



# Earthtech, Inc.

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March 16, 2005

U. S. Nuclear Regulatory Commission, Region 1  
Division of Nuclear Materials Safety  
Licensing Assistant Team  
475 Allendale Road  
King of Prussia, PA 19406-1415  
Attn: Mr. Satter Lodhi

Q-2

RECEIVED  
REGION 1  
MAR 18 11:02

RE: License No. 37-28570-01  
Docket No. 030-31879  
Control #~~136541~~ 136777 <sup>RLS</sup>  
Renewal to Current Materials License

Dear Mr. Lodhi:

Earthtech, Inc. appreciates your help in processing our renewal application. As we discussed yesterday, (March 15, 2005) during our phone conversation, Earthtech, Inc., submits a "revised" NRC Form 313 along with supporting documentation as per NUREG 1556 Vol. 1, Rev. 1, Appendix B; for your review/approval.

Also, as per your request, the latest copies of Leak Test Analysis reports for the three (3) Nuclear Density Gauges we own are attached. As indicated on the Leak Test reports performed by North East Technical Services, Inc. and/or Troxler Electronic Laboratories, Inc., all gauges tested did not exceed 0.005 microCuries and therefore may remain in use. Due to no leakage found in any of our gauges during past and/or recent Leak Testing, Earthtech, Inc. wants to move the gauges to a new location and decommission our current storage facility area upon NRC approval of our Renewal Application..

Again, Earthtech, Inc. would like to thank you for your time in helping us expedite our renewal application. Please feel free to call if you have any questions or require additional information.

Sincerely,

Dennis A. Noll, R.S.O.  
EARTHTECH, INC.

136777  
NMSS/RGNI MATERIALS-002

Mailing Address: 336 Bloomfield St., Suite 201  
Johnstown PA 15904

Office Numbers: Johnstown: (814) 266-6402 FAX: (814) 266-6530  
Uniontown: (724) 439-1313 FAX: (724) 439-0633  
Somerset: (814) 443-3384

(4-2004)  
10 CFR 30, 32, 33,  
34, 35, 36, 39, and 40

Estimated burden per response to comply with this mandatory 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. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F52), 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.

**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:**

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, MISSISSIPPI, 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:

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, 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 **37-28570-01**

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

Earthtech, Inc.  
1021 Ferndale Avenue  
Johnstown, PA 15905

**3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED**

Licensed materials will be used at the address listed in item 2 and at temporary job sites throughout the United States.

**4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION**

Dennis A. Noll

**TELEPHONE NUMBER**

(814) 266-6402

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 (See 10 CFR 170 and Section 170.31)**

FEE CATEGORY **3P** AMOUNT ENCLOSED **\$ 0.00**

**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**

Dennis A. Noll, President/RSO

**SIGNATURE**

*Dennis A. Noll*

**DATE**

3/16/05

**FOR NRC USE ONLY**

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

**ITEMS 5 AND 6: MATERIALS TO BE POSSESSED AND PROPOSED USES**

Yes	No	Radioisotope	Manufacturer or Distributor Model No.	Quantity	Use As Listed on SSD Certificate	Specify Other Uses Not Listed on SSD Certificate
✓		Cesium-137	Sealed source manufacturer or distributor and model number: _____ Device manufacturer or distributor and model number: Troxler 3400 Series Nuclear Density Gauges	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes <input checked="" type="checkbox"/> Specific description of the gauge use: _____ _____ _____ _____ _____ _____	<input type="checkbox"/> Not applicable _____ <input type="checkbox"/> Uses are: _____ (Submit safety analysis supporting safe use)
✓		Americium-241	Sealed source manufacturer or distributor and model number: _____ Device manufacturer or distributor and model number: Troxler 3400 Series Nuclear Density Gauges	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes <input checked="" type="checkbox"/> Specific description of the gauge use: _____ _____ _____ _____ _____ _____	<input type="checkbox"/> Not applicable _____ <input type="checkbox"/> Uses are: _____ (Submit safety analysis supporting safe use)

APPENDIX B

Yes	No	Radioisotope	Manufacturer or Distributor Model No.	Quantity	Use As Listed on SSD Certificate	Specify Other Uses Not Listed on SSD Certificate
	✓	Californium-252	Sealed source manufacturer or distributor and model number: _____ Device manufacturer or distributor and model number: _____	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes <input type="checkbox"/> Specific description of the gauge use: _____ _____ _____ _____ _____	<input type="checkbox"/> Not applicable _____ <input type="checkbox"/> Uses are: _____ (Submit safety analysis supporting safe use)
	✓	Other Isotope (Specify):	Sealed source manufacturer or distributor and model number: _____ Device manufacturer or distributor and model number: _____	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes <input type="checkbox"/> Specific description of the gauge use: _____ _____	<input type="checkbox"/> Not applicable _____ <input type="checkbox"/> Uses are: _____ (Submit safety analysis supporting safe use)
<i>Financial Assurance Required and Evidence of Financial Assurance Provided</i>						

