

FORM NRC-313 I (3-80) 10 CFR 30		U.S. NUCLEAR REGULATORY COMMISSION		
APPLICATION FOR BYPRODUCT MATERIAL LICENSE INDUSTRIAL		1. APPLICATION FOR: (Check and/or complete as appropriate)		
See attached instructions for details. Completed applications are filed in duplicate with the Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety, and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555 or applications may be filed in person at the Commission's office at 1217 H Street, NW, Washington, D. C. or 7915 Eastern Avenue, Silver Spring, Maryland.		a. NEW LICENSE		
		b. AMENDMENT TO: LICENSE NUMBER		
		c. RENEWAL OF: LICENSE NUMBER X 49-16921-01		
2. APPLICANT'S NAME (Institution, firm, person, etc.) Division of Health & Medical Services TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION (307) 777-7956		3. NAME AND TITLE OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION Edd Johnson, Chief of Radio Health TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION (307) 777-7956		
4. APPLICANT'S MAILING ADDRESS (Include Zip Code) (Address to which NRC correspondence, notices, bulletins, etc., should be sent.) Hathaway Bldg. Cheyenne, WY 82002		5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED (Include Zip Code) Same as Item 4		
(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)				
6. INDIVIDUAL(S) WHO WILL USE OR DIRECTLY SUPERVISE THE USE OF LICENSED MATERIAL (See Items 16 and 17 for required training and experience of each individual named below)				
FULL NAME		TITLE		
a. Edd Johnson		Chief of Radiological Health Services		
b. Gene Rugotzke		Chief of Chemical Testing Program		
c.				
7. RADIATION PROTECTION OFFICER Edd Johnson		Attach a resume of person's training and experience as outlined in Items 16 and 17 and describe his responsibilities under Item 15.		
8. LICENSED MATERIAL				
LINE NO.	ELEMENT AND MASS NUMBER A	CHEMICAL AND/OR PHYSICAL FORM B	NAME OF MANUFACTURER AND MODEL NUMBER (If Sealed Source) C	MAXIMUM NUMBER OF MILLICURIES AND/OR SEALED SOURCES AND MAXIMUM ACTIVITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME D
(1)	Nickel - 63	Foil	NEN Model NER-001 in Shimadzu Model EDC-5 Cell.	10 millicuries
(2)				
(3)				
(4)				
DESCRIBE USE OF LICENSED MATERIAL E				
(1)	For use in a Shimadzu gas chromatograph for sample analysis.			
(2)				
(3)	8802010200 870827 REG4 LIC30 49-16921-01 PDR			
(4)				

INFORMATION REQUIRED FOR ITEMS 15, 16 AND 17

Describe in detail the information required for Items 15, 16 and 17. Begin each item on a separate page and key to the application as follows:

15. RADIATION PROTECTION PROGRAM. Describe the radiation protection program as appropriate for the material to be used including the duties and responsibilities of the Radiation Protection Officer, control measures, bioassay procedures (if needed), day-to-day general safety instruction to be followed, etc. If the application is for sealed source's also submit leak testing procedures, or if leak testing will be performed using a leak test kit, specify manufacturer and model number of the leak test kit.
16. FORMAL TRAINING IN RADIATION SAFETY. Attach a resume for each individual named in Items 6 and 7. Describe individual's formal training in the following areas where applicable. Include the name of person or institution providing the training, duration of training, when training was received, etc.
 - a. Principles 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.
17. EXPERIENCE. Attach a resume for each individual named in Items 6 and 7. Describe individual's work experience with radiation, including where experience was obtained. Work experience or on-the-job training should be commensurate with the proposed use. Include list of radioisotopes and maximum activity of each used.

18. CERTIFICATE

(This item must be completed by applicant)

The applicant and any official executing this certificate on behalf of the applicant named in Item 2, certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, Part 30, and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our 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.

a. LICENSE FEE REQUIRED
(See Section 170.31, 10 CFR 170)

Except per 10 CFR 170.11(a)(9).

