(1.79) 10 C F	H 30	1. APPLICATION FOR: (Check and/or complete as approp		
	APPLICATION FOR	BYPRODUCT MATER	IAL LICENSE	a. NEW LICENSE
See att	ached instructions for details.			5. AMENDMENT TO
Comple Offue Vashing 1717 H	ted applications are filed in dui of Nuclear Material Safety, and fron. DC 20555 or applications Street NW Washington D C	Fuel Cycle and Material Safety, igulatory Commission he Commission's office at liver Spring, Maryland	del Safery. c. RENEWAL OF: LICENSF NUMBER 47-11627-01	
2 APPL	ICANT'S NAME (Institution fir	m, person, etc.)	3. NAME OF PERSON TO BE	CONTACTED REGARDING THIS
Wes	t Virginia Departme	ent of Health	APPLICATION	
Ind	ustrial Hygiene Div	vision	Beattie L. Del	Bord
TELCE	HONE NUMBER AREA CODE	- NUMBER EXTENSION	TELEPHONE NUMBER AP	EA CODE - NUMBER EXTENSIO
(30	4)-348-3526	United Tim Control	(304)-348-3526	
4. APPL	t Virginia Departme	ant of Health	5 STREET ADDRESS WHERE (Include Zip Code)	LICENSED MATERIAL WILL BE
Ind	ustrial Hygiene Div	vision		
151	11th Avenue		151 11th Avenue	101 05000
Sou	th Charleston, WV	25303	South Charlestor	1, WV 25303
	IF MORE SPACE IS N	VEEDED FOR ANY ITEM	USE ADDITIONAL PROPER	LY KEYED PAGES.)
6. IND	IVIDUAL (S) WHO WILL US	E OR DIRECTLY SUPER	VISE THE USE OF LICENSE!	MATERIAL
(See	items 16 and 17 for required trai	ining and experience of each in	dividual named below)	
	FULL NA	ME		TITLE
a G	rady Bowyer		Increator III	
0	ruay bonyer	en meneteren anteren anteren en den er sen en en en er en er	Inspector III	and a first of the processing the state of the state of the Party of the state of the state of the state of the
b R	odnou Vousek			
	ouney Kovack		Inspector 111	
	ouney kovack	namentari menangan kanangan ka	Inspector III	
c. 5	teve Loyd		Inspector III Inspector III	
c. <u>S</u> 7. RAD	teve Loyd	Ŗ	Inspector III Inspector III Attach a resume of person's train 16 and 17 and describe his respon	ning and experience as outlined in I nsibilities under Item 15.
c. <u>S</u> 7. RAD	teve Loyd	R R LICENSE	Inspector III Inspector III Attach a resume of person's train to and 17 and describe his respon	ning and experience as outlined in I nsibilities under Item 15.
c. <u>S</u> 7. RAD	ELEMENT	8. LICENSE	Inspector III Inspector III Attach a resume of person's train 16 and 17 and describe his respon ED MATERIAL NAME OF MANUFACTUREF	ning and experience as outlined in i nsibilities under Item 15. MAXIMUM NUMBER O
C. S 7. RAD L I N E	ELEMENT MASS NUMBER	8. LICENSE CHEMICAL AND/OR PHYSICAL FORM	Inspector III Inspector III Attach a resume of person's train 16 and 17 and describe his respon ED MATERIAL NAME OF MANUFACTUREF AND MODEL NUMBER (If Sealed Source)	MAXIMUM NUMBER OF MILLICURIES AND/OR SEA SOURCES AND MAXIMUM A VITY PER SOURCE WHICH M BE POSSESSED AT ANY ONE
C. S 7. RAD L I N E NO.	ELEMENT MASS NUMBER	R 8. LICENSE CHEMICAL AND/OR PHYSICAL FORM B	Inspector III Inspector III Attach a resume of person's train to and 17 and describe his respon ED MATERIAL NAME OF MANUFACTUREF AND MODEL NUMBER (If Seeled Source) C	ning and experience as outlined in I nsibilities under Item 15. MAXIMUM NUMBER OF MILLICURIES AND/OR SEA SOURCES AND MAXIMUM VITY PER SOURCE WHICH M BE POSSESSED AT ANY ONE D
c. <u>S</u> 7. RAD L I N E NO. (1)	ELEMENT AND MASS NUMBER	R 8. LICENSE CHEMICAL AND/OR PHYSICAL FORM B	Inspector III Inspector III Attach a resume of person's train 16 and 17 and describe his respon ED MATERIAL NAME OF MANUFACTUREF AND MODEL NUMBER (If Sealed Source) C	ning and experience as outlined in I nsibilities under Item 15. MILLICURIES AND/OR SEA SOURCES AND MAXIMUM A VITY PER SOURCE WHICH W BE POSSESSED AT ANY ONE D
c. <u>S</u> 7. RAD L I N E NO. (1)	ELEMENT AND MASS NUMBER A See attachment	R 8. LICENSE CHEMICAL AND/OR PHYSICAL FORM B	Inspector III Inspector III Attach a resume of person's train to and 17 and describe his respon ED MATERIAL NAME OF MANUFACTUREF AND MODEL NUMBER (If Seeled Source) C	ning and experience as outlined in I nsibilities under Item 15. MAXIMUM NUMBER OF MILLICURIES AND/OR SEA SOURCES AND MAXIMUM VITY PER SOURCE WHICH W BE POSSESSED AT ANY ONE D
