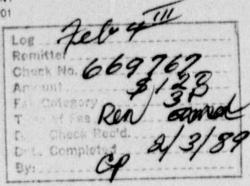
WISCONSIN EleCtric POWER COMPANY

231 W. MICHIGAN, P.O. BOX 2046, MILWAL'KEE, WI 53201

(414) 221-2345

VPNPD-89-034 NRC-89-005

January 20, 1989



CERTIFIED MAIL

Dr. Bruce Mallett Materials Licensing Section U. S. NUCLEAR REGULATORY COMMISSION Region III 799 Rocsevelt Road Glen Ellyn, Illinois 60137

Gentlemen:

APPLICATION FOR LICENSE RENEWAL BYPRODUCT MATERIAL LICENSE 48-16729-02 ENVIRONMENTAL LABORATORY GAS CHROMATOGRAPH SYSTEMS

In accordance with your notice dated November 1, 1988, regarding the expiration of our Specific Byproduct Material License 48-16729-01, we hereby apply for renewal. Attached is our license renewal application in duplicate.

A review of our current license has determined that two of the license conditions need to be amended. Condition 10 of the license specifies that the licensed material shall be used only at 520 North Second Street, Milwaukee, Wisconsin, or 333 West Everett Street, Milwaukee, Wisconsin. The permanent location for the chromatograph systems is now only at the 333 West Everett Street address. We hereby request that license Condition 10 be amended to read as follows:

> "License material shall be used only at the Public Service Building Annex, 333 West Everett Street, Milwaukee, Wisconsin."

Condition 12 of the license specifies that the licensed material shall be used by, or under the supervision of, Edward J. Lipke, R. S. Alberg, or other approved individuals. Wisconsin Electric no longer employs R. S. Alberg. We, therefore, hereby request that license Condition 12 be amended Reid RTH to read as follows:

JAN 2 8 1989

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Dr. Bruce Mallett January 20, 1989 Page 2

> "Licensed material shall be used by, or under the supervision of, Edward J. Lipke, Ph.D (the Radiation Protection Officer) or other employees of Wisconsin Electric Power Company who have been approved as users by the Radiation Protection Officer, and have received the training described in Item 8 of application dated September 26, 1978."

We have reviewed the documents which we have submitted to you in the past and have found them to reflect our current program. The documents reviewed were:

- 1. Our original application dated September 25, 1978.
- 2. The license certificate dated November 1, 1978.
- 3. Our letter requesting an amendment dated June 2, 1981.
- 4. Amendment No. 01 dated July 30, 1981.
- 5. Our letter requesting renewal dated February 14, 1984.
- 6. The license certificate dated February 24, 1984.
- 7. Our letter requesting an amendment dated August 18, 1986.
- 8. Amendment No. 3 dated September 15, 1986.

Wisconsin Electric will continue to operate in accordance with these documents and applicable U. S. Nuclear Regulatory Commission regulations.

Since our current license will expire on February 28, 1989, we request that the attached renewal application be reviewed and approved prior to that date. Our check in the amount of \$120 for a Category 3P renewal fee is enclosed in accordance with the provisions of 10 CFR 170. Please contact us if you have any questions or require additional information regarding our license renewal application.

Very truly yours,

Smiriesur

C. W. Fay

Vice President Nuclear Power

Enclosures (Check 669767)

