIAL RECORD COPY



ALASKA RADIOLOGICAL PHARMACY, LTD.

2000 W. Int'l Airport Rd., Suite A11, Anchorage, AK 99502

(907) 243-6377 • Fax (907) 243-4570

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DATE SENT:

4/11/97

TIME SENT:

TO:

KENT

FAX NUMBER:

COMPANY NAME:

NRC

510-975-0381

FROM:

PETER

COMPANY NAME:

ARP

TEL NO.:

VIEWER FOOT IS WORKING ON CONTINUING EDUCATION
COURSES THROUGH WAM FOR NUCLEAR PHARMACEUT

FAX NO.:

AND UNDER MY SUPERVISION. I WILL SEND
DATA AS SHE COMPLETES WORKS

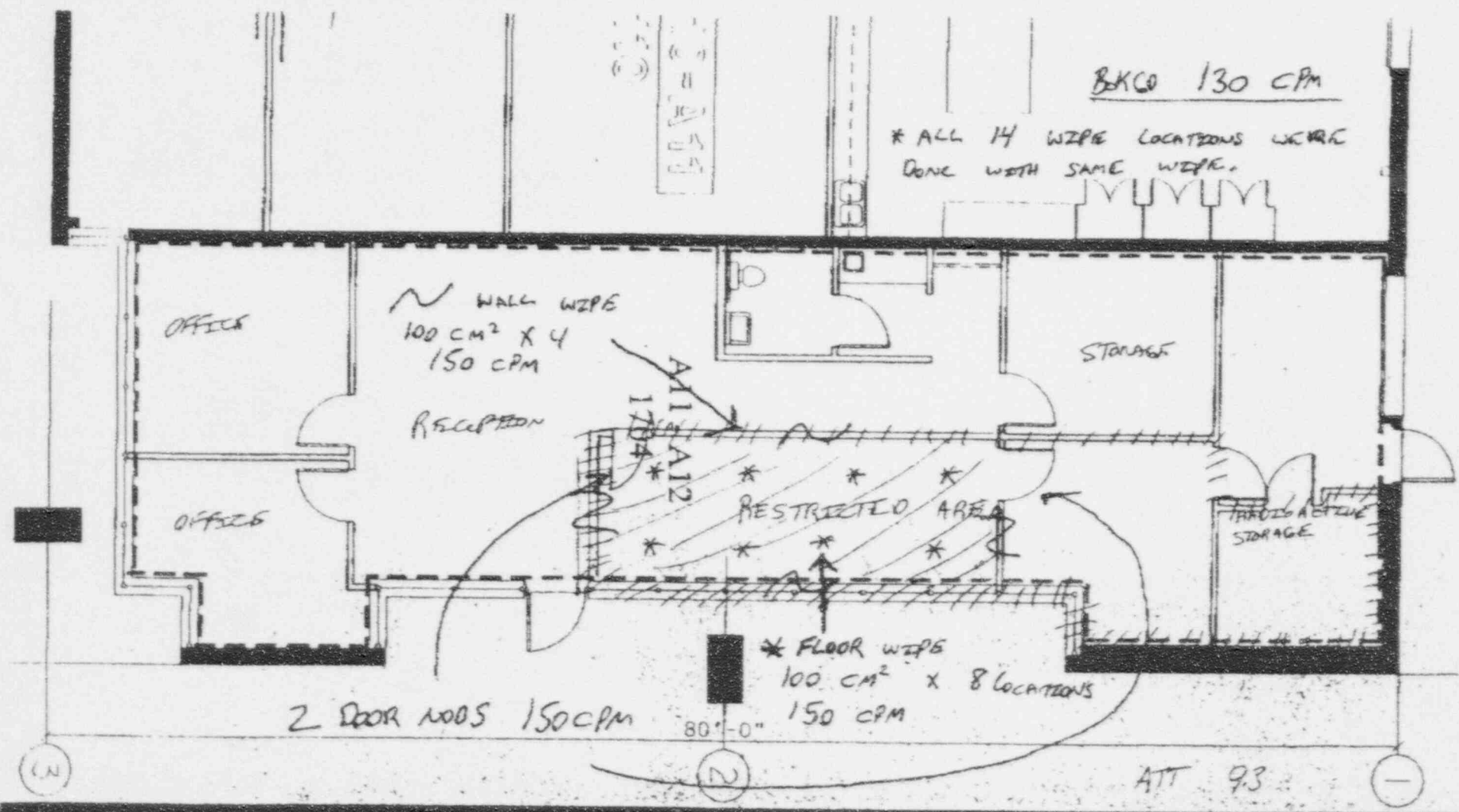
DESCRIPTION:

