

<b>NRC Form 313 I</b> (12-81) 10 CFR 30		<b>U.S. NUCLEAR REGULATORY COMMISSION</b>		<b>1. APPLICATION FOR:</b> <i>(Check and/or complete as appropriate)</i>	
<b>APPLICATION FOR BYPRODUCT MATERIAL LICENSE INDUSTRIAL</b>				a. NEW LICENSE	
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 1717 H Street, NW, Washington, D. C. or 7915 Eastern Avenue, Silver Spring, Maryland.				b. AMENDMENT TO: LICENSE NUMBER <b>04-04346-02</b>	
c. RENEWAL OF: LICENSE NUMBER					
<b>2. APPLICANT'S NAME</b> <i>(Institution, firm, person, etc.)</i>  Department of the Navy  TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION (415) 765-6936			<b>3. NAME AND TITLE OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION</b> John F. Wagner, MAJ, USA  TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION (415) 765-5075/5761		
<b>4. APPLICANT'S MAILING ADDRESS</b> <i>(Include Zip Code)</i> <i>(Address to which NRC correspondence, notices, bulletins, etc., should be sent.)</i> NAVAL TECHNICAL TRAINING CENTER TREASURE ISLAND SAN FRANCISCO, CA 94130-5034			<b>5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED</b> <i>(Include Zip Code)</i> BUILDING 343 NAVAL STATION, TREASURE ISLAND SAN FRANCISCO, CA 94130-5034		
(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)					
<b>6. INDIVIDUAL(S) WHO WILL USE OR DIRECTLY SUPERVISE THE USE OF LICENSED MATERIAL</b> <i>(See Items 16 and 17 for required training and experience of each individual named below)</i>					
FULL NAME			TITLE		
a. John F. Wagner, MAJ, USA			Radiation Health Officer		
b. Others, SEE SUPPLEMENT 6-1					
c.					
<b>7. RADIATION PROTECTION OFFICER</b>  John F. Wagner, MAJ, USA			<i>Attach a resume of person's training and experience as outlined in Items 16 and 17 and describe his responsibilities under Item 15.</i>		
<b>8. LICENSED MATERIAL</b>					
L I N E  NO.	ELEMENT AND MASS NUMBER  A	CHEMICAL AND/OR PHYSICAL FORM  B	NAME OF MANUFACTURER AND MODEL NUMBER <i>(If Sealed Source)</i>  C	MAXIMUM NUMBER OF MILLICURIES AND/OR SEALED SOURCES AND MAXIMUM ACTI- VITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME  D	
(1)	Cesium 137	Sealed source	Oak Ridge Natl. Lab	One source- 66 Curies	
(2)	Cesium 137	Sealed source	U.S. Nuclear, Mod 371	One source- 21 Curies	
(3)					
(4)					
<b>DESCRIBE USE OF LICENSED MATERIAL</b> E					
(1)	Training personnel in radiac instrument calibration.				
(2)	Training personnel in radiac instrument calibration.				
(3)					
(4)					

## 9. STORAGE OF SEALED SOURCES

LINE NO.	CONTAINER AND/OR DEVICE IN WHICH EACH SEALED SOURCE WILL BE STORED OR USED. A.	NAME OF MANUFACTURER B.	MODEL NUMBER C.
(1)	Radiac Calibrator- SEE SUPPLEMENT 13-1	NEMS-CLARKE, INC.	AN/ULM-1A
(2)	Radiac Calibrator- SEE SUPPLEMENT 13-1	MECHANICAL TECHNOLOGY CO.	TS-1216/UD
(3)			
(4)			

## 10. RADIATION DETECTION INSTRUMENTS

LINE NO.	TYPE OF INSTRUMENT A	MANUFACTURER'S NAME B	MODEL NUMBER C	NUMBER AVAILABLE D	RADIATION DETECTED (alpha, beta, gamma, neutron) E	SENSITIVITY RANGE (milliroentgens/hour or counts/minute) F
(1)	SEE SUPPLEMENT 10-1					
(2)						
(3)						
(4)						

## 11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

<input checked="" type="checkbox"/> a. CALIBRATED BY SERVICE COMPANY NAME, ADDRESS, AND FREQUENCY Radiac Repair Facility Mare Island Naval Shipyard Vallejo, CA 94592 (every 6 months)	<input type="checkbox"/> b. CALIBRATED BY APPLICANT Attach a separate sheet describing method, frequency and standards used for calibrating instruments.
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## 12. PERSONNEL MONITORING DEVICES

