



Introducing the DNSR's new Director General: Colin Moses

Appointed in July 2015, Colin Moses is the new Director General of the Directorate of Nuclear Substance Regulation (DNSR) at the Canadian Nuclear Safety Commission (CNSC). Mr. Moses is accountable for the delivery of the nuclear substance regulatory program, which provides assurance that the possession, use and transport of nuclear substances and prescribed equipment in Canada are carried out in a manner that protects the health, safety and security of Canadians and the environment.

With more than a decade of nuclear regulatory experience, Mr. Moses previously served as the CNSC's Director of the Regulatory Framework Division, where he was responsible for the development and publication of CNSC regulations and regulatory documents. He has held a variety of other positions within the CNSC: Engineering Assessment Specialist; Project Officer, overseeing various facilities for radioactive waste management; and Executive Advisor, providing strategic technical, policy and program recommendations and advice to senior executives.

As the DNSR's Director General, Mr. Moses is committed to ensuring a strong safety culture across all licensees overseen by DNSR through the delivery of an effective and efficient regulatory program. Leveraging his regulatory policy experience, Mr. Moses is focused on implementing clear regulatory expectations that reflect the diverse and unique nature of the different sectors regulated by the CNSC, and on ensuring a consistent and risk-informed approach to nuclear regulation.

Mr. Moses holds a bachelor's degree in mechanical engineering from McMaster University. ✎



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CNSC consulting on additional guidance for developing radiation safety training programs

With the August 2014 publication of REGDOC-2.2.2, *Personnel Training*, DNSR licensees have asked for additional guidance on implementing a radiation safety training program (beyond the advice given in section 5 of that document). The CNSC has determined that the best approach to provide this guidance is to add an annex to REGDOC-2.2.2, which will provide practical examples from industry for developing and implementing systematic training programs.

The CNSC will soon be publishing this draft guidance on its website. It will remain online for 30 days, during which time all interested parties are encouraged to provide feedback. All comments received will be considered when determining the nature of the guidance to be issued.

In keeping with the CNSC’s commitment to stakeholder engagement – and as part of the ongoing efforts to enhance and clarify its regulatory framework – comments and suggestions on any regulatory document may be submitted to the CNSC at any time. The CNSC will use these comments to inform future reviews of its regulatory tools.

Contact information

For questions and information about REGDOC-2.2.2, please contact:

Directorate of Safety Management
Canadian Nuclear Safety Commission
P.O. Box 1046, Station B
Ottawa ON K1P 5S9

Telephone: 1-800-668-5284 (Canada only)

Fax: 613-995-5086

Email: cnscconsultation.ccsn@canada.ca

Easier, quicker submission of annual compliance reports

In June 2015, the CNSC released new electronic forms that simplify and speed up annual compliance report (ACR) submissions. Tailored to licensed activity, the forms allow ACRs to be built by filling in required boxes in any PDF viewer.

Many licensees are already seeing the benefits, which include quicker report completion and less back-and-forth contact with CNSC licensing specialists to address information that may have been missed previously with the paper-based forms. The new forms can also be submitted electronically to cnsccr-rac.ccsn@canada.ca.

Visit the [CNSC website](http://www.cnsccr-rac.ccsn@canada.ca) to download the new PDF-based forms.

Protected B when completed
Print Form Reset Form

Licensee Organization Information			
Licensee Name			
Licensee Corporation Number (if applicable)		Reporting Period This Annual Compliance Report covers the 12 month period from:	
Licensee Business Number (if applicable)			
Head Office Legal Address			
Street Address			
City	Province/State	From <input type="text"/> To <input type="text"/>	
Country	Postal/Zip Code	License Number	
License Contact Person (Person with authority to act for the licensee in dealing with the CNSC)			
Name		Title	
Mailing Address			
<input type="checkbox"/> Check here if same as "Head Office Legal Address" above			
Street Address			
City	Province/State	Country	Postal/Zip Code
Telephone Number	Alternate Telephone Number	Facsimile	
Email Address			



