



Conference of Radiation Control Program Directors, Inc.

NEWSBRIEF

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A Partnership Dedicated to Radiation Protection December 2013

Message from Chairperson Joe Klinger

In late October, I was honored to participate in an **International Conference on the Safety and Security of Radioactive Sources: Maintaining Continuous Global Control of Sources throughout Their Life Cycle**, in Abu Dhabi, United Arab Emirates (UAE). The conference was hosted graciously by the UAE Federal Authority for Nuclear Regulation. In light of the recent stolen teletherapy source in Mexico and the international attention covering this event, the conference was very timely. **I presented a poster session on CRCPD Programs for Orphan and Disused Radioactive Material Sources.** Approximately, 400 health physicists from over 100 countries participated and it was a truly informative exchange of information. In general, it was reassuring to learn of the aggressive radioactive materials safety and security measures that are being pursued throughout the world, even in the most underdeveloped countries. The International Atomic Energy Agency (IAEA),

Nuclear Regulatory Commission (NRC), State Department and U.S. Department of Energy (DOE) spend millions of dollars and dedicate extensive staff resources on this effort and the presentations revealed that



numerous orphaned radioactive sources have been located and are now safely controlled and secured by the various regulatory authorities. IAEA works with the various countries (states) and encourages them to commit to the IAEA Code of Conduct and related radiation standards and controls. Upon request, IAEA performs assist visits (comprised of a team of experienced radiation control personnel from established

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Message from Chairperson *(continued)*

International Conference on the Safety and Security of Radioactive Sources

Highlights

Approximately, 400 health physicists from over 100 countries.

Presentations and posters can be reviewed at IAEA GNSSN.

programs) to the various countries to provide technical assistance to enhance their program. There is still much work to do as problems continue to arise (e.g., a disused source in long-term storage in India event described below) through the inadvertent handling of these sources. **It was very satisfying to have international representatives visit the poster area and express interest in the CRCPD Orphan Source Program (funded by NRC) and the Source Collection and Threat Reduction (SCATR), funded by DOE programs.** All of the presentations and posters can be reviewed at the IAEA Global Security Safety and Security Network.

One of the most interesting presentations was in Session 7, by Mr. Rajoo Kumar, Head of the Atomic Energy Regulatory Board in India. A review of that presentation is worth the time. Mr. Kumar expressed particular interest in the CRCPD programs as they want to preclude any more problems with disused sources in long-term storage in India, and so do we. Why is this important to us in the United States? If you recall the Co-60 contaminated PETCO pet bowls and the Bed Bath and Beyond Co-60 contaminated Kleenex boxes we had to deal with from India, a possible source of that contamination became evident in Mr. Kumar's presentation. It was a large Gamma Cell 220 category I AECL dry source storage irradiator obtained by a New Delhi university in 1969. The source originally contained 16 pencils, 7 slugs/pencil with a total activity of approximately 4,000 Curies. **The source unit had been in long term storage, and, as we all know what can happen to disused sources in long-term storage, it ended up at a scrap yard in Mayapuri, New Delhi, India.** As a result, sadly, 7 individuals received very high doses and one of the victims died from the exposure. The presentation goes on to describe the event in detail, but as you can see it was, as we presumed, **a scrap yard incident that resulted in contaminated products throughout the world and sadly responsible for a death and serious injuries.**

I want to also express my sincere gratitude to Mike Snee, CRCPD Chair-Elect, for serving in my stead at the CRCPD Board Meeting in Columbus in November. Mike did a superb job and the Board meeting was very successful. Illinois was hit with deadly tornadoes on November 17, and I was unable to participate in Columbus as we were involved in response and recovery operations associated with these storms.

Message from Chairperson *(continued)*

Thanks also for everyone's hard work on various CRCPD working groups, task forces and committees that benefit radiation control programs throughout the world.

Our organization continues to grow as **we have grown from 790 to 863 since June 2013!**

Finally, disaster operations always remind us of how fortunate we are when we are personally spared from the agony and misery that the victims of these events endure. It puts our daily stresses in proper perspective and makes us realize just how lucky we are.

I hope you and your families all have a safe and wonderful holiday season and look forward to the challenges and continued successes in 2014!

Sincerely, Joe Klinger



Greetings from Your Executive Director



Ruth E. McBurney, CHP

Thomas Jefferson once said:

“It is wonderful how much may be done, if we are always doing.”

