



**UNITED STATES**  
**NUCLEAR REGULATORY COMMISSION**  
REGION I  
2100 RENAISSANCE BOULEVARD, SUITE 100  
KING OF PRUSSIA, PA 19406-2713

October 23, 2014

Docket No. 03019941  
Control No. 584598

License No. 06-20581-01

Andreas L. Nonnenmacher  
Vice President and General Manager  
Goodrich Corporation  
100 Wooster Heights Road  
Danbury, CT 06810

**SUBJECT: GOODRICH CORPORATION, REQUEST FOR ADDITIONAL INFORMATION  
CONCERNING APPLICATION FOR LICENSE RENEWAL, CONTROL NO.  
584598**

Dear Mr. Nonnenmacher:

This is in reference to your application dated August 12, 2014 requesting to renew Nuclear Regulatory Commission License No. 06-20581-01. In order to continue our review, we need the following additional information:

1. Your application does not contain the information needed to support your request for service provider licensed activities. Please resubmit your application using the guidance in NUREG-1556, Volume 18, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Service Provider Licenses." The checklist in Appendix C in NUREG-1556, Volume 18 contains procedures that are acceptable to the NRC and may be used to submit your response.
2. Your application did not provide an organization structure. Please provide a description of your organization structure and individuals responsible for ensuring day-to-day oversight of the radiation safety program.
3. Confirm that each sealed source/device combination is listed and approved in the Sealed Source and Device registry for the purpose intended.
4. Section 6 of your application dated August 12, 2014, indicates that licensed material is used for measurement of Charge Transfer Efficiency in a Charge Coupled Device. Please confirm that this activity is done as a commercial service for other entities or if this is a research and development project. If this is a research and development activity, please follow the guidance in NUREG-1556 Volume 7, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance about Academic, Research and Development, and Other Licenses of Limited Scope Including Gas Chromatographs and X-Ray Fluorescence Analyzers;" otherwise continue following NUREG-1556 Volume 18 for service providers.

5. Section 7 of your application dated August 12, 2014, only lists the Radiation Safety Officer (RSO) as the sole Authorized User (AU), but Section 10 of your Radiation Safety Standard WI BMS-0300-1029 Rev. B states that Authorized Users (plural) are specifically named in the license. The laboratory manager or the assistant RSO can be listed as AUs if they have the required training and experience. Also in the event of a NRC inspection, then the AUs can be called to act in the RSO's absence, as was the case during the last inspection.
6. Section 8.2 of your application dated August 12, 2014, provides a list of topics covered in your one hour training. The list is not as detailed as the suggested radiation safety topics in Appendix H of NUREG-1556 Volume 18. Please ensure that your training covers the proper use of protective equipment and decontamination of contaminated protection equipment, and a discussion on emergency procedures. You may provide the following statement:
  - a. "Before using licensed material, authorized users will receive the training described in Appendix H of NUREG-1556, Vol. 18, 'Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Service Provider Licenses,' dated November 2000."
  - OR
  - b. "A description of the training and experience for proposed authorized users."
7. Section 8 of your application dated August 12, 2014 discusses training of Authorized Users and Radiation Workers, but does not address ancillary personnel (e.g., housekeeping, security, personnel who man the control center at extension 5911, etc.). You may provide the statement:
  - a. "Before using licensed materials, ancillary personnel will have successfully completed the classroom training portion of the training course described in Appendix H of NUREG-1556, Vol. 18, 'Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Service Provider Licenses,' dated November 2000."
  - OR
  - b. "A description of the radiation safety training program, including topics covered, groups of workers, assessment of training, qualifications of instructors, and the method and frequency of training."
8. Section 9 of your application provides the room number to the laboratory where the radioactive source will be used. If the sealed source will be handled outside of a shielded container, please provide the following:
  - a. Submit a drawing or sketch of the proposed permanent facility identifying areas where radioactive materials, including radioactive wastes, will be used or stored;
  - b. Show in the drawings the relationship and distance between restricted areas and adjacent unrestricted areas;

