

Br. 2

R & F Asphalt Unlimited, Inc.
P.O. 801028
Coto Laurel, PR 00780-1028

September 13, 2017

Licensing Assistance Team
Division of Nuclear Materials Safety
U.S. Nuclear Regulatory Commission, Region I
2100 Renaissance Boulevard, Suite 100
King of Prussia, PA 19406 - 2713

Dear Sir or Madam:

Please find enclosed a renewal application for the use and handling of radioactive materials. NRC license # 52-31279-01. *103037552*

If you need any further information, please feel free to contact Moisés Estrada at (787) 376-3923.

Sincerely,

Raul Robles, CEO.

REC-61 10 24 17 PM 0702

601490
FNUC-7000 MATERIALS-002

Item 1 Address

- a) Mailing address
R & F Asphalt Unlimited, Inc.
P.O. Box 801028
Coto Laurel, PR 00780-1028
(787) 284-3065
Fax (787) 840-6122

- b) Main Office address
R & F Asphalt Unlimited, Inc.
Carretera PR 14 Km 9.6
Coto Laurel, PR 00780-1028
(787) 284-3065
Fax (787) 840-6122

- c) Physical location (storage/location of the Nuclear gauge & records)
R & F Asphalt Unlimited, Inc.
Carretera PR 14 Km 9.6
Coto Laurel, PR 00780-1028
(787) 284-3065
Fax (787) 840-6122

Please authorize the use at any temporary job site location within US territories.

(06-2016)
10 CFR 30, 32, 33, 34
35, 36, 37, 39, and 40



APPLICATION FOR MATERIALS LICENSE

Estimated burden per response to comply with this mandatory collection request: 4.3 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 FOIA, Privacy, and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollections.Resource@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 CURRENT VOLUMES OF THE NUREG-1556 TECHNICAL REPORT SERIES ("CONSOLIDATED GUIDANCE ABOUT MATERIALS LICENSES") FOR DETAILED INSTRUCTIONS FOR COMPLETING THIS FORM: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1556/>. SEND TWO COPIES OF THE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

MATERIALS SAFETY LICENSING BRANCH
DIVISION OF MATERIAL SAFETY, STATE, TRIBAL AND RULEMAKING PROGRAMS
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
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PA 19406-2713

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 IV
1600 E. LAMAR BOULEVARD
ARLINGTON, TX 76011-4511

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

52-31279-01

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

R & F ASPHALT UNLIMITED, INC
PO BOX 801028
COTO LAUREL, PR 00780-1028

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

R & F ASPHALT UNLIMITED, INC
CARRETERA PR-14 KM 9.6
COTO LAUREL, PR 00780-1028

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

MOISES ESTRADA

BUSINESS TELEPHONE NUMBER

787-284-3065

BUSINESS CELLULAR TELEPHONE NUMBER

787-376-3923

BUSINESS EMAIL ADDRESS

roblesempresas@gmail.com

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. 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 AND 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 (Fees required only for new applications, with few exceptions*)

(See 10 CFR 170 and Section 170.31)

*Amendments/Renewals that increase the scope of the existing license to a new or higher fee category will require a fee.

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, 37, 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

RAUL ROBLES, CEO

SIGNATURE

Raul Robles

DATE

9/13/17

FOR NRC USE ONLY

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

The following is based on Portable Gauge Licenses, NUREG 1556 Vol 1, November 2001, and Appendix B Item 5 and 6: Materials to be Possessed and Proposed Uses

