



**CNSC/Industrial Radiography Working Group Meeting
February 15, 2012
CNSC Southern Regional Office, Mississauga, Ontario
(Video conference link with the CNSC Calgary Office)**

Attendees:

Mississauga

André Régimbald (CNSC)
Peter Fundarek (CNSC)
Henry Rabski (CNSC)
Alan Brady (TISI)
Sylvain Faille (CNSC)
Jonathan Schmidt (CNSC)
Doug Hanna (SGS)

Calgary via Video Conference

Tom Levey (Acuren)
Rick DeBruyn (Aztec)
Peter Larkin (CNSC)
Chris Spencer (Spencer Manufacturing)
Patricia McNeil (Atech)

Absent:

Karen Mayer (CNSC)

Chair of the Meeting

Henry Rabski

Co-Chair

Alan Brady

1) Review of Minutes from Previous Meeting

1. Henry Rabski indicated that the revised terms of reference for the working group has been updated and are out for translation into French. Upon translation they will be posted on the CNSC website.
2. The nominations for two new industry representatives to the Working Group have been completed (See Item 2). The working group sincerely acknowledges former members François Rodier and Joel Kish for their contributions to the group. In an upcoming publication of the DNSR news letter the new members will be introduced and old members will be acknowledged for their contributions.
3. A lengthy discussion was held surrounding the information on radiography to be developed for the CNSC website. It was determined that a sub-committee is to be struck to determine what types of communication tools are needed and what information should be included in the tools. The project lead for the sub-committee will be Michael Grace. Team members will include Nathalie Ringuette, Peter Larkin and Alan Brady. The team is to consider whether there is a need to have multiple communication approaches including:
 - a. A brochure for the general public
 - b. A poster for clients that contract radiography work
 - c. CNSC website section on radiography
 - d. A Radiation Safety handbook for radiographers and RSOs
4. There has yet been no success to arrange for a radiography equipment manufacturer to attend a future working group meeting. Henry Rabski indicated that he has attempted to contact two separate people at Best Theratronics with no response.



Tom Levey indicated that he had attended a meeting where QSA Global was engaging the industry to see how the next version of the 880 exposure device could be designed to include their needs. He suggested that QSA be invited to provide the manufacturers perspective.

Action: Tom Levey to contact QSA Global regarding a presentation at the Annual meeting with a focus on Radiation Safety Aspects of future exposure devices designs.

5. It was suggested that the action item 11(WGM) 6.0 be revised as the process for adjusting workers doses in the National Dose Registry (NDR) is already known.

Peter Fundarek confirmed that if a regulatory limit were to be exceeded it would be reported to the CNSC from the NDR. The CNSC's Radiation and Health Sciences Division would then investigate the dose by following-up with the licensee. Once the investigation was completed if it is determine that the dose is non-personal then the licensee is responsible to request a dose change request by submitting the required form. It is understood that like a medical record this request requires the permission of the person who may have received the dose. If the permission is not granted then the dose will not be changed in the NDR.

Tom Levey indicated that the industry was concerned that there may be some large non-personal doses which are not being removed from the NDR. These doses could significantly impact the average annual dose statistics for the radiography sector.

6. All action items arising from the October 2011 Meeting were reviewed. Minutes of last meeting were officially adopted with the correction identified above.

2) New members to the Working Group

André Régimbald formally welcomed Doug Hanna, (SGS) and Patricia MacNeil, (Atech) as the two new industry representatives to the working group. André shared with the new members that the goal of the group is to engage the whole radiography industry including those not a part of CIRSA in improving safety in the workplace.

It was discussed that it would be beneficial to invite an operator to attend one of the meetings. The field level expertise and opinions of a CEDO would be beneficial to the group.

Action: Industry representatives on the working group are encouraged to take turns inviting an operator to a future meeting.



3) CSA-CEDO Project Review

Work on the development of a CSA standard continues for exposure device operators in Canada to replace the current G 227. A job task analysis workshop was held in late September. The working group which is made up of representatives from the industry identified the key tasks associated with performing radiography and classified them into six areas. The classification was validated by an on line survey performed in December 2011 where CEDO's and other stakeholders reviewed the proposed classification of tasks.