(1) LICENSE FEE CATEGORY:

(2) LICENSE FEE ENCLOSED: \$

b. CERTIFYING OFFICIAL (Signature)

c. NAME (Type or print)

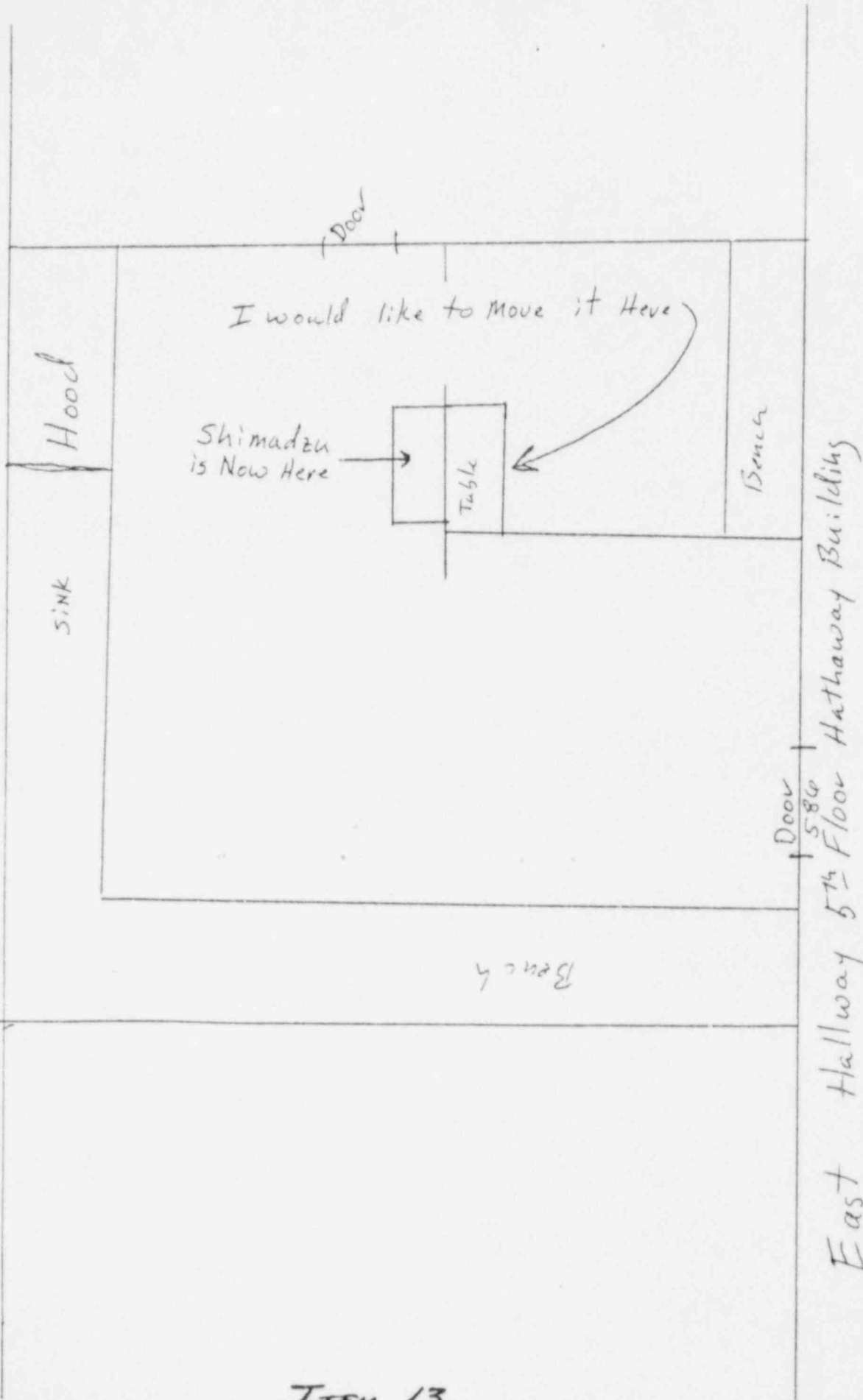
L.J. Cohen, M.D.

d. TITLE Administrator

Division of Health & Medical Services

e. DATE

Mechanical Corridor



ITEM 13

Item 15 - Radiation Safety Program

The Radiation Protection Officer will perform the necessary functions, i.e. surveys, leak tests, to coordinate the safe use of byproduct material and will assure compliance with the applicable parts of Title 10, Code of Federal Regulations.

