Docket: 030-38914
Control: 590337

NRC FORM 313 (02-2016)
10 CFR 30, 32, 33, 34 35, 36, 37, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR MATERIALS LICENSE

APPROVED BY OMB: NO. 3150-0120 **EXPIRES: 02/29/2016**

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 Infocollects.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 APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW. *AMENDMENTS/RENEWALS THAT INCREASE THE SCOPE OF THE EXISTING LICENSE TO A NEW OR HIGHER FEE CATEGORY WILL REQUIRE A FEE.

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

RECEIVED
MAR 3 7 2016
DNMS

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)*

- [x] A. NEW LICENSE
- [ ] B. AMENDMENT TO LICENSE NUMBER _____
- [ ] C. RENEWAL OF LICENSE NUMBER _____

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

Alexander M Hall
1302 W. Hayden Ave
Hayden, Idaho 83835

PUBLIC
- [ ] Immediate Release
- [x] Normal Release

NON-PUBLIC
- [ ] A.3 Sensitive-Security Related
- [ ] A.7 Sensitive Internal
- [ ] Other:

Reviewer: _____ Date: 3/10/16

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

HMH Engineering
1302 W. Hayden Ave.
Hayden, Idaho 83835

Temporary job sites in Idaho.

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Alex Hall

BUSINESS TELEPHONE NUMBER	BUSINESS CELLULAR TELEPHONE NUMBER
4/6/16 (208) 635-5828	(208) 661-3474

BUSINESS EMAIL ADDRESS
ahall@hmh-llc.com
enter system code for reporting

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. LICENSE FEES (Fees required only for new applications, with few exceptions*) *(See 10 CFR 170 and Section 170.31)*

FEE CATEGORY: 03121 AMOUNT ENCLOSED $: 2,600.00

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, 37, 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
Alexander M Hall, Managing Member	Alexander M Hall	2/23/16

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED $	CHECK NUMBER	COMMENTS
					590337
APPROVED BY				DATE	

NRC FORM 313 (02-2016)

ML16145A409

APPLICATION FOR MATERILAS LICENSE- NRC FORM- 313

5. RADIOACTIVE MATERIAL

A. ELEMENT/MASS NUMBER		B. CHEMICAL AND/OR PHYSICAL FORM	C. MAX AMOUNT THAT WILL BE POSSESSED AT ONE TIME	MANUFACTURE/MODEL/NUMBER OF UNITS ESTIMATED
1.	Cs-137	ENCAPSULATED	8 mCi ± 10%	TROXLER 3430/3440, 2
2.	Am-241:Be	ENCAPSULATED	40 mCi ± 10%	TROXLER 3430/3440, 2
3.	Cs-137	ENCAPSULATED	Max 50 mCi	INSTROTEK, CPN MC3,2
4.	Am-241:Be	ENCAPSULATED	Max 10 mCi	INSTROTEK, CPN MC3,3

6. PURPOSE FOR WHICH LICENSE MATERIAL WILL BE USED

   a. Licensed material listed in item 5 will be used for the measurement of physical properties of materials (soil, aggregates, and asphalt pavements).

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE
   Prior to obtaining licensed materials, the radiation safety officer will meet the requirements of 10 CFR part 35.50 Training for Radiation Safety Officer.

   a. RSO: Alexander M Hall

   b. Training:

   March 16, 2006 -Transportation of Nuclear Devices, 49CFR172, H

   June 4, 2004 – Hazmat Certification Transportation of Nuclear Gauges

   June 9, 2004 – Radiation Safety Officer Class (Troxler Electronic Lab)

   December 2002 – BS Engineering, Boise State University

   October 22, 2003 – Transportation of Nuclear Devices, 49CFR172, H

   June 25, 2001 – Nuclear Gauge Safety Training, Troxler Electronic Lab

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTLING RESTRICTED AREAS

   Only employees who have obtained the following training and operational requirements may use the nuclear density gauges.

   a. Successful completion of a Radiation Safety Course.

b. Completion of awareness training on the HMH NRC Licensing, operating and emergency procedures, operating manual, and storage procedures.

c. Completion of annual refresher by the RSO or gauge manufacturer.

d. Prior to transporting gauge, attend an approved Hazmat training or refresher course within the last 2 years.