TYPE (Check and/or complete as appropriate.) A	SUPPLIER (Service Company) B	EXCHANGE FREQUENCY C
<input type="checkbox"/> (1) FILM BADGE <input checked="" type="checkbox"/> (2) THERMOLUMINESCENCE DOSIMETER (TLD) <input checked="" type="checkbox"/> (3) OTHER (Specify): IM-9 <u>Pocket Dosimeter</u>	(2) Naval Medical Command Dosimetry Center Naval Medical Command Bethesda, MD 20814 (3) Radiac Repair Facility Mare Island Naval Shipyard Vallejo, CA 94592	<input type="checkbox"/> MONTHLY <input type="checkbox"/> QUARTERLY <input checked="" type="checkbox"/> OTHER (Specify): <u>TLD- Six weeks</u> <u>IM-9 - Six Months</u>

## 13. FACILITIES AND EQUIPMENT (Check where appropriate and attach annotated sketch(es) and description(s).)

- ☒ a. LABORATORY FACILITIES, PLANT FACILITIES, FUME HOODS (Include filtration, if any), ETC.  
☒ b. STORAGE FACILITIES, CONTAINERS, SPECIAL SHIELDING (fixed and/or temporary), ETC.  
☐ c. REMOTE HANDLING TOOLS OR EQUIPMENT, ETC. SEE SUPPLEMENT 13-1  
☐ d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC.

## 14. WASTE DISPOSAL

- a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED  
**SEE SUPPLEMENT 14-1**
- b. IF COMMERCIAL WASTE DISPOSAL SERVICE IS NOT EMPLOYED, SUBMIT A DETAILED DESCRIPTION OF METHODS WHICH WILL BE USED FOR DISPOSING OF RADIOACTIVE WASTES AND ESTIMATES OF THE TYPE AND AMOUNT OF ACTIVITY INVOLVED. IF THE APPLICATION IS FOR SEALED SOURCES AND DEVICES AND THEY WILL BE RETURNED TO THE MANUFACTURER, SO STATE.

### 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.

SEE SUPPLEMENT 15-1

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.

SEE SUPPLEMENT 16-1

- 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.

SEE SUPPLEMENT 17-1

### 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)

N/A

b. CERTIFYING OFFICIAL (Signature)

*M. J. Evans*

c. NAME (Type or print)

M. J. EVANS

d. TITLE

Commanding Officer

e. DATE

16 Aug 85

(1) LICENSE FEE CATEGORY: N/A

(2) LICENSE FEE ENCLOSED: \$ N/A

Supplement 6-1

Individuals who will Use or Directly Supervise the Use of Licensed Material

Full Name

Title

James T. Droesch, ETC, USN

Director, Radiac Maintenance School

Mark T. Smith, ET1, USN

Instructor, Radiac Maintenance School

*NEW* — Kenneth W. Sparkman, ET1, USN

Instructor, Radiac Maintenance School

and no others.

SUPPLEMENT 6-1  
NRC LIC 04-04346-02  
(AUG 85)

Supplement 13-1

Facilities and Equipment

1. Facilities

- a. Location
- b. Description

2. Equipment

- a. AN/UDM-1A
- b. TS-1216C/UD

Appendix A - Location, Layout and Floor Plans

Appendix B - Equipment Illustrations, AN/UDM-1A

Appendix C - Equipment Illustrations, TS-1216C/UD

SUPPLEMENT 13-1  
NRC LIC 04-04346-02  
(AUG 85)

SUPPLEMENT 15-1

Radiation Protection Program

4. Instructions to Workers

a. Standard Operating Procedures

- (1) AN/UDM-1A
- (2) Leak Test Procedure - AN/UDM-1A
- (3) TS-1216C/UD
- (4) Leak Test Procedure - TS-1216C/UD
- (5) Boiler Room Access Procedure

NOTE: The following NTTC, Treasure Island SOPs are part of the Radiation Protection Program but do not pertain to the sources covered by this license:

- (8) Vault Entry/Exit
- (9) Exempt Quality Sources
- (10) AN/UDM-5
- (11) AN/UDM-5 Leak Test Procedure
- (12) AN/UDM-7B
- (13) AN/UDM-7B Leak Test Procedure
- (14) CL-1 Tritium Calibrator
- (15) TS-1189/PD
- (16) TS-1189/PD Leak Test Procedure
- (17) Breakage of Radiological Electron Tubes

