

NRC FORM 313
(4-2008)
10 CFR 30, 32, 33,
34, 35, 36, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0120

EXPIRES: 10/31/2003

APPLICATION FOR MATERIALS LICENSE

Estimated burden per response to comply with this mandatory collection request: 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 Service Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, D.C. 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 194061415

IF YOU ARE LOCATED IN:

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

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 II
612 E LAMAR BOULEVARD, SUITE 400
ARLINGTON, TX 76011-4125

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

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

CONSTRUCTORA I MELENDEZ, S.E.
BETANCES 15 SEGUNDO NIVEL
SANTA ISABEL PR 00757

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

AC-520096, PR-52 JUANA DIAZ-PONCE-PR
AC-010821, PR-108-MAYAGUEZ-PR
CARR. 153 BO. PASO SECO-SANTA ISABEL

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

ABIMAE MELENDEZ VAZQUEZ

TELEPHONE NUMBER

7878452475

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE NATURE 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. maximum amount which will be possessed at any one time.

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

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

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM

11. WASTE MANAGEMENT.

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

FEE CATEGORY GAUGES AMOUNT ENCLOSED \$ 1,300.00

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 CONTAINED 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

ABIMAE MELENDEZ VAZQUEZ

SIGNATURE

Abimael Melendez Vazquez

DATE

02/24/2009

FOR NRC USE ONLY

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

CONSTRUCTORA I MELENDEZ, S.E.
ATTACHMENTS

5 & 6. RADIOACTIVE MATERIAL & PURPOSE FOR WHICH
LICENSED MATERIAL WILL BE USED

A. ELEMENT AND MASS NUMBER; B. CHEMICAL AND/OR PHYSICAL FORM; C. MAXIMUM
AMOUNT WHICH WILL BE POSSESSED AT ANY ONE TIME.

RADIOISOTOPE	MANUFACTURER MODEL NO.	QUANTITY	LICENCED MAT. USED
RADIUM 226(BE)	SEAMAN NUCLEAR MOD.C-200 SERIE 538 MCI-4.5 SEAMAN NUCLEAR MOD. C-300 SERIE 21052 MCI-4.5 SEAMAN NUCLEAR MOD. C-300 SERIE 21054 MCI-4.5	NOT TO EXCEED EITHER THE MAXIMUM ACTIVITY PER SOURCE OR MAXIMUM ACTIVITY PER DEVICE AS SPECIFIED IN SEALED SOURCE AND DEVICE REGISTRATION CERTIFICATE	GAUGES WILL BE USED FOR THE PURPOSE DESCRIBED IN THEIR RESPECTIVE SSD REG. SHEET

7. INDIVIDUALS RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE

ABIMAEL MELENDEZ VAZQUEZ JUAN J GALARZA-FIGLIEROA FERNANADO L ROSADO-RAMIREZ	BEFORE OBTAINING LICENSED MATERIALS THE PROPOSED RSO WILL HAVE SUCCESSFULLY COMPLETED ONE OF THE TRAINING COURSES DESCRIBED IN CRITERIA IN THE SECTION ENTITLED "INDIVIDUALS RESPONSIBLE FOR RADIATION SAFETY PROGRAM"
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8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

TYPE OF TRAINING	PLACE	DURATION
NORMS AND PRINCIPLES OF PROTECTION AGAINST RADIATION	TOMAS CUERDAS INC	5 HRS
STANDARIZATION OF MEASUREMENTS OF RADIOACTIVITY AND RECOGNIZION INSTRUMENTS	TOMAS CUERDAS	5 HRS
BASICS CALCULATIONS AND MEASUREMENTS OF RADIOACTIVITY	TOMAS CUERDAS	5 HRS
BIOLOGICAL EFFECTS OF RADIATION	TOMAS CUERDAS	5 HRS

RADIATION SAFETY PROGRAM

General

This radiation Safety Program covers the procedures for the safe and proper use and possession of radioactive material as contained in portable moisture/density gauges used to measure soil and other materials. When handled in accordance with this program, the radioactive materials present no hazard to the licensee's employees, customers, or the general public.

