

**CNSC/ Industrial Radiography Working Group Meeting**  
**November 20, 2018**  
**CSNC Ottawa Laurier Office 410 Laurier Ave West**  
**Ottawa, ON**

**Attendees:**

|   |  |
|---|--|
| C. Moses (CNSC)                                     | A. Bouchard (CNSC)                     |
| S. Faille (CNSC)                                    | K. Mayer (CNSC)                        |
| L. Simoneau (CNSC)                                  | A. Brady (TISI)                        |
| J. Sigetich (CNSC)                                  | P. Larkin (CNSC) – via videoconference |
| P. MacNeil (A-Tech) via videoconference             |  |
| B. Bizzarri (NDT Cloud) observer via teleconference |  |
| C. Auzenne (QSA Global) via teleconference          |  |
| T. Levey (Acuren) via videoconference               |  |

**Chair of the Meeting:** K. Mayer  
**Co-Chair:** A. Brady

K. Mayer opened the meeting at 10:20 am and we experienced a few technical difficulties. C. Moses was not able to attend the opening of the meeting, two new CNSC working group members were introduced to the rest of the working group. In 2018, DNSR underwent a management change and as such S. Faille is now the new Director of Nuclear Substances and Radiation Devices and has replaced P. Fundarek as a working group member. Similarly, A. Bouchard is now the new Director of Operations Inspection Group and has replaced H. Rabski as a working group member.

The agenda was adopted as proposed.

**Review/Adoption of Previous Minutes**

Minutes from the last meeting (February 05, 2018) were emailed to all members prior to the meeting. Some minor changes were proposed by J. Sigetich and discussed during the meeting. The consensus was that the minutes can be amended to incorporate these changes. All members agreed that there was no need to re-circulate.

The action items were reviewed and updated accordingly.

C. Moses put forth motion to adopt the minutes with the proposed changes; the motion was confirmed by T. Levey.

**Membership Discussion and Terms of Reference**

There was good discussion on new members and what the working group may need. There is a need to ensure that there is enough licensees at the table and if there is sufficient manufacturer support. A comment was made as to whether there should be more than one manufacturer. C.

Auzenne added to the discussion that he enjoys being a part of the working group and that he holds a position for manufacturer, however, he has no issue with another manufacturer joining and that he wanted it to be clear that QSA has no monopoly that the industry has chosen QSA equipment. After discussion, the group agreed that to keep the manufacturer position status quo for the time being. If another manufacturer shows interest, they could be invited to an annual meeting for a presentation or even to sit as an observer at a future IRWG meeting.

More discussion took place on the criteria and numbers; it was felt that there should be a minimum of 4 licensees on the IRWG. It was decided that the following wording should be added to the ToRs. **“Membership is restricted to stakeholders of the industrial radiography industry with a minimum of four who are in the employment of any company regulated by the CNSC.”**

The criteria for selection will not be added to the ToRs. For any new members, we will need a statement of commitment and maybe even from their employer to ensure that they will have the time to dedicate as a member of the IRWG. Future members will be asked to present to the group how they can effect change and what they can offer to contribute to safety and the IR industry and working group.

There was a discussion of B.Bizzarri’s current situation and whether he will be able to stay on as a member. B. Bizzarri stated that being a member of the IRWG has been a very rewarding experience and he would very much like to stay on. He says it has given him the opportunity to have his voice heard and to effect change. In his role as a consultant, it helps him to make licensee aware of the regulatory requirements. He is able to get the message out to the industry and how safety can be achieved. He feels it is a great opportunity to disseminate information to others.

A fist of five vote was taken by the group for his reinstatement to the group. The consensus was that he is a valuable member and should remain as a member of the IRWG.

More discussion took place on a training company joining the IRWG, the consensus is to keep it this way for now, however, there is much value added to have a trainer’s input at the table, every effort will be made to invite trainers to give presentations. There is a need to obtain feedback on the interaction between trainers and CEDOs as well as have the metrics to see how the numbers look.

A comment was made that trainers are one aspect for the licensee however, there obligations are much broader as a licensee. K. Mayer suggested that a survey to the training groups to gather information before the Spring meetings would be beneficial.

**Action – all IRWG members to provide questions for trainers to Karen for early March so that we can set up a survey to be sent out by end of March 2019.**

**Action item – K. Mayer to update the ToRs accordingly with the new paragraph.**

### **Review of Action List**

The action list was reviewed and updated accordingly.