Welcoming our new technical trainees and inspector-in-training

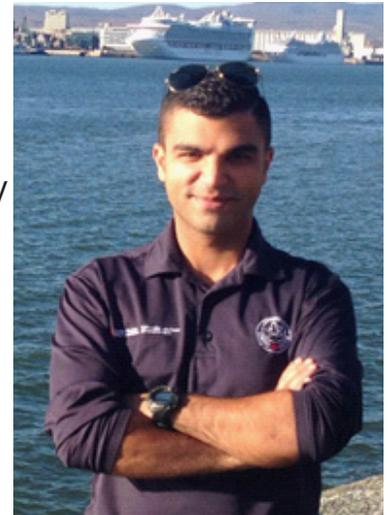
In 2015, the DNSR welcomed several new staff members to its Ottawa and Laval offices. Following extensive recruitment for technical trainees, four candidates were hired in various divisions. A new inspector-in-training was also hired in Laval.

Abdel Nassani

Inspector-in-Training, Operations Inspection Division (Laval, QC)

“Having worked at the CNSC for three summer-student terms between 2012 and 2014, I joined the Eastern Regional Office in Laval full time in January 2015. I am currently working through the Inspector Training and Qualification Program and look forward to becoming a certified inspector in the near future. My career aspirations at the CNSC are to eventually progress into a management role. I recently completed my master’s degree in energy engineering, specializing in nuclear engineering, after obtaining a bachelor’s degree in chemical engineering at École Polytechnique de Montréal. I am also interested in pursuing further graduate studies,

such as a PhD or an MBA, in parallel with my work at the CNSC. I look forward to applying my knowledge to my work at the CNSC. In my spare time, my hobbies include soccer, cars and reading.” ✨



Rachel Timmins

Technical Trainee, Accelerators and Class II Facilities Division (Ottawa, ON)

“I started at the CNSC in March and since then have been working in the Accelerators and Class II Facilities Division. I have been completing the Inspector Training and Qualification Program as well as learning the ins and outs of licensing Class II facilities. I completed my master’s degree in medical physics in 2012 and, before coming to CNSC, I worked at the University of Ottawa Heart Institute doing nuclear medicine research. Switching over from the clinic to the regulator presented a new challenge and I was excited to come on board. While my training thus far has focused mostly on cancer clinics, I look forward to learning more about other

types of Class II facilities in the future. In my spare time, I can often be found swimming laps at the pool. I spent my teenage years working as a lifeguard/swim instructor and competing on the swim team – and my love of the water continues today.” ✨





Erik Menna Technical Trainee, Operations Inspection Division (Ottawa, ON)

“I have been working at the CNSC since March 2015 in both the Operations Inspection Division and the Transport Licensing and Strategic Support Division. There are so many areas in the CNSC that interest me: what’s important is that I have the opportunity to use my technical abilities, and the DNSR has been wonderful at letting me do so. Born and raised just west of Ottawa, I have a mechanical engineering degree from Carleton University and a lifelong interest in mechanical systems. I will always take a moment to understand or at least come up with a method on how certain machines

and devices work. I have applied this to both my terms so far in the DNSR. Outside of work, I enjoy hockey and a variety of board sports (snowboarding, wakeboarding, skateboarding, etc.).”



Michael Lafleur Technical Trainee, Transport Licensing and Strategic Support Division (Ottawa, ON)

“I grew up in the National Capital Region, completing all of my schooling in the area. I recently received my bachelor’s degree in chemical engineering from the University of Ottawa, and have worked in many different departments within the Government of Canada through its co-op program. I worked at Environment Canada, Transport Canada and Natural Resources Canada prior to starting

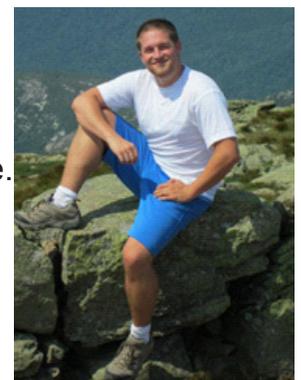
at the CNSC, and am looking forward to the new opportunities that working here affords me. Outside of work, I like to play various sports, with a particular passion for hockey and golf.”