c. S 7. RAD L I N E NO. (1) (2)	ELEMENT AND MASS NUMBER A see attachment	R 8. LICENSE CHEMICAL AND/OR PHYSICAL FORM B	Inspector III Inspector III Attach a resume of person's train to and 17 and describe his respon ED MATERIAL NAME OF MANUFACTUREF AND MODEL NUMBER (If Seeled Source) C	MAXIMUM NUMBER OF MILLICURIES AND/OR SEA SOURCES AND MAXIMUM A VITY PER SOURCE WHICH W BE POSSESSED AT ANY ONE D
c. <u>S</u> 7. RAD L I N E NO. (1) (2) (3)	ELEMENT AND MASS NUMBER A See attachment	R 8. LICENSE CHEMICAL AND/OR PHYSICAL FORM B B	Inspector III Inspector III Attach a resume of person's train to and 17 and describe his respon ED MATERIAL NAME OF MANUFACTUREF AND MODEL NUMBER (If Seeled Source) C	ning and experience as outlined in I nsibilities under Item 15. MAXIMUM NUMBER OF MILLICURIES AND/OR SEA SOURCES AND MAXIMUM A VITY PER SOURCE WHICH M BE POSSESSED AT ANY ONE D
c. <u>S</u> 7. RAD L I N E NO. (1) (2) (3) (4)	ELEMENT AND MASS NUMBER A see attachment	R 8. LICENSE CHEMICAL AND/OR PHYSICAL FORM B B	Inspector III Inspector III Attach a resume of person's train to and 17 and describe his respon ED MATERIAL NAME OF MANUFACTUREF AND MODEL NUMBER (If Seeled Source) C	ning and experience as outlined in I nsibilities under Item 15. MAXIMUM NUMBER OF MILLICURIES AND/OR SEA SOURCES AND MAXIMUM A VITY PER SOURCE WHICH W BE POSSESSED AT ANY ONE / D
c. <u>S</u> 7. RAD L I N E NO. (1) (2) (3) (4)	ELEMENT AND MASS NUMBER A see attachment	8. LICENSE CHEMICAL AND/OR PHYSICAL FORM B B DESCRIBE USE OF	Inspector III Inspector III Attach a resume of person's train 16 and 17 and describe his respon- ED MATERIAL NAME OF MANUFACTUREF AND MODEL NUMBER (If Sealed Source) C LICENSED MATERIAL	ning and experience as outlined in f nsibilities under Item 15. MAXIMUM NUMBER OF MILLICURIES AND/OR SEA SOURCES AND MAXIMUM VITY PER SOURCE WHICH W BE POSSESSED AT ANY ONE D
c. <u>S</u> 7. RAD L I N E NO. (1) (2) (3) (4)	ELEMENT AND MASS NUMBER A see attachment	R 8. LICENSE CHEMICAL AND/OR PHYSICAL FORM B B DESCRIBE USE OF E	Inspector III Inspector III Attach a resume of person's train to and 17 and describe his respon- ED MATERIAL NAME OF MANUFACTUREF AND MODEL NUMBER (If Seeled Source) C LICENSED MATERIAL	ning and experience as outlined in I nsibilities under Item 15. MAXIMUM NUMBER OF MILLICURIES AND/OR SEA SOURCES AND MAXIMUM VITY PER SOURCE WHICH W BE POSSESSED AT ANY ONE D
c. S 7. RAD L I N E NO. (1) (2) (3) (4)	ELEMENT AND MASS NUMBER A see attachment	8. LICENSE CHEMICAL AND/OR PHYSICAL FORM B B DESCRIBE USE OF E	Inspector III Inspector III Attach a resume of person's train t6 and 17 and describe his respon ED MATERIAL NAME OF MANUFACTUREF AND MODEL NUMBER (If Seeled Source) C	ning and experience as outlined in I nsibilities under Item 15. MAXIMUM NUMBER OF MILLICURIES AND/OR SEA SOURCES AND MAXIMUM VITY PER SOURCE WHICH W BE POSSESSED AT ANY ONE / D
c. S 7. RAD L I N E NO. (1) (2) (3) (4) (1) (2)	ELEMENT AND MASS NUMBER A see attachment	R 8. LICENSE CHEMICAL AND/OR PHYSICAL FORM B B DESCRIBE USE OF E	Inspector III Inspector III Attach a resume of person's train to and 17 and describe his respon- ED MATERIAL NAME OF MANUFACTUREF AND MODEL NUMBER (If Sealed Source) C LICENSED MATERIAL	ning and experience as outlined in I nsibilities under Item 15. MAXIMUM NUMBER OF MILLICURIES AND/OR SEA SOURCES AND MAXIMUM VITY PER SOURCE WHICH M BE POSSESSED AT ANY ONE D
c. <u>S</u> 7. RAD L I N E NO. (1) (2) (3) (4) (1) (2) (3)	ELEMENT AND MASS NUMBER A see attachment	R 8. LICENSE CHEMICAL AND/OR PHYSICAL FORM B DESCRIBE USE OF E	Inspector III Inspector III Attach a resume of person's train to and 17 and describe his respon- ED MATERIAL NAME OF MANUFACTUREF AND MODEL NUMBER (If Sealed Source) C LICENSED MATERIAL	ning and experience as outlined in i nsibilities under Item 15. MAXIMUM NUMBER OF MILLICURIES AND/OR SEA SOURCES AND MAXIMUM VITY PER SOURCE WHICH M BE POSSESSED AT ANY ONE D
c. <u>S</u> 7. FAD L I N E NO. (1) (2) (3) (4) (1) (2) (3) (3)	ELEMENT AND MASS NUMBER A see attachment	8. LICENSE CHEMICAL AND/OR PHYSICAL FORM B DESCRIBE USE OF E	Inspector III Inspector III Attach a resume of person's train to and 17 and describe his respon- ED MATERIAL NAME OF MANUFACTUREF AND MODEL NUMBER (If Seeled Source) C LICENSED MATERIAL	ning and experience as outlined in i nsibilities under Item 15. MAXIMUM NUMBER OF MILLICURIES AND/OR SEA SOURCES AND MAXIMUM VITY PER SOURCE WHICH W BE POSSESSED AT ANY ONE D

