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Newsletter



NEW ENGLAND CHAPTER OF THE HEALTH PHYSICS SOCIETY

**Volume XXXVII No. 4
January 2001**

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January Meeting Announcement

Date: Thursday, January 25, 2001

Location: Papa Razzi Restaurant
16 Washington Street, Wellesley, MA

Time: 5:30 p.m. Registration/Cash Bar
6:00 p.m. Dinner
7:00 p.m. Guest Speaker

Topic: Bio-safety for the Radiation Safety Professional

Speaker: **Elizabeth A. Gilman**
Biological Safety Officer, Boston University

Menu: Italian Style Buffet

Cost: \$20.00 Members, \$30.00 Guests, and \$10.00 Students

DIRECTIONS TO PAPA RAZZI RESTAURANT

From 128 North or South take the Route 16 West exit. Follow 16 West for ~ 1/4 mile and the restaurant is on the left. Free parking is available across the street in the former Grossman's parking lot.

Registration Deadline is January 18, 2001.

Cancellations must be made before January 22, or you are responsible for payment.

Name: _____ Phone: _____

Mail registration (with check to NECHPS) to:
Ninni Jacob
Box 1914
164 Angell Street
Providence, RI 02912

OR Register online at www.nechps.org

OR call Ninni at 401 863 1738

USEPA Finalizes Drinking Water Regulations

The U.S. Environmental Protection Agency (USEPA) published the final rule pertaining to National Primary Drinking Water Regulations (NPDWRs) for radionuclides in community water systems [Federal Register (65 FR 76707-76753)]. The Agency has finally made its decision on maximum contaminant level goals (MCLGs), maximum contaminant levels (MCLs), and monitoring, reporting, and public notification requirements for radionuclides. Although published just today, it does not become "effective" until December 8, 2003.

For those of you who have not been following the progress of these regulations, the proposed rule was published in 1991. It included monitoring requirements for combined radium-226 and radium-228, gross alpha particle radioactivity, and beta particle and photon radioactivity. In the final rule, the current MCLs (enforceable regulatory limits) for combined radium-226/228 (5 picocuries per liter) and gross alpha particle radioactivity (15 picocuries per liter) have been retained. So have the MCLs for beta particle and photon radioactivity (i.e., based upon a 4 millirem per year maximum dose scenario). However, in the final rule, the USEPA states that they will be revisiting these levels at some time in the in the near future.

Oh, one more thing . . . in the final rule, all MCLGs have been left at zero (yes, we really mean "zero"!) to satisfy the linear, no-threshold (LNT) cancer risk model for radionuclides that the USEPA seems to be taking as fact. In other words, only MCLGs of zero are acceptable since, according to the USEPA, any radiation dose, no matter how small, has an associated risk. While we are disappointed, we are not surprised to see that little in the way of progressive thinking went on in regard to this hotly-contested since the date of publication of the proposed rule.

So what else is new? Our cursory review of the final rule reveals that, in order to satisfy the Safe Drinking Water Act (SDWA), the rule now includes requirements for uranium. In case you hadn't noticed, this radionuclide was previously unregulated. Now, however, its MCLG is zero and its MCL has been set at 30 micrograms/liter, a level that the USEPA considers to be protective of the kidney from toxic effects. Other additions/updates include discussions of (1) the possibility of regulating and measuring radium-224 and polonium-210 in water, (2) best available technologies (BAT) for radionuclides, (3) analytical methods, including the use of Inductively Coupled Plasma Mass Spectrometry method (ICP-

MS) for uranium, (4) locations and frequencies of water system testing, and (5) economic analyses and impacts of the final rule. But there is more. . . much more.

We advise you to read this important final rule at you earliest convenience. We caution you to not only look hard at its content, but at its applicability to your operational parameters. Even if you are not in the business of providing drinking water to members of the public, please do not lose sight of the fact that USEPA regulations often form the basis for interpreting the results of environmental surveys, for setting clean-up standards for decontamination and decommissioning (D&D), and for resolving issues of "how clean is clean". Even though the final rule does not become effective until December of 2003, we believe that it will quickly become the standard against which any drinking water issue - including risk assessments, pathways analyses, and litigation-related matter - will be measured.

