

MATERIALS LICENSE

Amendment No. 14

CN 399373

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.

In accordance with application dated
~~October 26, 1995~~ and letters dated
October 25, 1995, August 30, 1996 and
November 13, 1996

3. License Number 34-12736-02 is amended in
its entirety to read as follows:

4. Expiration Date January 31, 1995

5. Docket or
Reference No. 030-13379

Licensee
1. Environmental Protection Agency

2. MS 163
26 W. Martin Luther King Drive
Cincinnati, OH 45268

6. Byproduct, Source, and/or
Special Nuclear Material

A. Any byproduct
material listed in
Schedule A, Section
33.100 of 10 CFR Part
33

B. Nickel-63

C. Any byproduct
material with Atomic
Numbers 1 through 83,
inclusive

D. Americium-241

7. Chemical and/or Physical
Form

A. Any

B. Any foil or plated
sources in detector
cells approved for
licensing purposes
by the NRC or
Agreement State

C. Any

D. Sealed source (Model
CPN-131)

8. Maximum Amount that Licensee
May Possess at Any One Time
Under This License

A. Quantities listed
in Column I,
Schedule A of 10
CFR Part 33 (Type B
Broadscope
license), except as
noted below:

Iodine-125 - 100 millicuries
Iodine-131 - 100 millicuries
Cobalt-60 - 70 millicuries

B. No single detector
cell to exceed 100
millicuries

C. 100 millicuries
total

D. 50 millicuries

9611270298 961119
PDR ADOCK 03013379
C PDR

COPY

o/h JMC
30
50

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

34-12736-02

Docket or Reference Number

030-13379

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- A. To be used for research and development as defined in 10 CFR Part 30, Section 30.4 including iodinations, tracer studies, animal studies and preparation of standards.
- B. To be used in gas chromatograph for sample analysis.
- C. To be used for preparation of standards and analysis of environmental samples.
- D. To be used in Boart Longyear CPN Model 503 Hydroprobe for surface moisture/density measurements.

CONDITIONS

- 10. A. Licensed material in Items 6.A., 6.B. and 6.C. may be used only at the licensee's facilities located at 26 W. Martin Luther King Drive, Cincinnati, Ohio, 3411 Church Street, Newton, Ohio, 5995 Center Hill Road, Cincinnati, Ohio and 1600 Gest Street, Cincinnati, Ohio.
- B. Licensed material in Item 6.D. may be stored at 26 W. Martin Luther King Drive, Cincinnati, OH and at 5995 Center Hill Road, Cincinnati, Ohio, and may 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. A. Licensed material in Items 6.A., 6.B. and 6.C. shall be used by, or under the supervision of, individuals designated by, Robert M. Danner, Radiation Safety Officer.
- B. Licensed material in Item 6.D. shall be used by, or under the supervision and in the physical presence of, individuals who have satisfactorily completed the device manufacturer's training program for portable gauge users and have been designated by the licensee's Radiation Safety Officer. The licensee shall maintain records of the individuals who have been designated as authorized users.
- 12. The Radiation Safety Officer for this license is Robert M. Danner.
- 13. 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 2 years from the date of each inventory.
- 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.

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- 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. Each sealed source fabricated by the licensee shall be inspected and tested for construction defects, leakage, and contamination prior to any use or transfer as a sealed source.
- E. 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 or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
- F. 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.
- G. 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.

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15. Any cleaning, maintenance or repair of the gauge(s) that requires removal of the source rod shall be performed only by the manufacturer or by other persons specifically licensed by the Commission or an Agreement State to perform such services.
16. Sealed sources containing licensed material shall not be opened.
17. When performing tests at temporary job sites, the authorized user shall not leave the moisture/density gauge unattended. Upon completion of tests the device shall be locked in the licensee's vehicle or a secure building to prevent unauthorized use, loss, or theft.
18. Each portable nuclear gauge shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The gauge or its container must be locked when in transport, storage, or when not under the direct surveillance of an authorized user.
19. Any cleaning, maintenance, or repair of the gauge(s) that requires removal of the source rod shall be performed only by the manufacturer or by other persons specifically licensed by the Commission or an Agreement State to perform such services.
20. Licensed material shall not be used in or on human beings or in field applications where activity is released except as provided otherwise by specific condition of this license.
21. Experimental animals administered licensed materials or their products shall not be used for human consumption.
22. The licensee may transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
23. Pursuant to Sections 20.1302(c) and 20.2002 of 10 CFR Part 20, the licensee is authorized to dispose of byproduct material by incineration provided the gaseous effluent from incineration does not exceed the limits specified for air in Appendix B, Table II, 10 CFR Part 20. Ash residues may be disposed of as ordinary waste provided appropriate surveys pursuant to Section 20.1501 of 10 CFR Part 20 are made to determine that concentrations of licensed material appearing in the ash residues do not exceed the concentrations (in terms of microcuries per gram) specified for water in Appendix B, Table II, 10 CFR Part 20.
24. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.