. .

Ele Mas	ement and ss Number	Chemical and/or Physical Form	Name of Manufacturer And Model Number	Maximum Number of Millicuries and/or Sealed Sources and Maximum Activity Per Source which will be Possessed at any time
	Α	В	C	D
1.	Any by product material between Atomic Numbers 1-83, inclusive	Any		Not to exceed 1 millicurie per radionuclide
2.	Cobalt 60	Sealed Source	International Chemicals Nuclear Corporation	not to exceed 10 millicuries
3.	Hydrogen 3	Foils Fordector Cells		not to exceed 30 millicuries

Describe Use Of Licensed Material E

1. Laboratory instrumentation and analysis

2. Survey instrumentation calibration

3. For gas chromatograph analysis

	DNTAINER AND/DI XURCÉ WILL BE ST Storage Si	R DEVICE IN WHICH EA ORED OR USED A.	CH SEALED	NAME OF M	B.	C.
	Storage Si	Α.			B.	
	Storage S	anteresta de la constante de la				
	Storage S		and a subject of the second			463
		hield		Internati	onal Chemical	401
and a verse of				THE REPORT OF LAND	ENTE	
	a - ang a carangel B. range of the Annual Control of the South	10. RAI	DIATION DETE	CTION INSTRUM	RADIATION	SENSITIVITY
	TYPE OF INSTRUMENT	MANUFACTURER'S	NUMBER	AVAILABLE	DETECTED (aipha, beta, gamma, neutron)	RANGE (milliroentgens/hou/ or counts/minute)
	A	В	Ċ	D	E	F
,	Lab	Tennelec	LB5100	1	Gamma	0-1000000 cpm
11	Portable	Eberline	E-120	1	Beta, Gamma	0-50 m R/hr
1	Portable	Eberline	E-400	1	Beta, Gamma	0-200 m R/hr
41	FOILADIC	Indlum	2218	1	Beta, Gamma	0-500000 cpm
	Portable	11 CALIBR	ATION OF INS	TRUMENTS LIST	ED IN ITEM 10	and the second
		12. PE	RSONNEL MO	SUPPLIER	CES	EXCHANGE FREQUENCY
10	Cheek and/or comple	re as appropriate.)		(Service Company) B		<u> </u>
(1)	FILM BADGE					D MONTHLY
(2)	THE PHONE UMINES	CENCE		Ludlum		QUARTERLY
(3)	OTHER (Spanoily)					
						angenerative states and the second states of the state states and the second states of the states and the state
					apportated sketch(es)	and description(s).
	13. FACTLITTE	SAND EQUIPMENT	Check were app	ropriate and attach	anno danvi ETC	NAME AND ADDRESS OF A DESCRIPTION OF A D
[] a	LABORATORY F	ACILITIES, PLANT FAC	ILITIES, FUME	NG (fixed and/or tem	porary), ETC	
D b.	STORAGE FACIL	TIES CONTAINERS S	EUTAL SMIELDI	and trades provide the		
0 0	REMOTE HANDL	ING TOOLS ON EUGIPH	T. ETC.		and the second second	
d	RESPIRATORY P	NUTECTIVE EDUTRIET	14. WA	STE DISPOSAL		
a Ner	ME OF COMMERC	IAL WASTE DISPOSAL	SERVICE EMPLO	YED		
	COMMERCIAL WA	STE DISPOSAL SERVIC	E IS NOT EMPLO	YED. SUEMIT A DE	TAILED DESCRIPTION	OF METHODS WHICH WIL

FORM NRC 3131 (1.79)

	INFORMATION REQUIRED FOR ITEMS 15, 16 AND 17
Describe separate	in detail the information required for Items 15, 16 and 17. Begin each item on a 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 (<i>if needed</i>), 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.
	 Radioactivity measurement standardization and monitoring techniques and instruments.
	 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.
	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.
	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 behall 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.
WARNIN	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 applicent 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. IG18 U.S.C. Section 1001; Act of June 25, 1948; 62 Stat 749; makes it a criminal offense to make a willfully false statement atton to any department or agency of the United States as to any matter within its jurisdiction.
WARNIN representa LILENS (See Sei	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 applicent and any official executing this certificate on behall of the applicant named in item 2, certify thet 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. IG 18 U.S.C. Section 1001; Act of June 25, 1948; 62 Stat 749; mekes it a criminal offense to meke a willfully false statemeation to agency of the United States as to any matter within its jurisdiction. EFEE REQUIRED crino 12031. 10 CFR 1201 b. CERTIFYING OFFICIAL (Signeture)
WARNIN representa LILENS (See Sei MON	18. CERTIFICATE (This item must be completed by applicant) 18. CERTIFICATE (This item must be completed by applicant) 18. CERTIFICATE (This item must be completed by applicant) 18. CERTIFICATE (This item must be completed by applicant) 18. CERTIFICATE (This item must be completed by applicant) 18. CERTIFICATE (This item must be completed by applicant) 18. CERTIFICATE (This item must be completed by applicant) 18. CERTIFICATE (This item must be completed by applicant) 18. CERTIFICATE (This item must be completed by applicant) 18. CERTIFICATE (This item must be completed by applicant) 18. CERTIFICATE (This item must be completed by applicant) 19. Certification 19. Certification 10. And the all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowedge and belief. 19. CERTIFYING OFFICIAL (Signeture) 10. States as to any matter within its jurisdiction. 11. Beattie L. DeBord
WARNIN representa LICENS (See Sei 2000	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 thet this application is prepared in conformity with Title 10, Code of Faderal Regulations. Bert 30, and thei all information contained herein, including any upplements attached hereto, is true and correct to the best of our knowledge and belief. NG18 U.S.C. Section 1001. Act of June 25, 1948; 62 Stat 749; makes it a criminal offense to make a willfully false statement and very of the United State as to any matter within its jurisdiction. EFEE REQUIRED critical Provide b. CERTIFYING OFFICIAL (Signeture) c. NAME (Type or print) Beattife L., DeBord d. TITLE Reduil/beging Mattheta