Meeting Calendar 2001

TENTATIVE MEETING SCHEDULE 2001

January 25, 2001 –

Topic: Biosafety for the Radiation Safety Professional

Guest Speaker: Elizabeth Gilman

**Papa Razzi Restaurant,
Wellesley, MA**

**March 14, 2001 – Joint meeting
with AAPM
TBD**

**June 5, 2001 --Annual Meeting
TBD**

NRC News and Updates

William A. Lorenzen

Radiation Workers to Receive Financial Compensation

In Executive Order 13179 (65 FR 77487, dated December 11, 2000), President Clinton established a program for compensating people who worked in the U.S. Nuclear weapons program and subsequently contracted diseases as a result of exposure to toxic materials. One of the elements of this program is the establishment of an Advisory Board on Radiation and Health. The Advisory Board will consist of no more than 20 members to be appointed by the President, and include affected workers and their representatives, as well as representatives from scientific and medical communities.

The Advisory Board will assist the Secretary of Health and Human Services in developing guidelines for determining whether an individual with cancer sustained that cancer in the performance of his/her duty at a Department of Energy facility or an atomic weapons employer facility. The Board will also advise the Secretary of Health and Human Services on the scientific validity and quality of dose reconstruction efforts performed for this Program. In addition, they are tasked with determining whether there is a class of employees at any Department of Energy facility who were exposed to radiation, but for whom it is not feasible to estimate their radiation dose, and whether there is a reasonable likelihood that such radiation dose may have endangered the health of members of the class.

As you can imagine, the efforts of the Advisory Board and the Secretary of Health and Human Services will have broad-reaching implications for radioactive materials licensees, law firms, and regulatory agencies. This is because the question of what level of exposure to radiation, radioactivity, and other substances might cause disease is not limited to just nuclear weapons workers. The protocols established as part of the compensation process have the potential to impact federal and state exposure standards, worker health and safety programs, and the likelihood of litigation when workers perceive an impact they feel is associated with their exposure.

A General License Isn't So General Any More!

In the culmination of a rulemaking process that has been underway since 1998, the USNRC published final regulations on the registration of certain generally licensed industrial devices containing byproduct material in the December 18, 2000 edition of the Federal Register: (65 FR 79161). In essence, the new rule is intended to allow the

USNRC to improve tracking of generally licensed devices, and to ensure general licensees are aware of and understand the requirements associated with the possession of devices containing byproduct material.

The new regulations include explicit provisions for a registration process, including the imposition of registration fees. This departure from tradition applies to a limited fraction of general licensees (e.g., users of exit signs are excluded). The final rule also modifies the reporting, record keeping, and labeling requirements for specific licensees who distribute these generally licensed devices.

In a related matter (65 FR 79139, dated December 18, 2000), the USNRC amended its "General Statement of Policy and Procedure for NRC Enforcement Actions," (NUREG-1600) to establish separate base civil penalty amounts for loss, abandonment, or improper transfer or disposal of sealed sources and devices containing USNRC-licensed material. The base civil penalty amount is being set at roughly equivalent to three times the cost of proper disposal. The hope is that this will provide for sufficient deterrence and an economic incentive for licensees to expend the necessary resources to ensure compliance. Both this and the generally licensed devices rule change become effective on February 16, 2001.

Both of these new regulations will be a challenge to implement. General licensees have historically been responsible for only the minimum of requirements, largely following manufacturer's instructions for operation, and routine maintenance/testing only. Although the new requirements don't add significant new responsibilities, since they largely require that an individual within the company be responsible for keeping track of the devices, they do present a totally new regulatory scheme for the licensees. For some general licensees, these new requirements may encourage them to get rid of impacted devices that are in their inventory. Others will likely spend more time than is warranted to establish the required programs. Whatever the response, the manufacturers and distributors of these devices are going to be receiving a lot of phone calls from their customers.