SUPPLEMENT 15-1  
NRC LIC 04-04346-02



Supplement 16-1

Formal Training in Radiation Safety

1. John F. Wagner, MAJ, USA
2. James T. Droesch, ETC, USN
3. Mark T. Smith, ET1, USN
4. Kenneth W. Sparkman, ET1, USN



SUPPLEMENT 16-1  
NRC LIC 04-04346-02  
(AUG 85)

Supplement 16-1

Formal Training in Radiation Safety

1. Resume for John F. Wagner, MAJ, USA

a. Training in the following areas was obtained in the Army's Radiological Safety Officer Course (3 weeks) at the U.S. Army Ordnance and Chemical Center and School, Aberdeen Proving Ground, Maryland, during April 1977:

- (1) Principles and practices of radiation protection.
- (2) Radioactivity measurement standardization and monitoring techniques and instruments.
- (3) Mathematics and calculations basic to the use and measurement of radioactivity.
- (4) Biological effects of radiation.

SUPPLEMENT 16-1  
NRC LIC 04-04346-02  
(AUG 85)



Supplement 16-1

Formal Training in Radiation Safety

3. Resume for Kenneth W. Sparkman, ET1, USN

a. Training in the following areas was provided as part of the Navy Radiac Instrument Maintenance Course (5 weeks) conducted in April and May 1984, at the Naval Technical Training Center, Treasure Island, San Francisco, CA 94130-5034:

- (1) Principles and practices of radiation protection.
- (2) Radioactivity measurement standardization and monitoring techniques and instruments.
- (3) Mathematics and calculations basic to the use and measurement of radioactivity.
- (4) Biological effects of radiation.

SUPPLEMENT 16-1  
NRC LIC 04-04346-02  
(AUG 85)

Supplement 17-1

Work Experience with Radiation

1. John F. Wagner, MAJ, USA
2. James T. Droesch, ETC, USN
3. Mark T. Smith, ET1, USN
4. Kenneth W. Sparkman, ET1, USN

SUPPLEMENT 17-1  
NRC LIC 04-04346-02  
(AUG 85)

Supplement 17-1

Work Experience with Radiation

1. Resume for John F. Wagner, MAJ, USA

a. Nov 1973 to Dec 1976: Major Wagner was assigned as the Officer in Charge of the Alpha Radiation Measurement Team and a member of the Nuclear Accident/Incident Response Team of the 31st Air Defense Artillery Brigade, Homestead Air Force Base, Homestead, FL.



SUPPLEMENT 17-1  
NRC LIC 04-04346-02  
(AUG 85)

Supplement 17-1

Work Experience with Radiation

4. Resume for Kenneth W. Sparkman, ET1, USN

a. May 1984 to present: ET1 Sparkman has been assigned to the Naval Technical Training Center, Treasure Island, San Francisco, CA 94130-5034, as an instructor in the Radiac Instrument Maintenance Course. ET1 Sparkman has demonstrated to the radiation safety officer competency in the safe handling of radioactive materials up to 66 Curies sealed source of Cesium 137, monitoring, decontamination, leak testing, emergency procedures and security.

SUPPLEMENT 17-1  
NRC LIC 04-04346-02  
(AUG 85)





DEPARTMENT OF THE NAVY

NAVAL TECHNICAL TRAINING CENTER

TREASURE ISLAND

SAN FRANCISCO CALIFORNIA 94130-5034

IN REPLY REFER TO

1550

Ser N7/ 1089

16 August 1985

From: Commanding Officer, Naval Technical Training Center, Treasure Island  
To: Head, Division of Fuel Cycle and Material Safety, Office of Nuclear Safety and Safeguards, U.S. Nuclear Regulatory Commission  
Via: Officer in Charge, Naval Sea Systems Command, Detachment Radiological Affairs Support Office

Subj: REQUEST FOR AMENDMENT TO BYPRODUCT MATERIAL LICENSE 04-04346-02

Ref: (a) Title 10, Code of Federal Regulations, Part 30

Encl: (1) NRC Form 313I  
(2) Revised pages to NRC License 04-04346-02  
(3) Requisition and Invoice Shipping Document

1. Byproduct Material License 04-04346-02 was approved by the Nuclear Regulatory Commission on 29 October 1982. In accordance with reference (a), it is requested that this license be amended as follows:

- a. Replace NRC Form 313I with enclosure (1).
- b. Replace pages 3B, 5B, 7B-4-1, 8B, 8B-1, 8B-4, 9B, 9B-1, and 9B-4 with the corresponding page of enclosure (2).
- c. Remove pages 5B-3, 5B-13 to 5B-15, 7B-4-24 to 7B-4-33. These pages refer to the NBC Exercise Source which has been transferred.