.

RESUME RODNEY KOVACK

As a licensed x-ray technologist with 24 months training in an accredited school, Mr. Kovack received formal course work in the principles and practice of radiation protection, radioactive measurement, standardization, monitoring techniques and instrumentation, mathematics and calculations basic to the use and measurement of radioactivity and biological effects of radiation. He also received on-the-job training in each of the above. Mr. Kovach has attended the following formal courses:

- 1. Basic Radiological Health;
- 2. Medical X-ray Protection;
- Reynolds Electric & Engineering's Radiological Emergency Response;
- 4. Courses on radiation protection and measurement conducted by Duquesne Light; and,
- 5. Courses presented by FEMA on radiation detection, instrumentation and accident assessment.

RESUME

GRADY BOWYER

As a licensed x-ray technologist with 24 months training in an accredited school, Mr. Bowyer received formal course work in the principles and practice of radiation protection, radioactive measurement, standardization, monitoring techniques and instrumentation, mathematics and calculations basic to the use and measurement of radioactivity and biological effects of radiation. He also received on-the-job training in each of the above. Mr. Bowyer has attended the following formal courses:

1. Medical X-ray Protection;

B

- 2. Emergency Response and Surveillance;
- Reynolds Electric & Engineering's Radiological Emergency Response;
- 4. Radiation Accident Assessment;
- 5. Courses on radiation protection and measurement conducted by Duquesne Light; and,
- 6. Courses presented by FEMA on radiation detection, instrumentation and accident assessment.

RESUME

STEVE LOYD

As a licensed x-ray technologist with 24 months training in an accredited school, Mr. Loyd received formal course work in the principles and practice of radiation protection, radioactive measurement, standardization, monitoring techniques and instrumentation, mathematics and calculations basic to the use and measurement of radioactivity and biological effects of radiation. He also received on-the-job training in each of the above. Mr. Loyd has attended the following formal courses:

- Reynolds Electric & Engineering's Radiological Emergency Response;
- Courses on radiation protection and measurement conducted by Duquesne Light; and,
- Courses presented by FEMA on radiation detection, instrumentation and accident assessment.

(FOR LFMS USE) INFORMATION FROM LTS	ogram Code: 03124 atus Code: 2 e Category: EX 3P e Date: 19881031 e Comments:	DF HEALTH	ilestone 03 is entered IN	1(a) 5) preni
BETWEEN:	License Fee Management Branch, ARM Branch, ARM Store Regional Licensing Sections Exercised Sections Fee	LICENSE FEE TRANSMITTAL A. REGION A 1. Application ATTACHED Received Date: 880725 Docket No: 3006694 Control No: 220583 Control No: 47-11627-01 Action Type: Renewal 2. FEE ATTACHED 2. FEE ATTACHED Coeck No.: 220583 Control No: 220583	 COMMENTS Signed Control B. LICENSE FEE MANAGEMENT BRANCH (Check when million Fee Category and Amount: CX3 Correct Fee Paid. Application may be proce 	3. OTHER Signed M.

RESUME

BEATTIE DEBORD

Mr. DeBord has a B.S. in Biology and has attended the following courses relatted to the detection and measurement of radiation:

- 1. Basic Radiological Health;
- Medical X-ray Protection;
 Occupational Radiation Protection;
- 4. Chemical Analysis of Environmental Radionuclides;

5. Management of Radiation Accidents;

- 6. Measurement of Airborne Radioactivity;
- 7. Radionuclide Analysis by Gamma Spectroscopy;
- 8. Accident Assessment, Dose Projection, Protective Actions and Decision Making (Category VI);
- 9. Reynolds Electric & Engineering's Radiological Emergency Response;
- 10. Courses on radiation protection and instrumentation conducted by Duquesne Light for Beaver Valley Nuclear Power Station; and,
- 11. Courses presented by FEMA on radiation detection, instrumentation and accident assessment.

CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

1. The Tennelec system is calibrated every six months using Cs-137, Am-241 and Sr-89 & 90. An aliquote is drawn from standards received from the USEPA laboratory in Las Vegas, weighed in a planchet, solids added, evaporated and counted. QA tests are done weekly.

2. The Eberline Models E-120 and E-400 are calibrated every six months using the Co-60 source. Source activity and mR/hr values at various distances are calculated based on source strength. The calculated vs meter reading are compaired at the chosen distances.

3. The Ludlum Model 2218 is calibrated every six months using I-131. An aliquote is drawn from standards received from the USEPA laboratory, weighed in a planchet, evaporated and counted. QA tests are done monthly.