Simon Martel Technical Trainee, Operations Inspection Division (Laval, QC)

“I joined the CNSC in spring 2015 as a member of the Operations Inspection Division. I am currently working toward completing the Inspector Training and Qualification Program with the goal of becoming a certified inspector. Originally from the National Capital Region, I recently completed a master’s degree in environmental science at the University of Sherbrooke. Having worked for the Canadian Food Inspection Agency, Natural Resources

Canada and Environment Canada, I am pleased to now be part of the CNSC and look forward to a long and rewarding career here. Outside of work, I like to spend my time hiking in the Appalachians and kayaking in the Atlantic Ocean watershed.”





Reported events presented to the Commission

CNSC staff reported the following events at the public Commission meeting held in June 2015.

Radiation exposure of worker at the Montreal Neurological Institute

In January 2015, a technician working at the Montreal Neurological Institute received a radiation dose to his left hand. CNSC staff estimated the dose to be approximately 1.7 sieverts, which is above the annual regulatory limit of 500 millisieverts for the hands of a nuclear energy worker. This dose was incurred when the individual improperly handled fluorine-18 produced using the cyclotron at the facility.

Further information can be found in the June 2015 meeting transcript.

Unauthorized possession of technetium-99m by Pro Rayon-X Inc.

In March 2015, a vial of technetium-99m containing more than an exemption quantity was reported missing or stolen from the Centre hospitalier universitaire de Québec. A worker

The CNSC has migrated its email to the new Canada.ca system

In October 2015, the CNSC adopted the new email format for the Government of Canada. Although there are some exceptions, CNSC email addresses now take the format: FirstName.LastName@Canada.ca. If there are duplicate names across Government of Canada agencies and departments, a number will also appear in the email address.

Please note this change, as emails coming from the CNSC will now use different addresses than in the past. Be sure to update your email address books containing CNSC contacts.

Emails sent to the old addresses will continue to be delivered until March 31, 2018.

from Pro Rayon-X Inc., a consulting company, had been granted access to the laboratory by security staff and removed the technetium-99m.

Following this event, the CNSC issued an administrative monetary penalty to Mr. Mario Mignault of Pro Rayons-X Inc. Further information can be found in the June 2015 meeting transcript, as well as in the article on regulatory actions in this newsletter.

Loss of control of a sealed source by the CNSC

In August 2014, the CNSC lost control of a sealed source during an off-site training session. Left unattended at the training site, the sealed source was discovered missing in November 2014 when it was to be used for another training session. The loss of control did not result in any impact to public health or the environment.

Further information can be found in the June 2015 meeting transcript.

Packaging and Transport of Nuclear Substances Regulations, 2015

The CNSC has published the *Packaging and Transport of Nuclear Substances Regulations, 2015 (PTNSR 2015)* in the *Canada Gazette*, Part II. The new regulations clarify existing requirements and align with the 2012 edition of the International Atomic Energy Agency's Regulations for the *Safe Transport of Radioactive Material*. Effective since June 12, 2015, they repeal and replace the previous PTNSR.



CNSC regulatory actions

As part of its regulatory oversight – and to protect the health and safety of workers, the public and the environment – the CNSC issues regulatory actions to non-compliant licensees. The CNSC took the following [regulatory actions](#) February 1, 2015 and September 30, 2015.

Administrative monetary penalty issued to Isologic Innovative Radiopharmaceuticals Ltd.

