

Southern Consulting

Engineering • Materials Testing • Environmental Services

January 8, 2010

Mr. Sattar Lodhi
Licensing Assistance Team
Division of Nuclear Safety
US Nuclear Regulatory Commission, Region I
475 Allendale Road
King of Prussia, PA 19406-1415

RE: License Renewal Southern Consulting
Control Number – 144315

P-2
MS-16

41-25501-01
03035281

Dear Mr. Lodhi:

Please find enclosed our response to your email comments dated January 5, 2010. The response consists of 1) Appendix B of NUREG-1556, Vol. 1 Rev. 1, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance about Portable Gauge Licenses," dated November 2001; and 2) revised responses to items 5 through 11.

The firm changed its business structure on the advice of our tax preparer. The firm switched from an LLC to an S-Corporation. The firm began operating as Jefferson, Brenner & Smith, Inc. dba Southern Consulting on January 1, 2008. This change did not include any changes in ownership.

Should you require any additional information, please call me at (615) 740-8777.

Sincerely,
SOUTHERN CONSULTING

Trent B. Smith, P.E.
President

Enclosures

1208 Highway 47E • Dickson, Tennessee 37055
Telephone: (615) 740-8777 • Fax: (615) 441-8776 • E-mail: trentacs@comcast.net

REC'D IN LAT _____

144315
NRC/RONI MATERIALS-002

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. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE – RADIATION SAFETY OFFICER</p> <p>Name: <u>TRENT SMITH, PE</u></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.	<input checked="" type="checkbox"/>	<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.	<input checked="" type="checkbox"/>	<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.	<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;">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 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.

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>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<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"/>	<p style="text-align: center;"><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	



5. RADIOACTIVE MATERIAL

Cesium 137; Cs-137 – 11mCi
Americium 241; Am-241:Be – 55mCi

MANUFACTURER	MODEL NUMBER	SERIAL NUMBER
Humboldt	5001	2737
Humboldt	5001	2491
Humboldt	5001	2446
Campbell Pacific	MC-IDRP	MD80604368
Instrotek	3500 Xplorer	594

Each source is registered as an approved source by Tennessee. The activity per source and maximum activity per device will not exceed the maximum activity listed on the approved certificate of registration approved by Tennessee.

6. PURPOSE FOR WHICH MATERIAL WILL BE USED

Material will be used to measure the physical properties of materials including moisture content and density of soil.

7. INDIVIDUAL RESPONSIBLE FOR RADIATION SAFETY PROGRAM

TRENT SMITH, P.E.

Education: Bachelor's degree in engineering

Training: 02/26/98; Course in radiation safety and gauge operation

Experience: 11.5 years
Soil, aggregate and asphalt testing



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8. TRAINING FOR INDIVIDUALS WORKING IN RESTRICTED AREAS

Southern Consulting employees receive the following training:

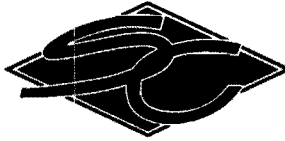
1. Radiation safety and regulatory requirements; 1.5 – 2 hours
2. Portable gauge theory and operation; 1.5 – 2 hours
3. Complete a 25-question closed book exam; passing is minimum 70% score
4. Review of correct answers to missed questions immediately following scoring of the test

9. FACILITIES AND EQUIPMENT

No information required.

10. RADIATION SAFETY PROGRAM

- a. Audit Program – No information required
- b. Survey Instruments - Southern consulting will possess 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, “Consolidated Guidance About Materials Licenses: Program-Specific Guidance about Portable Gauge Licenses,” dated November 2001, in the event of an incident. The instrument owned by Southern Consulting for radiation detection is the Troxler Troxalert PN104260001. This instrument is maintained in the office of Southern Consulting.
- c. 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.
- d. Occupational Dosimetry - Southern Consulting provides dosimetry processed and evaluated by an NVLAP-approved processor that is exchanged at a frequency recommended by the processor.
- e. Public Dose – No information required
- f. Operating and Emergency Procedures – The operating and emergency procedures in the Southern Consulting Radiation Safety Program meet the criteria of Appendix H of NUREG-1556, Vol. 1 Rev. 1, “Consolidated Guidance About Materials Licenses: Program-Specific Guidance about Portable Gauge Licenses,” dated November 200.



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- g. Leak Test - Leak detection shall be performed at an interval approved by the state of Tennessee. Leak tests shall be performed a minimum of every six months using a manufactured supplied leak detection kit and returned to the manufacturer. The test manufacturer will be an organization authorized by the NRC or Tennessee.
- h. Maintenance - Routine maintenance will be conducted according to each manufacturer's recommendations and instructions. For non-routine maintenance which requires detaching the source or source rod from the gauge, the gauge will be sent to the manufacturer or other person authorized by Tennessee.
- i. Transportation – No information required

11. WASTE MANAGEMENT

No material is to be disposed.