NRC FORM 313 U. S. NUCLEAR REGULATORY COMMISSION

(5-1997)
10 CFR 30, 32, 33
34, 35, 36, 39 and 40

APPROVED BY OMB: NO. 3150-0120 EXPIRES: 7/31/1998

Estimated burden per response to comply with this information collection request: 7 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. Forward comments regarding burden estimate to the Information and Records Management Branch (T-6 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0120), Office of Management and Budget, Washington, DC 20503. NRC may not conduct or sponsor, and a person is not required to respond to, an information collection unless it displays a currently valid OMB control number.

APPLICATION FOR MATERIAL LICENSE

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:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

LICENSING ASSISTANT SECTION
NUCLEAR MATERIALS SAFETY BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

ATLANTA FEDERAL CENTER
U. S. NUCLEAR REGULATORY COMMISSION, REGION II
61 FORSYTH STREET, S.W., SUITE 23T85
ATLANTA, GEORGIA 30303-3415

IF YOU ARE LOCATED IN:

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

MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
801 WARRENVILLE RD.
LISLE, IL 60532-4351

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, 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 SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TX 76011-8064

LL 31270
030 37533
03121

(45-31270-01)

RECEIVED REGION 1 2007 AUG 16 AM 11:16

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)*
   - [X] A. NEW LICENSE
   - [ ] B. AMENDMENT TO LICENSE NUMBER _____
   - [ ] C. RENEWAL OF LICENSE NUMBER _____

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

Colony Construction, Inc.
2333 Anderson Highway
Powhatan, VA 23139

3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

2333 Anderson Highway, Powhatan, VA 23139
and anywhere Colony Construction maintains
jurisdiction for regulating the use of radioactive materials

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION Wes Utley
wesu@colonypaving.com

TELEPHONE NUMBER
(804) 598-1400 ph (804) 598-1700 fax

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 EXPERIENCE.

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

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSEE FEES *(See 10 CFR 170 and Section 170.31)*
FEE CATEGORY 3. P. AMOUNT ENCLOSED $ 1,400.00

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	SIGNATURE	DATE
John W. Utley, Quality Control Manager	John W. Utley	8/17/07

FOR NRC USE ONLY

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

NRC FORM 313 (5-1997)

PRINTED ON RECYCLED PAPER

140957

NMSS/RGN1 MATERIALS-002

NRC Form 313 **Application for Material License**

Continuation – Questions 5 - 11

5. **RADIOACTIVE MATERIAL**
   a. **Element and mass number** Cesium -137
   b. **Chemical and/or physical form** Sealed Source Troxler Dwg. 102112
   c. **Maximum amount which will be processed at one time** No Single Source to exceed 9 mc:

6. **PURPOSE(S) FOR WHICH LICENSE MATERIAL WILL BE USED**
   For measurement of physical properties of materials using the Model 4640 series gauge

7. **INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE**
   Wes Utley - I have successfully completed Troxlers' nuclear gauge safety training class, Troxlers' radiation safety officer training class, and I am VDOT certified for nuclear safety and transportation of hazardous materials. (See Appendix D for RSO responsibilities and attachment for RSO certification).

8. **TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS**
   I will be the sole user of the Model 4640 gauge for Colony Construction, Inc. Any employee of Colony Construction, Inc. will have successfully completed the Troxler nuclear gauge safety program class and will also complete the VDOT certification course prior to using the gauge.

9. **FACILITIES AND EQUIPMENT**
   Colony Construction, Inc. will be in compliance with all security, posting and public dose regulations.

10. **RADIATION SAFETY PROGRAM**
    - All gauge users will wear personal monitoring devices and devices will be exchanged at the frequency recommended by the processor which will be accredited by NVLAP.
    - Colony Construction, Inc. will maintain safety programs that ensure the gauge is transported in compliance with VDOT regulations.
    - Leak tests will be performed at intervals not to exceed 6 months. Leak tests will be analyzed by an organization authorized by the NRC or agreement state to provide leak test services.
    - Records of receipt, transfer and disposal of gauges will be maintained for at least 3 years.
    - Physical inventories of sealed sources will be conducted at intervals not to exceed 6 months.
    - Gauge utilization logs and sealed source inventory logs will be in compliance with the NRC and VDOT guidelines.
    - Colony Construction, Inc. will control and maintain constant surveillance over gauges that are not in storage and secure gauges from unauthorized use or removal.
    - Colony Construction, Inc. will follow operating and emergency procedures stated in Appendix H.
    - Colony Construction, Inc. will implement and maintain procedures for routine maintenance and will send the gauge to the manufacturer for non-routine maintenance or repair.

