

## ACCEPTANCE REVIEW MEMO (ARM)

**Licensee:** Basic Engineering PC **License No.:** 11-29251-01  
**Docket No.:** 030-37409 **Mail Control No.:** 471259  
**Type of Action:** New License & Licensee **Date of Requested Action:** 02-07-07  
**Reviewer Assigned:** Roberto **ARM reviewer(s):** Torres

Response	Deficiencies Noted During Acceptance Review
	<input type="checkbox"/> Open ended possession limits. Limit possession. Submit inventory. <input type="checkbox"/> Submit copies of most recent leak test results. <input type="checkbox"/> Add - delete IC license condition. Add IC paragraph in cover letter. <input type="checkbox"/> Split license from cover letter. Add SUNSI marking to license. <input type="checkbox"/> Ask the licensee if they have any type-amount of EAct Material.
2-16-07	1. Date for 313, TJS, inventory, and nonroutine maintenance. <i>Requested info. on</i> 2-16-07.

**Reviewer's Initials:** RTC **Date:** 2-16-07

<input type="checkbox"/> Yes	<input type="checkbox"/> No	Unrestricted release Group 2 or >: Transfer memo to FCDB within 10 days.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Decommissioning notification should be completed within 30 days.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Termination request < 90 days from date of expiration
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Expedite (medical emergency, no RSO, location of use/storage not on license, RAM in possession not on license, other)
<input type="checkbox"/> Yes	<input type="checkbox"/> No	TAR needed to complete action.

**Branch Chief's and/or Sr. HP's Initials:** \_\_\_\_\_ **Date:** \_\_\_\_\_

	<b>SUNSI Screening according to RIS 2005-31</b>
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> Non-Publicly Available, Sensitive if <u>any</u> item below is checked
General guidance:	
_____	RAM = or > than Category 3 (Table 1, RIS 2005-31), use Unity Rule
_____	Exact location of RAM (whether = or > than Category 3 or not)
_____	Design of structure and/or equipment (site specific)
_____	Information on nearby facilities
_____	Detailed design drawings and/or performance information
_____	Emergency planning and/or fire protection systems
Specific guidance for medical, industrial and academic (above Category 3):	
_____	RAM quantities and inventory
_____	Manufacturer's name and model number of sealed sources & devices
_____	Site drawings with exact location of RAM, description of facility
_____	RAM security program information (locks, alarms, etc.)
_____	Emergency Plan specifics (routes to/from RAM, response to security events)
_____	Vulnerability/security assessment/accident-safety analysis/risk assess
_____	Mailing lists related to security response
<b>Branch Chief's and/or Sr. HP's Initials:</b> <u>RTC</u> <span style="float: right;"><b>Date:</b> 2-16-07</span>	

## Pre-Licensing Screening

**Applicant Information:**
**Control No. 471259**

Name: Basic Engineering PC	Type of Request: New License & Licensee Program Code(s):
Location: ID	License No.: 11-29251-01      Docket No.: 030-37409

**STEP 1—Radioactive Materials and Quantities Requested:**

<b>Instructions for Step 1: Complete Step 1 for all applications.</b> If all your responses in Step 1 are "No" then do not complete Step 2 (Screening Criteria). Sign and date the completed step-sheet and add it as the sensitive and non-publicly available OAR in ADAMS. If a "yes" response is indicated for any item in Step 1, also complete Step 2. If the type of use is subject to a Security Order or the requirements for increased controls, complete Step 3 (Item A or Item B) without delay.	Yes or No
A. The request is from a new applicant.	Y
B. NUREG-1556, Volume 20, Section 4.9 indicates a licensing site visit is needed for the requested type of use, e.g., (1) Type A broad scope license, (2) panoramic irradiator containing > 10000 curies, (3) manufacturers or distributors using unsealed radioactive material or significant quantities of sealed material, (4) radioactive waste brokers, (5) radioactive waste incinerators, (6) commercial nuclear laundries, and (7) any other application that in the judgement of the reviewer and cognizant supervisor involves complex technical issues, complex safety questions, or unprecedented issues that warrant a site visit.	N
C. The applicant requested certain radionuclides and quantities that equal or exceed the Risk Significant Quantity (TBq) values in the table, below, that have been "highlighted" by the reviewer	N

