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RNDT Inc.
nondestructive testing & research

ACCREDITED
Test Cert #3225.01

July 16, 2015

Re: RNDT, Inc., Request for Additional Information Concerning Application for a New License, Control 587207

Attention: Mr. Dennis Lawyer

Section 5, step 3.2 in RNDT, Inc. Radiation Safety QC Procedure will be changed from an "or" to an "and" for the Dose rate and TI requirement.

Section 6, step 1.2.1 in RNDT, Inc. Radiation Safety QC Procedure will be changed to comply with 10 CFR 20.1301(a)(2).

Section 6, step 2.2 in RNDT, Inc. Radiation Safety QC Procedure will be changed to allow for temporary job sites.

RNDT, Inc. confirms that we will comply with 10 CFR Part 37 requirements when possessing category 1 or 2 materials within NRC jurisdiction.

Contact me should you have any questions or require any additional information.

Sincerely,

Allan R. Thomassy, Jr.
Vice President – RSO
RNDT, Inc.

REC'D IN LAT 7/17/15

587207
NMSS/RGN1 MATERIALS-002

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Section 5: Transportation

1.0 Training of personnel who prepare, transport, and offer for transport hazardous material shipments is required pursuant to 49 CFR §172.700.

2.0 Visually inspect the package to determine if it is in unimpaired condition for shipment. The radiographic device should be inspected to determine that it is not damaged, that the lock operates properly, that the source assembly (pigtail) is securely locked in the package, and that the safety plug and lock cap are securely positioned. Verify that the package identification plate is present and legible, which identifies the package as a radiographic device and displays the Certificate of Compliance identification number.

2.1 Verify that the source assembly is properly secured and locked in the radiographic device. The safety plug and lock cap must be firmly attached. Measure the maximum surface radiation level and the maximum radiation level at 1 meter from the surface of the package. If the lock key is to be shipped in the same container with the camera, the lock key shall be sealed in an envelope which will be destroyed when opened.

3.0 Labeling containers appropriately (i.e., when to use Radioactive White I, Radioactive Yellow II, or Radioactive Yellow III labels);

3.1 Radioactive White I labels are required when the surface radiation level is less than 0.5 mR/hr (0.005 mSv/hr) or the TI = 0 (1 meter dose rate is less than 0.05 mR/hr (0.0005 mSv/hr) ;

3.2 Radioactive Yellow II labels are required when the surface radiation level is greater than 0.5 mR/hr (0.005 mSv/hr) and less than or equal to 50 mR/hr (0.5 mSv/hr) and the TI is less than or equal to 1 (1 meter dose rate is less than or equal to 1 mR/hr (0.01 mSv/hr); or,

3.3 Radioactive Yellow III labels are required when the surface radiation level is greater than 50 mR/hr (0.5 mSv/hr) and less than 200 mR/hr (2 mSv/hr) or the TI is less than or equal to 10 mR/hr (0.1 mSv/hr).

3.3.1 Placards are required for any vehicle containing a package with a Radioactive Yellow III label. NOTE: It is the policy of RNDT, Inc. to avoid transporting Radioactive Yellow III labeled packages.

3.4 The Radioactive label must contain the radionuclide, the activity in SI units (e.g., Bq, TBq), and the TI in the supplied box. The TI is entered only on Yellow II and Yellow III labels.

Section 6: Controlling access to radiographic areas

1.0 Licensed material that is stored in controlled or unrestricted areas shall be secured from unauthorized removal or access.

1.1 Each area or room in which there is used or stored licensed material shall be posted with a conspicuous sign or signs bearing the radiation symbol and the words "Caution, Radioactive Material(s)" or "Danger, Radioactive Material(s)".

1.1.1 Licensed material shall be stored in a manner which will minimize danger from explosion or fire.

1.1.2 Radiographic equipment stored at temporary jobsites must be secured at a location that prevents access to unauthorized personnel. This usually requires that the equipment be locked in a cabinet or other secure area where key access is controlled by site management and radiographic personnel. It is not acceptable for a device to be chained to a post and left unattended at the place of use during lunch, breaks, or after hours. Storage of exposure devices at a private residence or motel room is unacceptable.

