U.S. NUCLEAR REGULATORY COMMISSION APPROVED BY OMB 3180-0130 Expires 6-30-80 OFR 30, 32, 33, 34 PLICATION FOR MATERIAL LICEN 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 IF YOU ARE LOCATED IN APPLICATIONS FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, ORI U.S. NUCLEAR REGULATORY COMMISSION DIVISION OF FUEL CYCLE AND MATERIAL SAFETY, NMSS WASHINGTON, DC 20665 U.S. NUCLEAR REGULATORY COMMISSION, REGION III MATERIALS LICENSING SECTION 799 ROOSEVELT ROAD GLEN ELLYN, IL .60137 ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS. IF YOU ARE CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, NIAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHGDE ISLAND, OR VERMONT, SEND APPLICATIONS TO: ARKANSAS, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRAI NEW MEXICO, NORTH DAKOTA, OKLAHOMA, BOUTH DAKOTA, TEXAS, UT 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 78011 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, OREGON, WASHINGTON, AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS TO: U.S. NUCLEAR REGULATORY COMMISSION, REGION II NUCEAR MATERIALS SAFETY SECTION 101 MARIETTA STREET, SUITE 2800 ATLANTA, GA 20323 U.S. NUCLEAR 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 2 & Code) 1. THIS IS AN APPLICATION FOR (Check appropriete item) A. NEW LICENSE Department of the Treasury B. AMENDMENT TO LICENSE NUMBER Bureau Alcohol, Tobacco and Firearms C. RENEWAL OF LICENSE NUMBER 19-18331-01 Re 030-14864 1401 Research Blvd. Rockville, MD 20850

3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED Bureau Alcohol, Tobacco and Firearms Bldg. 233 Naval Station Bureau Alcohol, Tobacco and Firearms National Laboratory Center 1401 Research Blvd. Rockville, MD 20850 Treasure Island, CA 94130

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION
WILLIAM D. KINARD (ROCKVILLE) GEO. PETERSON (S.F.) TELEPHONE NUMBER 301-294-0420 415-556-7040

SUBMIT ITEMS 6 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 Element and mass number, b. chemical and/or physical form and c. maximum amount which will be possessed at any one time. 6 PURPOSEIS) FOR WHICH LICENSED MATERIAL WILL BE USED INDIVIDUALIS) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE B. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS 10. RADIATION SAFETY PROGRAM 9 FACILITIES AND EQUIPMENT 12 LICENSEE FEES (See 10 CFR 170 and Section 170 31)

AMOUNT ENCLOSED \$ 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 26, 1948, 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION

SIGNATURE-CERTIFYING OFFICER	TYPED/PRINTED NAME	TITLE	DATE	
Working	WILLTAM D. KINARD	FORENSIC CHEMIST	9/25/88	

8912060171 890829 REG1 LIC30 19-18331-01 PD PDR

FEE LOG

11. WASTE MANAGEMENT

TYPE OF FEE

AMOUNT RECEIVED

FOR NRC USE ONLY	
GORY GOMMENTS VI	APPROVED BY
	DATE

FEE CATEGORY EXEMPTED

FEE CATE

CHECK NUMBER

RADIDACTIVE 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.	Byproduct, source, and/or special nuclear material		7. Chemical and/or physical form	They possess at any one time ander this license
Α.	Nickel 63	,	A. Foils contained in flacint Explosives Model EXD-2 detector	A. Not to exceed 15 millicuries per foil
8.	Mydrogen 3	"	B. Fosts contained in  Mydronautics (Vapor  Trace Analyzers	8. Not to exceed 15 millicuries per foil
c.	Nickel 63	( <sub>'</sub> .	C. Foll contained in Perkin-Einer Model 330-0119 detector cells	C. Not to exceed 15 millicuries per foil
D.	Nickel 63		D. Foir contained in Victoreen Instrument Division Model 4008-4-15	D. Not to exceed 15 millicuries per foil
٤.	Nickel 63		F. Foils contained in Perkin-Elmer Model 009-0282 detector cell	E. Not to exceed 15 millicuries per fuil
F.	Hydrogen 3		F. Titanium tritide foils contained in Sentex Sensing Technology, Inc. Model 50319 Detector Cell	F. Not to exceed 150 millicuries per foil or 6.000 millicuries total

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

For use in gas chromatographs for sample analysis.