### Table of Risk Significant Quantities

(Category 2 Quantities, IAEA Safety Guide No. RS-G-1.9, Categorization of Radioactive Sources, August 2005)

Radionuclide	Risk Significant Quantity (TBq) <sup>1</sup>	Risk Significant Quantity (Ci) <sup>1</sup>	Radionuclide	Risk Significant Quantity (TBq) <sup>1</sup>	Risk Significant Quantity (Ci) <sup>1</sup>
Am-241	0.6	16	Pm-147	400	11,000
Am-241/Be	0.6	16	Pu-238	0.6	16
Cf-252	0.2	5.4	Pu-239/Be	0.6	16
Cm-244	0.5	14	Ra-226 <sup>2</sup>	0.4	11
Co-60	0.3	8.1	Se-75	2	54
Cs-137	1	27	Sr-90 (Y-90)	10	270
Gd-153	10	270	Tm-170	200	5,400
Ir-192	0.8	22	Yb-169	3	81

<sup>1</sup> The primary values are TBq. The curie (Ci) values are for informational purposes only.

<sup>2</sup> The Atomic Energy Act, as amended by the Energy Policy Act of 2005, authorizes NRC to regulate Ra-226 and NRC is in the process of amending its regulations for discrete sources of Ra-226.

Calculations of the Total Activity or the Unity Rule are attached to document whether or not the screening criteria in Step 2 were also completed to evaluate the application. <b>NOTE—If an amendment of an existing license is being requested, the calculations will include the previously authorized quantities for the radionuclide(s).</b>	Yes, No, or Not Applicable (NA)
Total Activity—multiple activities are requested for a single radionuclide and the sum of the activities equals or exceeds the quantity of concern for the radionuclide	—
Unity Rule—multiple radionuclides are requested and the sum of the ratios equals or exceeds unity, e.g., [(total activity for radionuclide A) + (risk significant quantity for radionuclide A)] + [(total activity for radionuclide B) + (risk significant quantity for radionuclide B)] ≥ 1.0.	—

**Signature and Date for Step 1:**

RJC 2/6/07

License Reviewer and Date

# Fax

**To:** Roberto Torres, NRC                      **From:** Greg Floyd  
**Fax:** 817-880-8188                              **Pages:** 5  
**Phone:**    **Date:** 2/16/2007  
**Re:** Application for Material License        **CC:**