NRC News Continued next page

NRC News continued from previous page

Human Subject Research Demands Attention

There have been two recent announcements calling for tighter controls on the use of radioactive material in research involving human subjects. In the December 19, 2000 edition of the Federal Register (65 FR 79369), the Department of Health and Human Services issued a draft report from their National Bioethics Advisory Committee (available at www.bioethics.gov) that addresses the basic purpose, structure, and implementation of research oversight. The NBAC recommends broad, strategic changes to the oversight system. This report is not intended to be a rewrite of federal regulations but instead to provide the guidance, direction, and justification for change.

In a separate action, the U. S. Nuclear Regulatory Commission (USNRC) issued Information Notice 00-19, "Implementation of Human Use Research Protocols involving NRC Regulated Materials". (A copy of this notice is available in the Reference Library Section of the USNRC Website). In this notice, the USNRC emphasizes that researchers must be licensed to perform the particular research protocol to be used, and must comply with all license and regulatory requirements in implementing the protocol. Compliance is necessary even if the research is being performed under the direction of the Food and Drug Administration, or if a "blind" study is being performed.

USNRC to Increase its Regulatory Authority?

In 1997, while voting on issues involving Medical Oversight, the USNRC indicated its willingness to seek expansion of its statutory authority beyond Atomic Energy Act material. They wanted to include naturally occurring and accelerator-produced radioactive material (NARM) under their regulatory umbrella in order to make the national medical use program more uniform and consistent. At that time, the Commission did not pursue such legislation so as not to divert resources from the 10 CFR Part 35, "Medical Use of Byproduct Material," rulemaking initiative already underway. Now that the 10 CFR 35 activity is concluding, the USNRC is reassessing whether such legislation over NARM is a worthy goal, especially in light of the comments received on the proposed Part 35 indicating that several States currently have no regulatory structure specific to NARM.

The Commission has approved the drafting of two

potential legislative proposals by the Office of the General Counsel (OGC), in coordination with the USNRC staff. The first proposal would extend US NRC's statutory authority in the Atomic Energy Act (AEA) for regulating radioactive material to include accelerator-produced material when used for medical purposes. The second proposal would extend the US NRC's statutory authority to regulate radioactive material, to include accelerator-produced material, in all applications except "machine-produced" radiation (e.g., linear accelerators, X-ray units). The US NRC staff plans to consult with the States, including the Conference of Radiation Control Program Directors and the National Materials Working Group, on these proposals and seek their advice on which, if any, should be submitted to Congress.

The USNRC staff, in consultation with OGC, is also evaluating other areas in which the US NRC's jurisdiction might appropriately be adjusted so as to ensure radioactive materials and other sources of ionizing radiation presenting similar risks are treated similarly (e.g., technologically-enhanced naturally-occurring material, or "TENORM"). The Commission wants the potential areas identified so that it can decide whether to draft legislation and enter into a consultation process with the States and other Federal agencies similar to that for the accelerator-produced material described above.

The fact that the US NRC is looking into expanding its regulatory authority in these areas is not surprising. The agency has been concerned for some time that their regulatory role has been shrinking as more states achieve "Agreement State" status. Thus, in order to keep their often-expensive programs intact, they need additional sources of revenue.

The US NRC's forays into these areas may also have some beneficial effects, the most important being standardization of regulatory requirements for naturally-occurring and accelerator-produced materials throughout the country. Nevertheless, there will be numerous issues to address, such as how the US NRC's proposal to assume responsibility for NARM will interface with already existing programs at both the state and the federal level (i.e., the roles that the EPA and the FDA are currently fulfilling). While we don't know how these issues will play out, we are looking forward to watching the process unfold. Those of you that have never experienced the US NRC's jurisdiction in the past (e.g., oil companies, phosphogypsum facilities, metallurgical firms, zirconium chemical plants, etc.) should keep a watchful eye on this federal agency's exploits.

Thanks to our Affiliates...

Vendor Night was a great success!