For use in analyzers for tracer studies

C. through E. For use in gas chromatographs for sample analysis.

For use in explosive detectors, Scanex Jr. #60k-139.

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

WILLIAM D. KINARD (ATF LABORATORY-ROCKVILLE), (JOHN MCOWEN ATEANTA LABORATORY) GEORGE PETERSON (SAN FRANCISCO LABORATORY).

FORENSIC CHEMISTS AND FIREARMS SPECILIST, RESPECTIVELY, EXPERIENCED WITH RADIOACTIVE MATERIALS, HEALTH PHYSICS MONITORING AND GAMMA RAY SPECTROMETRY.

continue

- 8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREA.

  AREA NOT RESTRICTED, ALL FREQUENTING AREA ARE FORENSIC CHEMIST.
- 9. FACILITIES AND EQUIPMENT.
  FORENSIC LABORATORY DETECTORS.
- RADIATION SAFETY PROGRAM.
   SIMI-ANNUAL LEAK TESTING OF ALL SOURCE MATERIAL.
- 11. WASTE MANAGEMENT
  SEALED SOURCES NO WASTE. —
- 12. LICENSEE FEES
  FEE CATEGORY (U.S. GOVERNMENT AGENCY) EXEMPTED.

APPROVED BY DMB 3150-0020 EXPIRES 12-31-88

## CERTIFICATE OF DISPOSITION OF MATERIALS

	(All Items MUST I	be completed, please print)		
LICENSEE NAME AND ADDRESS		LICENSE NUMBER		
DEPARTMENT OF T	HE TREASURY	19-18331-01 Re: 030-14864		
BUREAU ALCOHOL, TOBACCO AND FIREARMS 1401 RESEARCH BLVD. ROCKVILLE, MD 20850		LICENSE EXPIRATION DATE		
		OCTOBER 31, 1988		
THE LICENSEE OR ANY INI appropriate (tern(s) below.)	DIVIDUAL EXECUTING THIS CERTIFICATE ON B	EHALF OF THE LICENSEE CERTIFIES THAT: (Check and/or complete the		
	A. MATERIALS DATA (Chi	eck one and complete, as necessary)		
C	E EVER BEEN POSSESSED OR PROCURED BY THE CONTROL OF POSSESSED BY THE LICENSEE	HE LICENSEE UNDER THIS LICENSE.  UNDER THE LICENSE NUMBER CITED ABOVE HAVE BEEN TRANSFERRED ON		
DATE	10			
	***************************************	WHICH HAS NRC LICENSE NUMBER		
OR 3. ALL MATERIALS PR	OCURED AND/OR POSSESSED BY THE LICENSEE	UNDER THE LICENSE NUMBER CITED ABOVE HAVE BEEN TRANSFERRED ON		
DATE	Tro			
	WHICH HAS LICENSE NUMBER	ISSUED BY THE STATE OF		
ACT OF 1034	TE PURSUANT TO SECTION 274 OF THE ATOMI	C ENERGY ACT OF 1954, AS AMENDED, AND THE ENERGY REORGANIZATION		
On .		R. (Describe specific disposal procedures—if additional space is needed, use the reverse of		
	N/A			
		OTHER DATA		
2 WAS A RADIATION S CONTAMINATION RE NO YES, THE RESULTS ARE ATTACHED WERE FORWARD	OT YET EXPIRED. PLEASE TERMINATE IT. URVEY CONDUCTED TO CONFIRM THE ABSENCE MAINS ON THE PREMISES COVERED BY THE LI	CE OF LICENSED RADIOACTIVE MATERIALS AND TO DETERMINE WHETHER ANY CENSE? (Check one)		
NAME		TELEPHONE NUMBER		
WILLIAM D. I	WILLIAM D. KINARC (301) 294-0420			
WILLIAM D.	SINARD BUR. ALCOHOL, TOBAC	CO AND FIREAR MS 1401 RESEARCH BLVD		
ROCKVILLE,	1D 20850			
RETURN TO	THE THE PERSON NAMED OF THE PERSON NAMED IN	CERTIFYING OFFICIAL		
DIRECTOR DIVISION OF	FUEL CYCLE AND MATERIAL SAFETY	SIGNAJURE, ALADI. DATE		
	TERIAL SAFETY AND SAFEGUARDS	Willetkings 9-25-80		
U.S. NUCLEAR REGULAT WASHINGTON, DC 20665	DRY COMMISSION	PRINTED NAME AND TITLE . CHEMIST		
20000		WILLIAM D Kusal		
		The state of the s		