**Urgent**     **For Review**     **Please Comment**     **Please Reply**     **Please Recycle**

● **Comments:**

Roberto,  
Here is the corrected application.  
Thank you, Greg

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FEB 12 2007

DNMS

APPENDIX A

NRC FORM 313 (6-1989) 10 CFR 32.32, 33 34, 35, 36, 39 and 40		U. S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB: NO. 3198-0120		EXPIRES: 08/1/2002	
<b>APPLICATION FOR MATERIAL LICENSE</b>							
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 (T-4 EB), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to <a href="mailto:1815@nrc.gov">1815@nrc.gov</a> , and to the Desk Officer, Office of Information and Regulatory Affairs, HHS-10002, (3130-0120), Office of Management and Budget, Washington, DC 20503. If a company 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.							
<b>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.</b>							
<b>APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:</b>  DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS U. S. NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20555-0001				<b>IF YOU ARE LOCATED IN:</b>  ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN. SEND APPLICATIONS TO:  MATERIALS LICENSING SECTION U. S. NUCLEAR REGULATORY COMMISSION, REGION II 801 WARRENVILLE RD. LISLE, IL 60532-4381			
<b>ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:</b>  <b>IF YOU ARE LOCATED IN:</b>  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 473 ALLIANCE ROAD KING OF PRUSSIA, PA 19406-1413				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 811 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TX 76011-9084			
ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:  SAN NUNN ATLANTA FEDERAL CENTER U. S. NUCLEAR REGULATORY COMMISSION, REGION II 81 FORESTH STREET, S.W., SUITE 23785 ATLANTA, GEORGIA 30303-8631							
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) <input checked="" type="checkbox"/> A NEW LICENSE <input type="checkbox"/> B AMENDMENT TO LICENSE NUMBER _____ <input type="checkbox"/> C RENEWAL OF LICENSE NUMBER _____				2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip code) Basic Engineering PC P.O. Box 403 Fruitland, Id. 83619			
3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED Basic Engineering PC 239 SW. 3RD ST. Fruitland, ID. 83619				4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION Kevin Shoemaker, PE. TELEPHONE NUMBER 208-452-2296			
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 (Rate 18 CFR 170 and Section 170.31) FEE CATEGORY   AMOUNT ENCLOSED \$			
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, 38, 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, 1949 (18 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 - TYPE PRINTED NAME AND TITLE Kevin Shoemaker				SIGNATURE Kevin Shoemaker		DATE 2/16/07	
<b>FOR NRC USE ONLY</b>							
TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS		
			\$				
APPROVED BY Kevin Shoemaker				DATE			

**ITEM 1: ACTION TYPE**

<b>ACTION TYPE:</b> <input checked="" type="checkbox"/> New <input type="checkbox"/> Amendment <input type="checkbox"/> Renewal	<b>ADMINISTRATIVE REVIEW:</b> <input type="checkbox"/> Current Guidance Used <input type="checkbox"/> References in Application Based On Current Regulations
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**ITEM 2: LEGAL IDENTITY**

NAME:	BASIC Engineering PC.
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**ITEMS 2 AND 3: ADDRESS**

<b>STORAGE &amp; LOCATION OF USE</b> 239 SW 3 <sup>RD</sup> St. Fruitland, Id. 83619	<b>MAILING ADDRESS</b> P.O. Box 403 Fruitland, Id. 83619
Temporary Job Sites <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	

**ITEM 4: PERSON TO BE CONTACTED ABOUT THIS APPLICATION**

CONTACT PERSON: LEA WALKER	Kevin Shoemaker
TELEPHONE: 208-452-2296	208-452-2296

APPENDIX M

ITEMS 5 AND 6: MATERIALS TO BE POSSESSED AND USES

Yes	No	Radioisotope	Model No.	Quantity	Use As Listed on SSD Certificate	Specify Other Uses Not Listed on SSD Certificate
X		Cesium-137	Sealed source manufacturer or distributor and model number: <u>APA Tech. QSA</u> Device manufacturer or distributor and model number: <u>CDC 8DS</u>	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration (SSDR) Certificate <u>11mCi</u>	Yes <input type="checkbox"/> Specific description of the gauge use: <u>Measurement of soils and construction materials</u>	<input checked="" type="checkbox"/> Not applicable <input type="checkbox"/> Uses are:
X		Americium-241	Sealed source manufacturer or distributor and model number: <u>APA Tech. QSA</u> Device manufacturer or distributor and model number: <u>AMNV977</u>	Not to exceed either the maximum activity per source or maximum activity per device as specified in SSDR Certificate <u>44mCi</u>	Yes <input type="checkbox"/> Specific description of the gauge use: <u>Measurement of soils and construction materials</u>	<input checked="" type="checkbox"/> Not applicable <input type="checkbox"/> Uses are:
	X	Californium-252 <u>NA</u>	Sealed source manufacturer or distributor and model number: Device manufacturer or distributor and model number: <u>Explorer Model 3500</u>	Not to exceed either the maximum activity per source or maximum activity per device as specified in SSDR Certificate	Yes <input type="checkbox"/> Specific description of the gauge use:	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are:

Manufacturer: Instrotek Inc.

