

March 29, 2006

USNRC Region 1  
475 Allendale Road  
King of Prussia, PA 19406

Attn.: LAT, DNMS

RE: Revised Application for Material License  
New License Application (03037179)  
Mail Control Number 138606

Q-2  
37-31142-01

RECEIVED  
REGION 1  
2006 MAR 30 PM 2:25

To Whom It May Concern:

Please find attached the completed revised APPLICATION FOR MATERIAL LICENSE for the firm of Navarro & Wright Consulting Engineers. We are applying for this license to be properly certified to operate the Troxler Model 3411 Nuclear Gauge in performing field in-place soil density and moisture content testing. We have included a check for \$1,100.00 to cover application processing fees with our initial application submission.

We respectfully request that our application be expedited as soon as possible, to allow us to use this device on upcoming projects. Please contact Mr. Bob Evans, PE @ 717/441-2216 (o) or 202/957-1324(c) or Mr. Chuck Wright @ 717/441-2216 with any questions on our application.

We thank you for cooperation.

Sincerely,  
Navarro & Wright Consulting Engrs.

Robert Evans

Robert N. Evans, P.E.  
Radiation Safety Officer

Enclosure

**Corporate Office**

151 Reno Avenue  
New Cumberland, PA 17070  
Ph: 717-441-2216  
Fax: 717-441-2218  
www.navarrowright.com

**Branch Offices**

209 Main Street  
Towanda, PA 18848  
Ph: 570-265-3580  
Fax: 570-265-3955

47 South Broad Street  
Hughesville, PA 17737  
Ph: 570-584-4206  
Fax: 570-584-2843

301 N. Charles Street  
Suite 601  
Baltimore, MD 21202  
Ph: 443-524-2700  
Fax: 443-524-2701

528 E. Chemung Street  
Waverly, NY 14892  
Ph: 607-565-7225

138606  
NMCS/RGNI MATERIALS-002

**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.**

<p><b>APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:</b></p> <p>DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY          OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS          U.S. NUCLEAR REGULATORY COMMISSION          WASHINGTON, DC 20555-0001</p>	<p><b>IF YOU ARE LOCATED IN:</b></p> <p>ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:</p>
<p><b>ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:</b></p> <p><b>IF YOU ARE LOCATED IN:</b></p>	<p>MATERIALS LICENSING BRANCH          U.S. NUCLEAR REGULATORY COMMISSION, REGION III          2443 WARRENVILLE ROAD, SUITE 210          LISLE, IL 60532-4352</p>
<p>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:</p> <p>LICENSING ASSISTANCE TEAM          DIVISION OF NUCLEAR MATERIALS SAFETY          U.S. NUCLEAR REGULATORY COMMISSION, REGION I          475 ALLENDALE ROAD          KING OF PRUSSIA, PA 19406-1415</p>	<p>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:</p> <p>NUCLEAR MATERIALS LICENSING BRANCH          U.S. NUCLEAR REGULATORY COMMISSION, REGION IV          611 RYAN PLAZA DRIVE, SUITE 400          ARLINGTON, TX 76011-4005</p> <p style="text-align: right;"><i>37-31142-01</i> <i>03037179</i></p>

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.

<p>1. THIS IS AN APPLICATION FOR (Check appropriate item)</p> <p><input checked="" type="checkbox"/> A. NEW LICENSE</p> <p><input type="checkbox"/> B. AMENDMENT TO LICENSE NUMBER _____</p> <p><input type="checkbox"/> C. RENEWAL OF LICENSE NUMBER _____</p>	<p>2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)</p> <p>Navarro &amp; Wright Consulting Engineers, Inc.          151 Reno Avenue          New Cumberland, PA 17070</p>
<p>3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED</p> <p>Navarro &amp; Wright Consulting Engineers, Inc.          151 Reno Avenue          New Cumberland, PA 17070</p>	<p>4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION</p> <p>Mr. Robert N. Evans, P.E. (RSO)</p> <p>TELEPHONE NUMBER</p> <p>(717) 441-2216</p>

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.

<p>5. RADIOACTIVE MATERIAL</p> <p>a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time.</p>	<p>6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.</p>			
<p>7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.</p>	<p>8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.</p>			
<p>9. FACILITIES AND EQUIPMENT.</p>	<p>10. RADIATION SAFETY PROGRAM.</p>			
<p>11. WASTE MANAGEMENT.</p>	<p>12. LICENSE FEES (See 10 CFR 170 and Section 170.31)</p> <table border="1"> <tr> <td>FEE CATEGORY</td> <td>AMOUNT ENCLOSED</td> <td>\$ 1,100.00</td> </tr> </table>	FEE CATEGORY	AMOUNT ENCLOSED	\$ 1,100.00
FEE CATEGORY	AMOUNT ENCLOSED	\$ 1,100.00		

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.

<p>CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE</p> <p>Charles E. Wright, Vice President</p>	<p>SIGNATURE</p> <p><i>Charles E. Wright</i></p>	<p>DATE</p> <p>3/29/06</p>
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**FOR NRC USE ONLY**

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		
APPROVED BY				DATE	138606

**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: <u>Troxler Model</u> Device manufacturer or distributor and model number: <u>Troxler Model</u> 3411	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: <u>Soil</u> <u>Density &amp; Water</u>	<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: <u>Troxler Model</u> Device manufacturer or distributor and model number: <u>Troxler Model</u> 3411	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: <u>Soil</u> <u>Density &amp; Water</u>	<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: <hr/> Device manufacturer or distributor and model number: <hr/>	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: <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<input checked="" type="checkbox"/> Not applicable <hr/> <input type="checkbox"/> Uses are: <hr/> (Submit safety analysis supporting safe use)
		Other Isotope (Specify):	Sealed source manufacturer or distributor and model number: <hr/> Device manufacturer or distributor and model number: <hr/>	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: <hr/>	<input checked="" type="checkbox"/> Not applicable <hr/> <input type="checkbox"/> Uses are: <hr/> (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><b>7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE – RADIATION SAFETY OFFICER</b></p> <p>Name: <u>Robert N. Evans, P.E.</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><b>8. 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><b>9. 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><b>10. 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><b>10. 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><b>10. 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 checked="" type="checkbox"/>	<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 checked="" type="checkbox"/>	<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;"><b>OR</b></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>	<input checked="" type="checkbox"/>          <input type="checkbox"/>	<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 checked="" type="checkbox"/>	<input type="checkbox"/>          <b>The information in Appendix J supporting a request to perform leak testing and sample analysis is attached.</b>

Item No. And Title	Suggested Response	Yes	Alternative Procedures Attached
<b>10. RADIATION SAFETY PROGRAM - MAINTENANCE</b>	<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 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>	<input checked="" type="checkbox"/>          <input checked="" type="checkbox"/>	<input type="checkbox"/>          <b>The information listed in Appendix G supporting a request to perform non-routine maintenance in-house is attached.</b>
<b>10. RADIATION SAFETY PROGRAM - TRANSPORTATION</b>	<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>		<b>Need Not Be Submitted With Application</b>
<b>11. WASTE MANAGEMENT - GAUGE DISPOSAL AND TRANSFER</b>	<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>		<b>Need Not Be Submitted With Application</b>