Ninni Jacob

The vendor Night and Holiday Social was a great success! It was held on December 7 at Albert's Restaurant in Stoughton, MA. There were 64 people in attendance, including vendor representatives. Twenty of our affiliates were represented. They came from all over the country, including New York, Pennsylvania, and as far away as Florida, Ohio and Tennessee. Wayne Norwood from J.L. Shepherd also attended the meeting and participated fully in the activities.

The evening started off with the vendor displays. This was a unique opportunity for the membership to mingle with the vendors, who offered a wide range of products and services. The affiliates were gracious enough to sponsor a raffle. Each vendor offered one or more gifts, and this year each member could win only one gift. If their name was drawn more than once, they only got to keep the first gift. So most of the members ended up with a gift. There were a variety of gifts given away including, bed and breakfast get-away, cash, wine, dosimeters, CD player, gift certificates, jackets, golf clubs, etc.

Two of our affiliates have changed their company names. Canberra was recently purchased by Cogema, a French nuclear services company. "Saint Gobain" purchased Bicon, and Jim Monde gave us a lesson in pronouncing that name correctly.

It was great to see a lot of student members, and all of them ended up winning prizes too. It was a pleasure to see our emeritus members like Ken Skrable (with his dimpled chads) and Charlie Killian.

The buffet was a great spread as usual. Albert's Restaurant always provides good food and plenty of it.

On behalf of the NECHPS I would like to thank our affiliate members for a fun and successful meeting. I hope they will get lots of business from the New England Chapter. I would also like to thank Ron Thurlow, Affiliate Chair for all of his efforts in organizing this meeting (and doing it on the night shift!), and the Andersons and Carol Yanofsky for helping with the arrangements at Albert's.

I wish all of you a safe and happy holiday season.

List of affiliates who attended:

AEA Technology QSA, Inc.
Atlantic Nuclear
APTEC-NRC
Bartlett Nuclear
Canberra (recently purchased by Cogema)
Duke Engineering
Frham Safety
ICN Pharmaceuticals, Inc.
Innovision
GTS Duratek
NSSI
Packard Instrument Company
Perkin Elmer New Life Sciences
Perma-Fix Environmental Services
Philotechnics Ltd
Radiation Safety & Control Services
RADeCO LLC
Radiac Research Corp.
Saint-Gobain Crystals & Detectors (formerly
Bicon)

How You Can Attend A Chapter Meeting For Free

Just submit an article for publication in the Newsletter! A free ticket to attend an evening NECHPS meeting will be issued to Chapter members who submit articles of interest to the membership. The deadline for submission for publication in the February Newsletter is February

The ticket is valid for one year from the date of issue and is not valid for the Annual Meeting.

Send all articles to the Editor:
 tara.bandini@rcp.dph.state.ma.us.

Is This You?

With the Chapter's increasing dependence on e-mail to communicate with its members, it is important that member information be as up-to-date as possible. Changing and updating your information is as easy as going to **www.nechps.org** and entering in the new data. If you move, change jobs, or switch e-mail accounts please let us know.

Following is an e-mail listing of invalid addresses. If you recognize one of the addresses as your own, please visit the website and make the appropriate corrections.

brahmavar@mrcnrth1.bms.org
bartlett@pcix.com
ercummin@dukeengineering.com
tom@ehs.uconn.edu
swiniarski@delphi.com
cwhite9@ibm.net
dlandauer@earthlink.net
ccm@acad.umass.edu
dgoodwin@ebi-net.com
mark.walsh_f@boston.va.gov
steven.alford@dfci.harvard.edu
jab_ci05@ports.navy.mil
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mau61@aol.com
wirwin@mit.edu
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rmp@bicron.com
oriorden@med_mail.bu.edu
hodgdon@sprynet

For the Fashion Conscious

The New England Chapter is selling T-shirts and golf shirts with the yellow and magenta NECHPS logo. They are available at all Chapter meetings as well as by mail; proceeds directly fund the Student Awards. Contact Bob Gallagher at **robert.gallagher@state.ma.us** or call 617.727.6214.