APPLICATION FOR MATERIAL LICENSE

U.S. NUCLEAR REGULATORY COMMISSION APPROVED BY OMB 3150-0120 Expires 6-30-50

DATE

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 APPLICATIONS FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH IF YOU ARE LOCATED IN LINDIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR ISCONSIN, SEND APPLICATIONS TO: U.S. NUCLEAR REGULATORY COMMISSION DIVISION OF FUEL CYCLE AND MATERIAL SAFETY, NMSS WASHINGTON, DC 20666 U.S. NUCLEAR REGULATORY COMMISSION, REGION HI MATERIALS LICENSING SECTION 799 RODSEVELT ROAD GLEN ELLYN, IL 60137 ALL OTHER PERSONS FILE APPLICATIONS AS POLLOWS. IF YOU ARE CONNECTICUT, DELAWARE, DISTRICY OF COLUMBIA, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO: ARKANSAS, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEW MEXICO, MORTH DAKOTA, OKLAHOMA, SOUTH DAKOTA, TEXAS, UTAH, OR WYOMING, SEND APPLICATIONS TO: U.S. NUCLEAR REGULATORY COMMISSION, REGION I NUCLEAR MATERIALS SAFETY SECTION B 475 ALLENDALE ROAD KING OF PRUSSIA, PA 19406 U.S. NUCLEAR REGULATORY COMMISSION, REGION IV MATERIAL RADIATION PROTECTION SECTION 611 RYAN PLAZA DRIVE, SUITE 1000 ARLINGTON, TX 76011 ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO: ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, DREGON, WASHINGTON, AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS U.S. NUCLEAR REGULATORY COMMISSION, REGION II NUCEAR MATERIALS SAFETY SECTION 101 MARIETTA STREET, SUITE 2800 ATLANTA, GA 30323 U.S. NUCLLAR REGULATORY COMMISSION, REGION V NUCLEAR MATERIALS SAFETY 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 WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTION. 2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip Code) 1. THIS IS AN APPLICATION FOR (Check appropriete item) Wisconsin Electric Power Company A. NEW LICENSE 231 West Michigan Street B. AMENDMENT TO LICENSE NUMBER C. RENEWAL OF LICENSE NUMBER 48-16729-02 Milwaukee, WI 53201 3. ADDRESSIES! WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED. Wisconsin Electric Power Company 333 West Everett Street Milwaukee, WI 53201 TELEPHONE NUMBER 4 NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION 221-2018 Edward J. Lipke SUBMIT ITEMS 5 THROUGH 11 ON 8% x 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE. RADIOACTIVE MATERIAL

a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time. 6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE. 8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS. ID RADIATION SAFETY PROGRAM 9. FACILITIES AND EQUIPMENT 12 LICENSEE FEES (See 10 CFR 170 and Section 170.31) IAMOUNT \$ 120.00 FEE CATEGORY 3P 11. WASTE MANAGEMENT 13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED 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, 52 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. DATE TYPED/PRINTED NAME SIGNATURE-CERTIFYING OFFICER Vice President-Nuclear Power 1/20/89 Ingruen C. W. Fay Cw. Far CONTROL NO. 8676 6 FOR NEC USE ONLY APPROVED BY COMMENTS FEE CATEGORY TYPE OF FEE

CHECK NUMBER

AMOUNT RECEIVED



September 25, 1978

CERTIFIED MAIL

Mr. Nathan Bassin
Materials Branch
Division of Materials and Fuel Cycle
Facility Licensing
U. S. NUCLEAR REGULATORY COMMISSION
Washington, D. C. 20555

Dear Mr. Bassin:

SPECIFIC BYPRODUCT MATERIAL LICENSE APPLICATION GAS CHROMATOGRAPH: NICKEL-63

Enclosed is our application for a Specific Byproduct Material License filed in accordance with 10 CFR Part 30.

The requested license will provide for the possession and use of two detector cells, each containing a foil with 10 millicuries of Ni-63. The detectors are to be used for a Perkin-Elmer Sigma 2 Gas Chromatograph.

Also enclosed is the Category 3.L. application and license fee of \$110.00 as required by 10 CFR Part 170.

NRC approval of this license application is requested.

Very truly yours,

Sol Burstein

Enclosures

Date SEP 29 1978
Log SPT PG Thew
By Drown
Orig to

Executive Vice President

Applicant W. Scoris in Electric tomen shock No. 40230 4 Amount For Appl 31 4/10. Dute Cheek Rec. 1 9/29/78

