



SUBSOIL EXPLORATION  
AND MATERIALS LABORATORY

July 7, 2003

Sam Nunn Atlanta Federal Center  
U.S. Nuclear Regulatory Commission, Region II  
61 Forsyth Street, S.W., Suite 23T85  
Atlanta, GA 30303-8931

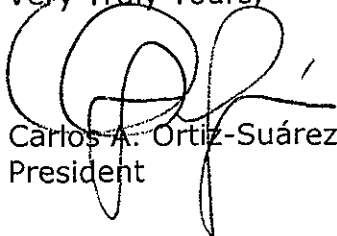
Attn: Mr. José Díaz Vélez  
Health Physicist

**Re: Geotec's Application for  
Material License dated  
February 3, 2003**

Dear Mr. Díaz:

Enclosed are our submittals to items 5 through 11 of the Application for Material License. Please substitute these for the previous ones sent in with our license application.

Very Truly Yours,



Carlos A. Ortiz-Suárez  
President

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# 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
X		Cesium-137	Sealed source manufacturer or distributor and model number: <u>Campbell Pacific MC-1</u> 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 checked="" type="checkbox"/> Specific description of the gauge use: <u>Fill Density</u> <u>Testing</u> _____ _____ _____	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: _____ (Submit safety analysis supporting safe use)
X		Americium-241	Sealed source manufacturer or distributor and model number: <u>Campbell Pacific MC-1</u> 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 checked="" type="checkbox"/> Specific description of the gauge use: <u>Fill Density</u> <u>Testing</u> _____ _____ _____	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: _____ (Submit safety analysis supporting safe use)

# **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
<b>7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE – RADIATION SAFETY OFFICER</b>  Name: <u>Carlos A. Ortiz</u>	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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS</b>	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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>9. FACILITIES AND EQUIPMENT</b>	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."	<b>Separate Item 9 Response</b>  <b>Need Not Be Submitted With Application</b>	
<b>10. RADIATION SAFETY PROGRAM – AUDIT PROGRAM</b>	The applicant is <i>not</i> required to, and should not, submit its audit program to NRC for review during the licensing phase.	<b>Need Not Be Submitted With Application</b>	
<b>10. RADIATION SAFETY PROGRAM – TERMINATION OF ACTIVITIES</b>	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.	<b>Need Not Be Submitted With Application</b>	
<b>10. RADIATION SAFETY PROGRAM – SURVEY INSTRUMENTS</b>	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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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<b>Item No. And Title</b>	<b>Suggested Response</b>	<b>Yes</b>	<b>Alternative Procedures Attached</b>
<b>10. RADIATION SAFETY PROGRAM – MATERIAL RECEIPT AND ACCOUNTABILITY</b>	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"/>
<b>10. RADIATION SAFETY PROGRAM – OCCUPATIONAL DOSIMETRY</b>	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"/>
<b>10. RADIATION SAFETY PROGRAM – PUBLIC DOSE</b>	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.	<b>Need Not Be Submitted With Application</b>	
<b>10. RADIATION SAFETY PROGRAM – OPERATING AND EMERGENCY PROCEDURES</b>	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.  OR  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 type="checkbox"/>          <input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>10. RADIATION SAFETY PROGRAM – LEAK TEST</b>	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
10. RADIATION SAFETY PROGRAM – MAINTENANCE	<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 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>
10. RADIATION SAFETY PROGRAM – TRANSPORTATION	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.	Need Not Be Submitted With Application	
11. WASTE MANAGEMENT – GAUGE DISPOSAL AND TRANSFER	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.	Need Not Be Submitted With Application	