

Radioactive Materials

TIP OF THE BRANCH

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FORWARD THINKING –

It is hard to believe it has already been

three months since the last newsletter. As with all careers, ours is one of creating, building and maintaining relationships. To be successful in this endeavor we must have a strong foundation of trust.

We can all be successful if we can develop a level of trust between licensee and regulator that fosters open-minded communication. I want to point out our prevalent philosophy of “*Not Regulating to Death but Educating to Life.*” I view our role as well as our licensees’ roles as being stewards of the environment, the occupational worker, and the public. Licensees will be given every opportunity to comply with their license requirements, statutes, and the N.C. Regulations for Protection aGainst Radiation. For those who choose not to comply---see fines, administrative penalties, and license modification.

If you are reading this now, thank you for your time. I hope that you will find this update useful and informative. Please let us hear from you if we can be of assistance to you at any time. My e-mail is lee.cox@ncmail.net (the other inspectors are first.lastname@ncmail.net).

Lee Cox, Manager

DIVISION CHANGES - Most of you now know the North Carolina Division of Radiation Protection has been integrated into the North Carolina Division of Environmental Health, and is now officially titled “The North Carolina Radiation Protection Section.” Linda Sewall recently retired as the Division Director and Mike Kelly has been named Acting Director. We will miss Linda’s perspective and guidance, but are excited about having Mike Kelly lead us in such times of great opportunity. The Radioactive Materials Section is now “The Radioactive Materials Branch.” which consists of 7 Health Physicists (inspectors) and one Manager. Our newest Health Physicist, Cliff Harris, comes to us from the research side of the business, most recently with LabCorp of America: His background is in radiobiology and his experience includes teaching at Harvard University. You will see him in the field for the next six months being mentored by Sharn Jeffries. Please introduce yourself to him. Our telephone number is 919-571-4141:

Name	Title	Extension
W. Lee Cox, III	Branch Manager	250
Grant T. Mills	Health Physicist	206
James D. Albright	Health Physicist	210
Sharn M. Jeffries	Health Physicist	209
J. Marion Eaddy III	Health Physicist	253
Gerald A. Speight	Health Physicist	204
George L. Accattato	Health Physicist	203
Cliff R. Harris, Ph.D.	Health Physicist	248





LICENSING - all forms, publications and licensing guides are posted on www.drp.enr.state.nc.us **If you are reading this document—you have found the website.**

- ***New License Requests***, when accompanied with a complete license application, should be reviewed, processed, and issued by the Radiation Protection Section (RPS) within approximately 30 days provided the reviewer does not need additional information. License deliveries are then scheduled with the licensee.
- ***License Renewals***, when accompanied with a complete license renewal application should be reviewed, processed and re-issued by RPS within approximately 30 days provided the reviewer does not need additional information. Please note that it is the responsibility of the licensee to submit a complete renewal package to RPS **AT LEAST** 30 days prior to the license expiration date. RPS sends renewal notices and reminders to licensees as a courtesy.
- ***License Amendments*** - and License Requests require **AT LEAST** two weeks for review and processing before they can be issued by RPS. Please use the “Application for Amendment” form to submit license amendments to us. *We will try our best to process amendments more quickly than the two-week time frame, but please try and do your part in submitting requests two weeks before they are needed. To find out more about the status of your amendment, please contact Angela Woodcock at 919-571-4141 ext. 216. She will put you in contact with the health physicist handling your amendment.*

After you receive your license amendment, please read it to identify errors and omissions. Reviewing it also reminds you of the commitments and requirements outlined in the license.

- ***License Reviews*** - All N.C. Specific Licensees are required to perform **and** document an annual review of their radiation protection program (Rule .1603). Failure to perform an annual review is the most commonly cited violation found during our inspections.



SECURITY – Security is and will remain our focus of attention and should remain yours. We are continuously reminded how committed everyone is to ensuring the prevention of the willful misuse of radioactive material. As we see the security levels rise and fall continuously, it is easy to become complacent with our own programs. We as regulators and you as possessors of radioactive material cannot afford such complacency. With the continued emphasis on homeland security, it is imperative that all North Carolina Licensees perform security analyses of their radioactive material storage locations and transportation practices to ensure that their radioactive

material is secure and accounted for. It is also important that all distributors and manufacturers of radioactive material examine their procedures, including measures to verify that the individual(s) requesting radioactive materials are appropriately licensed to receive the material.

The federal government still predicts that a “dirty bomb” containing radioactive material may be deployed if terrorists successfully obtain a radioactive source or radioactive material. To access a complete fact sheet on dirty bombs, please see the NRC web site: <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/dirty-bombs.html>

FINES, ADMINISTRATIVE PENALTIES AND LICENSE MODIFICATION - RPS has at its discretion the use of penalties, license modification and increased inspection frequencies to address violations of the statutes or regulations. These may be initiated under the following circumstances:

- ▶ Theft, loss, misuse or abandonment of Radioactive Material
- ▶ Deliberate and willful misconduct
- ▶ Repeat violations
- ▶ Multiple violations involving health and safety



According to the NC General Statutes, RPS is allowed to issue administrative penalties of up to \$10,000 per day for each incident.

Loss of material continues to be an area that the Agency looks at very closely. There have been two significant fines collected in this area recently. Please insure that your program has adequate policies and procedures in place to keep your facility from falling into this category.

Wave of Change

We are continuously attempting to improve our process and are always open to your suggestions on areas that we may have overlooked or not addressed as yet. Listed below are some of the areas and processes we have identified – some with your help – and the changes we have made. As this list evolves, I will highlight (**bold**) any new changes that did not appear in the last newsletter and continue to include changes that were listed on the last newsletter for one issue.