COPIES SENT TO OFF. OF INSPECTION AND ENGORCEMENT

y ac

Form AEC-813 (2-73) 10 CFR 30

INITED STATES ATOMIC ENERGY COMMISSION

APPLICATION FOR BYPRODUCT MATERIAL LICENSE

*ASTRUCTIONS -- Complete items 1 through 16 if this is an initial application or an application for renewal of a licenso. Information contained in premy is applications filed with the Commission with respect to Items 6 through 15 may be incorporated by reference provided references are clear and 'c Use supplemental sheets where necessary, item 16 must be completed on all applications. Mail two copies to: U.S. Atomic Energy Commission, Was ington, D.C., 20545, Attention, Materials Branch, Directorate of Licensing, Upon approval of this application, the applicant will receive an AEC By 1, dust to ment of License. An AEC Byproduct Material License is issued in accordance with the general requirements contained in Title 10, Code of Fed-Tures Ciris. Part 30, and the Licensee is subject to Title 10. Code of Federal Regulations. Part 20, and the license fee provisions of Title 10, Code of Federal Regulations, Part 170. The license fee cidegory should be stated in fism 16 and the appropriate fee enclosed. (See Note in Instruction Sheet).

(0) NAME AND STREET ADDRESS OF APPLICANT, (Institution, firm, hospital person, etc. Include ZIP Code and telephone number.

Wisconsin Electric Power Company 231 W. Michigan Street Milwaukee, Wisconsin 53201

(b) STREET ADDRESS(ES) AT WHICH BYPRODUCT MATERIAL WILL BE USED. (different from 1(a). Include 29 Code)

Wisconsin Electric Power Company Engineering and Construction Building 520 N. Second Street Milwaukee, Wisconsin 53201

DEPARTMENT TO USE SYPRODUCT MATERIAL

Quality Assurance and Technical Services

3. PREVIOUS LICENSE NUMBER(S). (If this is an application for renewal of a license,

Company possesses current Byproduct Materials License Number 48-16729-01.

4. INDIVIDUAL USER(S). (Name and title of individual(s) who will use or directly ervise use of byproduct material. Give training and experience in Items & and 9

5. RADIATION PROTECTION OFFICER. (Nome of person designated as radiation protes

(See attachment, item 4.)

Edward J. Lipke, Ph.D.

6. (e) SYPRODUCT MATERIAL (Elements

N1-63

(b) CHEMICAL AND/OR PHYSICAL FORM AND MAXIMUM NUMBER OF MILLICURIES OF EACH CHEMICAL AND/OR PHYS. ICAL FORM THAT YOU WILL POSSESS AT ANY ONE TIME. (If sealed source(s), also state name of manufacturer, model in

Deposited on gold or platinum foil, sealed in Detector Cell, Perkin-Elmer Part No. 330-0119.

Foil strength is 10 millicuries. No single detector contains more than 15 millicuries. No more than 2 detectors will be possessed at any one time.

Further information on foil manufacturers is provided on the attachment, item 6(b).

DESCRIBE PURPOSE FOR WHICH BYPRODUCT MATERIAL WILL BE USED. (If byproduct material is for "human use," supplement A (form AEC.313a) must be completed ct material is in the form of a sea'sd source, include the make and model number is storage container and/or device in which the source will

The sealed detector cell containing the Nickel-63 foil will be used in the Perkin-Elmer Model SIGMA 2 Gas Chromatograph with temperature protection circuitry which cuts off at 450°C.

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Principles and practices of radiation protection Radioactivity measurement standardization and manitoring techniques and instruments Mathematics and colculations basic to the use and measurement of radioactivity		(See attachment, item 8.)					Yes	No	Yes	No	
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ATTACHMENT TO BYPRODUCT MATERIAL LICENSE APPLICATION (SUPPLEMENTAL INFORMATION FOR FORM 313)

Item 4.

Authorized users will consist of: (1) The Radiation Protection Officer named in item 5; (2) Mr. R. S. Alberg, Superintendent - Laboratory Services; and (3) other individuals who have been approved by the Radiation Protection Officer and who (a) are employees of Wisconsin Electric Power Company, and (b) have received the training described in item 8.

Item 6(b).

Additional information:

Foil manufacturers may be any of the following:

New England Nuclear Corporation 575 Albany Boston, Massachusetts Foil Model NER-002

Nuclear Radiation Development Corporation 2937 Alt Blvd. Grand Island, New York 14070 Foil Model N1001

Amersham/Searle Corporation 2637 S. Clearbrook Dr. Arlington Heights, Illinois Foil Model N.B.C. 7020

Item 8.