- c. Specify in the drawings shielding materials (concrete, lead, etc.) and means for securing radioactive materials from unauthorized removal; and
  - d. Drawings, sketches, diagrams, etc. should indicate the scale or include dimensions on each drawing or sketch.
9. Section 2 of your Radiation Safety Standard WI BMS-0300-1029 Rev. B lists 10 CFR 19 twice. You should also reference 10 CFR Parts 20 and 30 in this section.
10. Section 7 of your Radiation Safety Standard WI BMS-0300-1029 Rev. B states that removal of radioactive material from the site is discussed in Section 19 of this Standard. But Section 19 states that the removed source will be in the custody of the RSO and not removed from the site. You may replace the word "site" in Section 7 with the word "laboratory" if this is a more accurate description.
11. Section 8.1 of your Radiation Safety Standard WI BMS-0300-1029 Rev. B requires the Radiation Worker to call 5911 immediately for any fire, explosion, or major accident and tell the control center that the accident involves radioactive materials. Please note that the RSO should also be called in the event of any emergency involving radioactive materials.
12. Section 8.2 of your Radiation Safety Standard WI BMS-0300-1029 Rev. B states that the Radiation Worker should call the Control Center at 5911 and the RSO immediately of any loss of or damage to a radioactive source, or any known or suspected overexposure of personnel. During your training sessions it is important to clearly indicate that a loss or damage of a source will be evident when reviewing the results of a leak test or an unusual higher than normal background dose rate (possibility due to a lack of shielding). Section 8.10.6 of NUREG-1556 Volume 18 requests that your emergency procedures include actions to be taken if a sealed source is ruptured, including actions to prevent the spread of contamination and minimize inhalation and ingestion of licensed materials and actions to obtain suitable radiation survey instruments. Please update your emergency procedures to address all likely scenarios.
13. Section 9 of your Radiation Safety Standard WI BMS-0300-1029 Rev. B has the acronym ALARA misspelled.
14. Your Radiation Safety Standard WI BMS-0300-1029 Rev. B does not state that you have developed and will maintain a written operating procedure. There is no description on how the Radiation Worker will handle the source. Please provide a description as to how the Radiation Worker will handle/use the radioactive source. NUREG-1556 Volume 18 requests the following:
  - a. A description of the equipment, techniques, and corresponding radiation safety procedures associated with providing services involving sealed sources as part of the radiation safety program.  
AND
  - b. Instructions for handling and using licensed materials.  
AND

- c. Instructions for using remote handling tools when handling sealed sources, except low-activity calibration sources.

15. Your application did not provide the survey instrument(s) you will use. Please provide:

- a. "A description of the instrumentation described in Section 8.10.2 of NUREG-1556, Vol. 18, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Service Provider Licenses," dated November 2000, that will be used to perform required surveys. We will use instruments that meet the radiation monitoring instrument specifications published in Appendix J of NUREG- 1556, Vol. 18, 'Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Service Provider Licenses,' dated November 2000.' We reserve the right to upgrade our survey instruments as necessary."

OR

- b. "A description of the instrumentation described in Section 8.10.2 of NUREG-1556, Vol. 18, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Service Provider Licenses," dated November 2000, that will be used to perform required surveys. "We will use instruments that meet the radiation monitoring instrument specifications published in Appendix J of NUREG- 1556, Vol. 18, 'Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Service Provider Licenses,' dated November 2000. Additionally, we will implement the model survey meter calibration program published in Appendix J of NUREG- 1556, Vol. 18, 'Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Service Provider Licenses,' dated November 2000. We reserve the right to upgrade our survey instruments as necessary."

OR

- c. A description of alternative equipment and/or procedures for ensuring that appropriate radiation monitoring equipment will be used during licensed activities and that proper calibration and calibration frequency of survey equipment will be performed. The statement, "We reserve the right to upgrade our survey instruments as necessary," should be added to the response.

16. Section 12.2 of your Radiation Safety Standard WI BMS-0300-1029 Rev. B does not address all the elements necessary for ordering and package receipt and opening. Please provide the following:

- a. "Ordering licensed material and package receipt and opening will follow the model procedures in Appendix K of NUREG- 1556, Vol. 18, 'Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Service Provider Licenses,' dated November 2000."