## MATERIALS LICENSE

Amendment No. 05

Pursuant to the Atomic Energy Act of 1954 emended, the Energy Reorganization Act 974 (Public Law 93 - 438), and Title 10, Code of Federal Regulations, Chapter 1, Parts 30, 31, 32, 33, 34, 35, 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 by product, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to Geliver 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.

1. Department of the Treasur, Bureau of Alcohol, Tobacci	y b and Firearms	April 29, 19 3. License numbe	ce with letter dated 987. ' 19-18331-01 is amended in y to read as follows:
2. 1401 Research Boulevard Rockville, Maryland 2085	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	4. Expiration date October 31. 1988	
		5. Docket or Reference No.	030-14864
6. Byproduct, source, and/or special nuclear material	7. Chemical an form	d/or physical	<ol> <li>Maximum amount that licensee</li> <li>may possess at any one time</li> <li>under this license</li> </ol>
Nickel 63	A. Foils conta Elscint Exp Model EXD-	losives	A. Not to exceed 15 millicuries per foil
. Hydrogen 3	B. Foils conta	s Vapor	8. Not to exceed 15 millicuries per foil
. Nickel 63	Trace Anal C. Voil obnta Perkin-Elm	laed in	C. Not to exceed 15 millicuries per foil
O. Nickel 63	, D. Foir conta Victoreen	Instrument odel 4008-4-15	0. Not to exceed 15 millicuries per foil
. Nickel 63	F. Foils contained in E. Not to exceed 15		E. Not to exceed 15 millicuries per foil
. Hydrogen 3	F. Titanium to contained	ritide foils in Sentex chnology, Inc.	F. Not to exceed 150 millicuries per foil or 6,000 millicuries total

For use in gas chromatographs for sample analysis.

For use in analyzers for tracer studies

through E. For use in gas chromatographs for sample analysis.

For use in explosive detectors, Scanex Jr. #60k-139.

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MUCY OF DYELL.