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25. Maintenance, repair, cleaning, replacement, and disposal of foils contained in detector cells shall be performed only by the device manufacturer or other persons specifically authorized by the Commission or an Agreement State to perform such services.
26. Except as otherwise specified in this license, the licensee shall have available and follow the instructions contained in the manufacturer's instruction manual for the chromatography device.
27. 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. Applications dated November 14, 1989, March 18, 1994 and August 3, 1994; and
- B. Letters dated January 10, 1990, May 31, 1990, March 4, 1991, October 17, 1991, December 30, 1991, September 3, 1992, and July 1, 1994.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date

November 19, 1996

By

Colleen C. Casey

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: 2
FEE CATEGORY: EX 3L
EXP. DATE: 19950131
FEE COMMENTS:
DECOM FIN ASSUR-REDDT Y

RSO

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED
APPLICANT/LICENSEE: ENVIRONMENTAL PROTECTION AGENCY
RECEIVED DATE: 951030
DOCKET NO: 3013379
CONTROL NO.: 399373
LICENSE NO.: 34-12736-02
ACTION TYPE: AMENDMENT

2. FEE ATTACHED
AMOUNT: \$
CHECK NO.: *B*

3. COMMENTS

SIGNED
DATE

for D. Neasey
Gene Bell
11-1-95

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED /__ /)

1. FEE CATEGORY AND AMOUNT: _____

2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR:
AMENDMENT _____
RENEWAL _____
LICENSE _____

3. OTHER _____

SIGNED
DATE

FEE EXEMPT

APPLICATION FOR MATERIAL LICENSE

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED BY GMS
3100-0130
Exempt 6-21-87

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

FEDERAL AGENCIES FILE APPLICATIONS WITH:

U.S. NUCLEAR REGULATORY COMMISSION
DIVISION OF FUEL CYCLE AND MATERIAL SAFETY, NMSS
WASHINGTON, DC 20545

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS, IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND, MASSACHUSETTS, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION I
NUCLEAR MATERIAL SECTION 9
631 PARK AVENUE
ENIG OF PRUSSIA, PA 19406

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION II
MATERIAL RADIATION PROTECTION SECTION
101 MARIETTA STREET, SUITE 2900
ATLANTA, GA 30333

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION III
MATERIALS LICENSING SECTION
790 ROOSEVELT ROAD
GLEN ELLYN, IL 60137

ARIZONA, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, SOUTH DAKOTA, TEXAS, UTAH, OR WYOMING, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
MATERIAL RADIATION PROTECTION SECTION
811 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TX 76011

ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, OREGON, WASHINGTON, AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION V
MATERIAL RADIATION PROTECTION SECTION
1450 MARIA LANE, SUITE 210
WALNUT CREEK, CA 94596

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY INTEND TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTION.

1. THIS IS AN APPLICATION FOR (Check appropriate item):

- ☐ A. NEW LICENSE
☒ B. AMENDMENT TO LICENSE NUMBER 34-12736-02
☐ C. RENEWAL OF LICENSE NUMBER _____

2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip Code)

U.S. Environmental Protection Agency
26 W. Martin Luther King Drive
Cincinnati, OH 45268

3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED.

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Angela Hadley, Environment, Safety & Health, TTSD

TELEPHONE NUMBER

(513) 569-7969

SUBMIT ITEMS 5 THROUGH 11 ON 8 1/2" X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL

a. Isotope and mass number, b. chemical and/or physical form, and c. approximate amount which will be processed at any one time

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSE FEE (See 10 CFR 170 and Section 170.31)

FEE CATEGORY * Exempt

AMOUNT
ENCLOSED \$ 0

13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BRIDING UPON THE APPLICANT.

I, APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, SIGNED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, AND 40 AND THAT ALL INFORMATION CONTAINED HEREIN, IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948, 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

SIGNATURE—CERTIFYING OFFICER

TYPED/PRINTED NAME

TITLE

DATE

Angela L. Hadley Angela Hadley

Radiation
Protection Officer

10-26-95

14. ANNUAL RECEIPTS

< \$250K	\$1M-3.5M
\$250K-600K	\$3.5M-7M
\$600K-750K	\$7M-10M
\$750K-1M	> \$10M

15. NUMBER OF EMPLOYEES (If not for radioactivity containing certain substances)

16. NUMBER OF BEDS

17. WOULD YOU BE WILLING TO FURNISH COST INFORMATION (Under certain staff hours) ON THE ECONOMIC IMPACT OF CURRENT NRC REGULATIONS OR ANY FUTURE PROPOSED NRC REGULATIONS THAT MAY AFFECT YOU? (NRC regulations permit it to protect confidential commercial or financial proprietary information furnished to the agency as confidential.)