#### **15WGM2.5 Reach out to Licensees (Syncrude and Suncor) to see if interest in presentation at annual meeting.**

To date, there has been no success in contacting a client to have them come to the table to discuss much less present at an annual meeting. It would be very beneficial to have an Oil and Gas client at the meeting. This item will be kept open for both CNSC and Industry.

The right audience has to be targeted and possibly leverage occupational H&S groups as there continue to be production pressures on IR companies by clients.

A Bouchard had a lot of input on this subject, essentially we have to find a way to target or reach out to fab shops, pulp and paper mills, pipelines, etc, across Canada.

Which conferences can we attend or training organizations where they tend to be.

A Brady will reach out in the East to see if he can find a contact and get a response from the client in Sarnia, they have not responded to the CNSC.

B. Bizzarri stated that we have to take a top down approach so that it becomes a requirement to work on sites and get true buy in from the clients.

P. Macneil added that the end result is to have all contract Oil & Gas companies all on the same page.

T. Levey said that the safety professionals are really our best opportunity.

**Action** – A Bouchard will look into gathering data and info with a technical trainee.

**Action** – All IRWG members try to come up with a list of potential contacts to give to K. Mayer so that we can approach them before the 2019 annual meetings.

#### **16WGM1.1 Invite potential IRWG member to attend next working group meeting**

K. Mayer and L. Simoneau will invite Éric Pouliot of Mistras Services Inc. (QC – Eastern) to the next meeting and if he is still interested. A Brady suggested that Eric would be a good candidate and supported the invitation from industry.

**Action** – K. Mayer will invite E. Pouliot to the February 2019 meeting.

**16WGM2.2 Provide an assessment of whether CIRSA can review large trainers programs for pre-qualification at next meeting.**

This item will be deferred to the February 2019 meeting for more discussion.

The action list was updated accordingly.

**QSA Update – C. Auzenne**

C. Auzenne gave a small presentation about customers sending in equipment for servicing to competitors and stated that in some cases incorrect screws have been used for the lock assemblies.

In the presentation, the first picture depicts the screws that are supplied by QSA with the camera. The second picture depicts the non-compliance screws purchased from a supply company.

The problem is that the screws have undergone a different heat-treating process (different alloys). They were wrongly attached; locktite was used and it resulted in the running of the nuts on the projector. This is something that QSA Global has definitely seen in the past due to customers using non-OEM parts. This is considered a type B violation by the USNRC and is also a violation in Canada.

NUREG-1631 (USNRC) was developed in the 1990s to place a 5-year working life on drive cables.

All connectors have lot numbers (which are laser etched with the date on all new drive cables).

In the last year or so, the crimping process was changed so that the etching remains legible and does not affect the wear.

The drive cables can last much longer, this will help QSA customers to keep up on the lifespan of their cables. This is very good for traceability.

P. MacNeil asked whether there would be a change in the manufacturers' requirement to enforce the 5-year time frame.

The response was that QSA suppliers can put a new tip on the drive cable with an etched number. The date and lot number can be engraved on the connector. B. Bizzarri mentioned that this is not the current practice that IRSS is following. C. Auzenne reiterated that they should be following this process.

The information is to be used as appropriate since there is no regulatory requirement for the 5-year lifespan in Canada.

The new method will give a better indication of the lot number and date. Feedback is that they seem to be holding up well.

T. Levey brought forward an incident where another licensee contacted him for his opinion. It was a source disconnect. T. Levey discussed the incident with QSA Global for awareness. The group iterated a need to have a forum for the CNSC to communicate source disconnects to Industry.

The incident seems to lean towards the drive cable and possible poor maintenance.

The drive cable connector is still intact but the drive cable broke behind the connector which sounds like a drive cable issue.

The incident was reported and there is question about the thoroughness of the investigation.

C. Auzenne mentioned that in any situation, QSA Global will perform an analysis on all equipment. The customer simply needs to return the components for evaluation and inspection. QSA will carry out a very thorough investigation to see what may have caused the cable break.

T. Levey and C. Auzenne both suggested to quarantine the sealed source assembly and asked if it was OEM parts – if not OEM parts, this could contribute to the root cause.

A discussion took place and the consensus was that all potential /failed equipment should be investigated. C. Moses added that all disconnect incidents and /or near misses are good learning opportunities; lessons can be learned by all (CNSC and Industry). QSA added that a service bulletin, similar to disconnect failures would be published to increase awareness and protect others.