PLEASE LET ME KNOW IF YOU NEED ADDITIONAL
INFO.THANKS,
PETER

NUMBER OF PAGES SENT (including Cover Sheet):

2

If there is a problem receiving
this transmission please contact:



BUILDING A FLOOR PLAN

'WAS-BUILT' DRAWINGS

AIRPORT BUSINESS PARK
INTERNATIONAL & MINNESOTA, ANCHORAGE
PREPARED FOR JK PROPERTIES

JOB NUMBER
8037
8037



ALASKA RADIOLOGICAL PHARMACY, LTD.

2000 W. Int'l Airport Rd., Suite A11, Anchorage, AK 99502

(907) 243-6377 • Fax (907) 243-4570

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DATE SENT: 2/10/97

TIME SENT:

TO: KENT

FAX NUMBER:

510-975-0381

COMPANY NAME: NRC

FROM: PETER

COMPANY NAME: ARP

TEL NO.:

FAX NO.:

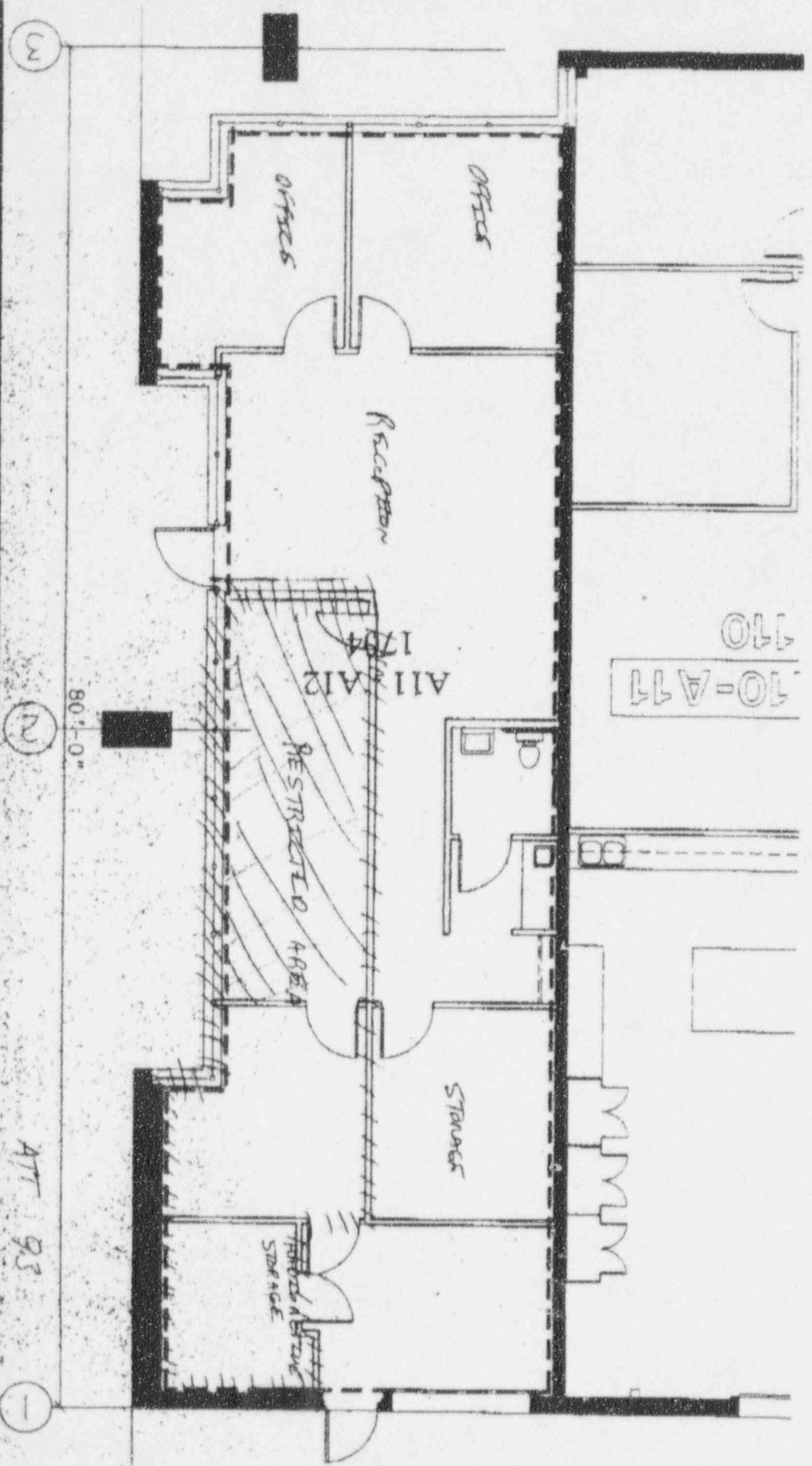
DESCRIPTION: IF YOU NEED ADDITIONAL INFO PLEASE
CALL ME A CALL.THANKS,
PETER

NUMBER OF PAGES SENT (including Cover Sheet): 3

If there is a problem receiving
this transmission please contact:

JOB NUMBER 89037
WCRK ORDER 940401

BUILDING A FLOOR PLAN
'WAS-BUILT' DRAWINGS
AIRPORT BUSINESS PARK
INTERNATIONAL & MINNESOTA, ANCHORAGE
PREPARED FOR JK PROPERTIES



- 1) Area previously marked as Restricted Area that is now Unrestricted was surveyed and wiped as per request.

Results were as follows: Background = 130 cpm
Wipe counts = 150 cpm

Survey Background = 0.1 mR/hr
Actual Survey = 0.1 mR/hr

- 2) Vivian Foote is currently out of state.

She will return on February 11, 1997.

Information can be faxed once Ms Foote has returned from her trip.

U.S. NUCLEAR REGULATORY COMMISSION		DATE: 2/5/97
TELEPHONE OR VERBAL CONVERSATION RECORD		TIME: 1:00P am or pm
INCOMING CALL	OUTGOING CALL	VISIT
PERSON CALLING Kent Prendergast	ADDRESS RIV, WCFO	PHONE # / EXTENSION (510) 975 - 0255
PERSON CALLED: Peter Iverslie	ADDRESS: Alaska Radiopharmacy	PHONE # / EXTENSION: (907) 243-6377
CONVERSATION		
SUBJECT: License Amendment		

SUMMARY: We discussed the recent request for amendment and I requested that Mr. Iverslie provide me the following.

- 1) Surveys and wipe tests of the area in the former restricted area to ensure there is no residual contamination.
