Wardrobe, Leonardo

From:	Wardrobe, Leonardo
Sent:	Wednesday, May 17, 2017 10:33 AM
To:	'fravel9709@comcast.net'
Subject:	Request for Additional Information - Control Number 594471

47-31316-01
03037778
594471

Concrete Imaging, Inc.

Dear Mr. Fravel,

This refers to your application request for license renewal dated April 1, 2017. In order to continue our review of your application request, the following additional information is needed:

1. It is not clear in your renewal application the models of sources, exposure devices and source changers you are requesting or the number of sources. Please confirm in writing that you would like to be authorized for the material specified in Amendment 4 of your current license or if you desire a different authorization, please format your request in a table similar to Condition 10 of your current license.

2. All references to the NRC's "Increased Control" orders in your application need to be replaced with the corresponding references from 10 CFR 37.

3. The Radiation Safety Awareness Examination Part 1 and the Radiation Safety Training Examination should be better focused on radiation safety issues. There are too many questions concerning radiation theory and not enough questions on radiation safety and regulatory requirements. Your exams should have questions that also address the following:
   - 2 man rule.
   - Emergency procedures.
   - Replace questions that reference "Increase Control" orders with questions that correspond with the appropriate sections of 10 CFR 37.

   Please submit revised exams with questions that address the above topics.

   Please submit answer keys for the above exams.

   Please Note: the Health Physics Society Webpage shows that the average annual dose from natural background radiation is 310 mrems and from man-made sources of radiation is also 310 mrems.

4. Please update your diagram located on the opposite page of your Table of Contents (TOC) for your O&E manual, in your application, showing the locations of NRC Offices and Agreement States.

5. In your O&E procedure, Section 2, Occupational Dose Limits – Personnel Monitoring Devices Use and Monitoring, item 4.2 and it states "the maximum allowable dose rate for a declared pregnant

woman shall not exceed 0.05 rem." 10 CFR 20.1208 states in part that the dose equivalent to the embryo/fetus during the entire pregnancy, due to the occupational exposure of a declared pregnant woman, does not exceed 0.5 rem. Please change the wording in this statement to reflect what is in the NRC regulations or state that Concrete Imaging, Inc. administrative dose limit for a declared pregnant woman is 0.05 rem during their entire pregnancy.

In your O&E procedure, Section 2, Occupational Dose Limits – Personnel Monitoring Devices Use and Monitoring, item 4.4 it states that it is incumbent on female employees to advise the RSO as soon as possible once the pregnancy is suspected or confirmed. The RSO can then determine if the acquired dose is less than 0.05 rem of the allowable limit (0.5 rem) since conception. A Declaration of Pregnancy shall be valid for one year unless withdraw by the female employee at the end of the pregnancy. Please note that in the definitions section of 10 CFR 20, a "declared pregnant woman" means a woman who voluntarily informed the licensee, in writing, of her pregnancy and the estimated date of conception. The declaration remains in effect until the declared pregnant woman withdraws the declaration or is no longer pregnant. Please consult Regulatory Guide 8.13 on the NRC web page. concerning pre-natal exposure.

6. In your O&E procedure, Section 3, Radiation Safety Instruments, Use, Maintenance and Surveys, item 4.5.3.1 states upon delivery of a package to the company, the package shall be surveyed as soon as practical after receipt, but no later than 4 hours after receipt if delivered during normal business hours or 18 hours after receipt if delivered after normal business hours. 10 CFR 20.1906(c) requires licensee's to perform package monitoring not later than 3 hours after package receipt if received during normal business hours or not later than 3 hours from the beginning of the next working day if the package is received after working hours. Please revise your procedure to align with the regulatory requirement.

7. In your O&E procedure, Section 8, Minimizing the Exposure of Persons in the Event of an Accident or Emergency, please add a section on immediate actions for an alarming ratemeter.

8. In your administrative procedure RSAP-001, Radiation Safety Assurance Program, item 3.3.2 refers to a Trustworthy & Reliability Official. Please change that to the Reviewing Official.