Byproduct material will be used in Room No. 536. This room is an analytical laboratory with Mr. Rugotzke having access and key control. Leak testing will be done on a six month basis by Mr. Johnson of the department. Using proper handling tools and procedures, the source will be wiped with moistened filter paper. The paper will then be dissolved in a planchet and counted for removal contamination in a Beckman "WIDEBET. II" gas flow proportional counter. Background and efficiency for this instrument are 1.7 cpm and 24.1% respectively in the beta mode. Any additional servicing, maintenance, or repair will be furnished by the supplier.

Items 16 & 17

For Edd Johnson, see attached resume.

For Gene Rugotzke, see below.

B. TYPE OF TRAINING		WHERE TRAINED	DURATION OF TRAINING	ON THE JOB (Circle answer)	FORMAL COURSE (Circle answer)
Rugotzki, Gene					
a. Principles and practices of radiation protection		University of Michigan	2 Semester	Yes No	<input checked="" type="radio"/> Yes No
b. Radioactivity measurement standardization and monitoring techniques and instruments		at Ann Arbor, Michigan,	11 11	Yes No	<input checked="" type="radio"/> Yes No
c. Mathematics and calculations basic to the use and measurement of radioactivity		and	11 11	Yes No	<input checked="" type="radio"/> Yes No
d. Biological effects of radiation		Kansas State University at Manhattan, Kansas	11 11	Yes No	<input checked="" type="radio"/> Yes No

17. EXPERIENCE WITH RADIATION (Actual use of radioisotopes or equivalent experience)				
ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
Co-60	mCi	Kansas State University	4 years	Research
Cs-137	quantities	Hewlett-Packard	3 months	and
Ga-68				Teaching
Fission Products				

RESUME

January 30, 1981

NAME Edd Johnson

ADDRESS 300 West Carlson
Apt. 106
Cheyenne, WY 82001

TELEPHONE (307) 632-5713

BIRTH DATE March 23, 1943

MARITAL STATUS Single

CITIZENSHIP U.S.A.

EDUCATION B.A. Degree, University of Wyoming, Laramie,
Wyoming, 1966
Began work in Chemical Engineering, but during
last three semesters picked up education courses
in order to teach high school. Emphasis on Chem-
istry, Physics, and Mathematics.

Colleges attended:

1961-1962, University of Wyoming, Laramie, WY
1962-1963, Northwest Community College, Powell, WY
1963-1966, University of Wyoming, Laramie, WY

Attended public school in Byron, Wyoming, graduation
in 1961 as Valedictorian of class. Was active in
music and athletics.

Additional Training:

July 1967 - Very intensive and extensive ten week
training in atomic energy. Emphasis was also placed
on methods to effectively communicate with the public.
Training by Oak Ridge Associated Universities, Oak
Ridge, Tennessee.

June 1970 - One week course in Nuclear Medicine at
Baylor of Medicine in Houston, Texas.

September 1970 - Three week course in Orientation
and Licensing Procedures at the USAEC Headquarters
in Bethesda, Maryland.

February 1971 - Ten weeks course in Health Physics
at Oak Ridge Associated Universities, Oak Ridge,
Tennessee.

March 1975 - One week course in Advanced X-Ray
Survey Techniques in Denver, Colorado.

Edd Johnson

EDUCATION (cont.)

May 1975 - One week course on oil well logging in Houston, Texas.

August 1978 - One week seminar on Quality Assurance in Diagnostic Radiology, Rockville, Maryland.

March 1979 - One week seminar on in situ Uranium Mining in Corpus Christi, Texas.

