

## Casey, Colleen

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**From:** Casey, Colleen  
**Sent:** Tuesday, September 15, 2015 4:41 PM  
**To:** 'tlautenbach@mtc-test.com'  
**Subject:** Request for additional information - 588496  
**Attachments:** Scan001.PDF

**Importance:** High

Dear Tim,

Attached is a record I prepared and it has several attachments from our portable gauge guidance document. Please review this and let me know when we can discuss it in a phone call. I'm in the rest of this week and most, possibly all (?) of next week. I want to ensure you understand what we are asking for so we can proceed with the amendment requests you have sent us.

We will need your response by 9/30/15, or contact me if alternative timeframe to respond is needed.

Thank you very much.

Colleen  
Colleen Carol Casey  
Materials Licensing Reviewer  
U.S. Nuclear Regulatory Commission  
Region III  
2443 Warrenville Road  
Suite 210  
Lisle, IL 60532-4352  
(630) 829-9841 Direct  
(630) 515-1078 Fax  
NRC 24 HR Operations Center  
(301) 816-5100

Gentle Reminders: Unless previously arranged with or requested by me directly, please do not submit any licensing requests, responses or correspondence via e-mail. Please only submit one complete, signed copy of your correspondence to us.

Please prepare your licensing requests in accordance with NUREG 1556 Series Guidance, as appropriate.

Thank you very much!

Please also note that my full-time work schedule includes every other Friday off.

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our people, our nation and  
our environment

<http://www.nrc.gov/>



CONVERSATION RECORD

09/15/2015

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU Steven Elliott/Tim Lautenbach		DATE OF CONTACT 09/15/2015	TYPE OF CONVERSATION <input checked="" type="checkbox"/> E-MAIL <input type="checkbox"/> TELEPHONE <input type="checkbox"/> INCOMING <input checked="" type="checkbox"/> OUTGOING
E-MAIL ADDRESS tlautenbach@mtc-test.com		TELEPHONE NUMBER (616) 456-5469	

ORGANIZATION Materials Testing Consultants, Inc.	DOCKET NUMBER(S) 03013918
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LICENSE NUMBER(S) 21-15281-02	CONTROL NUMBER(S) 588496
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SUBJECT  
Additional information needed for review of your amendment requests

SUMMARY  
We have reviewed your applications dated August 6, 2015, and August 10, 2015, requesting amendments to your NRC license and find that we will need additional information to complete our review as follows:

1. It does not appear that your proposed RSO, Tim Lautenbach, completed a portable gauge users' training course. Such a course would be different from and separate from the one day RSO course he took on June 17, 2015. Please state whether Mr. Lautenbach has completed a gauge users' training course, in addition to the recent RSO course, and provide a copy of his completion certificate and outline of specific topics covered in the course.
2. The Delegation of Authority for Mr. Lautenbach indicates that he will spend between 1 and 5 hours per week on RSO duties. Please explain whether this time range is for coverage of both of your gauge use and storage locations and temporary job sites collectively or individually (which would be 3 - 15 hours per week then, total). How often will he be working at each location?
3. How will Mr. Lautenbach exercise oversight of the radiation safety program at temporary job sites? Please be specific.
4. Please see the attached page from NUREG 1556, Vol. 1, Rev. 1, Appendix E, about RSO duties and responsibilities. It appears that most of these duties and responsibilities were not described in your application dated August 6, 2015. →

**Continue on Page 2**

ACTION REQUIRED (IF ANY)  
Please submit only one complete, dated and signed (by senior management such as Mr. Elliott) written response within 15 days of the date of this record, by Sept. 30, 2015. You may scan your response as a PDF file and email that to me at colleen.casey@nrc.gov OR fax it to 630-515-1078 (it may take a few days to reach me) OR send it via regular mail (it may take several days to reach me). Do not send more than one copy.

Please address your response to my attention as "additional information to control number 588496."

**Continue on Page 3**

NAME OF PERSON DOCUMENTING CONVERSATION Colleen Carol Casey
SIGNATURE 

## CONVERSATION RECORD (continued)

SUMMARY: (Continued from page 1)

Please specify the duties and responsibilities that your proposed RSO will be tasked with, focusing on those in Appendix E.