Training:

A. Educational background of the Radiation Protection Officer (Edward J. Lipke) is as follows:

B.S., 1964, Biology, University of Detroit

M.S., 1965, Radiological Health, Wayne State University

M.S., 1967, Environmental Health Sciences (Radiological Health), University of Michigan

Ph.D., 1971, Environmental Health Sciences (Radiological Health), University of Michigan

This totals approximately seven years of formal training in a) principals and practices of radiation protection, b) radioactivity measurement standardization and monitoring techniques and instruments, c) mathematics and calculations basic to the use and measurement of radioactivity, d) biological effects of radiation, and e) other related science and engineering areas.

36529

Experience included the following: ~2 weeks as summer student at Fermi I; √2 months as summer student at Battelle - Northwest (Hanford) ~2 years as Radiological Engineer at Vallecitos Nuclear Center (General Electric) ~1-1/2 years as Senior Scientist at Bettis Atomic Power Laboratory (Westinghouse) v4 years to present as Project Engineer (Nuclear Plant) at Wisconsin Electric Power Company, Nuclear Projects Office B. Mr. R. S. Alberg holds a B.S. degree in Chemistry. He has been with Wisconsin Electric Power Company for 10 years, with primary responsibilities in various areas of chemistry. For the past 5 years he has held the position of Superintendent - Laboratory Services. Except for some work involving small quantities of uranium while previously employed with the 3M Company. Mr. Alberg has not had previous experience with radioactive materials. He will satisfy the requirements outlined in D., below, before commencing utilization of the chromatograph. C. Other individuals will be approved as individual users provided they satisfy the following conditions: 1. They have satisfied the instructional requirements of D., below; and 2. They are employees of Wisconsin Electric Power Company; and 3. They have been approved by the Radiation Protection Officer. The Radiation Protection Officer will maintain a list of currently approved users. The list will be reviewed and updated from time to time, and a copy of the current list will be provided to the Superintendent - Laboratory Services. D. Individual users approved in accordance with C., above shall, as a minimum, satisfy the following instructional requirements: 1. Read 10 CFR Parts 19 and 20; and 2. Read the instruction manual for the chromatograph with the manufacturer's recommendations; in particular, each user shall study and adhere to the operating and safety instructions therein; and 3. Receive approximately 20 minutes of instruction from the Radiation Protection Officer. This instruction will address in particular the nature of leak testing, the radiological characteristics and consequences of Ni-63, and emergency procedures. The Radiation Protection Officer will also determine whether the two items above have been completed. Item 9. EXPERIENCE WITH RADIATION A. Edward J. Lipke has had the following experience with radioisotopes: -2-

		460 201		
Isotope	Max. Amt.	Location	Duration	Use
Co-60	10,000 Ci	U. of Michigan	5 years	Irradiation
Cs-137	∿5 C1	Bettis Atomic Power Lab	1-1/2 years	Irradiation and calibration
1-131	∿100 mCi	U. of Michigan	5 years	Absorption studies
Fe-59	~100 mCi	U. of Michigan	5 years	Bioaccumulation studies
Cs-137	~100 mC1	U. of Michigan	5 years	Bioaccumulation studies
Zn-65	~100 mCi	U. of Michigan	5 years	Bioaccumulation studies
Ce-144	~100 mCi	U. of Michigan	5 years	Bioaccumulation studies
Xe-133	∿10 mCi	Vallecitos Nuclear Center	2 years	Calibration
Kr-85	~10 mCi	Vallecitos Nuclear Center	2 years	Calibration
Misc. activation products	∿10 mCi on	U. of Michigan	5 years	Activation Analysis

Extensive experience at Michigan, Bettis, Vallecitos, and Point Beach Nuclear Plant with a variety of small sources including Sr-90, Pu-239, U-233, Th-232, and Cf-252.

