



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, ILLINOIS 60532-4352

June 3, 2021

Dr. Sidney A. Crawley, M.D.  
Radiation Safety Officer  
Diagnostic Imaging Centers, P.A.  
6650 W 110th St.  
Ste. 200  
Overland, KS 66211

SUBJECT: ADDITIONAL INFORMATION NEEDED REGARDING DIAGNOSTIC IMAGING CENTERS, P.A. RENEWAL APPLICATION, NRC LICENSE NO. 15-32819-01

Dear Dr. Crawley:

Our office has reviewed the March 17, 2021 application to renew Diagnostic Imaging Centers, P.A.'s (your) U.S. Nuclear Regulatory Commission (NRC) Materials License No. 15-32819-01. Upon review, our office has determined that additional information is needed to renew the license, regarding your authorized materials use, your RSO & AUs, your facilities & equipment, your radiation safety program, and your waste management program. Your renewal application is available electronically from NRC's Agencywide Documents Access and Management System (ADAMS) at accession number ML21083A190. The NRC's ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

For additional guidance, please refer to NUREG 1556 Volume 9, revision 3, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Medical Use Licenses," Section 8.5.1 "Byproduct Material and Depleted Uranium," p. 8-5, Section 8.6, "Purpose(s) for Which Licensed Material Will be Used," p. 8-12, Section 8.7.1, "Radiation Safety Officer (RSO) and Associate Radiation Safety Officers (ARSOs)," pp. 8-16 to 8-21, Section 8.7.2, "Authorized Users (AUs)," pp. 8-26 to 8-29, Section 8.9.1, "Facility Diagram," pp. 8-45 to 8-50, Section 8.9.3, "Dose Calibrator and Other Equipment Used to Measure Dosages of Unsealed Byproduct Material," pp. 8-52 to 8-54, Section 8.10.2, "Occupational Dose," pp. 8-63 to 8-67, Section 8.10.14, "Safe Use of Licensed Material," p. 8-87, and Section 8.11, "Waste Management," pp. 8-98 to 8-102.

**ADDITIONAL INFORMATION REQUESTED REGARDING AUTHORIZED MATERIAL:**

1. The application was unclear regarding whether 10 CFR 35.200 PET radionuclides are used under the license. **Please confirm that PET radionuclides are not used, under the license.**
2. Your application requested an unqualified authorization for 10 CFR 35.300 materials. However, all individuals currently authorized for use of 10 CFR 35.300 materials, under the license, are limited to oral administration 33 millicuries or less of sodium iodide I-131. The application was unclear as to whether all patients are day-of releasable, pursuant to 10 CFR 35.75. **Please confirm that any 10 CFR 35.300 use is limited to outpatient only. Should you wish to limit your 10 CFR 35.300 materials authorization to oral administration of sodium iodide I-131, please indicate the same in your response.**

**ADDITIONAL INFORMATION REQUESTED REGARDING AUTHORIZED INDIVIDUALS:**

3. Your application was signed by existing Radiation Safety Officer (RSO) Sidney A. Crawley, M.D. However, Dr. Crawley was not explicitly identified as the RSO in the body of the application. **Please confirm that you are continuing to designate RSO authorities and responsibilities to Sidney A. Crawley, M.D.**
4. Your application included contact information for the designated contact person Chris Bowers. However, it omitted contact information for RSO Sidney A. Crawley, M.D. **Please provide a phone number and email address for the designated RSO.**
5. The most recent amendment (No. 13) to your license, includes authorizations for Authorized Users (AUs) Zachary T. Boyd, M.D. (10 CFR 35.100, 10 CFR 35.200, 10 CFR 35.300 (limited to oral administration of sodium iodide I-131 in quantities of 33 millicuries or less)) and Jeffrey F. Brent, M.D. (10 CFR 35.100, 10 CFR 35.200). However, the renewal application reversed the requested authorizations for these two AUs. **Please indicate whether the reversed authorization requests is a typo, or if you wish to modify the authorizations, as stated in the application. If you wish to add an authorization for 10 CFR 35.300 (limited to oral administration of sodium iodide I-131 in quantities of 33 millicuries or less) for Dr. Brent, please include his training and experience, pursuant to the requirements of 10 CFR 35.390, 35.392, 35.394, etc.**

**ADDITIONAL INFORMATION REQUESTED REGARDING FACILITIES & EQUIPMENT:**

6. The three locations of use listed on your license and in the renewal application indicate specific room and suite numbers. For security purposes, it is NRC policy to omit room and suite numbers, as possible. Room and suite numbers may need to be included where there are multiple NRC radioactive materials licensees housed in the same building, or address designating the location of use. **Please indicate whether the room and suite numbers, designating the locations of use, are still needed in the conditions section of the license. If possible, please confirm that room and suite numbers may be removed from Condition No. 10, as listed on the license.**
7. The facility diagrams in the renewal application are unclear as to uses of areas above, below, and adjacent to areas of use authorized under the license. **For each location of use, please indicate any uses of areas above, below, and adjacent to the areas where materials are used or stored, under the license.**
8. The renewal application included equipment descriptions and a commitment regarding survey meters. However, the application omitted equipment descriptions and a commitment regarding dose calibrators and other dosage monitoring equipment. **Please provide a description of equipment used to measure dosages and confirm the statement, "Equipment used to measure dosages will be calibrated in accordance with nationally recognized standards or the manufacturer's instructions."**