Based on the actions taken at the last Board of Directors meeting in November, **CRCPD as an organization is continuing in the pursuit of getting things done.** This has been a busy year for CRCPD, as evidenced by the reports from the working groups and the feedback provided on our Annual Conference and training for 2013. As we go into 2014, the opportunities to take advantage of CRCPD programs and to serve on working groups abound. **More doing ahead to get things done!**

Volunteers Needed

During the Board meeting, **four new working groups were created in response to the need for new uniform guidance or procedures.** These working groups are described in a separate article, and are all in need of able and willing volunteers to serve on them.

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Executive Director

Greetings *(continued)*

RRVC

Funding Opportunity

Up to 10 new sub-awards available

See http://www.crcpd.org/RRVC/rvc_rfp.aspx.

SCATR

Success

5358 Sources

130.228 Ci

Collected as of
November 1, 2013

Radiation Response Volunteer Corps: New Sub-Award Funds Available

A new year of funding for up to 10 new sub-awardees to recruit and train radiation professionals and incorporate them into existing health volunteer response programs for population monitoring and shelter assistance in the event of a radiological emergency has begun. **For more information about this funding opportunity**, check the CRCPD website at http://www.crcpd.org/RRVC/rvc_rfp.aspx.

SCATR Update

From its beginning to November 1, 2013, **the Source Collection and Threat Reduction (SCATR) program has collected 5358 sources containing 130.228 Ci**. Now that all states have a disposal option again, CRCPD and DOE are making a concerted effort to provide assistance to the 36 un-sited states, and DOE is offering financial assistance to pay for disposals of unwanted sources in those states. The current collection incorporates 139 facilities in 28 states. As we have recently re-opened registration for participation, we anticipate the number of disposed, sealed sources to increase and the number of spent industrial radiography sources disposed to increase by approximately 10,000 to 20,000 by the close of the project.

CRCPD requests the assistance of all of its partners to publicize the SCATR program's efforts. Although the program is voluntary, information from regulatory agencies provides a means for the regulated community to hear about the program and could elicit a larger number of facilities registering their unwanted sources. CRCPD has cards available for distribution to licensees about the program and the DOE's Off-site Source Recovery Program (OSRP) website for registration of unwanted sources for participation in the SCATR disposal program. For more information on the program and how you can help get the word out to licensees, contact Russ Meyer, <RMeyer@crcpd.org> or Bill House <BHouse@crcpd.org> at CRCPD. Information on the SCATR program can also be found on the CRCPD website at <http://www.crcpd.org/StateServices/SCATR.aspx>.

Training Plans for the National Conference

The Technical Program Planning Committee met in November to start the planning process for the National Conference on Radiation Control, which will be held in May 2014 in Atlanta, Georgia. The Committee has made a concerted effort to include a lot of training opportunities on a variety of topics in conjunction with the meeting.

Executive Director

Greetings *(continued)*

Training Plans 2014 National Conference

Initial Training
Planning
Possibilities

Mammography Training
Fluoroscopy Training
Turbo FRMAC
Radiation Emergency
Medicine

Options for
Topical Training Sessions

CT Dose Reporting
Radiation Public Speaking

Training Plans for the National Conference - continued

Initial training that is in the planning stages includes:

Mammography Training – two days with CEUs for mammography inspectors, and technologists

Fluoroscopy Training—one day training sponsored by American Association of Physicists in Medicine (AAPM)

Turbo FRMAC—one day training by Federal Radiological Monitoring and Assessment Center (DOE/FRMAC)

Radiation Emergency Medicine—one day training by Radiation Emergency Assistance Center/ Training Site (REAC/TS)

In addition, two options have been provided to date for the Topical Training session for Monday afternoon, May 19:

CT Dose Reporting - sponsored by AAPM

Radiation Public Speaking—presented by the Environmental Protection Agency (EPA)

As we approach the new year, I also want to wish all of you a wonderful holiday season, and a happy, healthy and productive new year in 2014!



Volunteers Needed for CRCPD Working Groups

The Board has approved the formation of several new CRCPD working groups, several of which are still in need of members, advisors, and resource persons. Charges and information on each group are given in this issue of the *Newsbrief*.

