030-20412

NRC FORM 313 (10-2005) 10 CFR 30, 32, 33, 34, 35, 36, 39, and 40 — **U.S. NUCLEAR REGULATORY COMMISSION**

APPLICATION FOR MATERIALS LICENSE

APPROVED BY OMB: NO. 3150-0120 **EXPIRES: 10/31/2008**

Estimated burden per response to comply with this mandatory collection request: 4.4 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

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.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM
DIVISION OF NUCLEAR MATERIALS SAFETY
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

RECEIVED
MAY 19 2008
DNMS

MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MISSISSIPPI, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TX 76011-4005

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 JURISDICTIONS.

1. THIS IS AN APPLICATION FOR *(Check appropriate item)*
   - ☐ A. NEW LICENSE
   - ☐ B. AMENDMENT TO LICENSE NUMBER
   - ☑ C. RENEWAL OF LICENSE NUMBER **46-23247-01E**

2. NAME AND MAILING ADDRESS OF APPLICANT *(Include ZIP code)*

JAMCO AMERICA INC.
1018 80TH ST SW
EVERETT WA 98203

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

JAMCO AMERICA INC
1018 80TH ST SW
EVERETT WA 98203

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

RANDY L. MOSER

TELEPHONE NUMBER

425-347-4735 Ext 1257

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL
   a. Element and mass number; b. chemical and/or physical form; and c. maiximum amount which will be possessed at any one time. No change FROM 7-9-02

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED. No Change From 7-9-02

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE. Billie Joe Siemering / Tracy Wolfolk

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS. No change From 7-9-02

9. FACILITIES AND EQUIPMENT. No change From 7-9-02

10. RADIATION SAFETY PROGRAM. SEE Attached

11. WASTE MANAGEMENT. No Change From 7-9-02

12. LICENSE FEES *(See 10 CFR 170 and Section 170.31)*

FEE CATEGORY	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, 36, 39, AND 40, AND THAT ALL INFORMATION CONTANED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 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.

CERTIFYING OFFICER – TYPED/PRINTED NAME AND TITLE	SIGNATURE	DATE
Billie JoSiemering Safety Officer / Radiation	Billie Jo Siemering	4/23/08

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED $	CHECK NUMBER	COMMENTS
APPROVED BY				DATE	

NRC FORM 313 (10-2005) PRINTED ON RECYCLED PAPER

022658

University of Washington

Department of
Environmental Health and Safety

CERTIFICATE OF TRAINING

This is to certify that

Tracy Walrath

Successfully completed a program of instruction in

SEALED SOURCES

In

March, 2003

This course includes formal class presentations and sealed source handling demonstrations. This course covers Basic Radiation Physics and safety.

Stanley J. Addison, Radiation Safety Officer

March 13, 2003
Date

RSO Form 26 U:\Word\train\FORM26SS.smoke.det.doc

University of Washington

Department of
Environmental Health and Safety

CERTIFICATE OF TRAINING

This is to certify that

Billie Jo Siemering

Successfully completed a program of instruction in

SEALED SOURCES

In

March, 2003

This course includes formal class presentations and sealed source handling demonstrations. This course covers Basic Radiation Physics and safety.

Stanley J. Addison, Radiation Safety Officer

March 13, 2003
Date

JAMCO AMERICA INC

Training History by Course

COURSE HANDLING RADIOACTIVE MATL
CODE 52879-42
TYPE On the Job Training
CERTIFICATION None Specified

CREDITS 0.00
CEU 0.00

SESSIONS 0
HOURS 0.00

EMPLOYEE NAME	EMPLOYEE ID	JOB TITLE	DIVISION	DEPARTMENT	END DATE	JOB REL	GRADE
Baxter, Mary M	001622	Inventory Control	OPERATIONS	INV	11/30/2004	Yes	D
Bien, Danuta	001760	Assoc Mech	OPERATIONS	LAVS	05/09/2007	No	
Camatti, Charles A	001127	Warehouse Lead	OPERATIONS	INV	05/03/2002	Yes	B
Charles, Janice J	001522	Inventory Control	OPERATIONS	INV	05/03/2002	Yes	
Elliget, Don E	001540	Inventory Control	OPERATIONS	INV	05/03/2002	Yes	
Fortin, Christian C	001525	Customer Service	ADMIN	CUST SVC	10/11/2002	Yes	C
Henderson, Nettie E	001607	Shipping/Recvng	OPERATIONS	INV	08/20/2004	Yes	D
Hilbert, Barry C	001285	Assoc Mech	OPERATIONS	GALLEY	04/01/2003	No	A
Hope, Carolyn J	001403	Shipping/Recvng C	OPERATIONS	INV	05/03/2002	Yes	
KINGRY, JACKIE F	001132	TEST TECHNICIAN	TECH SVC	CERTIF	02/25/1994	Yes	C
Klein, Richard	001678	Inventory Control Clk	OPERATIONS	INV	06/22/2006	Yes	D
Nguyen, Anh H	001341	Assoc Mech	OPERATIONS	LAVS	11/15/2004	Yes	
Nguyen, Hung P	001272	Journey Mech	OPERATIONS	LAVS	11/15/2004	No	
Nguyen, Man V	001420	Inventory Control	OPERATIONS	INV	05/03/2002	Yes	B
Porter, William L	001517	Shipping/Recvng C	OPERATIONS	INV	05/03/2002	Yes	
Presler, Fred A	001121	Mechanic-Lead	OPERATIONS	LAVS	11/15/2004	No	A
Rapelyea, Alfred D	001214	Warehouse Lead	OPERATIONS	INV	05/03/2002	Yes	A
Rose, Kathleen M	001415	Inventory Control	OPERATIONS	LAVS	03/16/2002	Yes	C
Siemering, Billie J	001337	Journey Mech	OPERATIONS	LAVS	05/10/2007	No	B
Stevens, Kathy	001729	Assoc Mech	OPERATIONS	LAVS	05/09/2007	No	
Tackstrom, Christine A	001421	Inventory Control	OPERATIONS	INV	05/03/2002	Yes	B
Waldram, Dana W	001394	Inventory Control	OPERATIONS	INV	05/03/2002	Yes	B
Walrath, Tracy L	001278	Journey Mech	OPERATIONS	LAVS	04/01/2003	No	
Williams, Sherri L	001487	Inventory Control	OPERATIONS	INV	06/03/2003	Yes	