The CNSC continues to search for the right vehicle for this communication as well as how to reach disengaged licensees. A.Brady stated a very good point that one cannot lead a horse to water.

CIRSA bulletin – people stopped reporting and sharing information for fear of being blamed or finger pointing.

The DNSR newsletter continues to be a means of communicating events.

It was also discussed how applying the requirements that are found in the Safety Culture document are critical items to help promote a safety conscious work environment.

REGDOC-2.1.2 Appendix C contains tables with respect to maturity and safety model. It is a useful tool to challenge oneself and a question to ask yourself is “Do you simply comply because the CNSC asks you to?”

This is an opportunity for the CNSC to promote the use of these good practices.

There will be a new course certificate with a 5 year validity date on the course. Inspection & Maintenance of Radiography Equipment refresher training courses will be developed.

A new set of controls and handling assembly are being developed.

Since the IR work environment is not always ideal; service intervals must sometimes be increased to accommodate the environmental conditions.

Borescope is carried out by QSA Suppliers; however, it is not stated as a requirement in the manual. The US regs state that an inspection of the s-tube is required. You could have a leaking s-tube that will pass the leak test, but this does not mean it is correct. The only true way to determine if there is a leak is with a borescope. The image from the borescope is sent to the customer for review.

It is important to note that every camera may wear a little different; many situations arise and the distributors are trained on what exactly to look for.

Every source change; devices are borescoped; sometimes it is worth it to obtain a second opinion. There seems to be an attitude in Industry that the exposure device will last forever, this is clearly not the case.

A Bouchard suggested that maybe it is time to do an environmental scan on who is doing maintenance. What type of maintenance is being carried out and who is doing it, and furthermore, what kinds of parts are being used (OEM parts). The CNSC is currently undertaking a desktop review by preparing a survey of maintenance practices for IR to send to licensees.

### **CNSC/Regulatory Updates (CNSC Management)**

There has been a management shuffle with DNSR, Sylvain Faille is now the new Director, Nuclear Substances and Licensing Division, André Bouchard is the new Director of Operations Inspection Division and also Karen Owen-Whitred is the new Director of Transport Licensing and Strategic Support Division.

Recently, the CNSC has carried out a review of medical/academic areas on the key success factors for an RSO. A regulatory document is being developed as a compliment to REGDOC-1.6.1 and will be named REGDOC-1.6.2. All evaluations are being taken into consideration for more complex licensing systems. CNSC staff will keep the IRWG members informed and will circulate the document when ready before consultation. It is expected mid-year in 2019.

The *Nuclear Substances and Radiation Devices Regulations* are also being opened up for consideration for revision. Any feedback on possible processes should be passed along to K. Mayer. The main focus is to add in information on CEDO renewals and to incorporate the CEDO card expiry requirement.

There was some change to the IAEA – SSR6 which was published in 2018 to include ambulatory references in the *Packaging and Transport of Nuclear Substances Regulations, 2015*. There was a 2 year grace period for implementation and compliance. There has not been much effect on the IR industry. There was limited guidance for large components, new guidelines were added. Most of the changes were editorial in nature as well as to add additional isotopes.

T. Levey brought up safeguards and that information must now be submitted to the CNSC for review and that he has received the form for exemption. IR licensees now have licence condition number 2410 on their licence due to depleted uranium.

The concept of an exemption quantity and below that level a licence is not required does not exist in the safeguards world. The IAEA needs to demonstrate that they are being objective in their review of the UN States and as such are giving the same treatment to Canada as to other countries (member states). They need to know the complete inventory of all radioactive materials regardless of the quantity. A measure of confidence is still required for smaller quantities. Essentially a certificate of conformity will be issued and if anything changes they must be informed.

**Action – K. Mayer to invite Safeguards to the next IRWG meeting to give an overview presentation on the expectations and safeguards obligations and requirements.**

**K. Mayer also to invite NSD-Transport to the spring meeting for a presentation on the transport security exercises.**

The goal is to share best practices more broadly.

The *Canadian Nuclear Safety Commission Cost Recovery Fees Regulations* are also being opened up for revision. Currently there are no charges for CEDO renewals; however, costs are being incurred. The renewals/certifications and replacement cards are not a tremendous burden to Industry. There will be consultation on any proposed changes.

