

APPENDIX A

<p>NRC FORM 313 U. S. NUCLEAR REGULATORY COMMISSION</p> <p>(8-1999) 10 CFR 50.32, 33 34, 35, 39 and 40</p> <p><b>APPLICATION FOR MATERIAL LICENSE</b></p>		<p>APPROVED BY OMB: NO. 3150-0123 EXPIRES 10/31/2002</p> <p>Estimated burden per response to comply with this mandatory information collection request 7.4 hours. Submission 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 Management Branch (7-1E8), U.S. Nuclear Regulatory Commission, Washington, DC 20545-0001, or by e-mail to 76161@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NECE-10202, (3160-0120), 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, NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.</p>			
<p>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>					
<p>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</p> <p>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</p> <p>ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA SEND APPLICATIONS TO:  SAM NUNN ATLANTA FEDERAL CENTER U. S. NUCLEAR REGULATORY COMMISSION, REGION II 81 FORSYTH STREET, S.W. SUITE 23785 ATLANTA, GEORGIA 30303-8931</p>		<p>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</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:  NUCLEAR MATERIALS LICENSING SECTION U.S. NUCLEAR REGULATORY COMMISSION, REGION IV 611 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TX 76011-5064</p> <p style="text-align: right;">Q-2 LL 31222 03037424 03121 (19-31228-01)</p>			
<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>					
<p>1. THIS IS AN APPLICATION FOR (Check appropriate item) <input checked="" type="checkbox"/> A. NEW LICENSE <input type="checkbox"/> B. AMENDMENT TO LICENSE NUMBER _____ <input type="checkbox"/> C. RENEWAL OF LICENSE NUMBER _____</p>		<p>2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP Code) emc2, Inc. Inspection &amp; Testing Services 16840 Oakmont Ave. Gaithersburg, MD 20877</p>			
<p>3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED Temporary Job site</p>		<p>4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION Hassan Akhlaghi TELEPHONE NUMBER (301) 330-2703</p>			
<p>SUBMIT ITEMS 5 THROUGH 11 ON 6-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.</p>					
<p>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.</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. LICENSEE FEES (See 10 CFR 170 and Section 170.311) FEE CATEGORY: _____ AMOUNT ENCLOSED \$ _____</p>			
<p>13. CERTIFICATION (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BEING UPON THE APPLICANT. THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 7, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 50, 52, 53, 54, 55, 56, 59 AND 60, 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>					
<p>CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE Suninder Singh, P.E. President</p>		<p>SIGNATURE Suninder Singh DATE 3-5-07</p>			
<p>FOR NRC USE ONLY</p>					
TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		
APPROVED BY				DATE	
					140173

APPENDIX B

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
Yes		Cesium-137	Sealed source manufacturer or distributor and model number: <u>Troxler DWG A-102112</u> Device manufacturer or distributor and model number: <u>Troxler 3450</u> <u>one gauge</u>	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate  <u>&lt; 9 mCi</u>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use: <u>To be used in Troxler model 3450 gauge for measurement of physical properties of materials</u>	<input checked="" type="checkbox"/> Not applicable  <input type="checkbox"/> Uses are:  (Submit safety analysis supporting safe use)
Yes		Americium-241	Sealed source manufacturer or distributor and model number: <u>Troxler DWG A-102451</u> Device manufacturer or distributor and model number: <u>Troxler 3450</u> <u>one gauge</u>	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate  <u>&lt; 44 mCi</u>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use: <u>To be used in Troxler Model 3450 gauge for measurement of physical properties of materials.</u>	<input checked="" type="checkbox"/> Not applicable  <input type="checkbox"/> Uses are:  (Submit safety analysis supporting safe use)

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Yes	No	Radioisotope	Manufacturer or Distributor Model No.	Quantity	Use As Listed on SSD Certificate	Specify Other Uses Not Listed on SSD Certificate
	No	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/> 	<input type="checkbox"/> Not applicable <hr/> <input type="checkbox"/> Uses are: <hr/> (Submit safety analysis supporting safe use)
	No	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 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>						

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**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
7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE - RADIATION SAFETY OFFICER  Name: <i>Hassan Akhlaghi</i>	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.	X	<input type="checkbox"/>
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.	X	<input type="checkbox"/>
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."	Separate Item 9 Response Need Not Be Submitted With Application	
10. RADIATION SAFETY PROGRAM - AUDIT PROGRAM	The applicant is <i>not</i> required to, and should not, submit its audit program to NRC for review during the licensing phase.	Need Not Be Submitted With Application	
10. RADIATION SAFETY PROGRAM - TERMINATION OF ACTIVITIES	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.	Need Not Be Submitted With Application	
10. RADIATION SAFETY PROGRAM - SURVEY INSTRUMENTS	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.	X	<input type="checkbox"/>

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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;">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>	<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"/>  The information in Appendix J supporting a request to perform leak testing and sample analysis is attached.



BETWEEN: : (FOR LFYS USE)  
 : INFORMATION FROM LTS  
 : -----  
 :  
 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 Req'd: \_  
 : ::

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED  
 Applicant/Licensee: EMC2, INC.  
 Received Date: 20070306  
 Docket No: 3037424  
 Control No.: 140173  
 License No.: 19-31222-01  
 Action Type: New Licensee

2. FEE ATTACHED  
 Amount: \_\_\_\_\_  
 Check No.: \_\_\_\_\_

3. COMMENTS

Signed M. A. Perkins  
 Date 3/6/2007

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 \_\_\_\_\_