UNITED STATES NUCLEAR REGULATORY COMMISSION REGION II 101 MARIETTA STREET, N.W. ATLANTA, GEORGIA 30323

AUG 03 1988

West Virginia Department of Health ATTN: Kazim Sheikh, M.D. Industrial Hygiene Division 151-11th Ave. South Charleston, WV 25303

4.2	15ELO		
and and	and h	en.	
		- Child	Copp
			and and

Docket No	030-06694
License N	0. 47-11627-01
Control N	o. 220583

Gentlemen:

SUBJECT: LICENSE RENEWAL APPLICATION

This is to acknowledge receipt of your application for renewal of the nuclear material license identified above. Your application is deemed timely filed, and accordingly, the license will not expire until final action has been taken by this office.

Any correspondence regarding your renewal application should reference the control number and license number specified above.

Sincerely,

Nuclear Materials Safety Section Division of Radiation Safety and Safeguards

NMS-1 (1/85)

RC FORM 313 9-87)	U.S. NUCLEAR REGULATORY COMMISSIO APPROVED BY OM
CFR 30, 32, 33, 34, application FOR	MATERIAL LICENSE 3150-0120 Expires: 6-30-90
STRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR D THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BE	ETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES
PLICATIONS FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH	IF YOU ARE LOCATED IN:
U.S. NUCLEAR REGULATORY COMMISSION DIVISION OF FUEL CYCLE AND MATERIAL SAFETY, NMSS WASHINGTON, DC 20666	ILLINDIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:
L OTHER PERSONS FILE APPLICATIONS AS FOLLOWS, IF YOU ARE CATED IN:	U.S. NUCLEAR REGULATORY COMMISSION, REGION III MATERIALS LICENSING SECTION 799 ROOSEVELT ROAD GLEN ELLYN, 1L 80137
INNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND, ASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA, HODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:	ARKANSAS, 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 I NUCLEAR MATERIALS SAFETY SECTION B 175 ALLENDALE ROAD KING OF PRUSSIA, PA 19406	U.S. NUCLEAR REGULATORY COMMISSION, REGION IV MATERIAL RADIATI JN PROTECTION SECTION 611 RYAN PLAZA DRIVE, SUITE 1000
ABAMA, FLORIDA, GEORGIA, KENTUCKY, MIGSISSIPPI, NORTH CAROLINA, JERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR EST VIRGINIA, SEND APPLICATIONS TO:	ARLINGTON, TX 76011 ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, OREGON, 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 2900 ATLANTA, GA 30323	TO: U.S. NUCLEAR REGULATORY COMMISSION, REGION V NUCLEAR MATERIALS SAFETY SECTION 1460 MARIA LANE, SUITE 210 WALNUT CREEK, CA 94696
	1 des and
RSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURIS DICTION.	REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERI
THIS IS AN APPLICATION FOR (Check appropriate item)	2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip Code)
A. NEW LICENSE	Industrial Hygiene Division
B. AMENDMENT TO LICENSE NUMBER	151-11th Avenue
C. RENEWAL OF LICENSE NUMBER $47-11627-01$	South Charleston WV 25303
Same as #2	
Same as #2 NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION Best tie I. DoBord	TELEPHONE NUMBER
Same as #2 NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION Beattie L. DeBord JEMIT ITEMS 6 THROUGH 11 ON 8% × 11" PAPER. THE TYPE AND SCOPE OF INFORMATI	TELEPHONE NUMBER (304) 348-3526
Same as #2 NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION Beattie L. DeBord JBMIT ITEMS 6 THROUGH 11 CN 8% x 11" PAPER. THE TYPE AND SCOPE OF INFORMATI RADIOACTIVE MATEFIAL E. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time.	TELEPHONE NUMBER (304) 348-3526 ON TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE. 6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.
Same as #2 NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION Beattie L. DeBord DBMIT ITEMS 5 THROUGH 11 ON 8% x 11" PAPER. THE TYPE AND SCOPE OF INFORMATI RADIOACTIVE MATEFIAL E. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.	TELEPHONE NUMBER (304) 348-3526 ON TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE. 6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED. 8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS
Same as #2 NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION Beattie L. DeBord DBMIT ITEMS 5 THROUGH 11 ON 8% x 11" PAPER. THE TYPE AND SCOPE OF INFORMATI RADIOACTIVE MATEFILAL a. Element and mais number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE. FACILITIES AND EQUIPMENT.	TELEPHONE NUMBER (304) 348-3526 ON TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE. 6. PURPOSEISI FOR WHICH LICENSED MATERIAL WILL BE USED. 8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS 10. RADIATION SAFETY PROGRAM.
Same as #2 NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION Beattie L. DeBord IBMIT ITEMS 5 THROUGH 11 ON 8% x 11" PAPER. THE TYPE AND SCOPE OF INFORMATI RADIOACTIVE MATEFILAL E. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE. FACILITIES AND EQUIPMENT.	TELEPHONE NUMBER (304) 348-3526 ON TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE. 6. PURPOSEISI FOR WHICH LICENSED MATERIAL WILL BE USED. 8. TRAINING FOR INDIVIDUALS WORKING IN OR PREQUENTING RESTRICTED AREAS 10. RADIATION SAFETY PROGRAM. 12. LICENSEE FEES (See 10 CFR 170 and Section 170.31) 1. AMOUNT