5. It is not clear whether Mr. Lautenbach's RSO course was conducted online exclusively or "in person" in a classroom/laboratory setting. Please describe specifically the mode(s) of instruction and venue for his course.
6. Mr. Lautenbach did not specify whether his RSO course included a closed book, written exam, as described in Appendix D, "Course Examination" section, to NUREG 1556, Vol. 1, Rev.1. Please clarify whether he took such an exam and provide the details of the exam as described in Appendix D, including his score.
7. It is not clear whether Mr. Lautenbach's course included any kind of practical, hands-on training in the tasks associated with the RSO position for portable gauges. Please refer to the second paragraph of the "Course Content" section in Appendix D and provide the details of the practical, hands-on training Mr. Lautenbach has had.
8. Please see the attached excerpts from NUREG 1556, Vol. 1, Rev. 1, as they pertain to "Management Responsibility," "Addresses Where Licensed Material Will be Used or Possessed," and "Amendments and Renewals to a License." We are calling out and emphasizing the importance of these sections, in addition to the rest of the guidance document, because they describe NRC's expectations of licensees in areas where this license has been having issues. Please acknowledge the receipt and understanding of these excerpts in your response, for both Mr. Elliott and Mr. Lautenbach.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this record will be available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

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### 3 MANAGEMENT RESPONSIBILITY

NRC recognizes that effective radiation safety program management is vital to achieving safe and compliant operations. NRC also believes that consistent compliance with its regulations provides reasonable assurance that licensed activities will be conducted safely. NRC frequently finds ineffective management is the underlying cause of safety and compliance problems. Management refers to a senior-level manager who has responsibility for overseeing licensed activities.

To ensure adequate management involvement, a management representative must sign the submitted application acknowledging management's commitments and responsibility for the following:

- Radiation safety, security, and control of radioactive materials, and compliance with regulations;
- Completeness and accuracy of the radiation safety records and all information provided to NRC (10 CFR 30.9);
- Knowledge about the contents of the license and application;
- Meticulous compliance with current NRC and Department of Transportation (DOT) regulations and the licensee's operating and emergency procedures;
- Commitment to provide adequate resources (including space, equipment, personnel, time, and, if needed, contractors) to the radiation protection program to ensure that public and workers are protected from radiation hazards and meticulous compliance with regulations is maintained;
- Selection and assignment of a qualified individual to serve as the Radiation Safety Officer (RSO) for licensed activities;
- Obtaining NRC's prior written consent before transferring control of the license; and
- Notifying appropriate NRC Regional Administrator in writing, immediately following filing of petition for voluntary or involuntary bankruptcy.

For information on NRC inspection and enforcement, see the current version of "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, and Manual Chapter (MC) 87114, "Fixed and Portable Gauge Programs." NUREG-1600 is available electronically at <<http://www.nrc.gov/OE>>. For hard copies of NUREG-1600 and MC 87114, see the Notice of Availability (on the inside front cover of this report).

**Discussion:** Even though a licensee may have filed for bankruptcy, the licensee remains responsible for all regulatory requirements. NRC needs to know when licensees are in bankruptcy proceedings in order to determine whether all licensed material is accounted for and adequately controlled, and whether there are any public health and safety concerns (e.g., contaminated facility). NRC shares the results of its determinations with other involved entities (e.g., trustee), so that health and safety issues can be resolved before bankruptcy actions are completed.

**Response from Applicant:** None at time of application for a new license. Generally, licensees should notify NRC within 24 hours of filing a bankruptcy petition.

**Reference:** See the Notice of Availability on the inside front cover of this report to obtain copies of Inspection Procedure 87103, "Inspection of Material Licensees Involved in an Incident or Bankruptcy Filing," available on NRC's web site at <<http://www.nrc.gov>>.

**Additional References:** NUREG-1556, Volume 15, "Consolidated Guidance About Materials Licenses: Guidance About Changes of Control and Bankruptcy Involving Byproduct, Source, or Special Nuclear Materials Licenses."

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### 8.3 ITEM 3: ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

Most applicants need to provide two types of information in response to Item 3:

- Description of storage, use, and dispatch locations; and
- Specification of whether they intend to use the portable gauge at temporary job sites.

Specify the street address, city, and state or other descriptive address (such as on Highway 10, 5 miles east of the intersection of Highway 10 and State Route 234, Anytown, State) for each permanent facility used as a location of storage or use, and each facility from which the applicant will dispatch gauge users to job sites for more than one customer. If gauges will NOT be stored at a dispatch site, so indicate. The descriptive address should be sufficient to allow an NRC inspector to find the storage location. A Post Office Box address is not acceptable.

NRC does not consider long-term storage in vehicles or personal residences not listed on the license an acceptable practice. As discussed in the above paragraph, in responding to Item 3, license applicants should also include a description of those locations, such as personal residences where portable gauges may be stored by licensee staff for dispatch to customer job sites.

## CONTENTS OF AN APPLICATION

An NRC-approved license amendment is required before receiving, using, and storing licensed material at an address or location not included with the application or already listed on the license.

Being granted an NRC license does not relieve a licensee from complying with other applicable Federal, State, or local regulations (e.g., local zoning requirements for storage locations).