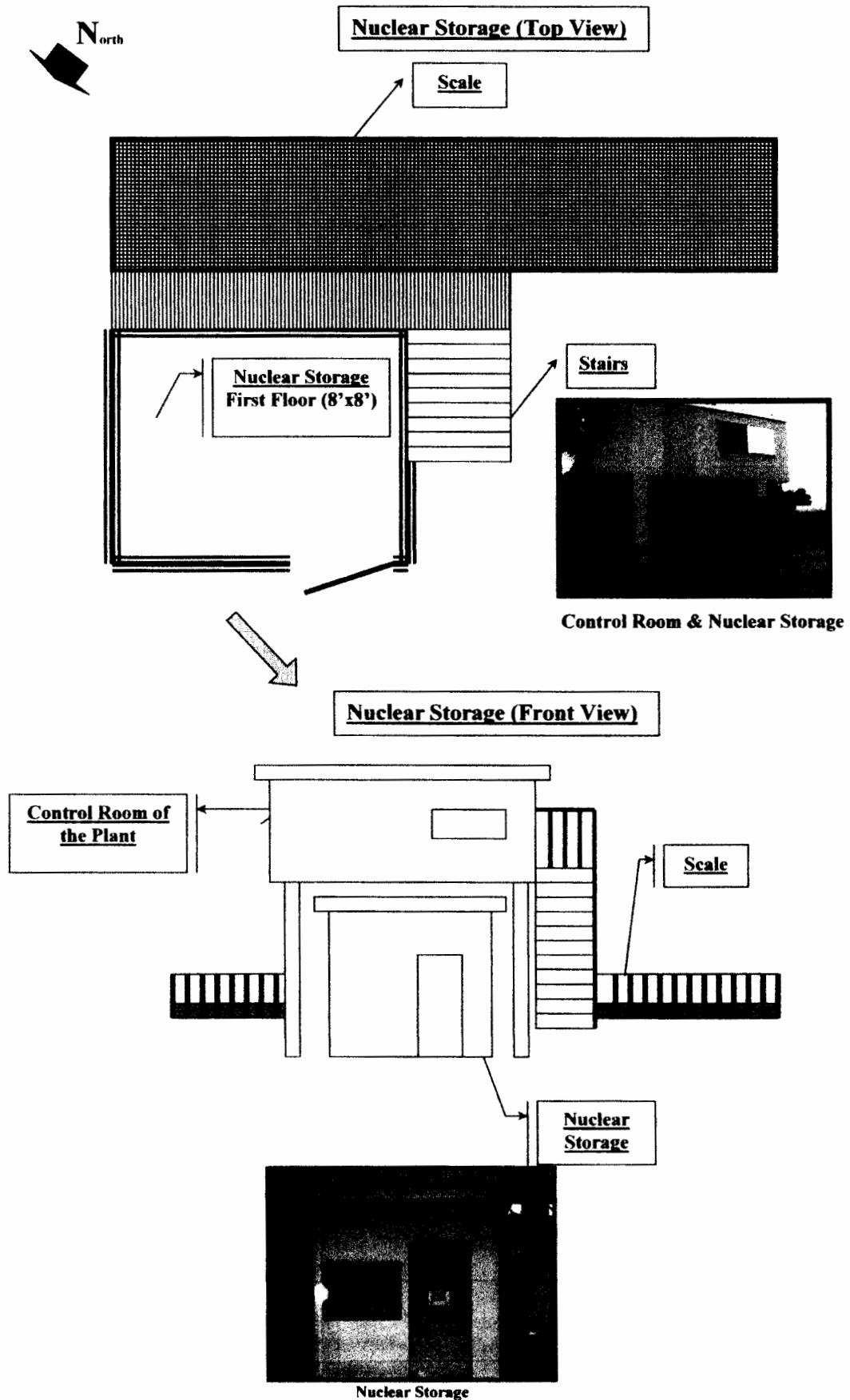
Radioisotope	Manufacturer	Quantity	Use as Listed on SSD Certificate	Other Uses Not Listed on SSD Certificate
Cs-137	Device manufacturer: CPN Model(s): MC-1, MC-2, MC-3, MC-1DR, and MC-1DR-P	Not to exceed the maximum activity per device as specified in Sealed Source and Registration Certificate. 20 mCi	Yes	Not Applicable
Ra-226	Devices manufacturer: Seamen Nucleat Model(s): C-200, C-300	Not to exceed the maximum activity per device as specified in Sealed Source and Registration Certificate. 18 mCi		
Am-241	Device manufacturer: CPN Model(s): MC-1, MC-2, MC-3, MC-1DR, and MC-1DR-P	Not to exceed the maximum activity per device as specified in Sealed Source and Registration Certificate. 100 mCi	Yes	Not Applicable