## ITEMS 7 THROUGH 11: TRAINING AND EXPERIENCE, FACILITIES AND EQUIPMENT, RADIATION SAFETY PROGRAM, AND WASTE DISPOSAL

Item No. And Title	Suggested Response	Yes	Alternative Procedures Attached
<p>7. <b>INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE – RADIATION SAFETY OFFICER</b></p> <p>Name: <u>Dennis A. Noll</u></p>	<p>Before obtaining licensed materials, the proposed RSO will have successfully completed one of the training courses described in Criteria in the section entitled "Individual(s) Responsible for Radiation Safety Program and Their Training and Experience – Radiation Safety Officer" in NUREG-1556, Vol. 1, Rev. 1, dated November 2001.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>8. <b>TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS</b></p>	<p>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.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>9. <b>FACILITIES AND EQUIPMENT</b></p>	<p>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."</p>	<p><b>Separate Item 9 Response</b> <b>Need Not Be Submitted With Application</b></p>	
<p>10. <b>RADIATION SAFETY PROGRAM – AUDIT PROGRAM</b></p>	<p>The applicant is <i>not</i> required to, and should not, submit its audit program to NRC for review during the licensing phase.</p>	<p><b>Need Not Be Submitted With Application</b></p>	
<p>10. <b>RADIATION SAFETY PROGRAM – TERMINATION OF ACTIVITIES</b></p>	<p>The applicant is <i>not</i> 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.</p>	<p><b>Need Not Be Submitted With Application</b></p>	
<p>10. <b>RADIATION SAFETY PROGRAM – SURVEY INSTRUMENTS</b></p>	<p>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.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

APPENDIX B

Item No. And Title	Suggested Response	Yes	Alternative Procedures Attached
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.	■	<input type="checkbox"/>
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.	■	<input type="checkbox"/>
10. RADIATION SAFETY PROGRAM – PUBLIC DOSE	The applicant is <i>not</i> required to submit a response to the public dose section during the licensing phase. This matter will be examined during an inspection.	Need Not Be Submitted With Application	
10. RADIATION SAFETY PROGRAM – OPERATING AND EMERGENCY PROCEDURES	<p>We will implement and maintain the operating and emergency procedures in Appendix H of NUREG-1556, Vol. 1, Rev. 1, dated November 2001, and provide copies of these procedures to all gauge users and at each job site.</p> <p style="text-align: center;">OR</p> <p>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.</p>	<p>■</p> <p><input type="checkbox"/></p>	<input type="checkbox"/>
10. RADIATION SAFETY PROGRAM – LEAK TEST	Leak tests will be performed at intervals approved by NRC or an Agreement State and specified in the Sealed Source and Device Registration Sheet. 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 an Agreement State to provide leak test kits to other licensees and according to the kit supplier's instructions.	■	<input type="checkbox"/> The information in Appendix J supporting a request to perform leak testing and sample analysis is attached.

Item No. And Title	Suggested Response	Yes	Alternative Procedures Attached
<p><b>10. RADIATION SAFETY PROGRAM – MAINTENANCE</b></p>	<p><i>Routine Cleaning and Lubrication</i>                      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>                      We will send the gauge to the manufacturer or other person authorized by 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>	<p>■  ■</p>	<p>□  □</p> <p><b>The information listed in Appendix G supporting a request to perform non-routine maintenance in-house is attached.</b></p>
<p><b>10.RADIATION SAFETY PROGRAM – TRANSPORTATION</b></p>	<p>The applicant is <i>not</i> required to submit its response to transportation during the licensing process. However, this issue will be reviewed during inspection.</p>		<p><b>Need Not Be Submitted With Application</b></p>
<p><b>11. WASTE MANAGEMENT – GAUGE DISPOSAL AND TRANSFER</b></p>	<p>The applicant is <i>not</i> 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.</p>		<p><b>Need Not Be Submitted With Application</b></p>



*North East Technical Services, Inc.  
1280 Landing Lane, Suite 3  
Westminster, MD 21157  
Ph: 410.751.5090 Fax: 410.751.5091*