9. FACILITIES AND EQUIPMENT

a. Gauges will be stored in a locked storage area. Only approved operators and RSO will have access to storage area keys. Storage area will be posted with a "CAUTION RADIOACTIVE MATERIAL" sign, applicable transport, updated gauge inventory, gauge checkout (operator, location being used), and emergency notification forms will be located in the storage area.

b. Storage area will be located at least 15 feet from any work station.

c. Storage will be limited to a maximum of 3 nuclear gauge units.

10. RADIATION SAFETY PROGRAM

a. TRAINING REQUIREMENTS: Only authorized personnel who have successfully completed a Nuclear Gauge Safety Training and Hazmat Certification-Transportation of Nuclear Gauges training. Authorization will be by the RSO and operator must be listed on authorized user list for each unit prior to use.

b. PERSONNEL MONITORING: All users will be required to wear a personnel monitoring device (TLD Badge). Badges will be worn only by the person assigned the badge. TLD's when not worn are to be kept in a low radiation area and never stored within the gauge case. The badges shall be exchanged at intervals not to exceed three months.

The requirement to wear a TLD badge may be eliminated upon evidence that the exposure to receive a radiation dose in excess of 10% of the allowable limit is established. Establishment will be met after evidence from 2 cycles of readings.

After each cycle, dosimeter results will be reviewed with each operator.

c. PUBLIC DOSE: Gauges shall be used per manufacturer's recommendations, stored, and transported in a way to reduce or eliminate the public exposure. Gauges shall be stored as far away as possible from areas occupied by members of the public. Current calculations of radiation levels in areas adjacent to gauge storage areas will be maintained and reviewed at least once every six months. Calculation worksheet is attached as appendix A.

d. RADIATION DETECTION INSTRUMENTS: A survey meter will be in maintained and in inventory. In the event of an incident, the survey meter will be used to locate the source if it has been separated from the gauge, verify that

the source and shielding are intact, and check for contamination of personnel and equipment.

The survey meter will be calibrated per manufactures recommendations and checked for functionality prior to use.

e. SEALED SOURCE LEAK TESTING: Leak testing will be performed on each unit at a frequency not to exceed 12 months using an approved leak test kit. Leak test samples will be analyzed by an organization authorized by the NRC to provide leak testing. Leak testing results will be retained on file.

f. MAINTENANCE: Standard maintenance will be performed per the manufacturer's recommendations and instructions. All non-routine maintenance that requires removal of the source will be performed by the gauge manufacturer or a qualified repair facility.

g. MATERIAL RECEIPT AND ACCONTABILITY: Records of receipt, transfer, and disposal of gauges will be maintained for at least three years.

Physical inventory of sources will be conducted at intervals no to exceed six months.

i. Receiving Procedures: Sources will be inspected by the RSO or authorized representative upon receiving and prior to use. Any damage to shipping container or contents shall be noted. Damage that may affect the integrity of the shipping container or contents will be evaluated and appropriate notifications to shipper, carrier, and licensing authority.

If visible damage to the gauge is noted, a contamination and radiation survey shall be taken with a meter. If high levels are noted, an immediate isolation of the gauge and contaminated material is required and immediate notification to shipper, carrier, and licensing authority.

ii. Shipping Procedures: The RSO will review all material and shipping documents prior to change in possession. Gauges may only be shipped to receivers possessing a valid Federal or State Materials License specific to the type and quantity of gauge being shipped. A copy of receiver's license will be on file prior to change in possession.

Shipping package must meet the requirements of a Type A Package and be sealed with a tamper seal. A Shipper's Certification for Radioactive Materials, Special Form, Type A Packaging Certification, and Emergency Instructions shall be provided to the carrier upon shipping.

h. TRANSPORTATION: Only approved, by the RSO, and qualified personnel are authorized to transport gauges. All transporting of gauges shall be per the US Department of Transportation regulations. Transport of gauges includes but not limited to the following:

i. Approved shipping containers shall be properly labeled, inspected for damage, and sealed prior to transport.

ii. Containers shall be properly blocked and secured against movement within the transport under conditions normally incident to transportation.

iii. Containers shall be located as far as possible from vehicle occupants.

iv. Shipping documentation shall be readily available to the driver including the following document:

1. Certificate of Competent Authority
2. Type A packaging testing results
3. Shipping Papers- Bill of Lading
4. Emergency Response Information

i. EMERGENCY ACTION:

i. Priority response actions may be performed before taking radiation measurements.