NEW Healing Arts Working Groups

H-43 Task Force on Consistency of Application of Release Criteria for Iodine Therapy

H-44 Task Force on CT Cone Beam

NEW General Council Working Group

G-71 Task Force on Licensing Criteria for Source Recovery and Packaging Operations

In addition to the new working groups, as people have retired or moved to other positions outside state government, vacancies for several of our existing working groups need to be filled by interested and involved state members. These are as follows:

Environmental Nuclear Council

E-34 Committee for Unwanted Radioactive Material

E-40 Liaison to the Institute of Scrap Recycling Industries (ISRI)

E-5 Committee on Radioactive Waste Management

Suggested State Regulations Working Groups

SR-M Licensing Requirements for Land Disposal of Radioactive Waste

SR-P Licensee Contingency Planning

SR-AA Lasers

SR-BB Tanning

If you are interested in serving on any of the working groups described above as a chair, member, or advisor, contact the Council Chair for the appropriate council in which the working group falls:

Healing Arts Council - Lisa Bruedigan, Chairperson, email at Lisa.Bruedigan@dshs.state.tx.us

General Council - Jared Thompson, Chairperson, email at Jared.Thompson@arkansas.gov

Environmental Nuclear Council - Mike Snee, Chairperson, email at michael.snee@odh.ohio.gov

Suggested State Regulations Council - David Allard, Chairperson, email at djallard@pa.gov

We hope that you will consider serving on one of these important working groups to help CRCPD in serving the needs of state radiation control programs.

Healing Arts

New CRCPD Working Groups Need Members, Advisors, and Resource Persons

H-43 Task Force on Consistency of Application of Release Criteria for Iodine Therapy

Charges:

1. By July 1, 2014, review current NRC and Agreement State guidance relative to the release of patients following iodine therapy. (SSRCR G.40)
2. Identify discrepancies in the application of guidance to patients upon release.
3. Make recommendations for improvements in training of practitioners, in the guidance provided to patients, and in patient assessment to enhance consistency among licensees in the application of this rule.

H-44 Task Force on CT Cone Beam

Charges:

1. Develop and publish a “white paper” that would be helpful to radiation regulatory programs on diagnostic X-ray Cone Beam Computed Tomography (CBCT) used in dental and medical facilities that describes the general principal of how the units work, quality control tests and shielding requirements.
2. Develop a protocol for state radiation control staff to use during inspections of CBCT units.
3. Provide written guidance on operator certification for CBCT units.
4. Complete the project by March 1, 2015.



**New CRCPD Working Group Needs
Members, Advisors, and Resource Persons**

General Council

**G-71 Task Force on Licensing Criteria
for Source Recovery and Packaging Operations**

This task force has been established to develop criteria for issuance or amendment of radioactive material licenses to recover high activity sources from devices and prepare for shipment for disposal, primarily in Type B shipping containers (not device maintenance or resourcing).

The task force will also develop training criteria for persons who plan to be engaged in dismantling devices and recovering sources for shipment in Type B containers.

Charges for this working group have not been finalized but are under development.



Environmental Nuclear Council

Vacancies for Existing Working Groups

As people have retired or moved to other positions outside state government, vacancies for several of CRCPD existing working groups need to be filled by interested and involved state members.

E-34 Committee for Unwanted Radioactive Material

The primary charge of this committee is to provide guidance on the implementation and operations of both the Unwanted and Orphan Radioactive Materials Program and the Source Collection and Threat Reduction Program (SCATR). As the SCATR program has expanded, it is even more important to provide state input into these programs.

E-40 Liaison to the Institute of Scrap Recycling Industries (ISRI)

The Liaison to ISRI serves as a channel for communicating concerns and interests shared by the two organizations. The Chair of the E-34 Committee usually also serves as the liaison to ISRI, but the two positions do not necessarily go together.

E-5 Committee on Radioactive Waste Management

The primary charge of this committee is to provide a state technical review function for state regulatory guidance documents needed to implement 10 CFR 61 radioactive waste management laws and regulations involving state radiation regulatory authorities.



Vacancies for Existing Working Groups

SSRCRs

Suggested State Regulations Working Groups

- SR-M Licensing Requirements for Land Disposal of Radioactive Waste needs a new chair.
- SR-P Licensee Contingency Planning needs a new chair.
- SR-AA Lasers recently has been reactivated.
- SR-BB Tanning recently has been reactivated.

*Thank you for considering serving on any of the works groups.
The Council Chairs look forward to hearing from you!*



NRC Public Meeting on Draft Revision to NUREG-0654

By: Ken Evans, Chairperson,
HS/ER-5 Committee on
Emergency Response Planning

NUREG -0654

Draft Public Meeting

Purpose of Meeting

Information
exchange

Receive comment
on the process

Public Meeting on the Draft Revision to NUREG-0654

On October 29-31, 2013, Patrick Mulligan and I attended the Nuclear Regulatory Commission (NRC) Public Meeting on the draft revision to NUREG-0654 in Rockville, Maryland.