1.2 A physical survey shall be performed to confirm that the area around the storage facility is an unrestricted area.

1.2.1 If a vehicle is used for storage, radiation levels may not exceed 2 mR/hr (0.02 mSv/hr) from any external surface of the vehicle and the vehicle shall be locked when used for storage.

1.3 Radiographers and/or radiographer's assistants must ensure that storage areas are locked and if key locked, with the key removed at all times except when in use. Keys shall be removed from all stored exposure devices.

2.0 Each entrance to a permanent radiographic installation shall be posted with a "Caution (or Danger) High Radiation Area" sign and ensured that the visible and audible system is operable.

2.1 Operability of the visible-audible system shall be checked daily as follows;

(1) Expose a radiation source in the permanent installation with all entrances closed.

(2) Determine that each visible signal outside the installation is functional.

(3) Open the entrance to determine that each audible alarm in the installation is functional.

(4) Close the entrance and confirm that the audible alarm stops.

(5) Record results of the test.

2.2 All radiographic operations conducted at the location of use authorized on the license must be conducted in a permanent radiographic installation or a temporary job site.

3.0 Licensed material that is in a controlled or unrestricted areas and that is not in storage shall be secured from unauthorized removal or access and maintained under constant surveillance.

3.1 When radiographic operations are performed outside a permanent radiographic installation, at least two qualified radiographic personnel must be present. At least one of the individuals must be a radiographer; the other may be another radiographer or a radiographer's assistant. The additional qualified individual shall observe the operations and be capable of providing immediate assistance to prevent unauthorized entry. Radiography may not be performed if only one qualified individual is present.

3.1.1 Whenever a radiographer's assistant uses radiographic exposure devices, associated equipment, or sealed sources or conducts radiation surveys required to determine that the sealed source has returned to the shielded position after an exposure, the assistant shall be under the personal supervision of the radiographer. The personal supervision must include;

(1) The radiographer's physical presence at the site where sealed sources are being used;

(2) The availability of the radiographer to give immediate assistance if required; and,

(3) The radiographer's direct observation of the assistant's performance of the operations as referred to above.

3.2 All areas where radiographic operations are conducted require posting of the radiation areas and high radiation areas. It is acceptable to post the perimeter of the restricted area rather than the perimeter of the radiation area.

3.2.1 Each restricted area at the point where radiation levels have been calculated to reach 2 mR (0.02 mSv) in any one hour shall be posted with a conspicuous sign or signs bearing the radiation symbol and the words "Caution, Radiation Area".

6. _____ is alpha particles, beta particles, gamma rays, X-rays, neutrons, high-speed electrons, high-speed protons and other particles capable of producing ions.

a. A practical examination
b. Radiation
c. Welding
d. Zirconium

7. _____ is an individual who performs radiographic operations or an individual in attendance at a site where radiation producing machines are being used who personally supervises industrial radiographic operations.

a. An Assistant Radiographer
b. A Professional Engineer
c. A Radiographer
d. none of the above

8. _____ is an evaluation of the radiological conditions and potential hazards incident to the production, use transfer, release, disposal or presence of radioactive material or other sources of radiation.

a. A storage area
b. A temporary job site
c. A survey
d. A walk down

9. An area to which access is neither limited nor controlled by the licensee is called _____.

a. an unrestricted area
b. a restricted area
c. Iolite Avenue
d. both b and c

10. The Company Administrative Control Level is _____ per calendar year.

a. 2.1 Rem
b. 4 Rem
c. 5 Rem
d. there is no Control Level

46. Radiation survey meters shall be calibrated to within an accuracy of _____.

a. +/- 1 %
b. +/- 5 %
c. +/- 10 %
d. +/- 20 %

47. A dosimeter may not be used for personnel monitoring unless the response is accurate within _____.

a. +/- 1 %
b. +/- 5 %
c. +/- 10 %
d. +/- 20 %

48. As a minimum, direct reading dosimeters shall be read and exposure values recorded _____.

a. weekly
b. monthly
c. at the beginning and the end of each worker's shift involving the use of a source of radiation
d. every hour

49. The use of X-ray machines is governed by the Nuclear Regulatory Commision.

a. True
b. False

50. What is the name of the following formula; $\mathbf{I_1D_1^2 = I_2D_2^2}$

a. Snell's Law
b. Pythagorean's Theory
c. Inverse Square Law
d. ID Reverse Formula