The Scheme Committee held a teleconference call on January 24, 2012 and reviewed the results of the survey. In addition they supported the recommendation by CSA to initiate the development of the examination based on the validated task analysis breakdown. A working group for item writing has been proposed to meet in April or May to develop the exam content. Members of the working group were encouraged to identify potential candidates for this working group meeting.

Work will continue on the standard over the coming months. Once the CSA document is approved by the scheme committee, the document will be published for public comment. The expectations are that the new standard will include a pre-requisite math exam, a maximum number of re-writes of the exam, a practical exam, and an expiry and re-certification requirement likely every 5 years. A general discussion on the development of the standard occurred.

4) CNSC Regulatory Review

Action Levels

Henry Rabski shared with the working group a review that CNSC staff had completed on Action Levels used by industrial radiography companies in Canada. The information showed that the level and period for an Action Level vary significantly. For example all radiographers have an annual Action Level but its value significantly ranges from 2 to 20 mSv. It appears that every company is setting different limits, depending on their company work profile and clients they service. Based on the information reported to the CNSC 58% of licensees have an annual Action Level that is double what they have reported for their maximum dose.

A discussion was held on how this information could be shared with the industry. It was suggested that perhaps the CNSC could provide some guidance on how to develop radiography Action Levels that would provide more detail. This may be something which could be presented at the annual meeting.

Activity of Sources Used In Radiography Cameras

Henry Rabski gave a second presentation on the data the CNSC has in its Sealed Source Tracking System on the maximum activity of sources used in radiography cameras. The majority of sources fall within 50-80% of a camera's maximum activity. The data shows



that the most used exposure device is the Sentinel 880 Delta.

A discussion was held surrounding whether there was an opportunity to limit the activity allowed in an exposure device in order to help reduce dose exposures. All agreed that limiting the activity would be in line with keeping doses ALARA. CNSC staff noted that these devices have been certified for a certain maximum activity and that based on the operational doses received by the average radiographer the industry continues to operate below regulatory limits. Imposing a limit may bring into questions of how the limit was chosen (Is it arbitrary?) and how the limit will be applied (fairness).

Action: Industry to look into this matter further to determine if a case to lower the maximum activity of sources for exposure devices can be made. If a case can be brought forward then a future subcommittee may be formed to review and make a recommendation.

5) Low Energy Industrial Accelerators

Kavita Murthy, Director of Accelerators and Class II Facilities Division provided the group with a summary of the recent policy change at the CNSC with respect to accelerators. As of November 2011 the CNSC acknowledged that all accelerators which operate above 1MeV fall into its mandate. By December 2013 all of these devices will be under a CNSC licence.

While the majority of these accelerators are used in hospitals and research labs there are new industrial uses, such as the examining of cargo containers, which will fall under this policy change. The purpose of this presentation is to ask if the industry members of the working group know of any equipment which will be included and whether they have received the letter sent to all licensees regarding this change.

The feedback from the working group was that at least three of the licensees represented around the tables did not receive the letters sent to explain this change. No company represented around the table currently uses one of these devices but they were aware of a few used in the industry. Alan Brady indicated that he could scan the letter and provide it to all working group members and also pass it on to the list of CIRSA members.

Kavita indicated that the regulatory requirements for these accelerators are found in the Class II Nuclear Facilities and Prescribed Equipment Regulations. The regulations specify a difference between operating and servicing. So if a manufacturer or distributor also services the device they will require a servicing licence.

6) Device Certification Presentation

Sylvain Faille, Director of the Transport Licensing and Strategic Support Division, completed a presentation on the certification process of exposure devices.

Questions arise surrounding how *RD-352 Design Testing and Performance of Exposure Devices* largely refers to the *ISO Standard 3339:2004 Radiation protection – Apparatus*



for industrial gamma radiography – Specifications for performance, design and tests.

