



# Radiation Safety Associates, Inc.

19 Pendleton Drive, PO Box 107 • Hebron, CT 06248

September 4, 2007

Steve Peterson  
EHS Manager  
Goodrich Corporation  
100 Wooster Heights Road  
Danbury, CT 06810-7589

Dear Mr. Peterson:

I visited your facility on Wednesday May 30, 2007 at your request to audit your radiation protection program. The following observations are based on the documents that I reviewed and the observations that I made of your program regarding NRC License 06-20581-01, Amendment 9. This is the final report of my findings.

You need to amend your license in three places. These are described in numbers 1, 6 and 14 below.

## **FINDINGS AND OBSERVATIONS**

1. The former RSO terminated her employment in March of 2006. Mike Toth has been acting as RSO since that time but you have not amended your license as of the date of this audit. An amendment request should be submitted as soon as possible naming Mike as the RSO of record. Submit his résumé to NRC along with his record of training.
2. This audit fulfills the requirement of 10 CFR 20.1101(c) that a licensee “periodically (at least annually) review the radiation protection program content and implementation.” There was no self-audit performed during calendar years 2005 or 2006. You should write a memo to file on this topic to document the fact that you are aware of the violation, and to state what effective corrective action you have taken to preclude this from happening in the future.

While you do have a form entitled “Monthly CCD Audit,” this audit does not fulfill the requirements of 20.1101(c).

3. Your Cd-109 source is nearing the end of its useful life. You have room on your license to order a new 10 mCi source. Your license prohibits you from replacing the source in your device (License Condition 15), so when the new source arrives call me and I will replace it. Also, in order to return the old source to the supplier requires a person who has been trained in the DOT requirements for shipping radioactive material. I could do this for you at the

same time I change the source. (Subsequent to this audit the new source was installed on July 3, 2007. It is in safe storage and will be returned to the supplier at a later date.)

4. The NRC Form 3 hanging in your lab is dated 9-1998. The most current edition of this form is dated 5-2005. You can print this form from NRC's web site ([www.nrc.gov/reading-rm/doc-collections/forms/form3\\_us.pdf](http://www.nrc.gov/reading-rm/doc-collections/forms/form3_us.pdf)).
5. Your training records are a bit thin. Your license application (which is part of your license requirements) states that annual retraining will be accomplished and have a duration of at least 30 minutes. I observed training records from 1993 (by Bolton and Galinek) and from 1996, 1997, 2004 and 2005, although no topics were listed for these last four training sessions. A properly documented training session would consist of the printed names and signatures (or initials) of the attendees, name and signature of the instructor, and a list of topics covered (or a copy of the handout material. I recommend that a brief training session be scheduled. I could do this in conjunction with the source change-out.
6. The radiation badging program was suspended in January 2006. This should be reinstated as soon as possible since your license application commits you to this program. I suggest that you request badge changes quarterly rather than monthly. When you amend your license, add this request to go from monthly badges to quarterly badges.
7. All of the portable radiation detectors you need to support the Cd-109 license were in calibration on the day of the audit. You also have additional radiation detectors designed to measure alpha radiation from the thorium operations that you run periodically. Since you possess these thorium compounds under a general license, there is no requirement to do any such monitoring, although it would still be a good idea from an ALARA standpoint. We could discuss this further if and when you begin more thorium work.
8. You are required to do an official inventory of the Cd-109 source every 6 months. A leak test is also required every 6 months. Leak test results could not be located for November 2005, May 2006, and November 2006. However a leak test was performed on January 11, 2006 which showed no leakage. I performed a leak test on the day of the audit (May 30, 2007) and these results will be forwarded to you for your records. I could train Mike Toth how to do the leak test. You should develop a record form to show that these requirements, including confirmation that the source is still in your possession, have been met every 6 months.
9. Your Federal and State license and registration fees are current.
10. You should confirm whether or not someone in your shipping department has had the requisite DOT training in radioactive material shipping. No radioactive material can be legally shipped unless the person signing the manifests has this training. We provide such a course if your shipping department needs the training.
11. The CCD Lab is posted properly with a "Caution Radioactive Material" warning sign. If you store the new source in your office, your office door or the door to a lockable cabinet must be similarly posted. The licensed material must be either locked securely or it has to be under constant surveillance by a qualified person.

12. We located three separate areas where records are stored. These records are important for license compliance but did not appear to be in good order. Some records need to be maintained for the life of your license. Other records may be disposed after a certain number of years. Refer to 10 CFR 20 Subpart L (20.2101 through 20.2110). Some attention needs to be given to these records.
13. The records of receiving and shipping your Cd-109 sources appear to be in good order.
14. There is confusion regarding radiation surveys in the CCD Lab. Your license application (Section 10.7) commits to monthly surveys but your Safety Manual (Section 17) requires a survey twice per year. Your "Monthly Audit" for the CCD Lab includes a survey, but this is not done consistently every month. I was able to locate two completed audit forms in 2004, seven in 2005 and only one in 2006. This needs to be corrected by license amendment. Since the source appears to be used infrequently you might consider a survey before and after each use, or at some other frequency that you can live with.

If you need assistance in writing the license amendment letter, with organization of records, or in any other way, please let me know.

Sincerely,

A handwritten signature in black ink, appearing to read "K. Paul Steinmeyer". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

K. Paul Steinmeyer, RRPT  
Senior Health Physicist