11. **WASTE MANAGEMENT**
    Any licensed material will be disposed of by transfer to Troxler Electronics.

APPENDIX D
RSO RESPONSIBILITIES

The RSO is responsible for ensuring the following:

- Stopping licensed activities that the RSO considers unsafe.
- Possession, use, storage, and maintenance of sources and gauges are consistent with the limitations of the license, the Sealed Source and Device Registration sheet(s), and manufacturer's recommendations and instructions.
- Individuals using gauges are properly trained.
- When necessary, personnel monitoring devices are used and exchanged at the proper intervals; records of the results of such monitoring are maintained.
- Gauges are properly secured.
- Proper authorities are notified in case of accident, damage to gauges, fire, or theft.
- Unusual occurrences involving the gauge (e.g., accident, damage) are investigated, causes(s) and appropriate corrective action are identified, and corrective action is taken.
- Audits are performed at least annually and documented, and corrective actions taken.
- Licensed material is transported in accordance with all applicable DOT requirements.
- Licensed material is disposed of properly.
- Appropriate records are maintained.
- Up-to-date license is maintained and amendment and renewal requests submitted in a timely manner.

Reference: NUREG-1556, Vol. 1

APPENDIX H
OPERATING AND EMERGENCY PROCEDURES

OPERATING PROCEDURES

1. Always wear assigned personnel dosimetry devices (e.g., TLD badge) when using or transporting the gauge.
2. Never wear another person's dosimeter.
3. Never store a dosimeter near the gauge or other radiation source.
4. Before removing the gauge from its place of storage, ensure that in gauges with movable source rods, the rod is locked in the shielded position, and the transport case is locked.
5. Sign out the gauge in a logbook, stating the date(s) of use, name(s) of authorized user(s) who will be responsible for the gauge, and the temporary job site(s) where the gauge will be used.
6. Block and brace the gauge to prevent movement during transport and lock the gauge in or to the vehicle. Follow all Department of Transportation requirements when transporting the gauge.
7. Use the gauge according to the manufacturer's instructions and recommendations.
8. Do not touch the end of the source rod with your fingers, hands, or any part of your body or place any part of the body in the radiation field of the unshielded source.
9. Unless absolutely necessary, do not look under the gauge when the source rod is being lowered into the ground. If you must look under the gauge to align the source rod with hole, keep all body parts as far from the unshielded source as possible to minimize radiation exposure.
10. After completing each measurement in which the source is unshielded, immediately return the source to the shielded position.
11. Always maintain constant surveillance and immediate control of the gauge when it is not in storage or secured in the transport vehicle. Never leave the gauge unattended. Protect the gauge and yourself from danger of moving heavy equipment.
12. Always keep unauthorized persons away from the area where the gauge is being used.
13. Perform routine cleaning and maintenance according to the manufacturer's instructions and recommendations.
14. When the gauge is not in use at a temporary job site, place the gauge in a secured storage location (e.g., locked in the trunk of a car or locked in a storage shed).
15. Prior to transporting the gauge, ensure that each gauge source is in the fully shielded position. Ensure that the source rod is locked in the shielded position and that the gauge is placed into the case and lock the case. Block and brace the gauge to prevent movement during transportation. Lock the case in or to the vehicle.
16. Return the gauge to its proper storage location at the end of the work shift.
17. Log the gauge into the daily use log when it is returned to storage.

18. If gauges are used for measurements with the unshielded source extended more than 3 feet below the surface, use piping, tubing or other casing material to line the hole from the lowest depth to 12 inches above the surface. If the piping, tubing, or other casing material cannot extend 12 inches above the surface, cap the hole liner or take other steps to ensure that the hole is free of debris (and it is unlikely that debris will enter the cased hole), so that the unshielded source can move freely (e.g., use a dummy probe to verify that the hole is free of obstructions).
19. After making changes affecting the gauge storage area (e.g., changing the location of gauges within the area, removing shielding, adding gauges, changing the occupancy of adjacent areas, moving the storage area to a new location), reevaluate compliance with public dose limits and ensure proper security of gauges.