Total Employees 24
Completed 24

MANUFACTURING PROCEDURE

TITLE:	Number :
Training Manual and Handling of Radioactive Material (Smoke Detectors)	52879-0000-42

REV	DESCRIPTION	DATE	APPROVAL
New	Initial release	05/11/88	**Prepared By:** S. Tomiyama **Checked By:** N. Natsume **Approved By:** N. Natsume
A	• Revised document to current format. • Added definitions, accidents, emergencies and records sections. • Renumbered entire document.	09/04/98	**Prepared By:** J. Mitchell **Checked By:** L. Shigetomi **Approved By:** D. Uriu
B	• Para 3.7-revised micro-radiants to millirems. • Deleted first sentence of note referring to micro-curies. • Revised Para 5.1 to specify dosage rate. • Revised Para 5.2 to specify 50 weeks exposure. • Revised note to specify 5000 millirems per year.	09/15/98	**Prepared By:** J. Mitchell **Checked By:** L. Shigetomi **Approved By:** D. Uriu
C	• Referenced JQSGU 002, Quality Manual and URG-0002. • Revised record storage from 7 to 2 years. • Other minor changes to format.	07/09/02	**Prepared By:** B. Baylon **Checked By:** D. Hendricks **Approved By:** D. Hendricks
D	• Revised subject to cover all radioactive materials. • Section II-added statement on the inspection and the superceding of IP-M-U010. Also specified applicability within JAMCO America only. • Section III-RSA is assigned primary and QA Manager as back-up. Added requirements for ensuring compliance and the recording of results. • Section V-replaced JQSGU with AS 9100. • Section 3-specified weekly testing, use of 2 equipments using their operating manuals and split the section into two sections. • Section VII- added UQ-005.	10/13/04	**Prepared By:** /S/ B. Baylon (On File) **Checked By:** /S/ D. Griffis (On File) **Approved By:** /S/ D. Hendricks (On File)

MANUFACTURING PROCEDURE

SUBJECT: Handling and Storage of Radioactive Materials	Number : 52879-0000-42 Revision: D
RELATED DOCUMENTS	JQSGU-002 Element 7.0

I. PURPOSE

To specify how to handle radioactive materials and how to use survey or Geiger Counter for detecting radiation.

II. APPLICABILITY

This procedure applies to all JAMCO America, Inc. (JAMCO) departments that handle, use, store, assemble and test radioactive devices. This procedure also covers the inspection for radioactive material contamination and supercedes Inspection Procedure IP-M-U010.

III. RESPONSIBILITY

Radiation Safety Officer (Primary) or QA Manager (Back-up)
Responsible for training affected personnel to ensure that the requirements of this procedure are met and the results documented.

Department Managers/Supervisor
Responsible for defining training plans and coordinating training of all personnel affected by this procedure.

IV. DEFINITIONS

Background Radiation
Natural radiation that is always present. Usually from the sun's heat and light.

Radiation
Energy that moves in the form of waves or particles.

Alpha (α) Particles
A particle emitted by radioactive nuclei, which consists of two protons and two neutrons.

Gamma (γ) Rays
Powerful radiation waves that are similar to x-rays.

Curie (Ci)
The unit used to measure radiation.

Half-Life
The time it takes half the atom of a radioactive subtonic to decay to another form.