YES

NO

FOR NRC USE ONLY

TYPE OF FEE

FEE LOG

FEE CATEGORY

COMMENTS

APPROVED BY

RECEIVED

AMOUNT RECEIVED

CHECK NUMBER

DATE

OCT 30 1995

PRIVACY ACT STATEMENT ON THE REVERSE

* Exempt under 10CFR 170.11 (5)

REGION III



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL RISK MANAGEMENT RESEARCH LABORATORY
CINCINNATI, OH 45268

October 25. 1995

OFFICE OF
RESEARCH AND DEVELOPMENT

Ms. Colleen Casey
U.S. Nuclear Regulatory Commission
Region III
Material Licensing Section
801 Warrenville Road
Lisle, Illinois 60532-4351

Re: Amendment to License No. 34-12736-02, Docket No. 030-13379

Dear Ms. Casey:

The purpose of this letter is to notify you of the following amendment to our Radiation Protection Program and request your approval of these changes.

1. Angela Hadley will no longer be performing the duties of Radiation Protection Officer for EPA-Cincinnati. Kathleen G. Lautenschlegar will resume the duties of Radiation Protection Officer. Her resume is enclosed.
2. New members of the Radiation Safety Committee:
 - a. Joseph R. Smith, OARM Safety Manager
 - b. Dr. Gregory P. Toth, Acting Chief, Molecular Ecology Research Branch will replace Dr. Maryrose K. Smith.
3. Merrel Robinson has resigned as a member of the Institutional Radiation Safety Committee.
4. Enclosed is the new organizational chart showing the placement of the radiation safety functions within the National Risk Management Research Laboratory.

If you have any questions please contact me at (513) 569-7969.

Sincerely,

A handwritten signature in cursive script that reads "Angela L. Hadley".

Angela L. Hadley
Radiation Safety Officer
National Risk Management Research
Laboratory

Enclosures

OCT 30 1995

Resume for Proposed Radiation Safety Officer
Kathleen G. Lautenschlegar

Education:

B.S., Chemistry, Xavier University
1 semester of Radiochemistry (see attached)
M.B.A., M.I.S., Xavier University

Certifications:

CIH Chemical Aspects
CIH Comprehensive Practice
CSP Comprehensive Practice

Related Experience:

1994-1995 Manager Environment, Safety and Health, OSORD, USEPA Cincinnati. Supervised R.S.O., member of Radiation Safety Committee, Project Officer for Radiation Support Contract

1992-1994 Branch Chief, Safety, Health and Security, OARM, USEPA Cincinnati. Supervised R.S.O. and Radiation Support Contract 1/92-7/92. Member of Radiation Safety Committee and Assistant R.S.O. 8/92-11/93.

1988-1992 Manager, Industrial Hygiene, G.E. Aircraft Engines. Supervised Radiation Safety Officer.

1979-1988 Industrial Hygienist, G.E. Aircraft Engines. Performed radiation surveys, managed film badge program, kept records.

Scheduled to attend Radiation Safety Officer Training at Radiation Safety Associates, Inc. as funding will permit 12/95 or 1/96.

