



CONVERSATION RECORD

10/17/2014

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| NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU Mitchell T. Hardert, P.E., proposed Radiation Safety Officer | | DATE OF CONTACT 10/17/2014 | TYPE OF CONVERSATION <input type="checkbox"/> E-MAIL <input checked="" type="checkbox"/> TELEPHONE <input type="checkbox"/> INCOMING <input checked="" type="checkbox"/> OUTGOING |
| E-MAIL ADDRESS mitchhardert@cbceng.com | | TELEPHONE NUMBER (937) 428-6150 | |

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| ORGANIZATION CBC Engineers & Associates, Ltd. | DOCKET NUMBER(S) 030-35192 |
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| LICENSE NUMBER(S) 34-26768-02 | CONTROL NUMBER(S) 584644 |
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SUBJECT
Our review of your license amendment request letter dated August 19, 2014

SUMMARY

We have reviewed your request to amend your radioactive materials license to add Mitchell T. Hardert as your Radiation Safety Officer (RSO), and find that we are unable to continue this action until we have received additional information noted below. Refer to NUREG 1556, Vol. 1, found at <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1556/v1/r1>, when providing additional detail regarding responses surrounding the qualifications and training required for the proposed RSO. Please provide your response with copies of requested documents and/or on typed 8.5" x 11" sheets, as applicable. For your convenience, copies of the relevant pages from the NUREG 1556 guidance volumes are attached. Include a signed and dated cover letter with your response.

Direct any questions you have to me at (630) 829-9892 or sara.forster@nrc.gov.

Submit requested information within 14 days of this record, referencing Control No. 584644, as listed at the top of this memo. Please FAX your response to my attention at (630) 515-1078. You may also scan your response and send to me via email, as a pdf file.

As discussed, we expect to receive your written response on or before October 31, 2014.

ACTION REQUIRED (IF ANY)

- Please note the responsibilities and duties the NRC expects of designated RSO. In our conversation, we discussed these duties and noted that you understood the duties assigned to you, as you have been appointed as RSO by your management. Provide a written memorandum of understanding/delegation of authority (MOU/DOA) document, signed by both you, the proposed RSO and the licensee's management. For your convenience, we have attached a copy of Appendix E to the above cited NUREG 1556 Vol. 1, rev. 1, guidance document, which outlines RSO duties that should be included in such an MOU/DOA document. You may use the model MOU/DOA, taken from the draft NUREG 1556, Vol. 4, rev. 2, Appendix C (attached) or create a custom document.
- Please provide documentation (including training certificate if available) showing that the proposed RSO has completed training noted in Appendix D to the above cited NUREG 1556, Vol. 1, rev. 1. A copy is attached for your convenience.

NAME OF PERSON DOCUMENTING CONVERSATION
Sara A. Forster, Materials Licensing Branch, Region III Office, 2443 Warrenville Road, Suite 210, Lisle, Illinois 60532

SIGNATURE
Sara A. Forster 10/17/2014

RSO training documentation should demonstrate completion
COURSE CONTENT of a course that meets the following criteria:

- 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:

- 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.

Please provide a signed copy of a model MOU/DOA document. You may use the sample, below, taken from the draft NUREG 1556, Vol. 4, rev. 1, volume (available at the NRC website), or create **Model Delegation of Authority to RSO** a custom document specific to your organization.

Memo To: Radiation Safety Officer
From: Chief Executive Officer
Subject: Delegation of Authority

You, _____, have been appointed radiation safety officer and are responsible for ensuring the safe use of radiation. You are responsible for managing the Radiation Protection Program, identifying radiation protection problems, initiating, recommending, or providing corrective actions, verifying implementation of corrective actions, stopping unsafe activities, and ensuring compliance with regulations. You are hereby delegated the authority necessary to meet those responsibilities, including prohibiting the use of byproduct material by employees who do not meet the necessary requirements and shutting down operations, when justified, to maintain radiation safety. You are required to notify management if staff does not cooperate and does not address radiation safety issues. In addition, you are free to raise issues with the U.S. Nuclear Regulatory Commission at any time. It is estimated that you will spend _____ hours per week conducting radiation protection activities.

Signature of Management Representative

Date

I accept the above responsibilities,

Signature of Radiation Safety Officer

Date

cc: Affected department heads

Forster, Sara

From: Forster, Sara
Sent: Friday, October 17, 2014 10:10 AM
To: 'mitchhardert@cbceng.com'
Subject: Additional Information Request for CBC Engineers & Associates, Ltd., NRC Lic. No. 34-26768-02
Attachments: 03121.584644.34-26768-02 telecon signed.pdf

Dear Mr. Hardert:

Please see the attached file for additional information needed to complete the review of the recent amendment request for NRC Lic. No. 34-26768-02. Note that the attached conversation record requests additional information on or before close of business on October 31, 2014. Additional guidance may be found in, NUREG 1556, Vol. 1, rev. 1, "Program-Specific Guidance About Portable Gauge Licenses," which may be found at:

<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1556/v1/r1/>.

Submission of your response as a pdf file attached to an email or via facsimile will allow for the quickest processing. Do not hesitate to call me with any questions you may have.

Sara A. B. Forster, Health Physicist Licensing Reviewer
U.S. Nuclear Regulatory Commission - Region III
Division of Nuclear Materials Safety
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