ii. Priorities are lifesaving, control of fire and other hazards, and first aid.

iii. Isolate hazard area and deny entry. Gauge users and other potentially contaminated individuals should not leave the scene until emergency assistance arrives. Notify radiation authority of accident conditions. Contact RSO and gauge manufacturer 24–hr. emergency response number.

iv. Delay final cleanup until instruction or advice of radiation authority. Gauge users and other potentially contaminated individuals should not leave the scene until emergency assistance arrives.

v. Do not move damaged packages, move undamaged packages out of fire zone.

vi. Use dry chemical, CO_2 water spray of regular foam on small fires.

vii. Use water spray, fog (flooding amounts) on large fires.

viii. Use first aid treatment according to the nature of the injury.

ix. RSO will contact appropriate authority for notification of an accident during transportation in which fire, breakage, spillage, or suspected contamination occurs.

11. WASTE MANAGEMENT: Licensed materials shall be disposed of in accordance with NRC requirements by transfer to an authorized recipient. Records of transfer and receiving license holder will be maintained.

HMH Engineering
1302 W. Hayden Ave.
Hayden, ID 83835

F

U.S. POSTAGE
$1.42
FCM LG ENV
83854
Date of sale
02/26/16
06 2S00
08259802
SSK
B6226022701381 6

USPS® FIRST-CLASS MAIL®

0 lb. 2.40 oz.

SHIP
TO:

ARLINGTON TX 76011

ZIP

(420) 76011

Nuclear Materials Licensing Branch
US Nuclear Regulatory Commission,
Region IV
1600 E. Lamar Boulevard
Arlington, TX 76011-4511

NRC FORM 532
(1-2012)

U. S. NUCLEAR REGULATORY COMMISSION

DATE

03/07/2016

NAME AND ADDRESS OF APPLICANT AND/OR LICENSEE	LICENSE NUMBER
Alexander M. Hall HMH Engineering 1302 W. Hayden Ave. Hayden, Idaho 83835	Docket 030-38911
	MAIL CONTROL NUMBER 590337
	LICENSING AND/OR TECHNICAL REVIEWER CH

This is to acknowledge the receipt of your:

☐ LETTER and/or ☑ APPLICATION DATED: 02/23/2016

The initial processing, which included an administrative review, has been performed.

☐ AMENDMENT ☐ TERMINATION ☑ NEW LICENSE ☐ RENEWAL

☐ There were no administrative omissions identified during our initial review.

☐ This is to acknowledge receipt of your application for renewal of the material(s) license identified above. Your application is deemed timely filed, and accordingly, the license will not expire until final action has been taken by this office.

☐ Your application for a new NRC license did not include your taxpayer identification number. Please fill out NRC Form 531, located at the following link:

http://www.nrc.gov/reading-rm/doc-collections/forms/nrc531.pdf

Send the completed NRC Form 531, by facsimile, to the following number: (301) 415-5387

A copy of your action has been emailed to our License Fee and Accounts Receivable Branch, in our Headquarters office in Rockville, MD. You will be contacted separately if there is a fee issue involved.

Your application has been assigned the above listed **MAIL CONTROL NUMBER.** When calling to inquire about this action, please refer to this control number. Your application has been forwarded to a technical reviewer. Please note that the technical review, which is normally completed within 180 days for a renewal application (90 days for all other requests), may identify additional omissions or require additional information. If you have any questions concerning the processing of your application, our contact information is listed below:

Region IV
U. S. Nuclear Regulatory Commission
DNMS/NMSB - B
1600 E. Lamar Boulevard
Arlington, TX 76011-4511
(817) 200-1140

NRC FORM 532
(1-2012)

✓ 3/7/16

BETWEEN:

Accounts Receivable/Payable
and
Regional Licensing Branches

[FOR ARPB USE]
INFORMATION FROM WBL

Program Code: 03121
Status Code: Pending New
Fee Category: 3P
Exp. Date:
Fee Comments:
Decom Fin Assur Reqd:

License Fee Worksheet - License Fee Transmittal

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee:	HMH Engineering
Received Date:	03/07/2016
Docket Number:	3038911
Mail Control Number:	590337
License Number:	11-35298-01
Action Type:	New License, new licensee

2. FEE ATTACHED

Amount: $ 2,600.00

Check No.: 60655

3. COMMENTS

Signed: Carol L Hess

Date: 3/7/16

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: _____