Radiation Safety Officer

All use and possession is under the direction and supervision of the Radiation Safety Officer (RSO). The RSO is a single point of accountability and responsibility between the Regulatory Agency and the Licensee. The RSO is responsible for all aspects of the Radiation Safety Program, including the following specific duties:

1. To ensure that all terms and conditions of the license are being complied with and that the information contained is up-to-date and accurate.
2. To ensure that the equipment is leak tested at the required intervals.
3. To ensure that the equipments are only used by operators authorized by the RSO, and that they use the equipment in accordance with all relevant regulations. This will include wearing of a suitable personnel-monitoring device.
4. To maintain records as required by the license and the regulations.
5. To ensure that all equipment is properly secured against unauthorized removal at all times.
6. To serve as a point of contact and give assistance in case of an emergency such as equipment damage in the field, theft, or fire and to notify the proper authorities (including our Radiation Safety Consultant, in case of an emergency).
7. To ensure that all operators have read and understand this Radiation Safety Program.
8. To post all required signs and notices at gauge storage location.
Post document RH-2364, Notice to Employees.
Label storage cabinet with "Caution, Radioactive Material", and international symbol.
Post notice where a copy of the organization's license, safety program, and copy of regulations are located.

Operation:

1. The operator will exercise suitable control over the gauge at all times. At no time is it to be unattended or in the possession of an unauthorized person.
2. When not being used for field measurements, the gauge will be locked and returned to its storage/transportation case.
3. When testing is complete, the gauge will be returned to its permanent place of storage as soon as possible.
4. When using the equipment, the operator will wear the personnel monitoring device assigned. When the operator is not using the equipment, the monitoring device will be kept in a radiation free, low heat area.
5. At all times operators will observe ALARA principles to minimize any dose received:
As Low as Reasonably Achievable
6. While the equipment is in the operators possession, the operator will have:
 - Copy of the License
 - Copy of Radiation Safety Program with Emergency Procedures and Telephone
 - Copy of Letter/Card of Authorization from RSO
 - Copy of the Gauge Operating Manual and
 - Copy of the Current Leak Test Certificate

Survey Instruments:

We will either possess and use, or have access to and use, a radiation survey meter that meets the Criteria in the section entitled "Radiation Safety Program Instruments".

Material Receipt and Accountability:

Physical inventories will be conducted at intervals not to exceed 6 months, to account for all sealed sources and devices received and possessed under the license.

Occupational Dosimetry.

Either we will maintain, for inspection by NRC, documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of 10 percent of the allowable limits in 10 CFR Part 20, or we will provide dosimetry processed and evaluated by an NVLAP-approved processor that is exchanged at a frequency recommended by the processor.

Emergency

See Appendix for Emergency Telephone Numbers.

Physical Damage

1. If any moving equipment is involved, stop its movement until the extent of contamination if any can be established.
2. Cordon off the area around the incident. An area with a radius of fifteen (15) feet will be sufficient.
3. Visually inspect the gauge to determine the extent of the damage to the source (s), source housing (s), and shielding.
4. At the least possible time, when the situation is under control, contact the RSO. The RSO will immediately notify the appropriated regulatory agency and our Radiation Safety Consultant.

Theft of Loss

Immediately notify the RSO. The RSO will immediately notify the appropriate regulatory agency and the police.

Fire

1. Call the Fire Department
2. Take action appropriated with the fire to protect personnel.
3. Notify to RSO
4. Stand by to advise the fire fighters as so the nature, locations, and potential hazards of the radioactive materials. Supply them with an information packet consisting of the facility layout and a data sheet of the equipment including a photograph. Be sure to include any other important information, e.g. explosives, guard dogs, etc.

Melting Points		°F	°C
Stainless Steel		2550	1440
Carbide		2000	1090
Aluminum	1005		540
Lead		620	327
Polyethylene		257	125

Temperature in an industrial fire will normally range from 500°F at floor level to a high at the ceiling of 1400° to 1800°. The polyethylene and lead would melt in most fires, the aluminum only in a severe fire. The stainless steel capsule would not reach its melting point.