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><input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/></p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p>The information listed in Appendix G supporting a request to perform non-routine maintenance in-house is attached.</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>Need Not Be Submitted With Application</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>Need Not Be Submitted With Application</p>

**From:** Roberto J Torres  
**To:** gfloyd@basicengineeringpc.com  
**Date:** 02/16/2007 10:52:49 AM  
**Subject:** Request for additional information in support of license application

Mr. Floyd:

Please correct the following deficiencies. I have attached two pdf files. One contains the things you need to correct, the other one is a clean copy you can use to provide your responses and return to me.

1. Sign and date NRC Form 313 in the appropriate section.
2. Mark either the "yes" or "no" checkbox on temporary job site.
3. Provide manufacturer's name and model number of proposed gauges.
4. Mark the "yes" checkbox on "Non-routine maintenance".

Thank you.

Roberto J. Torres  
Senior Health Physicist  
U.S. Nuclear Regulatory Commission, Region IV  
Division of Nuclear Materials Safety  
Nuclear Materials Licensing Branch  
611 Ryan Plaza Drive, Suite 400  
Arlington, Texas 76011  
Telephone 817-860-8189  
Facsimile 817-860-8188  
rjt@nrc.gov



**Mail Envelope Properties** (45D5E161.387 : 18 : 64234)

**Subject:** Request for additional information in support of license application  
**Creation Date** 02/16/2007 10:52:49 AM  
**From:** Roberto J Torres  
**Created By:** [RJT@nrc.gov](mailto:RJT@nrc.gov)

Recipients	Action	Date & Time
basicengineeringpc.com gfloyd ( <a href="mailto:gfloyd@basicengineeringpc.com">gfloyd@basicengineeringpc.com</a> )		
nrc.gov ARL_PO.ARL_DO AM	Delivered	02/16/2007 10:52:49
RJT BC (Roberto J Torres) AM	Opened	02/16/2007 10:52:54

Post Office	Delivered	Route
ARL_PO.ARL_DO	Pending 02/16/2007 10:52:49 AM	basicengineeringpc.com nrc.gov

Files	Size	Date & Time
MESSAGE	1539	02/16/2007 10:52:49 AM
SCAN2323.pdf	268343	02/16/2007 10:49:28 AM
SCAN2322.pdf	264743	02/16/2007 10:49:26 AM

**Options**

**Auto Delete:** No  
**Expiration Date:** None  
**Notify Recipients:** Yes  
**Priority:** Standard  
**ReplyRequested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

**To Be Delivered:** Immediate  
**Status Tracking:** Delivered & Opened

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FEB 12 2007

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APPENDIX A

<b>NRC FORM 313</b> <b>U. S. NUCLEAR REGULATORY COMMISSION</b> (8-1999) 10 CFR 30, 32, 33 34, 35, 36, 39 and 40		APPROVED BY OMB: NO. 3150-0120      EXPIRES 08/31/2002			
<b>APPLICATION FOR MATERIAL LICENSE</b>					
Estimated burden per response to comply with this mandatory information collection request is 7.4 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 Management Branch (T-8 E8), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bse1@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, NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.					
<b>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.</b>					
<b>APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:</b> DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS U. S. NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20555-0001		<b>IF YOU ARE LOCATED IN:</b> 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			
<b>ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:</b> <b>IF YOU ARE LOCATED IN:</b> 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		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 75011-8064			
<b>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</b>					
<b>1 THIS IS AN APPLICATION FOR (Check appropriate item)</b> <input checked="" type="checkbox"/> A NEW LICENSE <input type="checkbox"/> B AMENDMENT TO LICENSE NUMBER _____ <input type="checkbox"/> C RENEWAL OF LICENSE NUMBER _____		<b>2 NAME AND MAILING ADDRESS OF APPLICANT (Include Zip code)</b> Basic Engineering PC P.O. Box 403 Fruitland, Id. 83619			
<b>3 ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED</b> Basic Engineering PC 239 S.W. 3RD ST. Fruitland, ID. 83619		<b>4 NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION</b> Kevin Shoemaker, PE. TELEPHONE NUMBER 208-452-2296			
<b>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.</b>					
<b>5 RADIOACTIVE MATERIAL</b> a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time		<b>6 PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED</b>			
<b>7 INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE</b>		<b>8 TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS</b>			
<b>9 FACILITIES AND EQUIPMENT</b>		<b>10 RADIATION SAFETY PROGRAM</b>			
<b>11 WASTE MANAGEMENT</b>		<b>12 LICENSEE FEES (See 10 CFR 170 and Section 170.31)</b> FEE CATEGORY      AMOUNT ENCLOSED \$			
<b>13 CERTIFICATION (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT</b> 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 82 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		
<b>FOR NRC USE ONLY</b>					
TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED \$	CHECK NUMBER	COMMENTS
APPROVED BY <i>Kevin Shoemaker</i>		DATE			