Extensive experience in contamination control of mixed fission products and alpha emitters at Battelle-Northwest, Bettis, Vallecitos, Point Beach Nuclear Plant (PWR) and several BWR nuclear power plants.

Experience with sealed sources as follows:

- (a) Leak testing and use of Radium-226 needles, Wayne State University (Detroit).
- (b) Leak testing, calibration, and survey of Cobalt-60 teletherapy units at hospitals affiliated with Wayne State University.
- (c) Leak testing, calibration, survey, and use of 10,000 Ci Cobalt-60 source for irradiation at University of Michigan.
- (d) Leak testing, calibration, survey, shielding, and radiological procedures for 5 Ci Cobalt-60 and Cs-137 beam projector used for calibrations at Bettis Atomic Power Laboratory.

(e) Leak testing, health physics aspects, licensing, and use of a 2.5 Cf Cobalt-60 capsule at Point Beach Nuclear Plant. (f) Leak testing, licensing, and application of 100 mCi Cs-137 sealed sources for fly-ash level detection at Oak Creek Power Plant. B. The individual users approved in accordance with Item #4 of this application generally have no prior experience with radioactive materials. They receive instruction as described in Item #8 of this application. Item 13. **Facilities** Available facilities and equipment are those typical of most analytical chemistry laboratories. Item 14. Radiation Protection Program A. Routine Since the Ni-63 is a weak beta emitter and is internal to the chromatograph, no special radiological procedures are necessary. No external dose results from this application, and personnel monitoring devices are not required. To ensure the integrity of the source, users shall adhere to the manufacturer's operating manual at all times. B. Leak tests will be performed at six month intervals according to the procedures set forth in the manufacturer's instruction manual. The leak test smear will be sent to one of the following for analysis: Nuclear Sources and Services, Inc. 5711 Ethridge Street Houston, Texas 77017 Nuclear Radiation Development Corporation 2937 Alt Blvd. Grand Island, New York 14070 Eberline Instrument Corporation Midwestern Facility 245 Roosevelt Road West Chicago, Illinois 60185 -4-

The leak test sample labels will include the following information: Perkin-Elmer Detector Cell, Part No. 330-0119. Serial No., if available. 10 mCi Ni-63 source. Name of individual performing test. Date of test. Records of leak test results will be maintained indefinitely. The Radiation Protection Officer will be notified of any leak test results in excess of 0.005 µCi and will arrange for packaging and transportation of potentially leaking source to manufacturer, to Nuclear Sources and Services, Inc., to Nuclear Radiation Development Corp., or to a licensed disposal site. C. Cell cleaning or replacement of the foil will be performed by Nuclear Sources and Services, Inc., or by Nuclear Radiation Development Corp. D. Emergency Procedures 1. This procedure applies in instances where damage to the detector cell and foil has occurred, e.g., by fire, explosion, or impact. Immediately evacuate and isolate the laboratory. Turn off air conditioning system supplying the area. 3. Inform the Radiation Protection Officer: Edward J. Lipke Wisconsin Electric Power Company Nuclear Projects Office Milwaukee Office Extension 2018 Direct dial from outside company: (414)-277-2018 Home phone: (414)-377-9267 4. If the Radiation Protection Officer is unavailable, the Nuclear Projects Office can contact other qualified health physics personnel within the company. 5. Follow any instructions given by the Radiation Protection Officer. 6. Limit access to affected area until Radiation Protection Officer or other qualified health physics personnel arrive. 7. Instruct any fire fighting personnel to utilize self-contained breathing apparatus or other independent source of supplied air if entrance to laboratory is necessary. 8. Inform the regional NRC Office by phone or telegram. Inform the NRC whether the Radiation Protection Officer has been notified, whether the area has been secured, and that the source is 10 millicuries of Ni-63. U. S. NUCLEAR REGULATORY COMMISSION Region III, Office of Inspection and Enforcement 799 Roosevelt Road Glen Ellyn, Illinois 60137 (312)-858-2660 -5. Item 15.

Waste Disposal

In the event disposal is desired or necessary, the detector cell will be sent to Nuclear Sources and Services, Inc., to Nuclear Radiation Development Corp., or to a licensed burial site.