Item No. and Title	Response
7. Individual(s) responsible for the radiation safety program and their training and experience – Radiation Safety Officer. Name: Juan Robles	Before obtaining licensed material, the proposed RSO will have successfully completed one of the training courses described in Criteria in the section entitled “individuals(s) Responsible for Radiation Safety Program and Their Training and Experience- Radiation Safety Officer” in NUREG-1556, Vol 1, Rev. 1 dated November 2001.
8. Training for individuals working in or frequenting Restricted areas.	Before using licensed materials, authorized users will have successfully completed one of the training course described in Criteria in the section entitled “Training for Individuals Working In or Frequenting Restricted Areas” in NUREG-1556, Vol 1, Rev. 1 dated November 2001.
9. Facilities and equipment.	No information needs to be submitted in response to this item: key issues are addressed under “Radiation Safety Program – Public Dose” and “Radiation Safety Program – Operating and Emergency Procedures.”
10. Radiation Safety Program – Audit Program.	The applicant is not required to, and should not, submit its audit program to NRC for review during the licensing phase.
10. Radiation Safety Program – Termination of activities.	The applicant is not required to submit a response to the termination of activities section during the initial application. However, when the license expires when the licensee ceases operation, NRC Form 314 must be submitted.
10. Radiation Safety Program – Survey Instrument.	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” in NUREG-1556, Vol 1, Rev. 1 dated November 2001.
10. Radiation Safety Program – 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.
10. Radiation Safety Program – 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.
10. Radiation Safety Program – Public Dose.	The applicant is not required to submit a response to the public dose section during the licensing phase. This matter will be examined during an inspection.
10. Radiation Safety Program – Operating and Emergency Procedures.	Operating and emergency procedures will be developed, implemented, and maintained and will meet the Criteria in the section entitled “Radiation Safety Program – Operating and Emergency Procedures” in NUREG-1556, Vol 1, Rev. 1 dated November 2001

10. Radiation Safety Program – Leak Test.	Leak tests will be performed at intervals approved by the NRC or an Agreement State and specified in the sealed Sources and Device Registration Sheets. Leak tests 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 Agreement State to provide leak tests kits to other licensees and according to the kit supplier's instructions.
10. Radiation Safety Program – Maintenance.	<p><i>Routine Cleaning and Lubrication</i></p> <p>We will implement and maintain procedures for routine maintenance of our gauges according to each manufacturer's recommendations and instructions.</p> <p><i>Non-Routine Maintenance</i></p> <p>We will send the gauge to the manufacturer or other person authorized by the NRC or an Agreement State to perform non-routine maintenance or repair operations that require the removal of the source or source rod from the gauge.</p>
10. Radiation Safety Program – Transportation.	The applicant is not required to submit a response to transportation during the licensing process. However, this issue will be reviewed during an inspection.
11. Waste Management – Gauge Disposal and Transfer.	The applicant is not required to submit a response to waste management during the licensing process. However, the licensee should develop, implement, and maintain gauge transfer and disposal procedures in its radiation protection program.

1. The radiation monitoring instrument will be calibrated by a person qualified to perform survey meter calibrations. (See NRC license No. 52-25430-01)
2. This is to confirm that we will perform a prospective evaluation demonstrating that unmonitored individuals are not likely to receive, in one year, a radiation dose in excess of 10% of the allowable limits in 10 CFR Part 20 that meets the requirements listed under "Criteria" in NUREG 1556, Vol. 1, and dated November 2001.
3. With regards to the radioactive waste management, once the nuclear gauge is no longer needed, it will be sent to a waste disposal facility or returned to the manufacturer for proper disposal.