### **PCD/CEDO Update – J. Sigetich**

There are a number of improvement projects that PCD is working on but due to staffing requirements there are some delays.

There has been an increase in the number of applications received for CEDO cards new and renewals. There were 380 in the first year (2015) and then 450 the following year (2016), last year (2017) there were 390 and 470 in 2018. Along with this increase, there is an increased burden to review the applications.

There are approximately 2300 certified individual with cards which have renewed over 5 years there are approximately 450 renewals per year.

J. Sigetich asked whether Industry is also seeing an increase.

P. MacNeil responded that there has been a recession over the past 2-3 years and workload has been drastically reduced.

A Brady added that the economy has started to turn around in the oil and gas industry and it may balance out. Some may drop out and not re-certify or it may increase, it is really hard to say.

Many CEDOs are choosing not to renew as they are no longer active and are working in other NDT methods but not RT. A guess out of the 2300, there is probably close to 500 who are not active.

Five years ago, there were a lot more trainees; more people used less due to PCP-09 requirements and the introduction of AMPs. There is about a 30% increase looking to have trained people.

The numbers are lower and this may be due to how long people have been in the NRCan registry. The demand for CEDOs seems to go with the economy. Colleges are doing promotions with student job fairs and some companies it is who do you know...

\NAIT has added a new investment into their facility and KEENO in Ft McMurray (Darcy is involved).

Everyone is pushing forward with better capabilities.

There is a need to clarify expectations regarding mandatory steps and the practical examination (PCP-09 requirements). If they are related to regulatory requirements, they are marked as such.

If a step is failed with respect to the regulatory requirements, it is considered a fail and will need to re-do the practical exam.

The document in PCP-09 is not clear. There was a form submitted for practical exam to PCD from the beginning from the Scheme Committee.

PCD (CNSC) wants to create a CNSC practical examination that everyone would be required to use. As is, the exam is confusing and many steps are missed. There are some considerations to be fixed ( a more straight forward layout is required).

There are reasons why additional information is requested. In most cases, the applications are not complete, either there is no practical exam or no attestations included.

Another major issue is that the dates on the practical exam form are signed and dated before the actual exam is taken. People tend to fill out the form ahead of time, they need to take the practical exam before they complete the attestation for the exam.

In some cases, the authorized representatives do not match, further authorization or else another document is required.

If the certificate is expired, there is not clear explanation that they have worked with no supervision (this must be clarified). If the date is after it must only be working unsupervised. Clarification is required as it is not clear if working without supervision.

PCD is still working with IMTD (internal IT CNSC) to develop fillable forms.

It will be part of the compliance verification program to verify that CEDOs have records for continuous education and a log.

Workers must have:

- Knowledge and training before the examination
- There is no order enforced but there must be knowledge and skills to work safely
- It is simple if the NRC electronic registration is followed.

L. Simoneau asked the question as to how compliance verification will work, it needs to be determined. Inspectors may request the card and select candidates and then it will be decided what enforcement actions will be taken.

## **PCP-09**

J. Sigetich reported that PCD has lost a couple of staff members to DNSR and it has resulted in some delays. The focus has been on processing applications. The program is working status quo and no immediate change is required. PCD is still very committed to moving forward with producing a draft of PCP-09 for review.

The plan is to have an updated draft version of PCP-09 for comments by June 2019 and then to be forwarded to the scheme committee and a meeting by September or October 2019.

The document will be sent out to Industry for consultation.

There are many confusing requirements, the plan is to re-structure the way it is put together and the layout to flow better in more clear language.

There is also a plan to introduce some validity periods for examination and training, in order to have reasonable assurance that people have the qualifications and skills. There are many interesting questions. We are looking for assurance at the time of certification that people are and will be safe. All of the brainstorming that was done at the last annual meeting is being reviewed.

The process for adding requirements for expiry of certification as well as for de-certification will possibly be added to regulation as well as introducing a cooling off period to the regulatory requirements. Currently, there are no criteria or rules found in PCP-09. We are also looking for alternatives to expectations to introduce some options to demonstrate competence.

Who exactly requires certification? If you are not operating the device for many years and there is no intent for the foreseeable future, is certification really required?

If industry (IRWG members) have any ideas, please send along to J. Sigetich. T. Levey mentioned that this has already been done in the Scheme committee. J. Sigetich responded that the process is working well but there is room for improvement.