*Text for 1 semester (with lab) of Radiochemistry
taken at Xavier University.*

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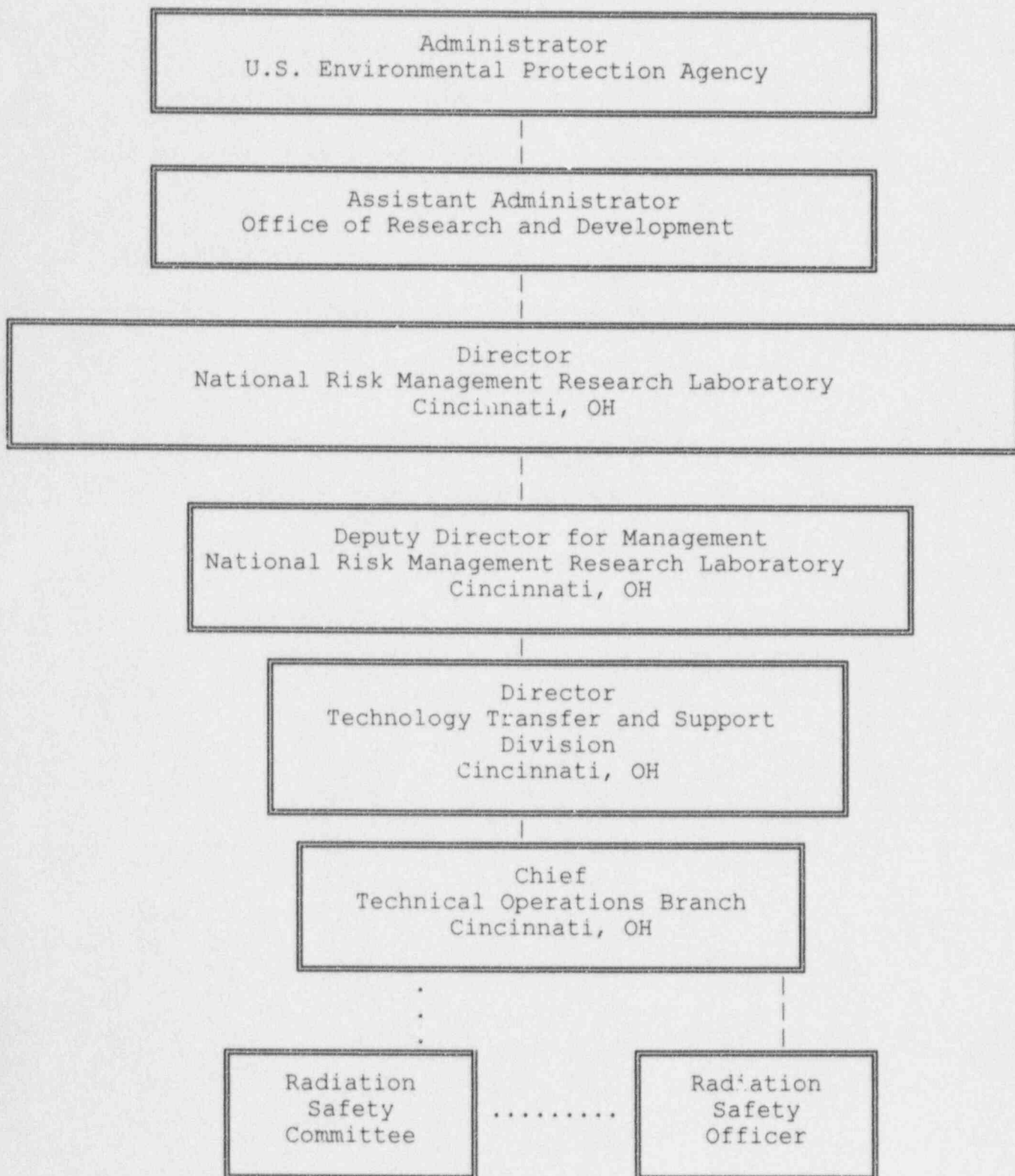
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Administrative Organization of the Radiation Safety Office



NOV 19 1996

Robert M. Danner
Radiation Safety Officer
Environmental Protection Agency
MS 163
26 W. Martin Luther King Drive
Cincinnati, OH 45268

Dear Mr. Danner:

Enclosed is Amendment No. 14 to your NRC Material License No. 34-12736-02 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.

- A. Please note that, at this time, we took the opportunity to update and reformat your license, including the addition of certain license conditions and the deletion of others:
1. In accordance with your letter dated November 13, 1996, and the telephone conversations between Colleen C. Casey and Robert M. Danner on November 7 and 12, 1996, we changed your license from a Type A broad scope to a Type B broad scope. Items 6, 7 and 8 and Condition No. 11.A. were reformatted for this reason.
 2. We deleted Condition No. 17., as it appeared on Amendment No. 13. This Condition authorized alternatives to the radiation symbol color requirements. As the regulations in 10 CFR 20.1901(b) now contain the same provisions, this Condition is no longer necessary.
 3. We updated Item No. 9.D. to reflect the new corporate name of the gauge manufacturer and we inserted the current 10 CFR Part 20 sections in Condition No. 23 to replace the outdated references.
 4. We added License Condition Nos. 17, 18, 19, 24, 25 and 26 because they are standard conditions for licenses authorizing gas chromatographs and portable gauging devices. Please be advised that these Conditions largely serve to formalize commitments and procedures you should already have in place. However, they are necessary to complete your license and must be added now.

399373

- B. 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;
 - 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
Colleen C. Casey
Nuclear Materials Licensing Branch

License No.: 34-12736-02
Docket No.: 030-13379

Enclosures: 1. Amendment No. 14
2. 10 CFR Part 20
3. 10 CFR Part 30
4. NRC Form 313

DOCUMENT NAME: M:\03013379.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 <i>CC</i>							
NAME	CCASEY:jaw							
DATE	11/9/96							

OFFICIAL RECORD COPY



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL RISK MANAGEMENT RESEARCH LABORATORY
CINCINNATI, OH 45268

November 13, 1996

OFFICE OF
RESEARCH AND DEVELOPMENT

U.S. Nuclear Regulatory Commission
Region III
Materials Licensing Section
799 Roosevelt Road
Glen Ellyn, Illinois 60137

RE: RADIOACTIVE MATERIAL LICENSE NO. 34-12736-02

Ms. Colleen Casey

In complying with NRC's recommendations and to be more in-line with NRC's objectives, I am requesting that License No. 34-12736-02 be down graded to a Broad Scope Type B License. Our present radiation program needs no longer justify the Broadscope Type A License and are more in concert with the conditions described under 10 CFR 33.11 (b) for "type B specific license of broad scope".