Map of Location of the Nuclear Gauges Storages



Radiation Safety Inspection
Portable Gauge Audit

Institution's R & F Asphalt

Date: 6 / 23 / 2017
Month Day Year

Performed by: David Rhoe

The following documents were reviewed and evaluated in regard to the NRC Regulations and conditions of the license:

ORGANIZATION

1. Storage area changed? Yes ☒ No ☒
 - Maximum dose rate at 1 meter from surface of storage area: 42.5 mR/hr
2. RSO changed? ☒ Yes ☐ No
 - If RSO changed, does the RSO:
 1. Stop unsafe activities? ☒ Yes ☐ No ☐ NA
 2. Proper use & maintenance? ☒ Yes ☐ No ☐ NA
 3. Training of personnel (excess of 100 mRem)? ☒ Yes ☐ No ☐ NA
 4. Hazmat training (once every 3 yrs)? Date Dec 2015 ☒ Yes ☐ No ☐ NA
4. Possession of a radiation survey meter? ☒ Yes ☐ No
 - ☐ Unit calibrated? Last calibration date: June 2017 ☒ Yes ☐ No ☐ NA
5. Personnel Dosimetry ☒ Yes ☐ No ☐ NA
6. During the inspection, Sealed Source(s) were Inventoried and leak tested ☒ Yes ☐ No ☐ NA
7. Posting of radiation signs – Notices ☒ Yes ☐ No ☐ NA
 - Notice to Employees, 206, and radiation signs
8. Radiation Incidents (Reports) Yes ☐ None ☒
9. Safe storage of radiation sources ☒ Yes ☐ No ☐ NA
10. Shipper's papers ☒ Yes ☐ No ☐ NA
11. Operation /Emergency procedures (Responsibilities of the Gauge Users)? ☒ Yes ☐ No ☐ NA
12. 10 CFR regulations on file (Parts 19, 20, 21, 30, and 71) ☒ Yes ☐ No ☐ NA
13. Ownership remained the same? ☒ Yes ☐ No ☐ NA
14. Nuclear Gauge log book? ☒ Yes ☐ No ☐ NA

15. Within NRC Authorized Limit

☒ Yes No NA

Total Number of NG	Total Activity (mCi)	Isotopes
4	100 & 20	Am-241 & Cs-127
4	18	Ra-226

16. Sealed Source Registration on File

☒ Yes No NA

17. Others: _____

Yes No NA

18. During the inspection, the following Sealed Source(s) were Inventoried and leak tested.

Number	Model Number	Serial Number
<input checked="" type="checkbox"/> 1	C-200	A-884
<input checked="" type="checkbox"/> 2	C-200	L-442
<input checked="" type="checkbox"/> 3	C-200	L-482
<input checked="" type="checkbox"/> 4	C-200	A-362
<input checked="" type="checkbox"/> 5	MC-1 DR-P	MD00805856
<input type="checkbox"/> 6		
<input type="checkbox"/> 7		
<input type="checkbox"/> 8		
<input type="checkbox"/> 9		
<input type="checkbox"/> 10		
<input type="checkbox"/> 11		
<input type="checkbox"/> 12		
<input type="checkbox"/> 13		
<input type="checkbox"/> 14		
<input type="checkbox"/> 15		
<input type="checkbox"/> 16		
<input type="checkbox"/> 17		
<input type="checkbox"/> 18		
<input type="checkbox"/> 19		
<input type="checkbox"/> 20		

Comments:

Management Signature: _____

Management's corrective actions:

1.

Leak Test

Leak Test Record
NRC License 52-25430-01

— July — Dec 2017

Leak Tested For:

R & F Asphalt

Leak Tested By:

David Rhoe

Standard Source (NIST traceable):

Am-241

Cs-137 NES-139S

Standard Activity (uCi):

1.145

0.105

Standard Date

15-Nov-98

09-Sep-88

Date of the Leak Test:

23-Jun-17

Decay Activity uCi (from decay chart):

1.11132

0.05399

Standard (dpm):

2467130.4

119857.8

Instrument used to count wipe sample:

Beckman Gamma

Instrument Model Number:

5500

Instrument Serial Number:

8044788

NIST Traceable Standard (cpm)

587794

34523

Counting Efficiency:

0.24

0.29

Counting Efficiency in percentage (%):

23.83

28.80

Counting time (minutes)

1

1

Background (cpm)

77

77

Minimum Detectable Activity:

2.346E-05

1.941E-05

Wipe (Smear) Test: All external or accessible surfaces of the source or housing are wiped with a piece of filter paper or other absorbent material which has been moistened with an appropriate solvent and the activity removed is measured.