*Earth Tech, Inc.  
336 Bloomfield St., Suite 201  
Johnstown, PA 15904  
ATTN: Thomas Matisko*

## ***LEAK TEST CERTIFICATE***

***MD Materials License # MD-13-020-01***

***This certifies that leak test analysis was conducted on the sample with the following information. The results shown below accurately represent the level of removeable contamination.***

<b>Gauge Model</b>	<b>3430</b>	<b>Gauge S/N</b>	<b>21332</b>	<b>Leak Test Date</b>	<b>2/18/2005</b>
<b>Source</b>		<b>Reading in microCuries</b>			
75-2840		0.0000562			
47-16589		0.00000			

***Note: 0.005 microCuries (185 Bq) or greater is considered a leaking source. The source(s) tested above may remain in use.***

Reviewed by:

*Doyle Sims*

Date:

*2/18/05*

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Friday, February 18, 2005





*North East Technical Services, Inc.  
1280 Landing Lane, Suite 3  
Westminster, MD 21157  
Ph: 410.751.5090 Fax: 410.751.5091*

*Earth Tech, Inc.  
336 Bloomfield St., Suite 201  
Johnstown, PA 15904  
ATTN: Thomas Matisko*

## ***LEAK TEST CERTIFICATE***

***MD Materials License # MD-13-020-01***

***This certifies that leak test analysis was conducted on the sample with the following information. The results shown below accurately represent the level of removeable contamination.***

<b>Gauge Model</b>	<b>3440</b>	<b>Gauge S/N</b>	<b>26033</b>	<b>Leak Test Date</b>	<b>3/4/2005</b>
<b>Source</b>			<b>Reading in microCuries</b>		
	75-9029		0.0000218		
	47-22414		0.0000		

***Note: 0.005 microCuries (185 Bq) or greater is considered a leaking source. The source(s) tested above may remain in use.***

Reviewed by:

*Douglas Sims*

Date:

*3-4-05*

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Friday, March 04, 2005



**Troxler Electronic Laboratories, Inc.**

3008 Cornwallis Rd., P.O. Box 12057  
Research Triangle Park, NC 27709  
Tel: (877) 876-9537 Fax: (919) 485-2250

License: NC 032-0182-1

**LEAK TEST CERTIFICATE**

**DEVICE:**

Model: 3440 Serial No: 19083

**SEALED SOURCES:**

SERIAL NO.	MEASURE DATE	NUCLIDE	ACTIVITY	
			(GBq)	(mCi)
47-14547	5/14/1990	AM-241:BE	1.48	40
50-8723	4/10/1990	CS-137	0.296	8

**LEAK TEST ANALYSIS:**

Sample collected on: 01/19/2005

Sample analyzed on: 01/24/2005 at 11:53:00 AM

Analyzed by: J.OLSEN

	ALPHA	BETA-GAMMA
Conversion factor (cpm/Bq)	1.30E+01	2.09E+01
Background measurement (cpm)	0	24
Sample measurement (cpm)	0	16
Activity (Bq)	< MDA	< MDA
Min. Detectable Activity (Bq)	4.4E-01	1.2E+00

This certifies that the above leak test results are:

Less than 185 Bq (0.005 uCi)       Greater than 185 Bq (0.005 uCi)

If greater than 185 Bq (0.005 uCi):

Person Notified \_\_\_\_\_ Date \_\_\_\_\_

Phone \_\_\_\_\_ and/or Fax \_\_\_\_\_

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

3/11/2005, and to inform you that the initial processing which includes an administrative review has been performed.

Renew 37-28570-01  
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 136777.  
When calling to inquire about this action, please refer to this control number.  
You may call us on (610) 337-5398, or 337-5260.

: (FOR LFMS USE)  
: INFORMATION FROM LTS  
: -----  
:  
: Program Code: 03121  
: Status Code: 2  
: Fee Category: 3P  
: Exp. Date: 20150331  
: Fee Comments: \_\_\_\_\_  
: Decom Fin Assur Req: N  
: ::

BETWEEN:  
  
License Fee Management Branch, ARM  
and  
Regional Licensing Sections

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED  
Applicant/Licensee: EARTHTECH, INC.  
Received Date: 20050318  
Docket No: 3031879  
Control No.: 136777  
License No.: 37-28570-01  
Action Type: Renewal

2. FEE ATTACHED  
Amount:             
Check No.:           

3. COMMENTS

Signed Rebecca J. Ford  
Date 4/16/2005

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 \_\_\_\_\_