EMERGENCY PROCEDURES

The following procedures apply when the source fails to return to the shielded position (e.g., as a result of being damaged, source becomes stuck below the surface) or if any other emergency or unusual situation arises (e.g., the gauge is struck by a moving vehicle or is in an accident involving a vehicle):

1. Immediately secure the area and keep people at least 15 feet away from the gauge until the situation is assessed and radiation levels are known. However, perform first aid for injured individuals and remove them from the area only when medically safe to do so.
2. If any heavy equipment is involved, detain the equipment and operator until it is determined there is no contamination present.
3. Gauge users and other potentially contaminated individuals should not leave the scene until emergency assistance arrives.
4. Visually inspect the gauge to determine the position of the source rod (exposed or shielded), and the position of the source shutter (open or closed), and the extent of damage, if any, to the source housing and/or shielding.
5. Notify the persons in the order listed below:

Name	Work Phone Number	Home Phone Number
Wes Utley	804 598-1400	[redacted]
Troxler	919 549-8661	
NRC	610 337-5216	

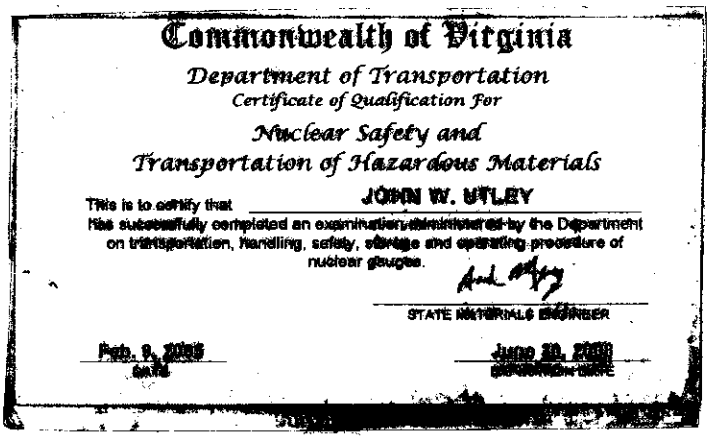
Fill in the names and telephone numbers of appropriate personnel (e.g., the Radiation Safety Officer or other knowledgeable staff, licensee's consultant, gauge manufacturer, or regulatory agency) to be contacted in an emergency. Update list as needed.

6. Follow the directions provided by the person contacted above.
7. RSO and Licensee management must:
   a. Arrange for a radiation survey to be conducted as soon as possible by a knowledgeable person using appropriate radiation detection instrumentation. This person could be a licensee employee or a consultant. The person must be competent in use of the survey meter.
   b. Make necessary notifications to local authorities as well as the NRC or Agreement State licensing agency as appropriate.
   c. Reports to the NRC or Agreement States must be made within the reporting timeframes specified in regulations. Reporting requirements are found in 10 CFR 20.2201-2203 and 10 CFR 30.50 or corresponding Agreement State regulations.

NOTE

Before shipping a damaged gauge to Troxler, you must do the following:

- **Send close-up photographs of the damaged gauge to Troxler.**
- **Send a leak test sample to Troxler for analysis or send leak test results.**
- **Obtain a Returned Goods Authorization (RGA) number from Troxler.**



Commonwealth of Virginia

Department of Transportation

Certificate of Qualification For

Nuclear Safety and

Transportation of Hazardous Materials

This is to certify that JOHN W. UTLEY

Has successfully completed an examination administered by the Department on transportation, handling, safety, storage and operating procedure of nuclear gauges.

STATE MATERIALS ENGINEER

Feb. 9, 2005
DATE

June 30, 2006
EXPIRATION DATE

Certificate of Completion

This certifies that

Wes Utley

has successfully completed the

Troxler Radiation Safety Officer Course

conducted by the training department of

Troxler Electronic Laboratories, Inc.

Harvey Dunlevy
Harvey Dunlevy
Instructor

December 7, 2000
Date

William F. Troxler, Jr.
President

TROXLER

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

8/17/2007, and to inform you that the initial processing which includes an administrative review has been performed.

☑ NEW LICENSE APPLICATION (03037533) 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

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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** 140957.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (RI)
(6-96)

Sincerely,
Licensing Assistance Team Leader

	:	(FOR LFMS USE)
	:	INFORMATION FROM LTS
BETWEEN:	:	----------
	:	
License Fee Management Branch, ARM	:	Program Code: 03121
and	:	Status Code: 3
Regional Licensing Sections	:	Fee Category: _____
	:	Exp. Date: 0
	:	Fee Comments: _____
	:	Decom Fin Assur Reqd: _
	::	

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED
   Applicant/Licensee: COLONY CONSTRUCTION, INC.
   Received Date: 20070820
   Docket No: 3037533
   Control No.: 140957
   License No.: 45-31270-01
   Action Type: New Licensee

2. FEE ATTACHED
   Amount: $1,400.00
   Check No.: 34427

3. COMMENTS

Signed M.C. Carlin
Date 8/20/2007

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /__/)

1. Fee Category and Amount: _____

2. Correct Fee Paid. Application may be processed for:
   Amendment _____
   Renewal _____
   License _____

3. OTHER _____
   _____

Signed _____
Date _____