To conduct operations at temporary job sites (i.e., locations where work is conducted for limited periods of time and from which gauge users are NOT dispatched to job sites for other customers), specify "temporary job sites anywhere in the United States where NRC maintains jurisdiction." See Figure 2.1.

*Note:* As discussed later under "Financial Assurance and Recordkeeping for Decommissioning," licensees must maintain permanent records describing where licensed material was used or stored while the license was in force. This is important for making future determinations about the release of these locations for unrestricted use (e.g., before the license is terminated). For portable gauge licensees, acceptable records are sketches or written descriptions of storage or use locations specifically listed on the license. Licensees only need to maintain this information for temporary job sites where sources have leaked.

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

Identify the individual(s) who can answer questions about the application and include telephone number(s). This is typically the proposed RSO, unless the applicant has named a different person as the contact. NRC will contact this individual if there are questions about the application.

Notify NRC if the contact person or his or her telephone number changes so that NRC can contact the applicant or licensee in the future with questions, concerns, or information. This notice is for "information only" and does not require a license amendment.

### **8.5 ITEM 5: RADIOACTIVE MATERIAL**

As indicated on NRC Form 313 (Appendix B), Items 5 through 11 should be submitted on separate sheets of paper. Applicants may use Appendix B for this purpose and should note that using the suggested wording of responses and committing to using the model procedures in this report will expedite NRC's review.

## 10 AMENDMENTS AND RENEWALS TO A LICENSE

It is the licensee's obligation to keep the license current. If any information in the original application is to be modified or changed, the licensee must submit an application for a license amendment before the change takes place. Also, to continue the license after its expiration date, the licensee must submit an application for a license renewal at least 30 days before the expiration date (10 CFR 2.109, 10 CFR 30.36(a)).

~~Applications for license amendment, in addition to the following, must provide the appropriate fee.~~ For renewal and amendment requests, applicants must do the following:

- Be sure to use the most recent guidance in preparing an amendment or renewal request;
- Submit either an NRC Form 313 or a letter requesting amendment or renewal;
- Provide the license number;
- For renewals, provide a complete and up-to-date application if many outdated documents are referenced or if there have been significant changes in regulatory requirements, NRC's guidance, the licensee's organization, or radiation protection program. Alternatively, describe clearly the exact nature of the changes, additions, and deletions.

**Using the suggested wording of responses and committing to using the model procedures in this report will expedite NRC's review.**

## COURSE CONTENT

- 1.5 to 2 hours of radiation safety and regulatory requirements, emphasizing practical subjects important to safe use of the gauge; radiation vs. contamination; internal vs. external exposure; concept of time, distance, and shielding to minimize exposure; control and surveillance of gauges; location of sealed source within the portable gauge; inventory; recordkeeping; incidents; licensing and inspection by regulatory agency; need for complete and accurate information; employee protection; deliberate misconduct.
- 1.5 to 2 hours of practical explanation of portable gauge theory and operation; operating, emergency, maintenance, and transportation procedures; and field training emphasizing radiation safety and including test runs of setting up and making measurements with the gauge, controlling and maintaining surveillance over the portable gauge, performing routine cleaning and lubrication, packaging and transporting the gauge, storing the gauge, and following emergency procedures.

## COURSE EXAMINATION

- At least a 70-percent score on a 25-to-50-question, closed-book written test
  - Emphasis on radiation safety of portable gauge storage, use, sealed source location, maintenance, and transportation, rather than the theory and art of making portable gauge measurements;
  - Review of correct answers to missed questions with prospective gauge user immediately following the scoring of the test.

## COURSE INSTRUCTOR QUALIFICATIONS

Instructor should have either:

- Bachelor's degree in a physical or life science or engineering;
- Successful completion of a portable gauge user course;
- Successful completion of an 8-hour radiation safety course; and
- 8 hours hands-on experience with portable gauges.

**OR**

- Successful completion of portable gauge user course;
- Successful completion of 40-hour radiation safety course; and
- 30 hours of hands-on experience with portable gauges.

*Note:* Licensees should maintain records of training.



The RSO's duties and responsibilities are illustrated in Figure 8.1 and typically include ensuring the following: ATTACHED.