- 2) a certificate, license or other documentation on Vivian Foot to document that she has completed the training in 35.980 and evidence of continuing education since her last training was in 1986 which exceeds the seven years listed in 35.972.

REFERRED TO: MS-15	ADVISE ME OF ACTION TAKEN (Y) OR (N)
ACTION REQUESTED Provide information	INITIALS: KP
	DATE
ACTION TAKEN	INITIALS:
	DATE
	NRC FORM 218 REPO (2-89;KMP)



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV

Walnut Creek Field Office
1450 Maria Lane
Walnut Creek, California 94596-5368

DEC - 3 1996

Peter Iverslie, RPh.
President
Alaska Radiological Pharmacy, Ltd.
2000 W. International Airport Road
Suite A11
Anchorage, Alaska 99502

SUBJECT: ACKNOWLEDGMENT OF REQUEST FOR LICENSING ACTION

REFERENCE: Letter dated November 21, 1996

We have completed the administrative review and initial processing of your application.

Please note that the technical review may identify additional omissions in the submitted information or technical issues that require additional information.

Amendment actions are normally processed within 90 days, unless the technical review identifies:

- Major technical deficiencies
- Policy issues that require input and coordination with other NRC Regional offices, Agreement State offices, or NRC's Office of Nuclear Materials and Safeguards

A copy of your correspondence has been forwarded to our License Fee and Accounts Receivable Branch, Office of the Controller, who will contact you separately if the appropriate license fee has not been submitted for your request, or for billing if your request is subject to full cost recovery.

Any correspondence about this application should reference the Control number listed below.

Sincerely,

Beth A. Prange

Beth Prange
Sr. Health Physicist (Licensing)
Materials Branch

Docket No. 030-34015
License No. 50-29096-01
Control No. 572434

Alaska Radiological Pharmacy, Ltd.
Anchorage, Alaska

-2-

bcc:
Docket File

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	RIV:AO:NMLB	N		N				
NAME	J. Garcia <i>[Signature]</i>		B. Prange <i>BaP</i>					
DATE	2/3/96		12/3/96					



Rx

Amendment
ALASKA RADIOLOGICAL PHARMACY, LTD.