**ADDITIONAL INFORMATION REQUESTED REGARDING RADIATION SAFETY PROGRAM:**

9. **Occupational Dose:** The application included a protocol, but was unclear regarding maintenance of applicable records and adherence to criteria in NUREG 1556, Vol. 9, rev. 3, Section 8.10.2. **Please provide one of the suggested statements: (1) "We will maintain, for inspection by the NRC, documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of the limits in 10 CFR 20.1502." or (2) "We will monitor individuals in accordance with the criteria in the section titled, 'Radiation Safety Program—Occupational Dose' in NUREG—1556, Vol. 9, Rev. 3, 'Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Medical Use Licensees.'" In the alternative, should you still wish to provide an alternative method for demonstrating compliance, please verify that it meets criteria outlined in the guidance document.**

10. **Safe Use of Unsealed Licensed Material:** Safe use was not addressed in the application. **Please confirm the statement, “We have developed and will implement and maintain written waste disposal procedures for licensed material, in accordance with 10 CFR 20.1101, that also meet the requirements of the applicable section of Subpart K to 10 CFR Part 20 and of 10 CFR 35.92.”**

**ADDITIONAL INFORMATION REQUESTED REGARDING WASTE MANAGEMENT:**

11. Waste management was not addressed in the application. **Please confirm the statement, “We have developed and will implement and maintain written procedures for safe use of unsealed byproduct material that meet the requirements of 10 CFR 20.1101 and 10 CFR 20.1201.”**

Please provide a response via a signed and dated letter within 30 days (on or prior to July 2, 2021). For quickest processing, please submit your response as a pdf file attached to an email message. You may also submit a response via fax or via regular mail. If you have any questions regarding this message, please do not hesitate to reach out to me at 630-829-9892.

In accordance with 10 CFR 2.390 of the NRC’s “Rules of Practice and Procedure,” a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the NRC’s ADAMS, accessible from the NRC Web site at <https://www.nrc.gov/reading-rm/adams.html>.

Sincerely,

**Sara A.  
Forster**

Digitally signed by Sara  
A. Forster  
Date: 2021.06.03  
12:41:01 -05'00'

Sara A. Forster, M.S.  
Health Physicist  
Materials Licensing Branch  
Division of Nuclear Materials Safety

Docket No.: 030-38424  
License No.: 15-32819-01  
Control No.: 624971

**From:** [Forster, Sara](#)  
**To:** [cbowers@dic-kc.com](mailto:cbowers@dic-kc.com)  
**Subject:** Additional Information Request re Diagnosti Imaging Centers, P.A., Lic. 15-32819-01, CN624971  
**Date:** Thursday, June 03, 2021 12:49:00 PM  
**Attachments:** [CN624971.Lic15-32819-01 RFAI letter public signed.pdf](#)

---

Good afternoon, Mr. Bowers:

Our office has reviewed the March 17, 2021 renewal application for the U.S. NRC Radioactive Materials License referenced in the subject line of this message. Upon review, our office has determined that additional information is needed to renew the license, as described in the attached document. For additional guidance, please refer to [NUREG 1556 Volume 9, revision 3, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Medical Use Licenses,"](#) Section 8.5.1 "Byproduct Material and Depleted Uranium," p. 8-5, Section 8.6, "Purpose(s) for Which Licensed Material Will be Used," p. 8-12, Section 8.7.1, "Radiation Safety Officer (RSO) and Associate Radiation Safety Officers (ARSOs)," pp. 8-16 to 8-21, Section 8.7.2, "Authorized Users (AUs)," pp. 8-26 to 8-29, Section 8.9.1, "Facility Diagram," pp. 8-45 to 8-50, Section 8.9.3, "Dose Calibrator and Other Equipment Used to Measure Dosages of Unsealed Byproduct Material," pp. 8-52 to 8-54, Section 8.10.2, "Occupational Dose," pp. 8-63 to 8-67, Section 8.10.14, "Safe Use of Licensed Material," p. 8-87, and Section 8.11, "Waste Management," pp. 8-98 to 8-102.

Please provide a response via a signed and dated letter within 30 days (on or prior to July 2, 2021). For quickest processing, please submit your response as a pdf file attached to an email message. You may also submit a response via fax or via regular mail. If you have any questions regarding this message, please do not hesitate to reach out to me at 630-829-9892.

Thank you in advance for your prompt attention to this request,

**Sara A. Forster, Health Physicist Licensing Reviewer**

U.S. Nuclear Regulatory Commission - Region III

Division of Nuclear Materials Safety

2443 Warrenville Rd. - Ste. 210

Lisle, IL 60532-4352

[sara.forster@nrc.gov](mailto:sara.forster@nrc.gov)

Direct: (630) 829-9892

Facsimile: (630) 515-1078

