

## ITEM 1: ACTION TYPE

<b>ACTION TYPE:</b>	<b>ADMINISTRATIVE REVIEW:</b>
<input checked="" type="checkbox"/> New <input type="checkbox"/> Amendment <input type="checkbox"/> Renewal	<input checked="" type="checkbox"/> Current Guidance Used - 1556, VOL 1 <input type="checkbox"/> References in Application Based On Current Regulations <input type="checkbox"/> All Attachments Referenced Included <input type="checkbox"/> Signature on Application

## ITEM 2: LEGAL IDENTITY

<b>NAME:</b>	CONSTRUCTION TESTING + ENGINEERING, INC.
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## ITEMS 2 &amp; 3: ADDRESS

<b>STORAGE &amp; LOCATION OF USE ADDRESS:</b>	<b>MAILING ADDRESS:</b>
CONSTRUCTION TESTING + ENGINEERING 8569-A SUDLER RD. MANASSAS, VA 20110	CONSTRUCTION TESTING + ENGINEERING, INC. P.O. Box 318 SPRINGFIELD, VA 22150
Temporary Job Sites <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	

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

<b>CONTACT PERSON:</b>	HASSAN TAJICK, VP
<b>TELEPHONE NUMBER:</b>	703/644-6665

**ITEMS 5 AND 6: MATERIAL TO BE POSSESSED AND USES**

YES	NO	RADIOISOTOPE	MFG./MODEL NO.	QUANTITY	MOST COMMON USE	SPECIFY OTHER USES NOT LISTED ON SSD CERTIFICATE
✓		Cesium-137	Sealed sources in compatible gauges as specified in Sealed Source & Device Registration Sheet	Not to exceed maximum activity per source as specified in Sealed Source & Device Registration Sheet	Measure Physical Properties of Materials	<input type="checkbox"/> Not applicable <input checked="" type="checkbox"/> Uses are: SOIL COMPACTION
✓		Americium-241	Sealed neutron sources in compatible gauges as specified in Sealed Source & Device Registration Sheet	Not to exceed maximum activity per source as specified in Sealed Source & Device Registration Sheet	Measure Physical Properties of Materials	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are:
	✓	Californium-252	Sealed neutron sources in compatible gauges as specified in Sealed Source & Device Registration Sheet	Not to exceed maximum activity per source as specified in Sealed Source & Device Registration Sheet	Measure Physical Properties of Materials	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are:
		Other (specify)				
<u>FINANCIAL ASSURANCE REQUIRED AND EVIDENCE OF FINANCIAL ASSURANCE PROVIDED</u>						

PROXLER <sup>MODEL</sup> 3400 SOURCES

SS+D NC-646-D-130-S

**ITEM 1: ACTION TYPE**

<b>ACTION TYPE:</b>	<b>ADMINISTRATIVE REVIEW:</b>
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**ITEM 2: LEGAL IDENTITY**

<b>NAME:</b>	
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**ITEMS 2 & 3: ADDRESS**

<b>STORAGE &amp; LOCATION OF USE ADDRESS:</b>	<b>MAILING ADDRESS:</b>
Temporary Job Sites <input type="checkbox"/> YES <input type="checkbox"/> NO	

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

<b>CONTACT PERSON:</b>	
<b>TELEPHONE NUMBER:</b>	

**ITEMS 5 AND 6: MATERIAL TO BE POSSESSED AND USES**

YES	NO	RADIOISOTOPE	MFG./MODEL NO.	QUANTITY	MOST	SPECIFY
		Cesium-137	Sealed sources in	Not to exceed	Measure	<input type="checkbox"/> Not applicable
		Americium-241	Sealed neutron sources in	Not to exceed	Measure	<input type="checkbox"/> Not applicable
		Californium-252	Sealed neutron sources in	Not to exceed	Measure	<input type="checkbox"/> Not applicable
		Other (specify)				
<b>FINANCIAL ASSURANCE REQUIRED AND EVIDENCE OF FINANCIAL ASSURANCE PROVIDED</b>						