1975-1979 - Various NRC seminars on uranium milling.

MILITARY SERVICE

None; was granted medical deferment because of bad knees resulting from football injuries.

WORK EXPERIENCE

1974 to Present - Division of Health and Medical Services, Cheyenne, Wyoming. Position of Chief of Radiological Health Services.

Responsible for direction of Radiation Control Program, which includes but is not limited to the following activities:

General administrative duties including correspondence, liaison with department heads, budgeting, staff supervision, etc.

Administer registration program for all users of ionizing radiation sources in the state, i.e., x-ray machines, radioactive materials.

Conduct surveys of facilities utilizing radiation sources to evaluate safety procedures and programs and to determine compliance with national standards and recommendations (used in lieu of state regs).

Establish and maintain rapport and working relationships with federal, national, interstate, intrastate, regional, and local agencies and/or groups, as well as the practitioners in the state, in the interest of radiological health.

Develop and coordinate statewide emergency response plan for radiation-related incidents.

Present lectures on radiation safety/protection upon request to civic clubs, professional groups, etc. Also provide in-house training of staff members

WORK EXPERIENCE (cont.)

Represent State of Wyoming in National Conference of Radiation Control Program Directors (CRCPD).

Serve as Chairman of CRCPD Task Force 2-A: "Criteria for Adequate X-Ray Control Programs."

1969-1974 Arizona Atomic Energy Commission, Phoenix, Arizona

Position of Nuclear Technology Development Specialist. Responsible for planning and implementing technical activities to encourage the development of peaceful uses of atomic energy in Arizona. Also provide liaison with and advise other government agencies and/or interested groups on nuclear activities, as well as provide the Health Physics Staff support in licensing.

Responsible for operation of Radiologic Environmental Monitoring System. This included coordination of sample pick-up and preparation of the sample for counting and analysis.

At onset of employment with AAEC, conducted "This Atomic World" lecture-demonstrations to schools and civic groups throughout the State of Arizona. During the year was invited to give program at the ANS/AIF Annual Conference in San Francisco, California.

Upon completion of "This Atomic World" tour, became involved with licensing and regulatory activities of the AAEC. Received much additional training during this one year period.

In August, 1971, became actively involved with developmental activities of the AAEC. Was appointed liaison between the AAEC Technical Advisory Committee, the Commission, and the AAEC staff. Was responsible for the logistics involved in meetings and conferences held by this committee.

Scheduled and coordinated "This Atomic World" program for school year 1972-73. Under sponsorship of the AAEC and the Arizona Nuclear Power Project, arranged contract with ORAU, selected Teacher-Demonstrator, and coordinated activities of the unit during the school year.

Edd Johnson

WORK EXPERIENCE (cont.)

Scheduled and coordinated "This Atomic World" program during 1973-74 school year for the Western Interstate Nuclear Board. Was responsible for contract arrangements, selection of Teacher-Demonstrator, and scheduling of this demonstration unit which operated in Colorado and New Mexico.

1967-1969 - Information and Exhibits Division, Oak Ridge Associated Universities, Oak Ridge, Tennessee.

1967 - Was hired as Exhibits Manager to travel throughout the United States presenting programs and lectures on the peaceful uses of atomic energy. Spent one academic year in Louisiana and Mississippi presenting "This Atomic World" programs to school and civic groups.

1968 - Received promotion to Senior Exhibits Manager. Managed large museum exhibits in Missouri, Tennessee, Texas, Arizona, and Minnesota. During six months duty in Minnesota, organized and conducted workshops and seminars on atomic energy for elementary and secondary teachers, and Boy Scout groups in addition to routine museum group tours and lecture-demonstrations.

1966-1967 - Worland High School, Worland, Wyoming

Taught Chemistry and Physics during the school year 1966-67. Was also Chairman of the Science Department.

SPECIAL ABILITIES

Ability to communicate very effectively and establish rapport with almost any group encountered. Good understanding of human relations.

INTERESTS

Main outside interest in music, sports, athletics, and hunting.