**ITEM 1: ACTION TYPE**

<b>ACTION TYPE:</b> <input checked="" type="checkbox"/> New <input type="checkbox"/> Amendment <input type="checkbox"/> Renewal	<b>ADMINISTRATIVE REVIEW:</b> <input type="checkbox"/> Current Guidance Used <input type="checkbox"/> References in Application Based On Current Regulations
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**ITEM 2: LEGAL IDENTITY**

<b>NAME:</b>	BASIC Engineering PC.
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**ITEMS 2 AND 3: ADDRESS**

<b>STORAGE &amp; LOCATION OF USE</b> 239 SW 3 <sup>RD</sup> St. Fruitland, ID. 83619	<b>MAILING ADDRESS</b> P.O. Box 463 Fruitland, Id. 83619
Temporary Job Sites <input type="checkbox"/> YES <input type="checkbox"/> NO	

**ITEM 4: PERSON TO BE CONTACTED ABOUT THIS APPLICATION**

<b>CONTACT PERSON:</b> LEA WALKER	Kevin Shoemaker
<b>TELEPHONE:</b> 208-452-2296	208-452-2296

APPENDIX M

ITEMS 5 AND 6: MATERIALS TO BE POSSESSED AND USES

Yes	No	Radioisotope	Model No.	Quantity	Use As Listed on SSD Certificate	Specify Other Uses Not Listed on SSD Certificate
X		Cesium-137	Sealed source manufacturer or distributor and model number: <u>AEA Tech. QSA</u> Device manufacturer or distributor and model number: <u>CDC 805</u>	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration (SSDR) Certificate <u>11 mCi</u>	Yes <input type="checkbox"/> Specific description of the gauge use: <u>Measurement of soils and construction materials</u>	<input checked="" type="checkbox"/> Not applicable <input type="checkbox"/> Uses are:
X		Americium-241	Sealed source manufacturer or distributor and model number: <u>AEA Tech. QSA</u> Device manufacturer or distributor and model number: <u>AMNV977</u>	Not to exceed either the maximum activity per source or maximum activity per device as specified in SSDR Certificate <u>44 mCi</u>	Yes <input type="checkbox"/> Specific description of the gauge use: <u>Measurement of soils and construction materials</u>	<input checked="" type="checkbox"/> Not applicable <input type="checkbox"/> Uses are:
	X	Californium-252 <u>NA</u>	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 SSDR Certificate	Yes <input type="checkbox"/> Specific description of the gauge use:	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are:

Yes	No	Radioisotope	Model No.	Quantity	Use As Listed on SSD Certificate	Specify Other Uses Not Listed on SSD Certificate
	X	Other Isotope (Specify):  N/A	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 SSDR Certificate	Yes <input type="checkbox"/>  Specific description of the gauge use: _____ _____ _____ _____	<input type="checkbox"/> Not applicable  <input type="checkbox"/> Uses are:  