Many items that have been suggested and are being reviewed are:

- 5 years of CE credits with a minimum of 5 per year.
- What is PCD doing now to allow someone to renew? Currently not implementing the 5 hrs. per year (no attestation to this). We are looking for care that you have you knowledge now (decided not directly related to safety).
- On a case by case basis, we are looking at 40 hrs., if they don't meet that with extra information and justification; they can potentially get extra hours by self-study or can provide a case for justification. It becomes much more complicated and time consuming when you have to do a case by case review.

Meeting adjourned at 3:30 pm.

**Ra:diography Working Group - ACTION LIST**

| <b>RWG Item #</b> | <b>Description</b>   | <b>Assigned Person(s)</b> | <b>Status or Due Date</b> |
|-------------------|--|---------------------------|---------------------------|
| 15WGM1.1          | Bring a recorder to future meetings.   | K. Mayer                  | Ongoing                   |
| 15WGM1.2          | Follow up with Regulatory Docs division for an update on the status/progress of REGDOC 2.5.5 and communicate the status to the working group until consultation/publication.   | K. Mayer                  | Closed                    |
| 15WGM2.2          | Ensure IRWG members are invited to Commission meeting for industrial report presentation   | K. Mayer/<br>C. Moses     | Ongoing                   |
| 15WGM2.4          | Industry (CIRSA) to check with community colleges for possible contacts for video opportunities.   | A. Brady                  | Closed                    |
| 15WGM2.5          | Reach out to licensees (Syncrude and Suncor) to see if interest in presentation at annual meeting  | K. Mayer                  | Closed                    |
| 15WGM2.6          | Provide further updates on QSA equipment   | C. Auzenne                | Ongoing                   |
| 16WGM2.2          | Provide an assessment of whether CIRSA can review large trainers programs for pre-qualification at next meeting.   | A. Brady                  | Defer 2019                |
| 17WGM2.4          | Client subgroup members (K. Mayer, L. Simoneau, P. MacNeil and A. Brady) to look into H&S councils and conferences, magazines that we could potentially publish an article in or bulletin boards and provide updates on progress at meeting. | K. Mayer and sub-group    | Defer 2019                |
| 17WGM2.5          | C. Moses send link for Alberta H&S conference  | C. Moses                  | Closed                    |
| 18WGM1.1          | P. Fundarek to send the link for the video/transcript of ROR to the  | P. Fundarek               | Closed                    |

|                 |  |                              |                   |
|-----------------|--|------------------------------|-------------------|
|                 | <b>Working Group.</b>  |                              |                   |
| <b>18WGM1.2</b> | <b>Update a new practical exam</b>   | <b>A. Brady</b>              | <b>Closed</b>     |
| <b>18WGM1.3</b> | <b>Provide most recent list of trainers to working group members</b>   | <b>J. Sigetich</b>           | <b>Closed</b>     |
| <b>18WGM1.4</b> | <b>Send out invitation for annual meeting</b>  | <b>K. Mayer</b>              | <b>Closed</b>     |
| <b>18WGM1.5</b> | <b>Discussion at meeting – CEDOs responsibility to maintain records</b>  | <b>K. Mayer</b>              | <b>Closed</b>     |
| <b>18WGM2.1</b> | <b>Provide questions for trainers to Karen for early March so that we can set up a survey to be sent out by end of March 2019.</b> | <b>All</b>                   | <b>March 2019</b> |
| <b>18WGM2.2</b> | <b>Update ToRs accordingly to add new paragraph.</b>   | <b>K. Mayer</b>              | <b>Feb2019</b>    |
| <b>18WGM2.3</b> | <b>Look at collecting data and info with a technical trainee on who we should reach out to.</b>                                    | <b>A Bouchard</b>            | <b>March 2019</b> |
| <b>18WGM2.4</b> | <b>Send a list of any potential contacts (clients) you may have to Karen for the 2019 spring meetings</b>                          | <b>All</b>                   | <b>March 2019</b> |
| <b>18WGM2.5</b> | <b>Invite E. Pouliot (Mistras – Eastern) to next IRWG meeting</b>  | <b>K. Mayer /L. Simoneau</b> | <b>Feb 2019</b>   |
| <b>18WGM2.6</b> | <b>Invite someone from Safeguards to next IRWG meeting to give a presentation on expectations and requirements</b>                 | <b>K. Mayer</b>              | <b>Feb 2019</b>   |