Therefore, per telephone conversation with Ms. Casey on November 12, 1996, I concur with the restructuring of the Type A license to a Type B license. Ms. Casey will restructure the Type B license in accordance with the conditions discussed.

In preparing the documents for the down grading of the Type A license, I submit that our original renewal application for the Type A license be used for restructuring. Please ignore the last renewal application for a "limited" license.

Sincerely,

A handwritten signature in cursive script that reads "Robert M. Danner".

Robert M. Danner, Chairman
Radiation Safety Committee

CONVERSATION RECORD

TIME
VARIOUS

DATE
VARIOUS NOV. 12, 1996

TYPE

☐ VISIT

☐ CONFERENCE

☒ TELEPHONE

☐ INCOMING

☒ OUTGOING

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU

BOB DANNER

ORGANIZATION (Office, dept., bureau, etc.)

USEPA

TELEPHONE NO:

513-569-7409

SUBJECT

L/N 34-12736-02

C/N 399373

ROUTING

NAME/SYMBOL

INT

SUMMARY

I held several discussions with Bob concerning his qualifications for RSO and the EPA's licensed program. Bob is not really qualified to be RSO for a Type A Broad Scope - BUT, this license isn't really a Type A broad scope functionally. Best solution is for EPA to downgrade to a Type B broad scope + name Bob as RSO - that we can do. Bob + his management agreed to this + will send letter to me. Prepare amendment no. 14 upon receipt + effect changes.

Then I will review renewal for a Type B license + proceed from there.

ACTION REQUIRED

When EPA letter is received, prep Amendment no. 14 per above.

NAME OF PERSON DOCUMENTING CONVERSATION

Colleen C. Casey

SIGNATURE

DATE

11/12/96

ACTION TAKEN

SIGNATURE

TITLE

DATE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL RISK MANAGEMENT RESEARCH LABORATORY
CINCINNATI, OH 45268

August 30, 1996

OFFICE OF
RESEARCH AND DEVELOPMENT

MEMORANDUM

SUBJECT: Renewal License No. 45-12736-02 EPA, Cincinnati, Ohio

FROM: Robert M. Danner, Chairman *R.M. Danner*
Radiation Safety Committee, EPA-Cinti

TO: Colleen C. Casey, License Specialist
NRC - Region III

Per our telephone conversation of July 19, 1996, please find attached the information you requested concerning Robert M. Danner's education, training and experience required for the Radiation Safety Officer (RSO) appointment. After reviewing RG10.7, Sections 16/17 and Mr. Danner's qualifications, it certainly appears that he meets the requirements specified for the RSO position.

With regards to the status of EPA's application for license renewal and the proposed downgrade of our Type A Broad Scope to a limited scope license, there seems to be some question as to the need of a Type A Broad Scope license. After reviewing your (Ms. Casey's) telephone conversation records with Ms. Angela Hadley (former RSO), I would like to address the three items (numbers 1,2, and 3) on page 2 of the conversation record.

1. At the present time EPA's (Cincinnati) use of radioisotopes is rather limited. This slow down in usage is the result of budget problem during 95 and 96 (continuing resolutions) and the major reorganization of EPA's R and D during the past year. Our laboratory has over 400 researchers working on many different scientific projects. Our 1997/98 research plans call for an increase in in-house research, thus there is a potential that at anytime a researcher could request to become a radioisotope user. If this happens there would be an increase in the number of amendments needing NRC's review and approval (increasing NRC's workload) under the proposed limited scope license downgrade. Under our present Type A Broad Scope License, this approval comes from our Radiation Safety Committee (no work for NRC). The downgrading does not seem to benefit either the NRC or our laboratory.
2. Mr. Danner's education, training and experience in the safe use of radioisotopes surpasses the requirements for the Radiation Safety Officer position. The RSO is a full time job dedicating 100% of time to managing the Radiation Safety Program.

RECEIVED

SEP 04 1996

REGION III

SEP 04 1996

3. EPA's annual license fee paid to NRC for 1996 was Category 3L, fee amount \$11,400.00. The license fee did not reflect any decrease in annual fee for a downgrade license. Conversation with Ms. Crutchfield did not provide sufficient information to determine if the downgrade would indeed result in an annual fee savings.

Considering the above information, the question still needs to be answered as to whether EPA's license needs to be downgraded. Also, there was published in the Federal Register a change in NRC's policies dealing with license renewals - extending "in place" license for a period of five years. How does this change effect our license?

Please advise as to the NRC's decision on EPA's 34-12736-02 renewal.