The Level 3 Public Meeting was moderated by staff from the NRC. The meeting opened with an opportunity for both NRC and the Federal Emergency Management Agency (FEMA) senior staff to provide welcoming remarks and comments on the purpose of the meeting. During the introduction and on numerous occasions throughout the meeting, **NRC Moderator stressed that the purpose of the meeting was for the exchange of information and ideas on the revision of the document.** It was clearly stated on several occasions that neither NRC nor FEMA was accepting comments on a draft document. The draft document with revised planning standards circulated for discussion at the meeting was nothing more than an initial attempt to capture the thoughts and ideas of the writing team. Before any of the planning standards were discussed, the **NRC stated they were not looking for comments as much as how to do the process. This was contradicted several times later in the first day when it was stated that our comments will have a profound effect on where the document is headed.** While Pat Mulligan and I had a hard time believing that a detailed draft of over 400 pages was not just some rough drafts put on paper, we left being more convinced that this was truly the case. In subsequent conversations with Bob Kahler of the NRC and Tim Greten of FEMA over lunch, **it became clear that NRC and FEMA management had not reviewed this draft to NUREG-0654 and were using the stakeholders to provide the initial feedback.**

The first day of the meeting consisted of presentations summarizing planning standards D, F, G, N, A, E, H, and O. Following a brief summary of each planning standard by the joint NRC/FEMA Writing Team Leads, the participants had an opportunity to provide comments or ask questions. Meeting participants included interested stakeholders attending in person, on a teleconference line or by webinar. It was during the direct exchanges with the writing team leaders that we learned the most about the thought process and reasoning underlying the draft planning standard revisions. Prior to the meeting, we were not sure about the process FEMA and the NRC were going to follow to solicit stakeholder input.

By the end of the first day, **it was clear that the overwhelming majority of the participants felt that the document was too prescriptive, too long and had information that belonged in reference materials.**

NRC Public Meeting on Draft Revision to NUREG-0654

continued

NUREG -0654 Draft Public Meeting

The overwhelming majority of the participants felt that the document was too prescriptive, too long and had information that belonged in reference materials.

FEMA stated that they would include explanations for the criteria of NUREG-0654 in the Radiological Emergency Preparedness (REP) Manual. The NRC stated that they are working in parallel on producing a companion document to provide detailed explanations of the NUREG-0654 criteria for the industry. Both FEMA and NRC seemed agreeable to relocating the more detailed explanations and some of the new criteria in the draft to NUREG-0654 in these other documents

The most significant point made during the first day from the NRC was that Revision 2 to NUREG-0654 was only guidance and that licensees may continue to use NUREG-0654 Revision 1 as an acceptable means to comply with 10 CFR 50.47b as long as that is what their Emergency Plan is based on. On the second day this was clarified some by pointing out that as far as the NRC is concerned the licensee's emergency plan is their licensing basis and NUREG-0654 is guidance or an acceptable means of meeting the emergency planning regulations. Once the licensee chooses to revise their Emergency Plan it will be evaluated and inspected to NUREG-0654 Revision 2. I asked a question as to how FEMA would treat Revision 2 to NUREG-0654. In other words would FEMA allow the use of NUREG-0654 Revision 1 after Revision 2 is approved? FEMA replied they believed NUREG-0654 Revision 1 would be retired. I asked a follow-up question related to the 44 CFR 350 approvals of state plans. **I wanted to ensure that when NUREG-0654 is revised it will not require new approval of State emergency plans. FEMA agreed that this is true, yet there is nothing in writing or on record to support that statement at this time.**

The remaining sessions of the meeting were conducted with representatives from the four writing teams present to explain the rationale for why the criteria for each planning standard were revised. Most of the actual time was taken up with questions and comments on the criteria from the participants. Because each team has its own unique personality and background there is considerable variations in the rationale for why certain items were included. **One positive observation was that most of the teams seemed open to receiving the feedback given.** Another observation was that Pat Mulligan and I provided the majority of the comments related to Offsite Response Organizations (ORO). In fact, **we were the only members present from offsite agencies.**

One of the recurring themes was that this revision to NUREG-0654 has become a catch all for any items that the writers want to capture. For example, if one of the writer's personal experiences involves

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NRC Public Meeting on Draft Revision to NUREG-0654

continued

NUREG -0654 Draft Public Meeting

NRC and FEMA are unclear at this time whether there will be another opportunity to provide feedback before a draft version of NUREG-0654 is officially issued for comment.

a certain exercise deficiency, it may lead to a new criterion being developed. Writers are also attempting to include supplemental material from other generic guidance documents into the NUREG document to capture interim changes. In addition, the document attempts to back fit changes made to the REP Program Manual so that they can have a basis. **The real danger in this method is that the document becomes diluted with too many criteria that are beyond the original scope of the sixteen planning standards. Additionally, the level of detail used to outline the criterion is far beyond the scope of the intent and purpose of this document.** It is important to realize that the regulations are the sixteen planning standards and while NUREG-0654 provides guidance on meeting these planning standards, **it is not supposed to be a training document for new emergency planners as was suggested several times during the three day meeting.**

The final day of the meeting resulted in a lively discussion of planning standards C, K, L, and P. The exchanges between the writing team and the audience were extremely productive.