2000 W. Int'l Airport Rd., Suite A11, Anchorage, AK 99502

(907) 243-6377 • Fax (907) 243-4570

030-34015

November 21, 1996

Radioactive Materials Safety Branch
U.S. Nuclear Regulatory Commission, Region V
1450 Maria Lane
Walnut Creek, CA 94596-5368
ATTN: Beth Prange

Dear Beth Prange:

Please find enclosed two copies of the addendum to our materials license #50-29096-01MD. The first is a floor plan of the pharmacy (ATT 1.1) which shows the reduction in the restricted area. The back two rooms now contain the same equipment that use to be in the old restricted area. A copy of the new lay out is being sent to the Fire Department. The second is the addition of two nuclear pharmacists to the license. The first Pharmacist is Yunga Vercelline (Chang was her madden name). She worked for Syncor in Maryland. I have enclosed her documentation. Her Alaska Pharmacy License number is 1126. The second Pharmacist is Vivian Foote. She could not locate her documentation but was on staff as a nuclear pharmacist at Syncor in Blue Ash, Ohio from 1986 to 1988. Her Alaska Pharmacy License number is 1120. If there are any questions please do not hesitate to call me at (907) 243-6377.

Sincerely,



Peter Iverslie, RPh.
President

enclosure

56 DEC -2 PM 12:48

572434

Name Yunga Chang

TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES

FIGURE 9-1

BREAKDOWN OF COURSE CONTENT IN CLOCK HOURS*										
Location of Training	Date(s) of Attendance	Course Title	Tot. Clock Hours of Course	Radiation Physics & Instrumentation	Radiation Protection	Math Pertaining to Radioisotopes	Radiation Biology	Radiopharmaceutical Chemistry		
SYNCRON INTL CORPORATION CHATSWORTH, CA	07/12/93 thru 07/30/93 AND 08/30/93 thru 09/16/93	SYNCRON AUTHORIZED USERS TRAINING PROGRAM HEALTH PHYSICS SUBSECTION	227	92	50	24	25	36		
*Note: Show a breakdown of hours by institution, dates, and subjects. List each hour only once (i.e., under the most applicable subject category)				TOTAL HOURS	227	92	50	24	25	36

Synco International Corporation

certifies that

Yung Chang

successfully completed the

Synco Authorized Users Training Program

on

September 16, 1993

[Signature]

Chairman of the Board

Russell

Vice President Quality and Regulatory



[Signature]

President

[Signature]

Training Director

FIGURE 9-2

FIGURE 2. DOCUMENTING RADIOISOTOPE HANDLING EXPERIENCE

Name: Yunga Chang, RPh

EXPERIENCE WITH RADIOACTIVE MATERIAL. (Actual Use of Radioisotopes Under the Supervision of an Authorized User)

ISOTOPE	MAXIMUM AMOUNT USED AT ONE TIME	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE (actual clock hours)	TYPE OF USE 1,2,3,4,5,6 (see key below)
Mo-99	3 Ci	Syncor International Corporation Timonium, Maryland	05/12/93 thru 07/09/93 344 Hours	1,6
Tc-99m	2 Ci			3,4,5,6
I-131	150 mCi			1,4,5
Xe-133	1 Ci		08/02/93 thru 08/27/93 120 Hours	1,3,4,5
I-123	1 mCi			1,3,4,5
I-125	100 uCi			1,3,4,5
Ga-67	100 mCi		09/20/93 thru 09/25/93 40 Hours	1,3,4,5
Tl-201	10 mCi			1,3,4,5
In-111	500 mCi			1,3,4,5
Co-57	5 mCi		504 Total Hours	2
Cs-137	250 uCi			2
Ba-133	250 uCi			2

Key for "Type of Use"

The number or numbers entered under "Type of Use" correspond to experience in the following activities:

1. Ordering, receiving, and unpacking radioactive materials safely, including performance of related radiation surveys.
2. Calibration of dose calibrator, scintillation detectors, and survey meters.
3. Calculation, dispensing, and calibration of patient doses, including proper use of radiation shields.
4. Appropriate internal control procedures to prevent mislabeling errors.
5. Emergency procedures to handle and contain spilled materials safely, including related decontamination procedures, surveys and wipe tests.
6. Elution of Technetium-99m generator systems, assay and testing of the elute for Molybdenum-99 contamination, and processing the elute with reagent kits to prepare Technetium-99m labeled radiopharmaceuticals.