MATERIALS LICE

19-18331-01 Destet or Reference 19-18381-01

Amendment No. 05

THE PARTY OF THE PROPERTY OF T

## COMDITIONS

- 10. Licensed material shall be used at 1401 Research Boulevard, Rockville, Maryland. Licensed material listed in Subitem 6.C., 6.D., 6.E. and 6.F. may also be used at the licensee's San Francisco Laboratory Center, Building 233, Naval Station, Treasure Island, California.
- 11. Licensed material shall be used by, or under the supervision of, William D. Kinard, Philip Wineman, Richard Tontarski, Richard Strobel, Ronald N. Holmes, or Felipe Alfonso, except that licensed material listed in Subitems 6.C., 6.D., 6.E. and 6.f. may also be used by John McOwen, Steve Roberts, Tony Henseler, Samuel Blitterman, or George Peterson.
- 12. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders or detector cells by the licensee.
- 13. A(1) Any sealed sources or detector cells specified in Items 7.A., 7.C., 7.D. and 7.E. shall be tested for leakage and/or contamination at intervals not to exceed 6 months. Any source or detector cell received from another person which is not accompanied by a certificate indicating that a test was performed within 6 months before the transfer shall not be put into use until tested.
  - (2) Notwithstanding the periodic leak test required by this condition, any licensed sealed source or detector cell is exempt from such leak tests when the source or detector cell contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.
  - B. Any sealed source or detector cell in storage and not being used need not be tested. When the source or detector cell is removed from storage for use or transfer to another person, it shall be tested before use or transfer.
  - C. The 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, the source or detector cell shall be removed from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. A report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region I, ATTN: Chief, Nuclear Materials Safety and Safeguards Branch, 631 Park Avenue, King of Prussia, Pennsylvania 19406. The report shall specify the source involved, the test results, and corrective action taken. Records of leak test results shall be kept in units of microcuries and shall be maintained for inspection by the Commission. Records may be disposed of following Commission inspection.
  - D. 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.

MATERIALS LICENSE SUPPLEMENTARY SHEET

19-18331-01 Ducket or Reference number

030-14864

Amendment No. 05

(Continued)

CONDITIONS

- 14. Installation, initial radiation survey, relocation, removal from service. maintenance, and repair of devices containing sealed sources and installation replacement and disposal of sealed sources shall be performed only by persons specifically licensed by the Commission or an Agreement State to perform such services.
- The licensee shall conduct a physical inventory every 6 months to account for 15. 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.
- In lieu of using the conventional radiation caution colors (magenta or purple 16. on yellow background) as provided in Section 20.203(a)(1), of 10 CFR Part 20. the licensee is hereby authorized to label detector cells and cell baths, containing licensed material and used in gas chromatography devices, with conspicuously etched or stamped radiation caution symbols without a color requirement.
- Detector cells containing titanium tritide foils shall only be used in conjunc-17. tion with a properly operating temperature control mechanism which prevents foil temperatures from exceeding 225 degrees Centigrade.
- 18. 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.
  - Application dated October 31, 1978 A.
  - Letter dated March 20, 1981 B.
  - Letter dated August 19, 1981 C.
  - D. Letter dated May 24, 1983
  - Letter dated July 11, 1983 E.
  - Letter dated August 3, 1983 F.
  - G. Letter dated October 12, 1983 Letter dated January 30, 1984 H.
  - Letter dated April 29, 1987

109655

30 SEP 1988

OFFICIAL RECORD COPY ML 10

For the U.S. Nuclear Regulatory Commission

Date

JUN 2 3 1987

Nuclear Materials Safety and

Safeguards Branch, Region I

King of Prussia, Pennsylvania 19406

•			: (FOR LEMS USE) : INFORMATION FROM LTS
BET	WEEN:		:
Manual Control of the	LICENSE FEE MANAGEMENT BRANCH, ARM AND REGIONAL LICENSING SECTIONS		: PROGRAM CODE: 03123 : STATUS CODE: 2
● RES	IONAL LICENSING SECTI	ONS	: FEE CATEGORY: EX 3P : EXP. DATE: 19881031 : FEE COMMENTS:
ric	ENSE FEE TRANSMITTAL		
• A.	REGION		
•	APPLICATION ATTACHED APPLICANT/LICENSEE: RECEIVED DATE: DOCKET NO: CONTROL NO.: LICENSE NO.: ACTION TYPE:	000930	ARTMENT OF THE
2.	PEE ATTACHED AMOUNT: CHECK NO.: 7		
3.	COMMENTS		
•			B. f. brown
8.	LICENSE FEE MANAGEMEN	BRANCH (CHEC	K WHEN MILESTONE 03 IS ENTERED //)
• 1.	FEE CATEGORY AND AMO	JNT:	
• 2.	CORRECT FEE PAID. AN AMENDMENT RENEWAL LICENSE		BE PROCESSED FOR:
3.			(B. R.
•		SIGNED	
•			