2. This license previously included a Cesium 137 sealed source, model LR-2339A, serial number 11 (NBC Exercise Source). This source has been transferred to the Naval Supply Center, Oakland, CA, for disposal purposes. Enclosure (3) annotates receipt of this source by the Naval Supply Center, Oakland, on 9 October 1984.

3. Point of contact at this command is Major John F. Wagner, AV 869-5075/5761 or Comm. (415) 765-5075/5761.

*M. J. Evans*  
M. J. EVANS

19185



APPLICATION FOR BYPRODUCT MATERIAL LICENSE  
INDUSTRIAL

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 1717 H Street, NW, Washington, D. C. or 7915 Eastern Avenue, Silver Spring, Maryland.

a. NEW LICENSE

b. AMENDMENT TO  
LICENSE NUMBER  
04-04346-02

c. RENEWAL OF:  
LICENSE NUMBER

2. APPLICANT'S NAME (Institution, firm, person, etc.)

Department of the Navy

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION  
(415) 765-6936

3. NAME AND TITLE OF PERSON TO BE CONTACTED  
REGARDING THIS APPLICATION

John F. Wagner, MAJ, USA

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION  
(415) 765-5075/5761

4. APPLICANT'S MAILING ADDRESS (Include Zip Code)  
(Address to which NRC correspondence, notices, bulletins, etc., should be sent.)

NAVAL TECHNICAL TRAINING CENTER  
TREASURE ISLAND  
SAN FRANCISCO, CA 94130-5034

5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED  
(Include Zip Code)

BUILDING 343  
NAVAL STATION, TREASURE ISLAND  
SAN FRANCISCO, CA 94130-5034

(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. John F. Wagner, MAJ, USA

Radiation Health Officer

b. Others, SEE SUPPLEMENT 6-1

c.

7. RADIATION PROTECTION OFFICER

John F. Wagner, MAJ, USA

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

L I N E  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 ACTI- VITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME  D
(1)	Cesium 137	Sealed source	Oak Ridge Natl. Lab	One source- 66 Curies
(2)	Cesium 137	Sealed source	U.S. Nuclear, Mod 371	One source- 21 Curies
(3)				
(4)				

DESCRIBE USE OF LICENSED MATERIAL  
E

(1) Training personnel in radiac instrument calibration.

(2) Training personnel in radiac instrument calibration.

(3)

(4)

LINE NO.	CONTAINER AND/OR DEVICE IN WHICH EACH SEALED SOURCE WILL BE STORED OR USED A	NAME OF MANUFACTURER B	MODEL NUMBER C
(1)	Radiac Calibrator- SEE SUPPLEMENT 13-1	NEMS-CLARKE, INC.	AN/UDM-1A
(2)	Radiac Calibrator- SEE SUPPLEMENT 13-1	MECHANICAL TECHNOLOGY CO.	TS-1216/UD
(3)			
(4)			

#### 10. RADIATION DETECTION INSTRUMENTS

LINE NO.	TYPE OF INSTRUMENT A	MANUFACTURER'S NAME B	MODEL NUMBER C	NUMBER AVAILABLE D	RADIATION DETECTED (alpha, beta, gamma, neutron) E	SENSITIVITY RANGE (milliroentgens/hour or counts/minute) F
(1)	SEE SUPPLEMENT 10-1					
(2)						
(3)						
(4)						

#### 11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

☒ a. CALIBRATED BY SERVICE COMPANY

NAME, ADDRESS, AND FREQUENCY:  
Radiac Repair Facility  
Mare Island Naval Shipyard  
Vallejo, CA 94592 (every 6 months)

☐ b. CALIBRATED BY APPLICANT

Attach a separate sheet describing method, frequency and standards used for calibrating instruments.