Note: Background counts were not subtracted from wipe test sample to calculate sample activity.

Source ID and Serial Number

CPN Am-241 & Cs-137 SnMD00805856

Wipe Test

79

Sample Activity

0.00015

Gamma

Sample Activity

0.00012

This test reveals that 0.005 microcuries or less was present as removable contamination.

Should the removable contamination exceed 0.005 microcuries, the source must be removed from use and necessary measures taken according to NRC regulations.



David Rhoe Health/Medical Physicist

Leak Test Record
NRC License 52-25430-01

Leak Tested For:	R & F Asphalt	
Leak Tested By:	David Rhoe	
Standard Source (NIST traceable):	Am-241	Cs-137 NES-139S
Standard Activity (uCi):	1.145	0.105
Standard Date	15-Nov-98	09-Sep-88
Date of the Leak Test:	23-Jun-17	
Decay Activity uCi (from decay chart):	1.11132	0.05399
Standard (dpm):	2467130.4	119857.8
Instrument used to count wipe sample:	Beckman Gamma	
Instrument Model Number:	5500	
Instrument Serial Number:	8044788	
NIST Traceable Standard (cpm)	587794	34523
Counting Efficiency:	0.24	0.29
Counting Efficiency in percentage (%):	23.83	28.80
Counting time (minutes)	1	1
Background (cpm)	77	77
Minimum Detectable Activity:	2.346E-05	1.941E-05

Wipe (Smear) Test: All external or accessible surfaces of the source or housing are wiped with a piece of filter paper or other absorbent material which has been moistened with an appropriate solvent and the activity removed is measured.
Note: Background counts were not subtracted from wipe test sample to calculate sample activity.

		Gamma	
Source ID and Serial Number	Wipe Test	Sample Activity	Sample Activity
Seaman C-200 A-362	69	0.00013	0.00011

This test reveals that 0.005 microcuries or less was present as removable contamination.
Should the removable contamination exceed 0.005 microcuries, the source must be removed from use and necessary measures taken according to NRC regulations.


David Rhoe Health/Medical Physicist

Leak Test Record
NRC License 52-25430-01

Leak Tested For:	R & F Asphalt	
Leak Tested By:	David Rhoe	
Standard Source (NIST traceable):	Am-241	Cs-137 NES-139S
Standard Activity (uCi):	1.145	0.105
Standard Date	15-Nov-98	09-Sep-88
Date of the Leak Test:	23-Jun-17	
Decay Activity uCi (from decay chart):	1.11132	0.05399
Standard (dpm):	2467130.4	119857.8
Instrument used to count wipe sample:	Beckman Gamma	
Instrument Model Number:	5500	
Instrument Serial Number:	8044788	
NIST Traceable Standard (cpm)	587794	34523
Counting Efficiency:	0.24	0.29
Counting Efficiency in percentage (%):	23.83	28.80
Counting time (minutes)	1	1
Background (cpm)	77	77
Minimum Detectable Activity:	2.346E-05	1.941E-05

Wipe (Smear) Test: All external or accessible surfaces of the source or housing are wiped with a piece of filter paper or other absorbent material which has been moistened with an appropriate solvent and the activity removed is measured.
Note: Background counts were not subtracted from wipe test sample to calculate sample activity.

Source ID and Serial Number	Wipe Test	Sample Activity	Gamma Sample Activity
Seaman C-200 L-482	71	0.00013	0.00011

This test reveals that 0.005 microcuries or less was present as removable contamination.
Should the removable contamination exceed 0.005 microcuries, the source must be removed from use and necessary measures taken according to NRC regulations.