ITEM NUMBER AND TITLE	SUGGESTED RESPONSE	APPLICANT'S RESPONSE			
		YES	NO	OTHER	
				YES	NO
<p>ITEM 7 INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE - RADIATION SAFETY OFFICER</p> <p>NAME <u>HASSAN</u> <u>TAJICK</u></p>	<p>Before obtaining licensed materials, the proposed <i>RSO</i> 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, dated May 1997.</p> <p style="text-align: center;"><b>AND</b></p> <p>Before being named as the <i>RSO</i>, future <i>RSOs</i> 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, dated May 1997.</p> <p style="text-align: center;"><u>Optional Response</u></p> <p>Criteria for Acceptable Training Courses for Radiation Safety Officer/Portable Gauge Users</p> <p>Course Content 1.5-2 hours of radiation safety and regulatory requirements 1.5-2 hours practical explanation of gauge theory and operation (including test runs)</p> <p>Course Examination 25- to 50-question written (closed book) test -- 70 percent grade</p> <p>Course Instructor Qualifications Bachelor's degree in a physical or life science or engineering with successful completion of both a portable gauge user course and 8-hour radiation safety course and 8 hours hands-on experience with portable gauges.</p> <p style="text-align: center;"><b>OR</b></p> <p>An individual with the following training: Successful completion of portable gauge user course Successful completion of 40-hour radiation safety course 30 hours of hands-on experience</p>	✓			
<p>ITEM 7 (CONTINUED)</p>					

<p>ITEM 8 TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS</p>	<p>Before using licensed materials, authorized users will have successfully completed one of the training courses described in Criteria in the section entitled "Training for Individuals Working In or Frequenting Restricted Areas" in NUREG-1556, Vol. 1, dated May 1997. <i>Optional Response</i> Review optional response against criteria listed under Item 7.</p>	<p>✓</p>			
<p>ITEM 9 FACILITIES AND EQUIPMENT</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>Separate Item 9 Response Need Not Be Submitted With Application</p>			
<p>ITEM 10 RADIATION SAFETY PROGRAM - AUDIT PROGRAM</p>	<p>The applicant is <u>not</u> required to, and should not, submit its audit program to the NRC for review during the licensing phase</p>	<p>Need Not Be Submitted With Application</p>			
<p>ITEM 10 RADIATION SAFETY</p>	<p>The applicant is <u>not</u> required to submit a</p>	<p>Need Not Be Submitted With</p>			

- APPLICANT INADVERTENTLY USED WRONG STATEMENT IN APPLICATION (USED RSO TRAINING STATEMENT, AS IN ITEM 7, INSTEAD OF ITEM 8 STATEMENT RE: USER TRAINING CONSISTING OF MANUFACTURER'S COURSE OR EQUIVALENT)

[SEE CONVERSATION RECORD RE: CLARIFICATION OF THIS ITEM]

Appendix M

ITEM NUMBER AND TITLE	SUGGESTED RESPONSE	APPLICANT'S RESPONSE			
		YES	NO	OTHER	
				YES	NO
ITEM 10 RADIATION SAFETY PROGRAM - INSTRUMENTS	<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, dated May 1997, in the event of an incident.</p> <p><u>Optional Response</u> A radiation survey meter should satisfy the following criteria:</p> <p>Be capable of detecting gamma radiation Be checked for functionality before use</p>	✓			
ITEM 10 RADIATION SAFETY PROGRAM - MATERIAL RECEIPT AND ACCOUNTABILITY	<p>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.</p> <p><u>Optional Response</u> Frequency and procedures to ensure: no gauge lost, stolen or misplaced, and if possession exceeds threshold, comply with financial assurance requirements in <b>10 CFR 30.35</b>.</p>	✓			
ITEM 10 RADIATION SAFETY PROGRAM - OCCUPATIONAL DOSIMETRY	<p>Either we will maintain, for inspection by <i>NRC</i>, documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of 10% of the allowable limits in 10 CFR Part 20 or we will provide dosimetry processed and evaluated by a <i>NVLAP</i>-approved processor that is exchanged at a frequency recommended by the processor.</p> <p><u>Optional/Response</u> Alternative response demonstrates compliance with 10 CFR Part 20 requirements.</p>	✓			
ITEM 10 RADIATION SAFETY PROGRAM - PUBLIC DOSE	<p>The applicant is <u>not</u> required to submit a response to public dose section during the licensing phase. This matter will be examined during an inspection.</p>	Need Not Be Submitted With Application			

ITEM NUMBER AND TITLE	SUGGESTED RESPONSE	APPLICANT'S RESPONSE			
		YES	NO	OTHER	
				YES	NO
ITEM 10 RADIATION SAFETY PROGRAM - OPERATING & EMERGENCY PROCEDURES	<p>We will implement and maintain the operating and emergency procedures in <i>Appendix H</i> of NUREG-1556, Vol. 1, dated May 1997 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, dated May 1997.</p> <p style="text-align: center;"><u><i>Optional Response</i></u></p> <p>Instructions to use gauge and perform routine maintenance per manufacturer's recommendations and instructions</p> <p>Instructions to maintain security during storage and transportation</p> <p>Instructions to keep the gauge under control and immediate surveillance during use</p> <p>Steps to take to keep radiation exposures <b>ALARA</b></p> <p>Steps to maintain accountability during use</p> <p>Steps to control access to a damaged gauge</p> <p>Steps to take, and whom to contact, when a gauge has been damaged.</p> <p>If gauges are used for measurements greater than 3 feet beneath the surface: use of surface casing or other procedures to ensure free movement of source in hole; instructions, procedures to retrieve a stuck source; <i>NRC</i> reporting requirements</p> <p>Copies provided to personnel and available at each job site</p>	✓			