#### 12. PERSONNEL MONITORING DEVICES

TYPE (Check and/or complete as appropriate.) A	SUPPLIER (Service Company) B	EXCHANGE FREQUENCY C
<input type="checkbox"/> (1) FILM BADGE	(2) Naval Medical Command Dosimetry Center Naval Medical Command Bethesda, MD 20814	<input type="checkbox"/> MONTHLY
<input checked="" type="checkbox"/> (2) THERMOLUMINESCENCE DOSIMETER (TLD)	(3) Radiac Repair Facility Mare Island Naval Shipyard Vallejo, CA 94592	<input type="checkbox"/> QUARTERLY
<input checked="" type="checkbox"/> (3) OTHER (Specify): IM-9 Pocket Dosimeter		<input checked="" type="checkbox"/> OTHER (Specify): TLD- Six weeks IM-9 - Six Months

#### 13. FACILITIES AND EQUIPMENT (Check where appropriate and attach annotated sketch(es) and description(s).)

- ☒ a. LABORATORY FACILITIES, PLANT FACILITIES, FUME HOODS (Include filtration, if any), ETC.  
☒ b. STORAGE FACILITIES, CONTAINERS, SPECIAL SHIELDING (fixed and/or temporary), ETC.  
☐ c. REMOTE HANDLING TOOLS OR EQUIPMENT, ETC. SEE SUPPLEMENT 13-1  
☐ d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC.

#### 14. WASTE DISPOSAL

a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED

SEE SUPPLEMENT 14-1

b. IF COMMERCIAL WASTE DISPOSAL SERVICE IS NOT EMPLOYED, SUBMIT A DETAILED DESCRIPTION OF METHODS WHICH WILL BE USED FOR DISPOSING OF RADIOACTIVE WASTES AND ESTIMATES OF THE TYPE AND AMOUNT OF ACTIVITY INVOLVED. IF THE APPLICATION IS FOR SEALED SOURCES AND DEVICES AND THEY WILL BE RETURNED TO THE MANUFACTURER, SO STATE

# 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.

SEE SUPPLEMENT 15-1

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.

SEE SUPPLEMENT 16-1

- 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.

SEE SUPPLEMENT 17-1

## 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)

N/A

b. CERTIFYING OFFICIAL (Signature)

c. NAME (Type or print)

M. J. EVANS

(1) LICENSE FEE CATEGORY: N/A

d. TITLE

Commanding Officer

(2) LICENSE FEE ENCLOSED: \$ N/A

e. DATE

16 AUG 85

Supplement 6-1

Individuals who will Use or Directly Supervise the Use of Licensed Material

<u>Full Name</u>	<u>Title</u>
James T. Droesch, ETC, USN	Director, Radiac Maintenance School
Mark T. Smith, ET1, USN	Instructor, Radiac Maintenance School
Kenneth W. Sparkman, ET1, USN	Instructor, Radiac Maintenance School

and no others.

SUPPLEMENT 6-1  
NRC LIC 04-04346-02  
(AUG 85)

Supplement 13-1

Facilities and Equipment

1. Facilities

- a. Location
- b. Description

2. Equipment

- a. AN/UDM-1A
- b. TS-1216C/UD

Appendix A - Location, Layout and Floor Plans

Appendix B - Equipment Illustrations, AN/UDM-1A

Appendix C - Equipment Illustrations, TS-1216C/UD

SUPPLEMENT 13-1  
NRC LIC 04-04346-02  
(AUG 85)

SUPPLEMENT 15-1

Radiation Protection Program

4. Instructions to Workers

a. Standard Operating Procedures

- (1) AN/UDM-1A
- (2) Leak Test Procedure - AN/UDM-1A
- (3) TS-1216C/UD
- (4) Leak Test Procedure - TS-1216C/UD
- (5) Boiler Room Access Procedure

NOTE: The following NTTC, Treasure Island SOPs are part of the Radiation Protection Program but do not pertain to the sources covered by this license:

- (8) Vault Entry/Exit
- (9) Exempt Quality Sources
- (10) AN/UDM-5
- (11) AN/UDM-5 Leak Test Procedure
- (12) AN/UDM-7B
- (13) AN/UDM-7B Leak Test Procedure
- (14) CL-1 Tritium Calibrator
- (15) TS-1189/PD
- (16) TS-1189/PD Leak Test Procedure
- (17) Breakage of Radiological Electron Tubes