David Rhoe Health/Medical Physicist

Leak Test Record
NRC License 52-25430-01

Leak Tested For:
Leak Tested By:

R & F Asphalt
David Rhoe

Standard Source (NIST traceable):	Am-241	Cs-137 NES-139S
Standard Activity (uCi):	1.145	0.105
Standard Date	15-Nov-98	09-Sep-88

Date of the Leak Test:	23-Jun-17	
Decay Activity uCi (from decay chart):	1.11132	0.05399
Standard (dpm):	2467130.4	119857.8

Instrument used to count wipe sample:	Beckman Gamma
Instrument Model Number:	5500
Instrument Serial Number:	8044788

NIST Traceable Standard (cpm)	587794	34523
Counting Efficiency:	0.24	0.29
Counting Efficiency in percentage (%):	23.83	28.80
Counting time (minutes)	1	1
Background (cpm)	77	77
Minimum Detectable Activity:	2.346E-05	1.941E-05

Wipe (Smear) Test: All external or accessible surfaces of the source or housing are wiped with a piece of filter paper or other absorbent material which has been moistened with an appropriate solvent and the activity removed is measured.
Note: Background counts were not subtracted from wipe test sample to calculate sample activity.

Source ID and Serial Number	Wipe Test	Sample Activity	Gamma Sample Activity
Seaman C-200 L-442	84	0.00016	0.00013

This test reveals that 0.005 microcuries or less was present as removable contamination.
Should the removable contamination exceed 0.005 microcuries, the source must be removed from use and necessary measures taken according to NRC regulations.


David Rhoe Health/Medical Physicist

Leak Test Record
NRC License 52-25430-01

Leak Tested For:	R & F Asphalt	
Leak Tested By:	David Rhoe	
Standard Source (NIST traceable):	Am-241	Cs-137 NES-139S
Standard Activity (uCi):	1.145	0.105
Standard Date	15-Nov-98	09-Sep-88
Date of the Leak Test:	23-Jun-17	
Decay Activity uCi (from decay chart):	1.11132	0.05399
Standard (dpm):	2467130.4	119857.8
Instrument used to count wipe sample:	Beckman Gamma	
Instrument Model Number:	5500	
Instrument Serial Number:	8044788	
NIST Traceable Standard (cpm)	587794	34523
Counting Efficiency:	0.24	0.29
Counting Efficiency in percentage (%):	23.83	28.80
Counting time (minutes)	1	1
Background (cpm)	77	77
Minimum Detectable Activity:	2.346E-05	1.941E-05

Wipe (Smear) Test: All external or accessible surfaces of the source or housing are wiped with a piece of filter paper or other absorbent material which has been moistened with an appropriate solvent and the activity removed is measured.

Note: Background counts were not subtracted from wipe test sample to calculate sample activity.

Source ID and Serial Number	Wipe Test	Sample Activity	Gamma Sample Activity
Seaman C-200 A-884	72	0.00014	0.00011

This test reveals that 0.005 microcuries or less was present as removable contamination.
Should the removable contamination exceed 0.005 microcuries, the source must be removed from use and necessary measures taken according to NRC regulations.


David Rhoe Health/Medical Physicist

CRMI

Consultores de Radiación Médica e Industrial NRC License # 52-25430-01

This certifies that

Moisés Estrada

Has successfully completed the courses entitled:

**Nuclear Gauge Certification,
Security for Hazardous Materials and
HAZMAT for Radiation Certification**

December 16, 2015

This course provides the continuing education requirements in compliance with the 49 Code of Federal Regulations Part 172.704 and the Nuclear Regulatory Commission NUREG 1556.



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

This certifies that the employee has been trained and tested, as required by 49 CFR 172.704.

Management

CRMI

Consultores de Radiación Medica e Industrial NRC License 52-25430-01

This certifies that

Moises Estrada Betancourt

Has successfully completed the courses entitled:

Radiation Safety Officer Certification

September 29, 2007

This course provides the continuing education requirements in compliance with the 49 Code of Federal Regulations Part 172.704 and the Nuclear Regulatory Commission NUREG 1556.



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

No 33433

Certificate Of Completion

*This is to certify that MOISES R. ESTRADA has completed the
basic CPN® training course on Radiation Safety and Use of Nuclear Gauges,
held this 24TH day of APRIL 19 99 in the
City of SAN JUAN State of PUERTO RICO by CPN International.*

CPN International, Inc.
2830 Howe Road
Martinez, CA 94553 USA
Phone: (925) 228-9770
Fax: (925) 228-3183



Shirley R. Miller
INSTRUCTOR
Douglas Carter
RADIATION SAFETY OFFICER