OR

- b. "Submit a description of procedure(s) for ordering licensed material and package receipt and opening."

17. Section 11 in your application and section 12.3 of your Radiation Safety Standard WI BMS-0300-1029 Rev. B describes source installation and removal, but states that only a licensed individual may perform this activity. It was our understanding that the RSO performs this activity. If so, please provide a written operating procedure for installing and removing the source.
18. Section 15.1 of your Radiation Safety Standard WI BMS-0300-1029 Rev. B states that a monthly gamma radiation survey will be performed in the laboratory and that this survey will be documented. But your Standard does not indicate that Radiation Workers will survey before, during, and after using the radioactive source. The surveys performed by Radiation Workers do not need to be documented but should be performed for their safety.
19. Section 15.2 of your Radiation Safety Standard WI BMS-0300-1029 Rev. B provides a description of your leak test process, but does not indicate if you will analyze the leak test or send it out to a licensed company. You may provide the following:
- a. "Leak tests, when required by the license, will be performed at intervals approved by NRC or an Agreement State and specified in the Sealed Source and Device Registration Sheet. Leak tests will be performed by an organization authorized by NRC or an Agreement State to provide leak testing services to other licensees or using a leak test kit supplied by an organization authorized by NRC or an Agreement State to provide leak test kits to other licensees and according to the kit supplier's instructions."
  - OR
  - b. "Leak testing will follow the model procedures in Appendix 0 of NUREG-1556, Vol. 18, 'Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Service Provider Licenses,' dated November 2000."
  - OR
  - c. "Leak testing procedures and analysis will be done by the applicant. Provide the information in supporting a request to perform leak testing. Appendix 0 of NUREG-1556, Vol. 18, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Service Provider Licenses," dated November 2000, may serve as guidance."
20. Section 17 of your Radiation Safety Standard WI BMS-0300-1029 Rev. B does not state that the dosimeters you will use are NVLAP approved. Section 8.10.4 of NUREG-1556 Volume 18 states: "Licensees may not permit any individual to provide services requiring dosimetry unless, at all times during the handling of these materials, each individual wears on the trunk of the body a NVLAP-approved personnel dosimetry sensitive to the type of radiation(s) to which the individual is exposed." Please confirm that the dosimeters will be NVLAP-approved or you may state the following:
- "We will have a prospective evaluation and determine that unmonitored individuals are not likely to receive, in one year, a radiation dose in excess of 10% of the allowable limits in 10 CFR Part 20, or we will monitor individuals in accordance with the criteria in the section entitled 'Occupational Dose' in NUREG- 1556, Vol. 18, 'Consolidated Guidance About Materials Licenses:

Program-Specific Guidance About Service Provider Licenses,' dated November 2000."

21. Section 17 of your Radiation Safety Standard WI BMS-0300-1029 Rev. B discusses notifications but does not include notifications for lost or stolen licensed material or a leaking source. This section is not needed for license renewal and may be removed. If you need to retain this section, please ensure that it addresses all likely scenarios.
22. It appears from your letter that a possible change of ownership (control) has occurred. The letterhead on the cover letter to your license renewal application, your email address, and a Google map search (and possibly the name on the side of your building or in the parking lot) indicate your company name as UTC Aerospace Systems. Licensees must provide full information and obtain NRC's **prior written consent** before transferring control of the license. Control of a license is in the hands of the person or persons who are empowered to decide when and how that license will be used. That control is to be found in the person or persons who, because of ownership or authority explicitly delegated by the owners, possess the power to determine corporate policy and thus the direction of the activities under the license. A transferee is an entity that proposes to purchase or otherwise gain control of an NRC-licensed operation. A transferor is an NRC licensee selling or otherwise giving up control of a licensed operation. Provide the following information concerning changes of control by the applicant (transferor and/or transferee, as appropriate). If any items are not applicable, so state.
  - a. Provide a complete description of the transaction (transfer of stocks or assets, or merger).
  - b. Indicate whether the name has changed and include the new name. Include the name and telephone number of a licensee contact who NRC may contact if more information is needed.
  - c. Describe any changes in personnel or duties that relate to the licensed program. Include training and experience for any new personnel.
  - d. Describe any changes in the organization, location, facilities, equipment or procedures that relate to the licensed program.
  - e. Describe the status of the surveillance program (surveys, wipe tests, quality control) at the present time and the expected status at the time that control is to be transferred.
  - f. Confirm that all records concerning the safe and effective decommissioning of the facility will be transferred to the transferee or to NRC, as appropriate. These records include documentation of surveys of ambient radiation levels and fixed and/or removable contamination, including methods and sensitivity.
  - g. Confirm that the transferee will abide by all constraints, conditions, requirements and commitments of the transferor or that the transferee will submit a complete description of the proposed licensed program.