- **Portable GL devices used in the detection of hazardous chemical agents, biological agents, or nuclear material may be received, possessed, transported, and used without first obtaining a specific license from the Agency by any State, County, or Municipal Law Enforcement, Fire Fighting, Emergency Response, or First Responder organization providing the following conditions are met:**
 1. **An application for a GL is submitted to the Agency on an Agency form and a GL is issued by the Agency. The applicant must submit a letter on departmental or organizational letterhead indicating that the device is for portable use during emergencies and/or for training for such emergencies.**

2. **The general licensee submits an annual physical inventory of the device(s) in their possession to the Agency. This annual physical inventory shall constitute the re-registration of all GL device(s) possessed by the General Licensee issued under this exception.**
 3. **The GL devices are leak tested, shutter tested (where applicable), and maintained in accordance with the manufacturer's manual or other instructions for that type of portable GL device.**
 4. **All individuals authorized to use the device meet the minimum training requirements to use the device specified by the manufacturer of that device. This training does not have to be documented, but individuals authorized to use the device must appear knowledgeable and competent using the device upon inspection by the Agency.**
- **We are allowing Iodine-125 GlinSite radiation therapy to be performed on selected outpatients. If you would like for us to consider this for your facility you may submit specific and detailed procedures in how you will support the request.**
 - **We are now allowing electronic signatures on written directives as long as the licensee can show that the user can maintain security over use of that method of signature.**
 - **Gamma camera QA/QC records will still be reviewed during Agency inspections but compliance issues arising from such inspections will be based on performance issues. The Agency will require the camera manufacturer recommendations to be followed at a minimum in licensing decisions.**
 - **The technical staff has completed their review of mobile nuclear medicine in North Carolina. This review and the resulting recommendations were based on the following: (1) performance-based inspection findings, (2) guidance and input from the NRC and other Agreement States, (3) feedback from licensees, and (4) technical staff observations and experience. The proposed changes are designed to DECREASE ADMINISTRATIVE burdens while maintaining safety. The proposed changes DO NOT DECREASE protection of occupational workers, the public or the environment.**

We are in the process of amending our licensing guidance to incorporate these changes. Once the new licensing guide has been completed, it will be added to our website (www.ncradiation.net) The **NEW symbol will be beside the document. Additionally, the Branch will be administratively amending all existing mobile nuclear medicine licenses to incorporate the changes. Please review your license CAREFULLY!! Make any changes in your existing Radiation Protection Program as required.**

- **As our Down Eastern North Carolinian licensees are struggling to recover from the aftermath of Hurricane Isabel we have modified our inspection schedule in this area so as not to impact your recovery efforts. This modified inspection schedule for normal audits will continue until December 1, 2003 to allow those efforts to progress without interruption from our Agency. Be assured that we will be attentive to and investigate emergencies, allegations or incidents as "business as usual."**

- **Identifying and meeting all of our customer's expectations is our number one goal. If I or a member of my staff is falling short in meeting your expectations please contact me directly (lee.cox@ncmail.net). I can promise you that I will address your concerns and any shortcomings on behalf of the Agency.**
- I must admit that I was a little overly ambitious in committing to a bimonthly newsletter as the past months have been a flurry of activity. You will now notice that the newsletter is now a quarterly undertaking. We have added several "QA steps" into the process to comply with DENR policies on publications, which take added time. I will admit that this is a good thing and we will all benefit from another set of trained eyes reviewing the newsletter before it's published!
- We are now accepting a "Board of Nuclear Cardiology" certificate as evidence of sufficient training and experience to add authorized users to licenses for cardiology studies. We are also still accepting the "old" method of preceptor documentation as well. We recognized that the old 10 CFR 35 did not specifically address cardiology studies and felt like this was a good way to address that.
- As promised in the last newsletter, we have just revised our inspection frequencies effective immediately. These frequencies may be found on our website at <http://www.drp.enr.state.nc.us/RMS/rmsinspfreq.htm>. Please review the list to see how you may be affected and forward me any comments that you may have.
- We no longer require dose calibrators for diagnostic veterinary use of radioactive material. For therapeutic use of material we will still require the use of a dose calibrator, because the results may affect the release of the patients.
- Another area of veterinary use of radioactive materials we changed concerns release of cats that have undergone radioiodine therapy. The new release criteria is based upon the dose to an individual member of the public. We have based this change on guidance documents from, and discussions with, the NRC. We are now allowing release of cats based upon a total dose of 100 mrem/yr to an individual member of the public. License amendment requests should be accompanied by (1) methodology and calculations which demonstrate that the 100 mrem/yr dose limit is not exceeded and the dose is ALARA and (2) release instructions (including care instructions) to be given to the owners. RPS will review the license requests on a case-by-case basis.



Basic Recognition and Awareness Training (B.R.A.T.) coming to a neighborhood near you soon! B.R.A.T. is presented by Grant Mills to first responders and others that may see a need for the course, which offers information on how commonly used radioactive materials are transported around the State. Please contact him for more information. B.R.A.T. has already begun to demonstrate its effectiveness on first responders' reactions to radiological events in the field. Recently, a first responder in Chapel Hill who had received BRAT training very appropriately controlled the scene of a portable gauge incident in the Meadowmont neighborhood. We are starting to see the "real world" benefits of such needed training and I am convinced that these benefits will only continue to grow!

We are currently looking at the following area:

- We have taken the first steps in trying to beef up our database to capture the number and types of violations cited against licensees. This requires that we have standard items of noncompliance (violations) tied to severity levels. We are all working to create these standard violations from our regulations. This is something that I expect to continue for the remainder of the year. I will keep you updated on its progress. Once completed, this product will allow us to keep you informed of what is going on around your regulatory community.