This is a concern to some licensees as the Pneumata Ray exposure device may not be able to meet this standard for quality control of the transport package during manufacturing and will therefore not be recertified.

Sylvain indicated that although the Regulatory Document refers to the standard, the document itself is guidance only.

7) Preparation for the Annual Meeting

The arrangements for this year's annual meeting were discussed. It was agreed that the Leduc, Alberta location was a success last year for the western Canada meeting and should be used again for this year. The CNSC headquarter's office on Slater Street in Ottawa will also be once again used for the eastern Canada meeting.

Tentative dates for the meeting were discussed. The Western meeting will be scheduled for either May 8th, 9th or 10th. The Eastern meeting will be either May 23rd or 24th.

The participants brainstormed ideas for the upcoming meeting including the following items:

1. Equipment manufacturer presentation from QSA Global
2. CSA-CEDO Project update (Dan Sullivan)
3. Update on Financial Guarantees (Peter Fundarek)
4. Dose Changes to the National Dosimetry Registry (Tom Levey)
5. Advancement in truck Alarms (Rick DeBruyn) (Henry to speak to CNSC security regarding this agenda item)
6. New Application Guide (Peter Fundarek)
7. Compliance Performance Update (Henry Rabski)
8. Device Certification (Sylvain Faille)
9. Presentation on Recent Events – SGS Over Exposure (Doug Hanna), High Level Source Retrieval (western Canada licensee to be contacted)
10. Update on Incidents 2011 report
11. Designated Officer process - André Régimbald
12. Decertification – Chuck McDermott
13. Action levels - TBD

Action: Annual Meeting for 2012: Leduc & Ottawa. Agenda to be prepared.

8) Other Business

- a) Peter Fundarek shared that the new licensing guide is available on the CNSC's website and ready for use by all licensees.
- b) Financial Guarantee Meeting with the Commission has been postponed. There is a working group which will be formed with the portable gauge industry. The protocol for establishing this working group will be posted on the CNSC's external website. If there is sufficient interest from across the radiography



- industry to have a similar working group this could be something proposed to the CNSC. Peter clarified that any mitigation measures proposed would be outside of the scope of an acceptable FG.
- c) Clarification was provided regarding a letter which was sent out to licensees regarding DRDs which may not respond adequately at high dose rates. The CNSC laboratory has undertaken a study to test DRDs to see if there are any deficiencies in their response. Results should be available to share with the industry during the annual meeting.
 - d) It was noted that a recent order was issued to an EDO directly and not the licensee. Henry indicated that this could be the case that orders are issued to individuals. It all depends on the situation the Inspector finds during the inspection.
 - e) Tom Levey shared with the group a recent meeting he attended at the IAEA in 2011. They are working on a radiography database that companies can use to compare their performance against others to see how they are doing. This database will be populated on a voluntary basis. The privacy of the info contained in the database is to be considered.

Next Meeting of Radiography Working Group is proposed to take place in September or October 2012.

The meeting ended at 4:30 pm.



The following are the actions that are arising from the January 2012 Working Group Meeting held in Mississauga.

Radiography Working Group - ACTION LIST			
RWG Item #	Description	Assigned Person(s)	Status or Due Date
	Communications		
11(WGM) 1.0	Planning for Annual Meetings 2012 in Leduc and Ottawa.	H. Rabski	On-going
11(WGM) 3.0	Add information on radiography to CNSC Website	H. Rabski	Open
	Subcommittee identified Item 1.3 of minutes	H. Rabski	
12(WGM) 1.0	Invitation to QSA Global to participate in 2012 Annual Meetings	A. Brady/H. Rabski	Open



Radiography Working Group - ACTION LIST			
RWG Item #	Description	Assigned Person(s)	Status or Due Date
	Compliance		
11(WGM) 8.0	Review of activity level of sources used in performing Radiography and conduct a literature survey of best practices. Presented during January meeting	H. Rabski	Closed
12(WGM) 2.0	Case for Limiting Source Strength in Radiography Cameras	T. Levey	Open