Same as #2 NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION Beattie L. DeBord UBMIT ITEMS 6 THROUGH 11 ON 8% × 11" PAPER. THE TYPE AND SCOPE OF INFORMATI RADIOACTIVE MATEFIAL a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time. INDIVIDUALISI RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE. FACILITIES AND EQUIPMENT. N. WASTE MANAGEMENT.	TELEPHONE NUMBER (304) 348-3526 ON TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE. 6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED. 8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAL 10. RADIATION SAFETY PROGRAM. 12. LICENSEE FEES (See 10 CFR 170 and Section 170.31) FEE CATEGORY ENCLOSED \$ ATALL STATES WITE SADD REPORT TO DATE ON THIS APPLICATION ARE
Same as #2 NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION Beattie L. DeBord UBMIT ITEMS & THROUGH 11 ON BY & 11" PAPER. THE TYPE AND SCOPE OF INFORMATI RADIOACTIVE MATEFIAL a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time. INDIVIDUALISI RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR FACILITIES AND EQUIPMENT. MASTE MANAGEMENT. CERTIFICATION. Must be completed by applicant! THE APPLICANT UNDERSTANDS TH SINDING UPON THE APPLICAT" THE APPLICAN THE APPLICAT" THE APPLICAN THE APPLICAT" THE APPLICAN THE ADD ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL RECULATIONS, PAR IS THUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BEHALF. GONATURE-CERTIFYING OFFICER TYPED/PRINTED NAME Kazim Sheikh, M.D.	TELEPHONE NUMBER (304) 348–3526 ON TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE. 6. PURPOSEISI FOR WHICH LICENSED MATERIAL WILL BE USED. B. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS 10. RADIATION SAFETY PROGRAM. 12. LICENSEE FREES (See 70 CFR 170 and Section 170.31) FEE CATEGORY EXEMPT FEE CATEGORY EXEMPT Immunol Section 170.31) FEE CATEGORY EXEMPT FEE CATEGORY EXEMPT OF THE APPLICATION SAFED IN ITEM 2, CERTIFY THAT THIS APPLICATION ARE OF THE APPLICATION IN THE AND HEREIN, CONTAINED HEREIN, CONTAINED HEREIN, CONTAINED HEREIN, CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION THIN ITS JURISDICTION. ITTLE DATE Director, Industrial Hygiene Director, Industrial Hygiene
Same as #2 NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION Beattie L. DeBord UBMIT ITEMS 5 THROUGH 11 ON BY & 11" PAPER. THE TYPE AND SCOPE OF INFORMATI RADIOACTIVE MATEFIAL a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time. INDIVIDUALISI RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR FACILITIES AND EQUIPMENT. . WASTE MANAGEMENT. . WASTE MANAGEMENT. . CERTIFICATION. (Must be compressed by applicant) THE APPLICANT UNDERSTANDE TH PIRE MANAGEMENT. . WASTE MANAGEMENT. . WASTE MANAGEMENT. . CERTIFICATION. (Must be compressed by applicant) THE APPLICANT UNDERSTANDE TH PIRE AND EQUIPMENT. . WASTE MANAGEMENT. . KAZIM Sheikh, M.D. . FOR NRI . WASTE MAUNT RECEIVED . THE CATEGORY . COMMENTS MUUNT RECEIVED . CHECK NUMBER . WASTE MUUNT RECEIVED	TELEPHONE NUMBER (304) 348-3526 ON TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.
Same as #2 NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION Beattie L. DeBord UBMIT ITEMS 5 THROUGH 11 ON BY & 11" PAPER. THE TYPE AND SCOPE OF INFORMATI RADIOACTIVE MATEFIAL * Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possaved as any one time. NDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR FRACILITIES AND EQUIPMENT. * WASTE MANAGEMENT. * CERTIFICATION. (Must be completed by applicant). THE APPLICANT UNDERSTANDS TH NINDIVIDUAL(S), RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR FRACILITIES AND EQUIPMENT. * WASTE MANAGEMENT. * CERTIFICATION. (Must be completed by applicant). THE APPLICANT UNDERSTANDS TH NINDIVIDUAL(S), RESPONSIBLE FOR PRADIATION OF PROGRAM AND THEIR FRACILITIES AND EQUIPMENT. * CERTIFICATION. (Must be completed by applicant). THE APPLICANT UNDERSTANDS TH NINDIVIDUAL(S), RESPONSIBLE FOR PRADIATION OF STATEMARKS. FACILITIES AND EQUIPMENT. * CERTIFICATION. (Must be completed by applicant). THE APPLICANT UNDERSTANDS TH NINDIVIDUAL(S), RESPONSIBLE FOR THE APPLICANT UNDERSTANDS TH SINDING UPON THE APPLICAT'. * CERTIFICATION. (Must be completed by applicant). THE APPLICANT UNDERSTANDS TH SINDING UPON THE APPLICAT'. * CERTIFICATION (MUST BELTON THE EXECUTION OF HEALTER ASTO ANY MATERN * COMPONENT OF AGENCY OF THE UNITED STATE ANY MATERN * GRATURE -CERTIFICING OFFICER * YPE OF FREE FEE LOO FEE TO THE BEST OF THEIR KNOWLEDGE AND BELLET. * THE OF FREE FEE LOO FEE CATEGORY ************************************	TELEPHONE NUMBER (304) 348-3526 ON TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE. 6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED. 8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREA 10. RADIATION SAFETY PROGRAM. 12. LICENSEE FEES (See 10 CFR 170 and Section 170.31) PEE CATEGORY EXEMPT PENCLOSED S AT ALL STATE! AT ALL STATE! ITS ANDMEPRESENTATIONS MADE IN THIS APPLICATION ARE OF THE APPLICIANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS ENCLOSED S AT ALL STATE! ITS ANDMEPRESENTATIONS MADE IN THIS APPLICATION IS OF THE APPLICIANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS ENCLOSED S OF THE APPLICIANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS ENCLOSED S OF THE APPLICIANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS ENCLOSED S OF THE APPLICIANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION BERNETION ENCLOSED S CHIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION ENCLOSED DIRECTOR, Industrial Hygiene Divisions OBTIVISION ENCLOSED BY McManual DATE MCLAN MCLAN