SUPPLEMENT 15-1  
NRC LIC 04-04346-02



Supplement 16-1

Formal Training in Radiation Safety

1. John F. Wagner, MAJ, USA
2. James T. Droesch, ETC, USN
3. Mark T. Smith, ET1, USN
4. Kenneth W. Sparkman, ET1, USN

SUPPLEMENT 16-1  
NRC LIC 04-04346-02  
(AUG 85)

Supplement 16-1

Formal Training in Radiation Safety

1. Resume for John F. Wagner, MAJ, USA

a. Training in the following areas was obtained in the Army's Radiological Safety Officer Course (3 weeks) at the U.S. Army Ordnance and Chemical Center and School, Aberdeen Proving Ground, Maryland, during April 1977:

- (1) Principles and practices of radiation protection.
- (2) Radioactivity measurement standardization and monitoring techniques and instruments.
- (3) Mathematics and calculations basic to the use and measurement of radioactivity.
- (4) Biological effects of radiation.

SUPPLEMENT 16-1  
NRC LIC 04-04346-02  
(AUG 85)

Supplement 16-1

Formal Training in Radiation Safety

3. Resume for Kenneth W. Sparkman, ET1, USN

a. Training in the following areas was provided as part of the Navy Radiac Instrument Maintenance Course (5 weeks) conducted in April and May 1984, at the Naval Technical Training Center, Treasure Island, San Francisco, CA 94130-5034:

- (1) Principles and practices of radiation protection.
- (2) Radioactivity measurement standardization and monitoring techniques and instruments.
- (3) Mathematics and calculations basic to the use and measurement of radioactivity.
- (4) Biological effects of radiation.

SUPPLEMENT 16-1  
NRC LIC 04-04346-02  
(AUG 85)

Supplement 17-1

Work Experience with Radiation

1. John F. Wagner, MAJ, USA
2. James T. Droesch, ETC, USN
3. Mark T. Smith, ET1, USN
4. Kenneth W. Sparkman, ET1, USN

SUPPLEMENT 17-1  
NRC LIC 04-04346-02  
(AUG 85)

Supplement 17-1

Work Experience with Radiation

1. Resume for John F. Wagner, MAJ, USA

a. Nov 1973 to Dec 1976: Major Wagner was assigned as the Officer in Charge of the Alpha Radiation Measurement Team and a member of the Nuclear Accident/Incident Response Team of the 31st Air Defense Artillery Brigade, Homestead Air Force Base, Homestead, FL.

SUPPLEMENT 17-1  
NRC LIC 04-04346-02  
(AUG 85)

Supplement 17-1

Work Experience with Radiation

4. Resume for Kenneth W. Sparkman, ET1, USN

a. May 1984 to present: ET1 Sparkman has been assigned to the Naval Technical Training Center, Treasure Island, San Francisco, CA 94130-5034, as an instructor in the Radiac Instrument Maintenance Course. ET1 Sparkman has demonstrated to the radiation safety officer competency in the safe handling of radioactive materials up to 66 Curies sealed source of Cesium 137, monitoring, decontamination, leak testing, emergency procedures and security.

SUPPLEMENT 17-1  
NRC LIC 04-04346-02  
(AUG 85)



SHIPPING CONTAINER TALLY

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49

## REQUISITION AND INVOICE/SHIPPING DOCUME

1 FROM  
N62639 NAVTECHTRACEN TREASURE ISLAND BLDG 29D2 TO  
N60028 N.S.T.I. BLDG 28D  
TREASURE ISLAND  
SAN FRANCISCO, CA 941303 SHIP TO MARK FOR  
COMMANDING OFFICER  
NAVAL SUPPLY CENTER  
CODE 402-121, BLDG 113  
OAKLAND, CA 94625