Attachments

EXHIBIT 2
SUPPLEMENT A

SUPPLEMENT		U.S. NUCLEAR REGULATORY COMMISSION		
TRAINING AND EXPERIENCE AUTHORIZED USER OR RADIATION SAFETY OFFICER				
1. NAME OF PROPOSED AUTHORIZED USER OR RADIATION SAFETY OFFICER Robert M. Danner (RSO)			2. FOR PHYSICIANS, STATE OR TERRITORY WHERE LICENSED	
3. CERTIFICATION				
SPECIALTY BOARD A	CATEGORY B		MONTH AND YEAR CERTIFIED C	
4. TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES				
FIELD OF TRAINING A	LOCATION AND DATE(S) OF TRAINING B	TYPE AND LENGTH OF TRAINING		
		CLOCK HOURS IN LECTURE OR LABORATORY	CLOCK HOURS OF SUPERVISED ON-THE-JOB EXPERIENCE	
a. RADIATION PHYSICS AND INSTRUMENTATION	Xavier University 1965 EPA/Health Effect Research Laboratory 1995 - 1987	72 hours	22 years	
b. RADIATION PROTECTION	Xavier University EPA/Health Effect Research Laboratory 1965-1987	72 hours	22 years	
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY	Xavier University 1961 EPA/Health Effect Research Laboratory	72 hours	22 years	
d. RADIATION BIOLOGY	Xavier University 1965 EPA/Health Effect Research Laboratory	72 hours	22 years	
e. RADIOPHARMACEUTICAL CHEMISTRY				
5. EXPERIENCE WITH RADIATION. (Actual use of Radioisotopes or Equivalent Experience)				
ISOTOPE	TIME USED AT ONE TIME	LOCATION	CLOCK HOURS	TYPE OF USE
C-14	10	EPA-Cinti	22 years	tracers
H-3	10	EPA-Cinti	22 years	tracers
S-35	1	EPA-Cinti	22 years	tracers
I-131	20	EPA-Cinti	22 years	tracers
I-125	20	EPA-Cinti	22 years	tracers
P32	20	EPA-Cinti	22 years	markers
Na-22	0.1	EPA-Cinti	22 years	tracers
Cd-109	0.1	EPA-Cinti	22 years	tracers

FORMAL EDUCATION

1965 - B.S. CHEMISTRY - XAVIER UNIVERSITY, CINCINNATI, OHIO

GRADUATE SCHOOL - ENVIRONMENTAL SCIENCE, UNIVERSITY OF CINCINNATI

FORMAL TRAINING WITH RADIOISOTOPES - 1965 XAVIER UNIVERSITY

COURSE TITLE: PRINCIPLES OF RADIOISOTOPE METHODOLOGY (72 HOURS)

COURSE MATERIAL:

- 1) THEORY AND PRINCIPLES OF RADIATION
- 2) PRINCIPLES AND PRACTICES OF RADIATION PROTECTION
- 3) RADIOACTIVITY MEASUREMENTS, STANDARDIZATION AND MONITORING TECHNIQUES
- 4) CALCULATIONS BASIC TO THE USE AND MEASUREMENT OF RADIOACTIVITY
- 5) BIOLOGICAL HAZARDS OF EXPOSURE TO RADIATION, ALPHA, BETA AND GAMMA RADIATION
- 6) RADIATION DETECTION INSTRUMENTATION

WORK EXPERIENCE WITH RADIOISOTOPES

1965-1987 - TWENTY-TWO YEARS OF EXPERIENCE WORKING AS A RESEARCH CHEMIST AT EPA'S HEALTH EFFECTS RESEARCH LABORATORY USING RADIOISOTOPES AS TRACERS IN BIOCHEMICAL AND METABOLIC ANIMAL STUDIES. WORKED WITH THE FOLLOWING ISOTOPES AND QUANTITIES:

CARBON-14 (100 MILLICURIE); HYDROGEN-3 (100 mCi); SULFUR-35 (10 mCi); SODIUM-22 (1 mCi); IODINE-131 (20 mCi); IODINE-125 (100 mCi); CHLORINE-36 (1 mCi); PHOSPHORUS-32 (10 mCi); CADMIUM-109 (100 mCi); AND NICKEL-63 (10 mCi)

1968-1970 - RADIATION SAFETY OFFICER, HEALTH EFFECTS RESEARCH LABORATORY, CINCINNATI, OHIO

1990-PRESENT - CHAIRMAN OF RADIATION SAFETY COMMITTEE

1992 - SERVED AS SUBJECT MATTER EXPERT FOR EVALUATING CANDIDATES FOR THE RADIATION SAFETY OFFICER POSITION

REFRESHER RADIATION COURSE SCHEDULED FOR SEPTEMBER 9-13, 1996

COURSE TITLE: RADIATION SAFETY OFFICE - COURSE (40 HOURS) BY RADIATION SAFETY ASSOCIATES, INC. HEBRON, CONNECTICUT. SEE ATTACHMENT FOR COURSE OUTLINE