On the third day of the meeting, Pat Mulligan and I were offered the opportunity to take a tour of the new NRC Operations Center. It had just opened and is a very impressive facility. Full staffing is 83 and there is additional space to bring in more staff as the accident may require specialized expertise.

In summary, both Pat Mulligan and I contributed a significant number of comments and recommendations to the writing teams and for the most part the comments were received favorably. **We intend to follow up with additional written comments that were compiled from the feedback received from the members and advisors to the HS/ER-5 Committee. A draft of the written comments will be provided to the CRCPD Board for review prior to submittal to the writing teams.** The writing teams are to reconvene before the end of the year to produce a draft for NRC and FEMA management review. The NRC and FEMA are unclear at this time whether there will be another opportunity to provide feedback before a draft version of NUREG-0654 is officially issued for comment. **The current schedule is to issue this version in about one year.** One final observation is that both Pat Mulligan and I expected there to be more input from the OROs at this meeting. **The fact that no other offsite agencies were in attendance made the comments of the CRCPD critical to the success of the meeting.**



Imaging Gently

Do You Know What Image Gently Is and What It Has Been Doing?

by Mary Ann Spohrer (IL)

I hope most of you by now are familiar with what Image Gently is but for those you may have forgotten or who have not thought about it for a while, what you need to know is that it is about medical imaging and kids.

The Image Gently Campaign goal is to change practice by increasing awareness of the opportunities to promote radiation protection in the imaging of children.

Their strategy is a simple one – to provide information and **FREE** educational materials to every member of the care team. The campaign was launched in January 2008 with the focus on Pediatric CT Imaging. **Available on their website are universal pediatric CT protocols that have been downloaded over 34,000 times.** Since the initial launch of pediatric CT information additional programs have been launched addressing:

- pediatric fluoroscopy imaging;
- interventional radiography;
- pediatric nuclear medicine imaging; and
- “Back to the Basics” with a focus on digital radiography.

Imaging Gently

In addition to the pediatric focused information there has also been a spin off campaign known as **Imaging Wisely** which is directed at adult imaging. Information specific to each of these campaigns as well as some information on dental imaging is available on the Image Gently website that can be found simply by Googling “Image Gently.” Information specific to the adult side of things can be found at www.ImageWisely.org. You may want to visit the website(s) and see exactly what is there. **You may even want to spread the news to registrants and licensees so that they become aware of the wealth of information that is available to them for FREE, including American Society of Radiologic Technologists (ASRT) approved Continuing Medical Education (CME) credit for fluoroscopy information.**

Imaging Gently

continued

The **Image Gently ALARA CT Summit: How to Use New CT Technologies for Children** will be held February 21-22, 2014 at the Hyatt Regency Orlando International Airport, Orlando, Florida.

The target audience for this Summit includes:

- medical imaging physicists;
- CT technologists;
- and radiologists from both pediatric and adult facilities.

Imaging Gently Summit

Information relative to CT issues includes:

- radiation protection for children;
- dose evidence and risk estimates;
- strategies to optimize CT for children;
- and approaches for protocol development.

The course has been approved by 12.5 AMA PRA Category 1 Credit as well as Category A credit hours. It has also been approved by 12.82 MPCEC credits.

Complete information and registration is available through Image Gently.



COMING SOON!

The CRCPD *Directory of Personnel Responsible for Radiological Health Programs* will be available in January 2014 with all the latest updates and changes.

In December membership greatly increased--so look for the new members in the upcoming directory!



CRCPD Board of Directors

<i>Board position</i>	<i>Name</i>	<i>State</i>	<i>Work Phone</i>	<i>E-mail address</i>
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The Newsbrief is written to address the needs of all radiation control program personnel. Readers are encouraged to contribute newsworthy or informative items for the Newsbrief, with neither charges nor stipends for the items that are selected. News of state radiation control programs is especially sought.

Articles should be sent to CRCPD, Attn: Sue Smith, 1030 Burlington Lane, Suite 4B, Frankfort, KY 40601 (fax: 502/227-7862; email: <ssmith@crcpd.org>. The deadline for contributions is the 15th of the month before an issue is to be published.

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