



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, IL 60532-4352

July 13, 2018

Noah Garrow
Garrow Inspection Services
2121 Frontier Court NW
Corydon, IN 47112

Dear Mr. Garrow:

We have reviewed your application for a new radiography license received June 22, 2018. We used NUREG-1556, Volume 2, Revision 1, "Consolidated Guidance About Materials Licenses Program-Specific: Guidance About Industrial Radiography Licenses" as a guidance to evaluate your application. A copy of the NUREG-1556, Volume 2, Revision 1 is available on the NRC website at <https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1556/v2/>. Based on our review and discussion with you via a telephone conference on July 13, 2018, we will need the following information.

- 1) Provide the exposure device's manufacturer and model number, sealed sources' manufacturer and model number, and source changer's manufacturer and model number. In addition, provide the maximum quantity of depleted uranium for shielding in exposure devices and source changers.
- 2) Provide the following: "We will use only radiographic exposure devices, source assemblies or sealed sources, and associated equipment, which meet the requirements specified in Title 10 of the *Code of Federal Regulations* (10 CFR) 34.20, "Performance requirements for industrial radiography equipment," in radiographic operations."
- 3) Provide the following: "Pursuant to 10 CFR 30.35(g), we shall maintain records important to decommissioning and transfer these records to an NRC or Agreement State licensee before licensed activities are transferred or assigned, in accordance with 10 CFR 30.34(b). Furthermore, pursuant to 10 CFR 30.51(f), prior to license termination, we shall forward the records required by 10 CFR 30.35(g) to the appropriate NRC regional office."
- 4) You stated that the proposed Radiation Safety Officer (RSO) has not completed a training for RSO and that he is scheduled to take the training in late of July 2018. Please provide a training completion certificate and a history of his work related to industrial radiography. In addition, please provide a copy of the delegation of authority for RSO (see attached sample).
- 5) During the discussion, you stated that the applicant will not have a Permanent Radiography Installation (PRI), the facility on Quality Avenue, New Albany, Indiana will be a Field location, and the applicant will conduct industrial radiography at temporary job sites. In addition, the applicant will also perform industrial radiography at its Field location. Please confirm that the applicant will use licensed material at the field location and temporary job site and provide a diagram of the Field location where industrial radiography may be performed and its surroundings, including a description of adjacent

properties. Additionally, describe how the licensed material will be secured at temporary job sites (for example: in a locked vault secured to the floor in the locked darkroom on the company radiography truck.)


- 6) With regard to the training program for radiographers and assistant radiographers, provide the following:
- Submit an outline of the training to be given to prospective radiographers and radiographer's assistants. Submit your procedures for experienced radiographers who have worked for another licensee.
 - Provide a copy of a typical examination and the correct answers to the examination questions. Indicate the passing grade.
 - Submit all training program descriptions noted in 10 CFR 34.43, except for those training and examination program topics listed in 10 CFR 34.43(g).
 - Specify the qualifications of your instructors in radiation safety principles and describe their experience with radiography. If training will be conducted by someone outside the applicant's organization, identify the course by title and provide the name and address of the company providing the training.
 - Describe the practical field examination that will be given to prospective radiographers and radiographer's assistants.
 - Describe the annual refresher training program, including topics to be covered and how the training will be conducted.
 - Submit your procedures for verifying and documenting the certification status of radiographers and for verifying that their certification remains valid.
 - Submit a description of your program for inspecting the job performance of each radiographer and radiographer's assistant at intervals not to exceed 6 months, as described in 10 CFR 34.43(e).
- 7) You stated that the applicant will not calibrated their radiation survey meters and the survey meters will be calibrated by other authorized licenses. Provide the following: "We will possess and use calibrated and operable radiation survey meters. Calibration will be performed by an NRC or Agreement State licensee specifically authorized to perform instrument calibration".
- 8) Provide the following: "Physical inventories will be conducted and documented at quarterly intervals (not to exceed 3 months) to account for all sealed sources containing byproduct material and devices containing depleted uranium received and possessed under the license. We will develop, implement, and maintain procedures for ensuring accountability of licensed materials at all times. We will comply with NSTS reporting requirements as described in 10 CFR 20.2207."
- 9) With regard to the sealed sources leak test, provide the following: "Leak tests sample collection and analysis will be performed by an organization authorized by the NRC or an Agreement State to provide leak-testing services to other licensees; or by using a leak-test sample collection kit supplied by an organization licensed by the NRC or an Agreement State to provide leak-test kits and sample analysis services to other licensees and according to the instructions provided in the leak-test sample collection kit."
- 10) For occupational dosimetry, provide the following: "Film badges and thermoluminescent dosimeters (TLD) for radiation workers will be processed and evaluated by a processor accredited by the National Voluntary Laboratory Accreditation Program (NVLAP)."

- 11) You provided that when the new sealed source in the source changer arrived at your facility, you will exchange it with the old source in the exposure device and will return the source changer with the old source to the manufacturer as soon as practically possible. Therefore, a maintenance procedure for the source changer is unnecessary. Please confirm the information above and provide the maximum amount of time the source changer will be in your possession.
- 12) Provide a copy of the operating procedure for the exposure device proposed in Question 1 above and the following: "We will use and maintenance our radiography devices and associated equipment in accordance with the recommendations of the equipment manufacturers."
- 13) Provide the following: "Before using a new sealed source/device combination, we will have written inspection and maintenance procedures that address the use of the new equipment as a Type B transport package. In addition, we will provide training to radiographic personnel before using a new sealed source/device combination."
- 14) Provide a copy of the operating and emergency procedure for transporting radiography exposure devices.
- 15) Provide a description of the actions which will be taken in response to a rate meter that is alarmed during the radiography operations.
- 16) You provided that the proposed RSO has not been trained or performed the replacement of selector ring on the exposure devices. In addition, he has not been trained or performed source retrieval operations. Therefore, at this time we ask you to withdraw the requests to perform the replacement of the selector ring on the exposure device and to conduct source retrieval.

To continue the review of your application, we request that you submit a signed written response to this letter by August 16, 2018. Please reference Mail Control No. 609186 in your response to facilitate proper correspondences handling in our office. To expedite the licensing process, you could fax your response to 630-515-1078. If you have any questions or require clarification on any of the information stated above, please do not hesitate to contact me at 630-829-9887 or frank.tran@nrc.gov.

In accordance with Title 10 of the *Code of Federal Regulations* Section 2.390 of the U.S. Nuclear Regulatory Commission's (NRC) "Rules of Practice," a copy of this letter and its enclosure 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>.

Sincerely,


Frank P.D. Tran
Health Physicist
Materials Licensing Branch

Model Delegation of Authority to RSO

Memo To: Radiation Safety Officer
From: Chief Executive Officer (or designee)
Subject: Delegation of Authority

You, _____, have been appointed radiation safety officer and are responsible for ensuring the safe and secure 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

Name

Title

I accept the above responsibilities,

Signature of Radiation Safety Officer

Date

cc: Affected department heads