9. In your administrative procedure RSAP-005, Records, Reports, and Notifications to the Nuclear Regulatory Commission, item 4.1.2, please update the address of the Region I Office to:
   2100 Renaissance Blvd, Suite 100
   King of Prussia, PA 19406-2713
   Please note, neither phone numbers listed in this section are fax numbers.

10. Your administrative procedure RSAP-006, Reporting of Defects and Non-Compliance per NRC 10 CFR 21, is vague and does not give directions. Please revise to give actionable items to the reader.

11. In your application, the pages between RSAP-006, Reporting of Defects and Non-Compliance per NRC 10 CFR 21, and RSAP-007, Receipt, Transfer and Disposal of Sealed Sources and/or Exposure Devices, the two maps of the agreement states and NRC offices need to be updated to reflect the current configuration of NRC Regional Offices, Agreement States, NRC contacts and phone numbers.

12. In RSAP-009, Leak Test Procedure, item 4.3, IR 192 should be replaced with sealed sources since you possess more than just Ir-192. Please revise your procedure to any survey meter reading above background could possibly indicate leakage of the sealed sources and should prompt the individual to immediately notify the RSO. Please replace "analyzing agency" with person(s) specifically authorized by the Commission or an Agreement State to perform the analysis.

13. In RSAP-009, Leak Test Procedure, item 5 NOTE, is specific to a SPEC 150 industrial radiography camera. Your current license a_uthorizes you to also possess QSA Global 880D and SPEC 300 radiography cameras. Does this need to apply to the other radiography cameras?

14. In RSAP-011, Maintenance and Inspection of Radiographic Exposure Devices, item 4.2, it states that the RSO or his authorized representative shall perform quarterly inspection and maintenance of the exposure device. This entails a more thorough check as outlined in this section. There is no reference in RSAP-011, Maintenance and Inspection of Radiographic Exposure Devices, for items to check for the quarterly inspection. It only details the daily maintenance and inspection checks. Please amend this procedure and add the detailed quarterly inspection checks to this procedure.

15. In RSAP-014, Training Procedure, item 1.3, please note that the requirements that you are imposing to allow candidates into your training program is not sufficient for the T&R process to allow unescorted access to Category 2 quantities of radioactive material. Please revise this procedure to specify this is an administrative requirement to enter your training program or correctly state the requirements for performing a T&R determination in accordance with 10 CFR 37 subpart B.

16. In RSAP-018, Occupational Dose Limits, item 5.2, states that the maximum allowable dose rate for a declared pregnant woman is also 0.5 rem per year. 10 CFR 20.1208 states in part that the dose equivalent to the embryo/fetus during the entire pregnancy, due to the occupational exposure of a declared pregnant woman, does not exceed 0.5 rem. Please correct wording.

17. If CIM Form FSAP 002 is to be used as the shippers document, it needs the following:
    a. Emergency contact phone number on it as required by 49 CFR 201(d).
    b. The words "Special Form" as required by 49 CFR 203 (d)(2)(i).

18. In RSAP-007, Receipt, Transfer and Disposal of Sealed Sources and/or Exposure Devices, section 6.6, it states that the RSO shall make or cause inquiries to the intended recipient when a 30-day period has elapsed and no disposal certificate has been received. Section 8.1 states that failure of an intended recipient to acknowledge a shipment within 45 day period constitutes an emergency. For Category 2 quantities of radioactive material, 10 CFR 37.75, 37.79 and 37.81 has more rigorous requirements for coordinating, tracking, and reporting of lost shipments. Please review these regulations and modify your procedure to address the shipping of Category 2 quantities of radioactive material.

Your reply must be an originally signed and dated letter. The letter may be scanned and submitted as a pdf document attached to an email; or it may be transmitted by facsimile to (610) 337-5269; or it may be sent by regular mail. If we do not receive a reply from you within 30 calendar days from the date of this e-mail, we will assume that you do not wish to pursue your application request.

Please respond by e-mail to acknowledge that you have received the e-mail request for additional information.

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