Butler University

College of Pharmacy

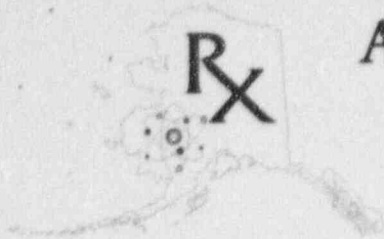


has successfully completed the
Nuclear Pharmacy Authorized Users Program

September 16, 1993


Program Director


Dean



ALASKA RADIOLOGICAL PHARMACY, LTD.

2000 W. Int'l Airport Rd., Suite A11, Anchorage, AK 99502
(907) 243-6377 • Fax (907) 243-4570

November 21, 1996

Radioactive Materials Safety Branch
U.S. Nuclear Regulatory Commission, Region V
1450 Maria Lane
Walnut Creek, CA 94596-5368
ATTN: Beth Prange

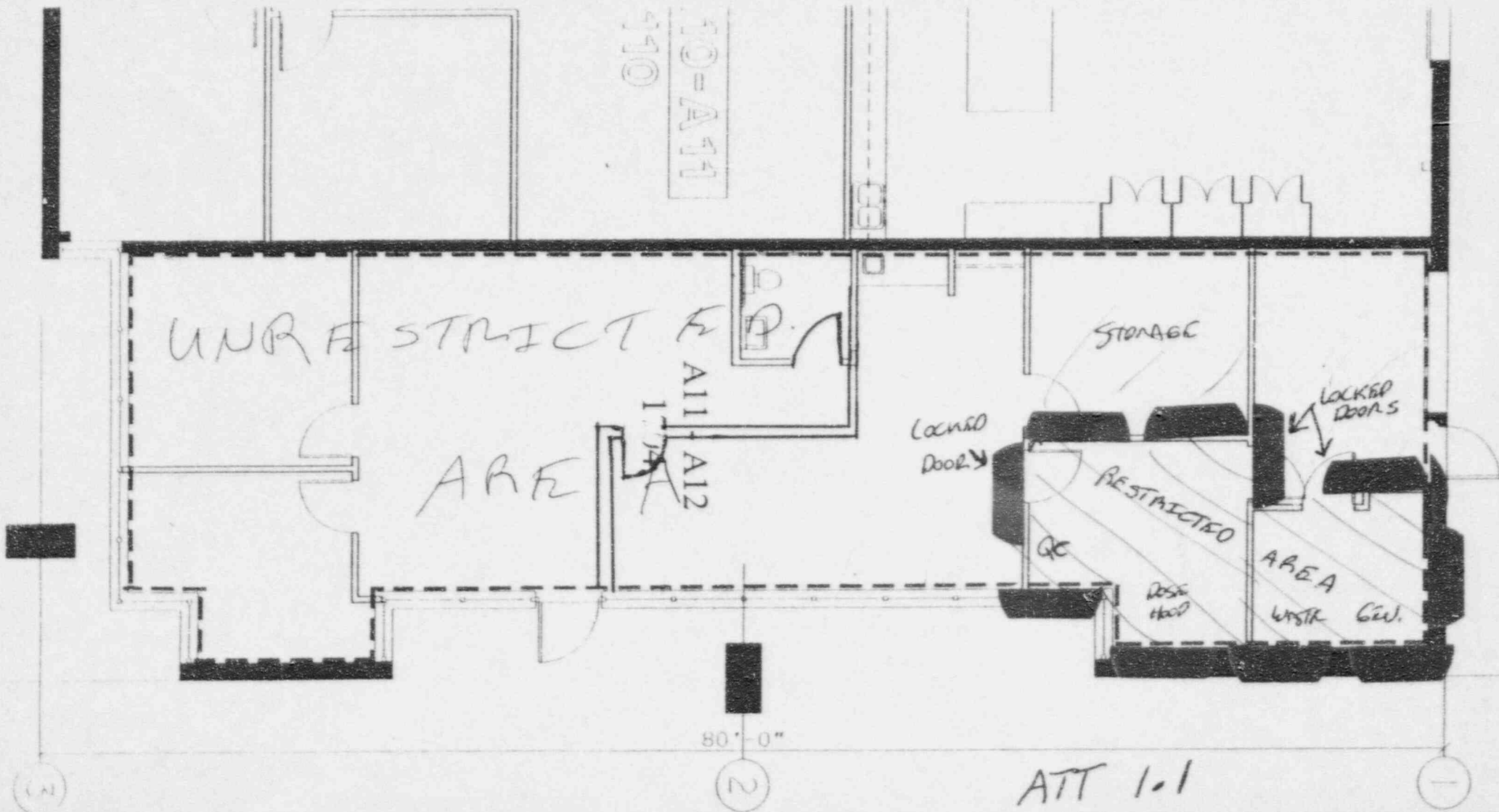
Dear Beth Prange:

Please find enclosed two copies of the addendum to our materials license #50-29096-01MD. The first is a floor plan of the pharmacy (ATT 1.1) which shows the reduction in the restricted area. The back two rooms now contain the same equipment that use to be in the old restricted area. A copy of the new lay out is being sent to the Fire Department. The second is the addition of two nuclear pharmacists to the license. The first Pharmacist is Yunga Vercelline (Chang was her madden name). She worked for Syncor in Maryland. I have enclosed her documentation. Her Alaska Pharmacy License number is 1126. The second Pharmacist is Vivian Foote. She could not locate her documentation but was on staff as a nuclear pharmacist at Syncor in Blue Ash, Ohio from 1986 to 1988. Her Alaska Pharmacy License number is 1120. If there are any questions please do not hesitate to call me at (907) 243-6377.

Sincerely,

Peter Iverslie, RPh.
President

enclosure



BUILDING A FLOOR PLAN

'WAS-BUILT' DRAWINGS

AIRPORT BUSINESS PARK

INTERNATIONAL & MINNESOTA, ANCHORAGE

PREPARED FOR JK PROPERTIES

FIGURE 9-1

TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES

Name: Yngga Cheng

Location of Training	Date(s) of Accordance	Course Title	Total Clock Hours of Course	BREAKDOWN OF COURSE CONTENT IN CLOCK HOURS*					
				Radiation Physics & Instrumentation	Radiation Protection	Math Pertaining to Radioactivity	Radiation Biology	Radiopharmaceutical Chemistry	
SYNCOR INT'L CORPORATION CHATSWORTH, CA	07/12/93 thru 07/30/93 AND 08/30/93 thru 09/16/93	SYNCOR AUTHORIZED USERS TRAINING PROGRAM HEALTH PHYSICS SUBSECTION	227	92	50	24	25	36	
*Note: Show a breakdown of hours by institution, dates, and subjects. List each hour only once (i.e., under the most applicable subject category)			TOTAL HOURS	227	92	50	24	25	36

Syncor International Corporation

certifies that

Yungga Chang
successfully completed the

Syncor Authorized Users Training Program

on

September 16, 1993

[Signature]
Chairman of the Board

Ronald E. Lane
Vice President (Quality and Regulatory)



Gene M. Hume
President

Dee Leight
Training Administrator

FIGURE 9-2

FIGURE 2. DOCUMENTING RADIOISOTOPE HANDLING EXPERIENCE

Name: Yunga Chang, RPh

EXPERIENCE WITH RADIOACTIVE MATERIAL. (Actual Use of Radioisotopes Under the Supervision of an Authorized User)

ISOTOPE	MAXIMUM AMOUNT USED AT ONE TIME	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE (actual clock hours)	TYPE OF USE 1,2,3,4,5,6 (see key below)
Mo-99	3 Ci	Syncor International Corporation Timonium, Maryland	05/12/93 thru 07/09/93 344 Hours	1,6
Tc-99m	2 Ci			3,4,5,6
I-131	150 mCi			1,4,5
Xe-133	1 Ci		08/02/93 thru 08/27/93 120 Hours	1,3,4,5
I-123	1 mCi			1,3,4,5
I-125	100 uCi			1,3,4,5
Ga-67	100 mCi		09/20/93 thru 09/25/93 40 Hours	1,3,4,5
Tl-201	10 mCi			1,3,4,5
In-111	500 mCi			1,3,4,5
Co-57	5 mCi		504 Total Hours	2
Cs-137	250 uCi			2
Ba-133	250 uCi			2

Key for "Type of Use"

The number or numbers entered under "Type of Use" correspond to experience in the following activities:

1. Ordering, receiving, and unpacking radioactive materials safely, including performance of related radiation surveys.
2. Calibration of dose calibrator, scintillation detectors, and survey meters.
3. Calculation, dispensing, and calibration of patient doses, including proper use of radiation shields.
4. Appropriate internal control procedures to prevent mislabeling errors.
5. Emergency procedures to handle and contain spilled materials safely, including related decontamination procedures, surveys and wipe tests.
6. Elution of Technetium-99m generator systems, assay and testing of the elute for Molybdenum-99 contamination, and processing the elute with reagent kits to prepare Technetium-99m labeled radiopharmaceuticals.

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