For more information see **www.nechps.org**.

Reminder to Students – Travel Funds Available

Students who submit a paper for presentation at the National HPS Annual meeting are eligible for consideration of a travel award funded by the New England Chapter.

The travel award will go to a student whose paper has been accepted for presentation at the National HPS meeting, which is in Cleveland next June. The student will present the paper both at the NECHPS annual meeting and at the National meeting. NECHPS will contribute \$500 to the travel costs of the student.

For more information contact Tom O'Connell, Awards Committee Chairman, at 617.983.6891 or e-mail toconnel@world.std.com.

Membership Dues

Members are reminded that overdue dues should be paid as soon as possible to assure inclusion in the 2001 Member Handbook. Dues status is printed on the mailing label of the Newsletter.

Remember that the current By-Laws state that dues are \$10.00 per year, however, a payment of \$40.00 will get a member 5 years of Chapter membership.

Please send your payment to Robert L. Gallagher, Treasurer, at the MA Radiation Control Program, 174 Portland St. 5th Floor, Boston, MA 02114. Dues are always accepted and payable at the Chapter's technical meetings.

EMPLOYMENT OPPORTUNITY

Radiation Safety and Control Services, Inc.

91 Portsmouth Avenue
Stratham, NH 03885

Contact: Fred Straccia
e-mail: fpstraccia@radsafety.com
Phone: 1-800-525-8339
Fax: 603-778-6879

RSCS, Inc. has an opportunity for a Health Physicist to provide consulting and technical support to a wide variety of customers in industrial, medical, and research environments. RSCS, Inc. was established to provide high quality health physics services to users of radioactive material and radiation producing devices. The Health Physicist position is full time and based in our Stratham, New Hampshire facility with local and occasional overnight travel required.

TO APPLY: Mail, fax or e-mail a resume and cover letter to the above

DUTIES to include:

- General Health Physics consulting
- Radiation Protection Program (RPP) development and implementation
- Regulatory compliance assistance, radioactive material license applications, amendment applications, facility close-out surveys
- Health Physics and RPP audits
- Decontamination and decommissioning projects
- Radiation safety instructor for RSCS 40 hour Radiation Safety Officer (RSO) and 24 hour Advanced Radiation Safety Courses
- On-site radiation safety training for clients
- Radiation detection instrument calibration
- Radioactive sealed source leak testing and other analytical laboratory analyses
- Radon testing and mitigation activities and customer support

REQUIREMENTS: The successful applicant should have a bachelor's degree in health physics or a related field, and experience in the field of health physics. Excellent written and communication skills, the ability to perform multiple tasks, and work both independently and as a team member are required. Knowledge of 10 CFR 20 and/or Agreement State regulations, radioactive material licensing requirements, health physics instrumentation, and proficiency in MS Office applications are highly desirable. RSCS offers a competitive salary and benefits program. Salary will be commensurate with education and experience.

EMPLOYMENT OPPORTUNITY

AEA Technology QSA, Inc.

40 North Avenue
Burlington, MA 01803

Position: Technical Sales Specialist

We currently have an opening for a Technical Sales Specialist at our Burlington, MA facility.

Musts:

- B.S. Degree – preferably with physics/radiation physics, with sound technical background
- Good computer skills
- Enthusiastic team player with good telephone manner

Preferreds:

- Experience with the calibration of radiation measurement equipment
- Health Physics/Medical Physics background
- Customer Service Experience

Area of Responsibility:

To act as a principle member of the Isotrak Sales Team by providing comprehensive “front-line” technical sales information and outstanding customer service. To pro-actively seek out and win new sales opportunities.

If you are interested in this position please forward your resume and salary requirements to:

Melissa Fortuna
Human Resources Manager
AEA Technology QSA, Inc.
40 North Avenue
Burlington, MA 01803
Phone: (781) 272-2000, x 201
Fax: (781) 229-2270
e-mail: melissa.fortuna@aeat.com

Please visit our website: www.aeat-qa.com