John D. Rockefeller IV Governor



L. Clark Hansbarger, M.D. Director RECEIVED

State of Mest Virginia

100 APR 31 AM 9 49

07786

DEPARTMENT OF HEALTH CHARLESTON 25305

April 27, 1981

U.S. NUCLEAR REG. COMMISSION MAIL SECTION

Radioisotopes Licensing Branch Division of Fuel Cycle & Material Safety Office of Nuclear Material Safety and Safeguards U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Gentlemen:

We would like to amend License number 47-11627-01 to include a maximum 25 r.Ci Americium 241, of which positions will be used for calibration standards. This material will be obtained from the U.S. Environmental Protection Agency in Las Vegas, Nevada.

If you have any questions or need additional information please do not hesitate to contact us at this address. 151-11th Avenue, South Charleston, W.V. 25303.

Sincerely yours,

Beattic L. DeBord

Beattie L. DeBord, Supervisor Radiological Health Section Radiological Health Program Industrial Hygiene Division

BLD:gp

Form 485-212	UNITED STATES ATOA	AK ENERGY COMMISSIO	N	1
(2-73) 10 CFR 30	APPLICATION FOR BYP	RODUCT MATERIAL	LICENSE	Form approved Budget Buracu No. 1
 Not Hochas - Johnson -	with the Commission with respect to Items 8 al sheets where necessary frem 16 must be 0545, Attention. Materials Branch, Directorate se. An AEC Byproduct Material License is issu and the Licensee is subject to Title 10. Code 170. The license fee category should be stated ORESS OF APPLICANT (Institution, firm, hospital p	through 15 may be incorp completed on all applicat or Licensing. Upon appro- ed in accordance with the (of Federal Regulations, Pa i in item 16 and the appropri- er. (b) STREET_ADDRESS(orated by reference provions. Mail two copies to val of this application, thi general requirements con rr 20, and the license fee inlate fee enclosed. (See Notes) AT WHICH BYPRODUC	Inded references are c U.S. Atomic Energy (e applicant will receive tained in Title 10, Code provisions of Title 10, ote in instruction Shee T MATERIAL WILL BE
son, etc. Include ZIP Con	se and telephone number.)	different from 1(o)	Include ZIP Code.)	
West Virgin Bureau of In 1800 Washing Charlestor	ia Dept. of Health ndustrial Hygiene gton Street, East	151 - 1 South C	lth Avenue harleston, W	V 25303
2. DEPARTMENT TO USE BYP	TODUCT MATERIAL	3 PREVIOUS LICENSE	NUMBER(S) (If this is on	application for renewal of
Same as abo	ve	47-11627-	01 (Renewal)	
William H. L. Kay Wolfe Rodney Kova (() BYPRODUCT MATERIAL	Aaroe Ord ck (Elements (b) CHEMICAL AND/OR PHYSIC	al form and maximum n	NAMBER OF MILLICURIES OF	EACH CHEMICAL AND
and mass number of ead	 ICAL FORM THAT YOU WILL P number of sources and maximu 	DSSESS AT ANY ONE TIME m activity per source.)	(If woled source(s), also state	name of manufacturer, mai
A. Any byprod materials h Atomic Nos 83 inclusio	uct A. Any chemica between millicurie . 1 thru ve	l or physical per radionucl	form not to ide.	exceed 1
B. Cobalt 60	B. Sealed sour	ce not to exc	eed 10 milli	curies.
C. Hydrogen 3	C. Detector ce per foil.	ll foils not	to exceed 30	0 millicuri
 7. Describe Purpose For v in lieu of this Hom If bypers be shored and/or used.) A & B - Calibi C - Gas Chromi 	which BYPRODUCT MATERIAL WILL BE USED (A dust momenial is in the form of a sealed Kouros, include ration and analysis atography analysis OG	byproduct material is for "hu the make and model number o PIES SENT TO O PECTION AND	mon use, "supplement & (for i the storage container and/s	m AEC 313c) must be con or device in which the sour

(Continued on reverse side)