SHEET NO. 1 NO. OF SHEETS 1 REQUISITION DATE 4 OCT 1984 REQUISITION NUMBER N62639-4278-8001

7 DATE MATERIAL REQUIRED

8 PRIORITY

15

9 AUTHORITY OR PURPOSE

10 SIGNATURE  
W.V. MANASAN, SKC, USN

11 VOUCHER NUMBER AND DATE

12 DATE SHIPPED

13 MODE OF SHIPMENT

14 BILL OF LADING NUMBER

15 AIR MOVEMENT DESIGNATOR OR PORT REFERENCE NO

4 APPROPRIATION AND SUBHEAD

OBJ CL

BUR CONT NO

SUBAL LOT

AUTHORIZATION ACCTG ACTIVITY

TRANS TYPE

PROPERTY ACCTG ACTIVITY

COUN TRY

COST CODE

AMOUNT

TAC N152

ITEM NO  
(a)FEDERAL STOCK NUMBER DESCRIPTION AND CODING OF MATERIAL AND/OR SERVICES  
(b)UNIT OF ISSUE  
(c)QUANTITY REQUESTED  
(d)SUPPLY ACTION  
(e)TYPE CONTAINER NOS  
(f)CONTAINER NOS  
(g)UNIT PRICE  
(h)TOTAL COST  
(i)1. NBC WARFARE TEST SOURCE, SERIAL NR. 11  
ELEMENT & MASS NR. CS-137

PG

00001

2. ALPHA CHECK SOURCE STANDARD, SERIAL NR. 22C&21C  
ELEMNT & MASS NR. U308

PG

00002

REQUEST ACKNOWLEDGEMENT AND RETURN SIGNED COPY TO:  
NAVAL TECHNICAL TRAINING CENTER  
MATERIAL DIVISION BLDG 29D  
TREASURE ISLAND, SF CA. 94130

RECEIVED BY:

DATE:

10/9/84

16 TRANSPORTATION VIA MATS  
OR MSTs CHARGEABLE TO

17 SPECIAL HANDLING

18 RECIRCULATION OF SHIPMENT	ISSUED BY	TOTAL CONTAINER	TYPE CONTAINER	DESCRIPTION	TOTAL WEIGHT	TOTAL CUBE	19 RECEIPT	CONTAINERS RECEIVED EXCEPT AS NOTED	DATE	BY	SHEET TOTAL
	CHECKED BY							QUANTITIES RECEIVED EXCEPT AS NOTED	DATE	BY	GRAND TOTAL
	PACKED BY							POSTED	DATE	BY	20 RECEIVER'S VOUCHER NO
				TOTAL							



# UNITED STATES NUCLEAR REGULATORY COMMISSION Washington, D.C. 20555

## NOTICE TO EMPLOYEES

### YOUR EMPLOYER'S RESPONSIBILITY

Your employer is required to—

1. Apply these NRC regulations and the conditions of his NRC license to all work under the license.
2. Post or otherwise make available to you a copy of the NRC regulations, licenses, and operating procedures which apply to work you are engaged in, and explain their provisions to you.
3. Post Notices of Violation involving proposed imposition of civil penalties and orders.
4. Refrain from discriminatory acts against employees who provide information to NRC.

### YOUR RESPONSIBILITY AS A WORKER

You should familiarize yourself with those provisions of the NRC regulations and the operating procedures which apply to the work you are engaged in. You should observe their provisions for your own protection and protection of your co-workers.

### WHAT IS COVERED BY THESE NRC REGULATIONS

1. Limits on exposure to radiation and radioactive material in restricted and unrestricted areas.
2. Measures to be taken after accidental exposure.
3. Personnel monitoring, surveys and equipment.
4. Caution signs, labels, and safety interlock equipment.
5. Exposure records and reports.
6. Options for workers regarding NRC inspections.
7. Identifies "protected activities" that employees may engage in.
8. Prohibits discrimination against employees who engage in these protected activities.
9. Identifies the Department of Labor as a source of relief in the event of discrimination, and
10. Related matters.

### REPORTS ON YOUR RADIATION EXPOSURE HISTORY

1. The NRC regulations require that your employer give you a written

report if you receive an exposure in excess of any applicable limit as set forth in the regulations or in the license. The basic limits for exposure to employees are set forth in Section 20.101, 20.103, and 20.104 of the Part 20 regulations. These Sections specify limits on exposure to radiation and exposure to concentrations of radioactive material in air.

2.

If you work where personnel monitoring is required pursuant to Section 20.202:

- (a) your employer must give you a written report of your radiation exposures upon the termination of your employment, if you request it, and
- (b) your employer must advise you annually of your exposure to radiation, if you request it.