NAME OF PERSON DOCUMENTING CONVERSATION
Colleen C. Casey

SIGNATURE
NMLB Reviewer

DATE

7/19/96

ACTION TAKEN

SIGNATURE

Colleen C. Casey

TITLE

DATE

OPTIONAL FORM 99 (7-97)

FAX TRANSMITTAL

of pages ► 3

To	JOHN IRELAND	From	COLLEEN CASEY
Dept./Agency	USEPA	Phone #	708-89-9841
Fax #	513-569-7585	Fax #	708-575-1259

NSN 7540-01-317-7368

5090-101

GENERAL SERVICES ADMINISTRATION

PAGE 1

CONVERSATION RECORD

TIME

DATE

10 a.m.
CDT

7/19/96

☐ VISIT☐ CONFERENCE☒ TELEPHONE☐ INCOMING☒ OUTGOING

NAME OF PERSON(S) CONTACTED OR IN CONTACT

ORGANIZATION (OFFICE, DEPT. ETC.)

TELEPHONE NO.

JOHN IRELAND

USEPA

513-569-7409

ROBERT DANNER

SUBJECT

L/N 34-12736-02

CIN 399373

SUMMARY

This discussion concerned deficiencies identified in the amendment request to name Robert Danner as the RSO. (During previous discussions with the prior RSO, Angela Hadley, the licensee agreed to downgrade the scope of their licensed program from a Type A Broad scope to a limited scope license.

The downgrade accomplishes 3 things:

- (Licensee is re-considering whether to downgrade license as new RSO might be qualified for broad scope)*
1. It much more accurately reflects the reality of the scope of the active program, which has substantially diminished over the years. The program now is a quite small R and D program that does not now and should not, in the future, require frequent amendments.
 2. As their initial RSO candidate, Kathleen Lautenschlager, was not qualified to become RSO of a broad scope license, it will be possible for Mr. Danner to be considered for the RSO position if the licensee downgrades, contingent upon resolving the deficiencies below.
 3. The licensee may be able to save some money with their annual fees. The reviewer suggested that Ms. Hadley call Shirley Crutchfield to confirm this aspect. Prior to Ms. Hadley's departure in January 1996, She spoke with Ms. Casey and advised her that it did appear that the downgraded license would result in some annual fees savings for the EPA.)

The licensee resubmitted their renewal application in entirety based on the downgraded license. They also submitted Mr. Danner's credentials for review. This telecon focussed on Mr. Danner's qualifications for the RSO position. The renewal will be reviewed in the near future but Ms. Casey wanted to complete the RSO changeover first.

Therefore:

1. In order for us to approve Robert Danner as your Radiation Safety Officer (RSO), it will be necessary for you to demonstrate that his training and experience will adequately support the duties and responsibilities of the RSO position and the oversight of the uses of byproduct material, with respect to the types of radionuclides and quantities to be used and specific procedures/protocols to be followed.

Please refer to sections 16 and 17 of the mailed Regulatory Guide 10.7 for guidance in preparing your response. Also, the criteria in 10 CFR

33.15(b), mailed, may assist you. Generally, please do not submit resumes or curriculum vitae- use the mailed Supplement A forms only and, if appropriate, include a brief narrative statement of explanation on a separate sheet of paper.

Please describe in greater detail Mr. Danner's on-the-job and formal coursework training, including the location and duration of the training and the dates when the training was received.

Training should consist of at least forty hours and cover:

- a. principles and practices of radiation protection,
- b. radioactivity measurements, standardization, and monitoring techniques,
- c. mathematics and calculations basic to the use and measurement of radioactivity,
- d. biological hazards of exposure to radiation appropriate to the type and form of byproduct material to be used, and
- e. radiation detection instrumentation.

Address Mr. Danner's training in each of these areas on the mailed Supplement A form, "Training and Experience." The description of his prior use of licensed materials should include the specific isotopes handled, the maximum quantities of materials handled, where the experience was gained (and the facility's license number), the dates and duration of experience and the types of use.

Please prepare the requested information separately for each different facility he studied/worked at, i.e., his training and experience at the EPA should be complete and distinct from his training at any other academic, private industry or government institution, etc.

2. It is our understanding that, until final action has been taken on the downgraded renewal application:

* THE RADIATION SAFETY PROGRAM MAY CONTINUE TO OPERATE AS IT HAD UP TO JANUARY 1996, BUT WE NEED A COMMITMENT/CONFIRMATION THAT ANY PROGRAM CHANGES RESULTING IN ANY NEW USES, USERS, OR FACILITIES WILL NOT BE ACTED UPON BY THE RSC. THE PROGRAM REMAINS STATUS QUO UNTIL THE RENEWAL IS ISSUED.