REM
A measure of effect of radiation on humans, incorporating doses and types of radiation

V. REFERENCES

SAE-AS 9100 Aerospace Quality standard or BQSM D6-82479 Appendix A
URG-0002 Establishment of Quality System Documents

VI. PROCEDURE

1. Radioactive Material Facts
   - 1.1. Americium-241 (241Am)
   - 1.2. Radiant Rays (Alpha and Gamma)
   - 1.3. Half-Life (433 Years)
   - 1.4. Intensity (0.7 Ci for each Smoke Detector)
2. Handling of Radioactive Smoke Detectors
   - 2.1. Smoke detectors shall be assembled, disassembled, and handled by authorized personnel.
   - 2.2. Do not eat or drink while working with smoke detectors.
   - 2.3. Do not remove smoke detectors form the designated storage and manufacturing areas.
   - 2.4. Only trained personnel shall handle smoke detectors.
3. Inspection Using Survey Meter For Weekly Contamination Test
   - 3.1. Use either Victoreen Model 290 (SN443) or Technical Associates' Model PUG-7(SN006465), and set-up per their respective equipment manual.
   - 3.2. Selecting 5 random locations on the workbench (Location A) and 3 random locations in the storage cabinet (Location B), the mechanic:
     - 3.2.1. Measure radioactive contamination.
     - 3.2.2. Record results on *UQ-005, Periodic Radiation Inspection Form*
     - 3.2.3. Acceptable measurements shall be less than two time (2X) background radiation. If measurements exceed thresholds, follow Section 4.0 below.
     - 3.2.4. Submit report to the QA Manager for review and retention.
4. Accident/Emergency
   - 4.1. Contamination occurs when the reading at the workstation exceeds the background reading (normally taken in the parking lot of the facility or outside the building) by 2X.
   - 4.2. The Radiation Safety officer will ensure that there is a survey meter in good operating condition in the area where the radiation will be used, including plastic gloves, foot cover and whole body suits, if required.
   - 4.3. Control access to a contaminated area by establishing an exclusion zone. Detour traffic around the area until a radiation survey indicates it is safe and contamination-free. Do not remove any contaminated material until it has been properly surveyed and released.
   - 4.4. Verify that (206)-NUCLEAR has been called and reached.
   - 4.5. If skin or superficial contamination of wounds happened, wash thoroughly with running water and soap, blot dry.
   - 4.6. If eyes are contaminated, treat by irrigating with lots of water for at least five full minutes.
   - 4.7. If contaminated internally, induce vomiting to eliminate quickly, induce sneezing and blow nose repeatedly. Note: Do not attempt these procedures

unless you have proper medical training. Also, contact a hospital or physician as soon as possible.

5. Biological Effect

5.1. At the warehouse, 10 detectors are packed into a cardboard box. Their dimensions 5.5cm height, 9.5cm width and 22cm length. The shipping box (46cm x 30cm x 30cm) holds 30 cardboard boxes. The external radiation of the shipping box is of nearly negligible dosage rate.

5.2. The maximum external radiation dosage of a person, who is engaged 50 weeks per year is 5000mREMs.

VII. RECORDS

UQ-005 Periodic Radiation Inspection Form

U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 04

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 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 byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver 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.

Licensee	
1. JAMCO America, Inc..	In accordance with application dated July 09, 2002,
2. 1018 80th Street, S.W. Everett, Washington 98203	3. License number 29-08864-04E is amended in its entirety to read as follows: 4. Expiration date January 31, 2008 5. Docket No. 030-05355 Reference No.

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
A. Americium-241	A. Foil source (Amersham Model AMM-1001)	A. Not applicable (See Condition 11)

9. Authorized use:

Pursuant to Section 32.26, 10 CFR Part 32, "Specific Domestic Licenses to Manufacture or Transfer Certain Items Containing Byproduct Material," the licensee is authorized to distribute smoke detector devices specified in Condition 10 to persons exempt from the requirements for a license pursuant to Section 30.20, 10 CFR Part 30, or equivalent provisions of the regulations of any Agreement State.

CONDITIONS

10. The following smoke detector devices may be distributed pursuant to this license provided the amount of americium-241 contained in the device does not exceed the amounts specified in the following table:

Device Model	Maximum Quantity per Device
PU90-21000-1	0.7 microcuries (25.9 kBq)
PU90-41000-1	0.7 microcuries (25.9 kBq)

11. This license does not authorize possession or use of licensed material.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number
46-23247-01E

Docket or Reference Number
030-20412

Amendment No. 04

CONDITIONS

(Continued)

12. The licensee may distribute only from its facility located at 1018 80th Street, S.W., Everett, Washington.

13. The licensee shall file periodic reports as specified in Section 32.29(c), 10 CFR Part 32.

14. The licensee shall perform leak testing of the final product, immediately prior to distribution in the United States, at the Lot Tolerance Percent Defective (LTPD) 5% sampling rate in accordance with Regulatory Guide 6.9, Establishing Quality Assurance Programs For The Manufacture and Distribution of Sealed Sources and Devices Containing Byproduct Material.

15. Except as specifically provided otherwise by 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.

    A. Application dated March 24, 1986
    B. Letters dated August 18, August 26, and September 17, 1986;
    C. Letter dated April 16, 1987; and
    D. Application dated July 09, 2002

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date January 23, 2003

By Anthony S. Kirkwood

Anthony S. Kirkwood
Materials Safety and Inspection Branch
Division of Industrial and
Medical Nuclear Safety
Office of Nuclear Material Safety
and Safeguards
Washington, DC 20555

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