*Financial Assurance Required and Evidence of Financial Assurance Provided*

**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: <i>Lea Walker</i></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 checked="checked" type="checkbox"/>	<input type="checkbox"/>
10. RADIATION SAFETY PROGRAM – OCCUPATIONAL DOSIMETRY	Either we will maintain, for inspection by NRC, documentation demonstrating that <i>unmonitored individuals</i> 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="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	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 style="text-align: center;"><b>OR</b></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.	<input checked="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="checked" type="checkbox"/>	<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></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>	<p><input checked="" type="checkbox"/></p> <p><input type="checkbox"/></p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p>The information listed in Appendix G supporting a request to perform non-routine maintenance in-house is attached.</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>	



This is to certify that

***Lea Walker***

attended an 8 hour Portable Nuclear Gauge

**RADIATION SAFETY OFFICER COURSE**

Conducted by

**BHP ENTERPRISES**

At Fruitland, Idaho, January 5, 2007

*Bruce H Peterson*  
\_\_\_\_\_  
Health Physicist

This is to certify that

***Lea Walker***

Has successfully completed an 8 hour class in

**PORTABLE NUCLEAR GAUGE SAFETY**

Conducted by

**BHP ENTERPRISES**

At Boise, Idaho, On June 16, 1999

*Bruce H. Peterson*

*Health Physicist*

This is to certify that

***Kevin Shoemaker***

Has successfully completed an 8 hour class in

**PORTABLE NUCLEAR GAUGE SAFETY**

Conducted by

**BHP ENTERPRISES**

At Fruitland, Idaho, On November 14, 2006

*Bruce H. Peterson*

*Health Physicist*

This is to certify that

***Matthew A. Patzer***

Has successfully completed an 8 hour class in

**PORTABLE NUCLEAR GAUGE SAFETY**

Conducted by

**BHP ENTERPRISES**

At Fruitland, Idaho, On November 14, 2006

  
\_\_\_\_\_  
*Health Physicist*

471259

FEB 20 2007

This is to acknowledge the receipt of your letter/application dated  
02-16-07, and to inform you that the initial processing,  
which includes an administrative review, has been performed.

DATE

- There were no administrative omissions. Your application will be 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:

---

The action you requested is normally processed within 90 days.

- 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** 471259.  
When calling to inquire about this action, please refer to this mail control number.  
You may call me at 817-860-8103.

Sincerely,

*Colleen Murrah*

Licensing Assistant

BETWEEN:

License Fee Management Branch, ARM  
and  
Regional Licensing Sections

(FOR LFMS USE)  
INFORMATION FROM LTS  
-----

Program Code: \_\_\_\_\_  
Status Code: 3 \_\_\_\_\_  
Fee Category: \_\_\_\_\_  
Exp. Date: 0 \_\_\_\_\_  
Fee Comments: \_\_\_\_\_  
Decom Fin Assur Req'd: \_\_\_\_\_  
.....

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED BASIC ENGINEERING PC  
Applicant/Licensee: 20070212  
Received Date: 3037409  
Docket No.: 471259  
Control No.:  
License No.:  
Action Type: New Licensee

2. FEE ATTACHED  
Amount: 1200.00  
Check No.: 1009

3. COMMENTS  
Signed Allen P. ...  
Date 02-15-07

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 \_\_\_\_\_

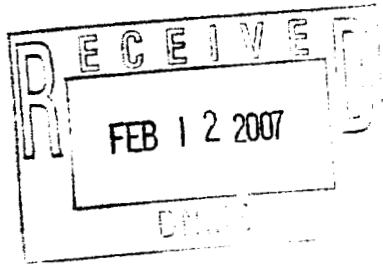


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Nuclear Materials Licensing Section  
US Nuclear Regulatory Commission, Region 10  
611 Ryan Plaza Drive, Suite 400  
Arlington, TX 76011-8064