- Licensed activities that the RSO considers unsafe are stopped;
- Possession, use, storage, and maintenance of sources and gauges are consistent with the limitations in the license, the Sealed Source and Device Registration sheet(s), and the manufacturer's recommendations and instructions;
- Individuals who use gauges are properly trained;
- When necessary, personnel monitoring devices are used and exchanged at the proper intervals; records of the results of such monitoring are maintained;
- Gauges are properly secured;
- Proper authorities are notified in case of accident, damage to gauges, fire, or theft;
- Unusual occurrences involving the gauge (e.g., accident, damage) are investigated, cause(s) and appropriate corrective action are identified, and corrective action is taken;
- Audits are performed at least annually and documented, and corrective actions are taken;
- Licensed material is transported in accordance with all applicable DOT requirements;
- Licensed material is disposed of properly;
- Appropriate records are maintained;
- An up-to-date license is maintained and amendment and renewal requests are submitted in a timely manner;
- Up-to-date operating and emergency procedures are developed, maintained, distributed, and implemented;
- Non-routine operations are performed by the manufacturer, distributor, or person specifically authorized by NRC or an Agreement State;
- Documentation is maintained to demonstrate, by measurement or calculation, that the TEDE to the individual member of the public likely to receive the highest dose from the licensed operation does not exceed the annual limit in 10 CFR 20.1301;
- When the licensee identifies violations of regulations or license conditions or program weaknesses, corrective actions are developed, implemented, and documented;
- Posting of documents required by 10 CFR 19.11 (Parts 19 and 20, license documents, operating procedures, NRC Form 3, "Notice to Employees"), and 10 CFR 21.6 (Part 21, Section 206 of Energy Reorganization Act of 1974, procedures adopted pursuant to Part 21) or posting a notice indicating where these documents can be examined.

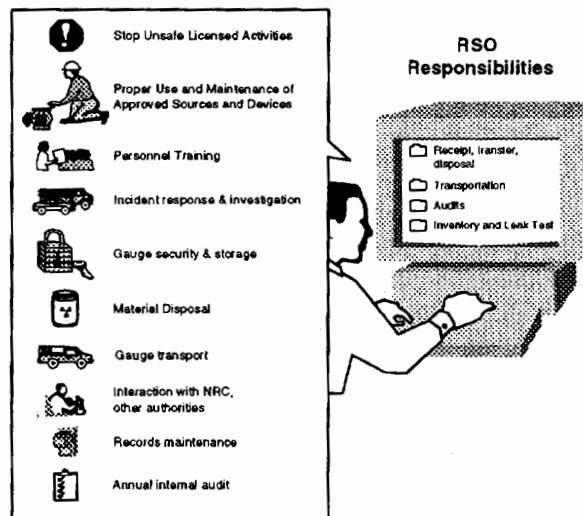
## 8.7 ITEM 7: INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE

**Regulations:** 10 CFR 30.33(a)(3).

**Criteria:** RSOs must have adequate training and experience. In the past, NRC has found successful completion of one of the following as evidence of adequate training and experience:

- Portable gauge manufacturer's course for users or for RSOs; or
- Equivalent course that meets Appendix D criteria.

**Discussion:** The person responsible for the radiation protection program is called the RSO. The RSO needs independent authority to stop operations that he or she considers unsafe. He or she must have sufficient time and commitment from management to fulfill certain duties and responsibilities to ensure that radioactive materials are used in a safe manner. Typical RSO duties are illustrated in Figure 8.1 and described in Appendix E. NRC requires the name of the RSO on the license to ensure that licensee management always has a responsible, qualified person identified and that the named individual knows of his or her designation as RSO.



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**Figure 8.1 RSO Responsibilities. Typical duties and responsibilities of RSOs.**

**Response from Applicant:** Provide either of the following:

- Name of the proposed RSO;

AND EITHER ANY FUTURE PROPOSED NEW RSO

- Statement that: ~~“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, ‘Consolidated Guidance about Materials Licenses: Program-Specific Guidance about Portable Gauge Licenses,’ dated November 2001”;  REQUEST AMENDMENT TO LICENSE AND INCLUDE COMPLETED DELEGATION OF AUTHORITY OR

- Alternative information demonstrating that the proposed RSO is qualified by training and experience. REQUEST AN AMENDMENT FROM

**Note:** It is important to ~~notify~~ NRC, as soon as possible, <sup>WHEN</sup> ~~of~~ changes in the designation of the RSO, <sub>occur</sub>.

Alternative responses will be reviewed against the criteria listed above.

### 8.8 ITEM 8: TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS (INSTRUCTIONS TO OCCUPATIONALLY EXPOSED WORKERS AND ANCILLARY PERSONNEL)

**Regulations:** 10 CFR 19.11, 10 CFR 19.12, 10 CFR 30.7, 10 CFR 30.9, 10 CFR 30.10, 10 CFR 30.33.

**Criteria:** Authorized users must have adequate training and experience. In the past, NRC has found successful completion of one of the following as evidence of adequate training and experience:

- Portable gauge manufacturer’s course for users; or
- Equivalent course that meets Appendix D criteria.

**Discussion:** The individuals using the gauges are usually referred to as authorized users. Authorized users have the responsibility to ensure the surveillance, proper use, security, and routine maintenance of portable gauges containing licensed material.