Leak Test:

Leak test will be performed at intervals approved by NRC or an Agreement State and specified in the Sealed Source and Device Registration Sheet. Leak Test will be performed by an organization authorized by NRC or an Agreement State to provide leak testing services for other licensees or using a leak test kit supplied by an organization authorized by NRC or an Agreement State to provide leak test kit to other licensees and according to the kit supplier's instructions.

Maintenance


1. Periodic maintenance will include cleaning of the gauge. The operator will have received proper instruction on how to clean the gauge and will wear his assigned monitoring device.
2. No maintenance will be performed in which the radioactive source is removed from gauge. The gauge will be returned to the manufacturer or an approved service center for this type of service.
3. A leak test will be performed every six (6) months in collaboration with our Radiation Safety Consultant, using an approved leak test kit provided by CPN, and in accordance with the gauge manufacturer's instructions. The Radiation Service Consultant has received proper instruction on how to leak test the gauge and will wear his assigned monitoring device.
4. The shipping case will be periodically checked for integrity, and to verify that all labels are present and readable.

RADIATION SAFETY PROGRAM

This radiation safety program will be implemented at all times. A copy of these procedures shall be maintained in the licensee's radioactive materials file, and another copy in the shipping case of the nuclear gauge at all times.

SIGNED:

CONSTRUCTORA I. MELENDEZ, S.E.


Abimael Melendez-Vazquez
Administrative VP

'Date: _____

**APPENDIX
EMERGENCY PHONE NUMBERS**

Main Office	(787)845-2475
	(787)845-5475
	(787)845-6787
	(787)845-6797
Engineering Department	(787)845-7343
	(787)845-1403
Workshop	(787)845-3475
Police Department	(787)343-2020
	911
Fire Department	(787)343-2330
Radiology Health Department	(787)274-7816
	(787)813-0832

CRMI

Paseo de la Fuente
D-4 Calle Tivoli
San Juan, PR 00926
(787) 245-7248
Fax (787) 292-7976

CERTIFICATION OF CALIBRATION NRC License Number 52-25430-01

Customer:	<i>Construction & Machinery</i>
Model:	<i>C-300</i>
Serial No.:	<i>21052</i>
Date of Calibration:	<i>Dec 21, 2008</i>

This calibration complies with the ASTM Standards D 2922-91, D 2950, and D 3017-88. These standards are traceable to the U.S. Department of Transportation, which are referenced to the National Bureau of standards.

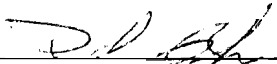
1. D 2922-91 – Density of soil and soil aggregate in place by nuclear method.
ASTM requirements: Minimum calibration frequency of 24 months.
2. D 2950 – Density of bituminous material in place by the nuclear method.
ASTM requirements: Minimum calibration frequency of 12 months.
3. D 3017-88 – Moisture content of soil and soil aggregate by the nuclear method.
ASTM requirements: Minimum calibration frequency of 24 months.

This certifies that the unit mentioned above meets the calibration requirements as stated in the ASTM standards.

ASTM CALIBRATION REQUIREMENTS: Verify or re-establish calibration curves, table or equation coefficients and after all major repairs which may affect the instrument geometry. Calibration curves, table or equations shall be established or verified once each year by determining by test the nuclear count rate of at least two samples of different known water content.

PUERTO RICO HIGHWAY AUTHORITY CALIBRATION REQUIREMENTS: Yearly.

It is recommended that the nuclear gauge be recalibrated at intervals not to exceed manufacturer recommendations.


David Rhoe, MS, WSO-CHME, WSO-CSI
Health/Medical Physicist

This is to acknowledge the receipt of your letter/application dated

2/24/2009, and to inform you that the initial processing which includes an administrative review has been performed.

☒ **NEW LICENSE APPLICATION (03037992)**
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned Mail **Control Number** 143507
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.