TRAINING AND EXPE	RIENCE OF E	ACH INDIVIDU	UAL NAMED IN ITEA	A 4 (Use supplem	nental sheets if necess	Dry
TYPE OF TRAINING		WHERE	TRAINED	DURATIO	N OF ON THE JO	B FORMAL COURSE (Circle prismer)
Principles and practices of radiation protection	U.S. Boston	HS, Rock n, Mass.	kville, Md., , etc.	~-20 v	NKS (Yes) No	Yes No
Radiaactivity measurement standardiza- tion and monitoring techniques and in- struments	Same a	as above		Same	e (Yes) No	0 (Yes) No
 Mathematics and calculations basic to the use and measurement of radioactivity 	Same a	as above	& Morris Ha	arvey Same	years No	· Yes No
Biological effects of radiation	Same a	as above		Same	e (No	Ves No
EXPERIENCE WITH RADIATION Actual	use of radio 10	topes or equivale	ent experience)			
131 1 m Ci 0 60 10 m Ci On .	Job	E WAS GAINED	11 J	/ears	Instrumer	nt
CS137 1 m C1 Sr90 1 m Ci Am241 1 m Ci					calibrat	tion
RADIATION DETECTION INSTRUMENTS	time Use suppler	ental sheets if na	ecessory /			
TYPE OF INSTRUMENTS	NUMBER	RADIATION	SENSITIVITY RANGE	WINDOW THICKN	VESS	USE
(Include make and model number of each)	AVAILABLE	DETECTED	(mr/hr)	(mg/cm-)	(Monitoring,	surveying, measuring)
TLD System, Model 2800 Victoreen	1	Gamma	1 - 10 mR		Monitor	ring & eying
Eberline PAC 4G	1	Alpha	0-500,000	.85 mg/o	cm ² Survey	ing
Eberline PRM-5	1	Beta- Gamma	0-500,000 cpm		Survey	ing
Film badges are re a monthly basis fr	ceived o om Sear	on each d le.	of the indiv	/iduals na	amed in No.	. 8 on
INFORMAT	ION TO BI	SUBMITTED	ON ADDITIONA	L SHEETS IN	DUPLICATE	
of facility is attached. (Circle answer)	Tes No	Sep a	ttachment	conforners, shieldin	ig tume hoods, etc	Explanatory sketch
14 FADIATION PROTECTION PROGRAM D Institute procedures where applicable, name icing, mointenance and repair of the source	hescribe the radio fraining, and e See	attachm	ent	measures If applied orrangements fo	icotion covers septed s i petforming initial rac	iources, submit leak diation survey, serv
 WASTE DISPOSAL. If a commercial waste be used for disposing of radioactive waster 	e dispasal services and estimates in	e is employed, spe of the type and ar	ecity name of company mount of activity involved	Omenwise, submit o	detailed description of	methods which will
	CUTING	(This item m	nust be completed	l by applicant	1)	
PREPARED IN CONFORMITY WITH TITLE TO SUPPLEMENTS ATTACHED HERETO, IS TRU	CODE OF FEDE	RAL REGULATION	IS PART 30, AND THAT	ALL INFORMATION	CONTAINED MEREIN	IS APPLICATION IS
License Fee Category #	NO	1039 TIVW	SSHA Applicant	nomedyn item 1	a Dept. of	Health
Fee Enclosed \$.D.	NOIS STUR	1 S'A By	1/10	aane	-
Done July 5, 1978			1 TAP BIB	ector, BUI	r. of Indu	strial Hygi
WARHENG 18 U.S.C. Section 100 representation to any department or agence	11. Act BI Juns	25, 1948, 62 States as to any	Stat. 749, makes it a matter within its wrisd	criminal offense i iction	to make a willfully	talse statement or
		03413	53A		WU.S. GPC	D: 1973-543-126/51
			10.7-8			

Attachment

Application for Byproduct Material License 47-11627-01 (Renewal)

- 13. Isotopes used under NRC License No. 47-11627-01 are used for efficiency determinations on alpha-beta and gamma scintillation laboratory instrumentation. Remote handling equipment, storage containers, shielding, fume hoods, etc., are not required for guantities possessed with the exception of Co⁶⁰. Shielding for the Co⁶⁰ calibration source meets NRC requirements.
- 14. When the Co⁶⁰ source is in use, the room in which it is used is properly posted with only the individual(s) calibrating survey equipment allowed in that room. Each individual within the room is required to wear a film badge. Leak testing is done by Mr. DeBord once every six months. Mr. DeBord's training and experience are listed under Part 8. The Co⁶⁰ source is wiped using alcohol, smear and remote handling equipment and counted in a low beta background counter.

15. N/A

2579

N. H. DYER, M.D., M.P.M. STATE DIRECTOR OF HEALTH



State of West Birginia DEPARTMENT OF HEALTH CHARLESTON 28808

February 4, 1970

Robert E. Brinkman Isotopes Branch Division of Materials Licensing Atomic Energy Commission Washington, D. C. 20545

Dear Mr. Brinkman:

Following is the supplemental information requested for Byproduct Material License #47-11627-01, Amendment Application.

Item 13

Facility consists of chemical or sample preparation laboratory and counting room. Storage area and counting room are below ground level. Radioactive materials will be stored in a leadlined box, which will be kept in a cabinet in the storage area. The storage area is kept locked and is considered a controlled area. The chemical laboratory is equipped with a fume hood. Remote handling of radioactive materials will be by the use of tongs where required. A sketch of the laboratory is attached.

Item 14 - Radiation Protection Program

Surveys will be made, in accordance with Part 20.201, of all areas where radioactive materials are used or stored.

Facility will be posted with caution signs in accordance with Part 20.203.

Personnel monitoring by N-C film badges. Area monitoring will be done with G-M survey meters.

Sealed sources will be leak tested initially by supplier. Subsequent leak tests will be made by B. L. DeBord, R. W. Norton or H. J. Roberts. (Experience and training resumes included in original application). Leak tests will be made by wipes and counted in a NC Model 1105 low background beta counter. Sealed source will be returned to supplier for maintenance or repairs. Robert E. Brinkman February 4, 1970 Page Two

Item 15

Radioactive waste will be disposed of by discharge into the sanitary sewerage system in accordance with Part 20.203. Radioactive materials will be used for the calibration of laboratory counting instruments and maximum amount of material to be disposed of will not exceed 80,000 dpm. Sealed calibration sources will be returned to the supplier on an exchange basis.

Very truly yours,

Harvey & Pobert

Harvey J. Roberts, Director Bureau of Industrial Hygiene

Attachment

HJR:dg