### INSPECTIONS

All activities under the license are subject to inspection by representatives of the NRC. In addition, a worker or representative of workers who believes that there is a violation of the Atomic Energy Act of 1954, the regula-

### STANDARDS FOR PROTECTION AGAINST RADIATION (PART 20); NOTICES, INSTRUCTIONS AND REPORTS TO WORKERS; INSPECTIONS (PART 19); EMPLOYEE PROTECTION

The Nuclear Regulatory Commission (NRC) in its Rules and Regulations: Part 20 has established standards for your protection against radiation hazards from radioactive material under license issued by the NRC; Part 19 has established certain provisions for the options of workers engaged in NRC licensed activities; Parts 30, 40, 50, and other parts containing provisions related to employee protection.

**POSTING REQUIREMENTS** Copies of this notice must be posted in a sufficient number of places in every establishment where activities licensed by the NRC are conducted, to permit employees to observe a copy on the way to or from their place of employment.

ions issued thereunder, or the terms of the employer's license with regard to radiological working conditions in which the worker is engaged, may request an inspection by sending a notice of the alleged violation to the appropriate United States Nuclear Regulatory Commission Regional Office (shown on map below). The request must set forth the specific grounds for the notice, and must be signed by the worker or the representative of the workers. During inspections, NRC inspectors may confer privately with workers, and any worker may bring to the attention of the inspectors any past or present condition which he believes contributed to or caused any violation as described above.

### EMPLOYEE PROTECTION

If an employee believes that discrimination has occurred due to engaging in the "protected activities" set forth in the regulations, within 30 days of the discriminatory act, file a complaint with the Department of Labor, Employment Standards Administration, Wage and Hour Division. The Department of Labor shall conduct an investigation.

### SABOTAGE OF NUCLEAR FACILITIES OR FUEL

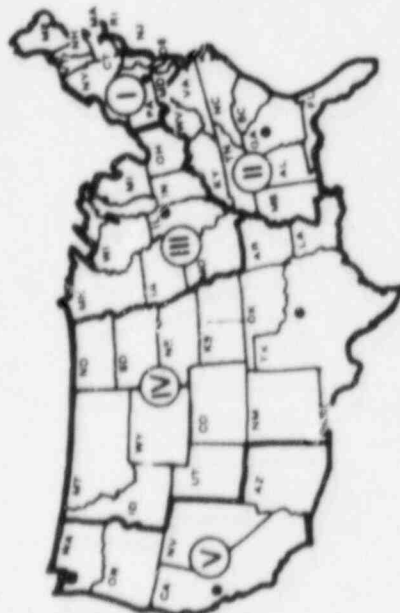
The amended Atomic Energy Act, section 236, provides criminal penalties against any individual who intentionally and willfully destroys or causes physical damage, or attempts to do so, to any production, utilization, or waste storage facility licensed under the act, or any nuclear fuel or spent fuel regardless of location.

### PROTECTION OF INSPECTORS

The amended Atomic Energy Act, section 235, provides criminal penalties against any individual who kills, forcibly assaults, resists, opposes, impedes, intimidates or interferes with any person who performs any inspection which (1) is related to any activity or facility licensed by the Commission, and (2) is carried out to satisfy requirements under the Atomic Energy Act or under any other Federal law covering the safety of licensed facilities or the safety of radioactive materials. This act described above is criminal not only if taken against inspection personnel who are engaged in the performance of such inspection duties, but also if taken against inspection personnel on account of such duties.

## UNITED STATES NUCLEAR REGULATORY COMMISSION REGIONAL OFFICE LOCATIONS

A representative of the Nuclear Regulatory Commission can be contacted at the following addresses and telephone numbers. The Regional Office will accept collect telephone calls from employees who wish to register complaints or concerns about radiological working conditions or other matters regarding compliance with Commission rules and regulations.



### Regional Offices

REGION	ADDRESS	TELEPHONE
I	U.S. Nuclear Regulatory Commission Region I 333 Constitution Avenue, N.E. Washington, D.C. 20001	215 337-5500
II	U.S. Nuclear Regulatory Commission Region II 327 Minnesota St., S.W. Atlanta, GA 30303	404 271-4503
III	U.S. Nuclear Regulatory Commission Region III 200 Roosevelt Road Glen Ellyn, IL 60137	312 832-2800
IV	U.S. Nuclear Regulatory Commission Region IV 811 Ryan Plaza Drive, Suite 1000 Arlington, TX 76012	817 466-8100
V	U.S. Nuclear Regulatory Commission Region V 1400 Main Lane, Suite 210 Redwood Creek, CA 94588	415 943-3700