- h. If your license requires financial assurance for decommissioning, you will need to address changes to financial assurance for name changes and/or change in ownership (control). If your company's name is changing and there is no change of ownership, you will need to amend your financial assurance instruments and supporting documents to address the change in name. If there has been a change of ownership (control), the transferee must submit new financial assurance in accordance with Chapter 4 to Volume 3 of NUREG-1757, "Consolidated NMSS Decommissioning Guidance."

NUREG-1556 Volume 15, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Changes of Control and About Bankruptcy Involving Byproduct, Source, or Special Nuclear Material Licenses" dated November 2000 and Regulatory Issue Summary 2014-06, "Regulatory Requirements for Transfer of Control (Change of Ownership) of Specific Materials Licenses" dated May 27, 2014, also provide additional guidance that may be helpful when developing your response.

23. Your application included your RSO's resume with **personally identifiable information** (PII). We have redacted this information and request that you do NOT provide PII to the NRC in the future. PII about employees or other individuals should not be submitted unless specifically requested by the NRC. Examples of PII are social security number, home address, home telephone number, date of birth, and radiation dose information. If PII is submitted, a cover letter should clearly state that the attached documents contain PII and the top of every page of a document that contains PII should be clearly marked as follows: "Privacy Act Information—Withhold Under 10 CFR 2.390." For further information, see Regulatory Issue Summary (RIS) 2007-04, "Personally Identifiable Information Submitted to the U.S. Nuclear Regulatory Commission," dated March 9, 2007, which can be found on the NRC's Generic Communications webpage under "Regulatory Issue Summaries": <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/>. Confirm that you will not provide PII in future correspondence unless specifically requested by the NRC.

The NRC's Safety Culture Policy Statement became effective in June 2011. While a policy statement and not a regulation, it sets forth the agency's *expectations* for individuals and organizations to establish and maintain a positive safety culture. You can access the policy statement and supporting material that may benefit your organization on NRC's safety culture Web site at <http://www.nrc.gov/about-nrc/safety-culture.html>. We strongly encourage you to review this material and adapt it to your particular needs in order to develop and maintain a positive safety culture as you engage in NRC-regulated activities.

Current NRC regulations and guidance are included on the NRC's website at [www.nrc.gov](http://www.nrc.gov); select **Nuclear Materials; Med, Ind, & Academic Uses**; then **Licensee Toolkits**, see our **toolkit index page**. You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-866-512-1800. The GPO is open from 8:00 a.m. to 5:30 p.m. EST, Monday through Friday (except Federal holidays).

A. Nonnenmacher

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We will continue our review upon receipt of this information. Please reply to my attention at the Region I Office and refer to Mail Control No. 584598 within 30 days from the date of this letter. If you have any technical questions regarding this deficiency letter, please call me at (610) 337-5251.

Your cooperation is appreciated.

Sincerely,

***Original signed by Kathy Modes***

Kathy Modes  
Senior Health Physicist  
Decommissioning and Technical Support  
Division of Nuclear Materials Safety

cc:  
Steven W. Peterson, Radiation Safety Officer



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**SUNSI Review Complete: KModes**

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