* THE LICENSEE HAS REQUESTED MODIFICATION OF THEIR LICENSE FROM A BROAD SCOPE TO A SPECIFIC LICENSE WITH A LIMITED R&D PROGRAM THAT WILL BE INCORPORATED INTO THE PENDING RENEWAL APPLICATION.

(Note that, although Ms. Hadley left in January 1996, the reviewer intended to review the renewal/RSO change together but time and circumstances did not permit this. It is our understanding that the licensed program is only active to a very limited degree. As the renewal review will require more time, it is necessary to complete the RSO changeover now, at a minimum. Also, Darrel Wiedeman inspected this licensee in May 1996 and did not note any problems.)

3. Does licensee have their "deemed timely" letter dated Jan. 3, 1995? - yes, per John Ireland.
- ACTION REQUIRED
15 day response (upon receipt of mailed materials, sent 7/17/96)

CONVERSATION RECORD

TIME

1:35pm

DATE

12/12/95

TYPE

☐ VISIT

☒ CONFERENCE

☒ TELEPHONE

☐ INCOMING

☒ OUTGOING

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU

Angela Hadley, RSO

ORGANIZATION (Office, dept., bureau, etc.)

EPA-Cinci, OH

TELEPHONE NO.

513-569-

7663

SUBJECT

C/N 399373 - Amendment and 397966 - Renewal
Lic. No. 34-12736-02

ROUTING

NAME/SYMBOL

INT

SUMMARY

This was the culmination of a number of telephone discussions I have had with Ms. Hadley (as well as proposed RSO Kathleen ^(K.L.) Fautenschlager). When amendmt. request arrived to add K.L. as RSO, I called K.L. and Ms. Hadley because K.L.'s credentials do not appear to qualify her as RSO of a Type A Broad scope program. K.L. and Miss Hadley agreed. Over the next few weeks, Ms. Hadley called to say EPA has decided to downgrade from a Type A broad scope (they only have 5 auth. users and a very limited program). So she is preparing a limited scope renewal application in entirety to replace 397966; she is also proposing a different RSO replacement as she is leaving this EPA office in early Jan. 96 (replacing 399373). C. Casey reviewed most all aspects of the renewal with Ms. Hadley in this 12/12/95 telecon @ RSO requirements @ portable gauge program. Casey sent Ms. Hadley a copy of DG-0008 to Supplement Reg Guides 10.5 and 10.7 for renewal. When resubmittals arrive, they may be combined as each will depend upon the other's completion.

ACTION REQUIRED

15-30 day response time.

NAME OF PERSON DOCUMENTING CONVERSATION

SIGNATURE

DATE

Kathleen C. Casey

12/12/95

ACTION TAKEN

SIGNATURE

TITLE

DATE

50271-101

U.S. G.P.O. 1983-381-526/8346

CONVERSATION RECORD

OPTIONAL FORM 271 (12-76)
DEPARTMENT OF DEFENSE

CONVERSATION RECORD

TIME

1:35pm

DATE

12/12/95

TYPE

☐ VISIT☒ CONFERENCE☒ TELEPHONE☐ INCOMING☒ OUTGOING

ROUTING

NAME/SYMBOL

INT

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT
WITH YOU

Angela Hadley, RSO

ORGANIZATION (Office, dept., bureau,
etc.)

EPA-Cinci., OH

TELEPHONE NO.

513-569-

7663

SUBJECT

C/N 399373 - Amendment and 397966 - Renewal
Lic. No. 34-12736-02

SUMMARY

This was the culmination of a number of telephone discussions I have had with Ms. Hadley (as well as proposed RSO Kathleen ^(K.L.) Fawcenschlager). When amend. request arrived to add K.L. as RSO, I called K.L. and Ms. Hadley because K.L.'s credentials do not appear to qualify her as RSO of a Type A Broad scope program. K.L. and Miss Hadley agreed. Over the next few weeks, Ms. Hadley called to say EPA has decided to downgrade from a Type A broad scope (they only have 5 auth. users and a very limited program). So she is preparing a limited scope renewal application in entirety to replace 397966; she is also proposing a different RSO replacement as she is leaving this EPA office in early Jan. '96 (replacing 399373). C. Casey reviewed most all aspects of the renewal with Ms. Hadley in this 12/12/95 telecon @ RSO requirements @ portable gauge program. Casey sent Ms. Hadley a copy of DG-0008 to Supplement Reg Guides 10.5 and 10.7 for renewal. When resubmittals arrive, they may be combined as each will depend upon the other's completion.

ACTION REQUIRED

15-30 day response time.

NAME OF PERSON DOCUMENTING CONVERSATION

Colleen C. Casey

SIGNATURE

DATE

12/12/95

ACTION TAKEN

SIGNATURE

TITLE

DATE