Appendix M

ITEM NUMBER AND TITLE	SUGGESTED RESPONSE	APPLICANT'S RESPONSE			
		YES	NO	OTHER	
				YES	NO
ITEM 10 RADIATION SAFETY PROGRAM - LEAK TEST	<p>Leak tests will be performed at intervals approved by the <i>NRC</i> or an Agreement State and specified in the Sealed Source and Device Registration Sheet. Leak tests will be performed by an organization authorized by <i>NRC</i> or an Agreement State to provide leak testing services for other licensees or using a leak test kit supplied by an organization authorized by <i>NRC</i> or an Agreement State to provide leak test kits to other licensees and according to the kit supplier's instructions.</p> <p><u>Optional Response</u></p> <p>Provide the information in <i>Appendix J</i> supporting a request to perform leak testing and sample analysis;</p> <p>Individual who will make the analysis; qualifications to make quantitative measurements</p> <p>Leak test frequency as specified in the appropriate Sealed Source and Device Registration Sheet.</p> <p>How and where test samples taken; materials to be used; methods of handling samples to prevent or minimize exposure to personnel.</p> <p>Type of instrument(s) used, counting efficiency, and minimum levels of detection for each radionuclide</p> <p><i>Note: An instrument capable of making quantitative measurements should be used; hand-held survey meters will not normally be considered adequate for measurements.</i></p> <p>Standard calibration sources including for each: the radionuclide, quantity, accuracy, and traceability to primary radiation standards</p> <p><i>Note: Accuracy of standards should be within <math>\pm 5\%</math> of the stated value and traceable to a primary radiation standard such as those maintained by the National Institutes of Standards and Technology (NIST).</i></p> <p>Sample calculation to convert measurement data to becquerels (or microcuries)</p> <p>Instructions on actions, notifications regarding leaking source</p>	✓			



Appendix M

ITEM NUMBER AND TITLE	SUGGESTED RESPONSE	APPLICANT'S RESPONSE			
		YES	NO	OTHER	
				YES	NO
ITEM 10 RADIATION SAFETY PROGRAM - MAINTENANCE	<p><b><u>ROUTINE CLEANING &amp; LUBRICATION</u></b>            We will implement and maintain procedures for routine maintenance of our gauges according to each manufacturer's recommendations and instructions.</p> <p><i>Optional Response</i>            Considers <i>ALARA</i>            Ensures gauge functions as designed            Ensures source integrity not compromised</p> <p><b><u>NON-ROUTINE MAINTENANCE</u></b>            We will send the gauge to the manufacturer or other person authorized by <i>NRC</i> 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><i>Optional Response</i>            Provide the information listed in <i>Appendix G</i> supporting a request to perform non-routine maintenance in-house.            Types of work to be performed            Who will perform maintenance, training, experience, why competent            Handling procedures: doses to public, personnel <i>ALARA</i> and reg. limits; security; posting; mfg. instructions and recommendations            Use of whole body and extremity monitoring or evaluation to demonstrate that individuals are not likely to receive greater than 10% of allowable limits            Possess survey instrument (detects gamma radiation; range 1-50 mrem/hr; annual calibration w/point source at 2 points/scale; readings within <math>\pm 20\%</math>; calibrated by <i>NRC/Agreement State</i> licensee; checked before use)  <i>10 CFR 20.1301</i> surveys (when and where instrument survey performed, records for 3 years)</p>	✓			
ITEM 10 RADIATION SAFETY PROGRAM - TRANSPORTATION	The applicant is <u>not</u> required to submit a response to transportation section during the licensing process. However, this issue will be reviewed during inspection.	Need Not Be Submitted With Application			

Appendix M

ITEM NUMBER AND TITLE	SUGGESTED RESPONSE	APPLICANT'S RESPONSE			
		YES	NO	OTHER	
				YES	NO
ITEM 11 WASTE DISPOSAL - GAUGE DISPOSAL & TRANSFER	The applicant is <u>not</u> required to submit a response to waste management section during the licensing process. However, the licensee should develop, implement, and maintain gauge transfer and disposal procedures in its radiation safety program.			Need Not Be Submitted With Application	