On February 6, 2015, the CNSC announced it had issued an administrative monetary penalty (AMP) of \$2,170 to Isologic Innovative Radiopharmaceuticals Inc., located in Montréal, QC. The AMP was issued because of Isologic's failure to comply with subsection 16(4) of the *Packaging and Transport of Nuclear Substances Regulations*. Authorized by the CNSC to process and distribute unsealed nuclear substances, the licensee delivered a number of packages with surface contamination above the regulatory limit.

The penalty was issued on January 26, 2015 to encourage compliance with the *Nuclear Safety and Control Act*. On March 3, 2015, the CNSC confirmed that the AMP had been paid.

Administrative monetary penalty issued to Alberta Health Services

On February 9, 2015, the CNSC announced it had issued an AMP of \$7,630 to Alberta Health Services. The AMP was issued due to a violation under paragraph 48(d) of the *Nuclear Safety and Control Act*. The licensee knowingly withheld information from the CNSC about the loss of control of two sealed sources.

The penalty was issued on January 28, 2015 to encourage compliance with the *Nuclear Safety and Control Act*. On March 3, 2015, the CNSC confirmed that the AMP had been

paid.

Request for action issued to the McGill University Health Centre

On February 11, 2015, the CNSC announced that a request had been issued under subsection 12(2) of the *General Nuclear Safety and Control Regulations* to the McGill University Health Centre (MUHC), located in Montreal, QC. The MUHC holds CNSC licences to carry out activities related to nuclear medicine.

The request was issued after CNSC staff noted deficiencies in the implementation of the MUHC's radiation safety program and worker training program in its nuclear medicine departments.

The MUHC was requested to provide a plan for corrective actions, review radiation safety officers' responsibilities and ability to perform their duties, analyze the implementation of the radiation protection program (including worker training), and examine all locations of licensed activity to verify compliance with regulatory requirements and correct all non-compliances.

On April 25, 2015, the CNSC confirmed that the MUHC had satisfied the terms of the regulatory action and provided the required information to the CNSC.

Order issued to the Montréal Neurological Institute and Hospital

On March 2, 2015, the CNSC announced it had issued an order to the Montreal Neurological Institute and Hospital, which holds a CNSC licence authorizing the operation of a cyclotron to produce various radioisotopes for medical and research purposes.

The order was issued on February 23, 2015 following an inspection of the cyclotron facility.

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During this inspection, a number of non-compliances with CNSC requirements were identified, including the failure to implement adequate controls to prevent radioactive contamination, and an insufficient number of qualified workers to safely conduct the licensed activities.

The Montreal Neurological Institute and Hospital was ordered to cease production of radiolabelled tracers until a radiation monitor is installed in the production area and a sufficient number of trained and qualified workers are in place. The organization was also ordered to stop processing any radioisotopes until it had implemented adequate controls to prevent radioactive contamination.

The licensee has since complied with all terms and conditions of the order. CNSC staff reviewed the corrective measures implemented and found them satisfactory.

Order issued to Big Guns Energy Services Inc.

On March 12, 2015, the CNSC announced it had issued an order to Big Guns Energy Services Inc., a company based in Calgary, AB that services the oil and gas industry. The company holds a CNSC licence authorizing the possession and use of sealed nuclear substances used to assess geological formations in drilled oil wells.

The order was issued on March 5, 2015 following an inspection of the company's location in Red Deer, AB. It was found that the company was not complying with several regulatory requirements, including correct labelling of packages, maintenance of training records for workers and effective implementation of its radiation protection program.

The order required Big Guns Energy Services Inc. to place all of its nuclear substances in secure storage until all of its workers are trained in accordance with company procedures. It also required the company to correct all non-compliances observed during the inspection and effectively implement its radiation protection program.

On March 19, 2015, the CNSC confirmed that Big Guns Energy Services Inc. had complied with all terms and conditions of the order. CNSC staff reviewed the corrective measures implemented and found them satisfactory.

Order issued to Baker Hughes and Canada Company

On May 28, 2015, the CNSC announced it had issued an order to Baker Hughes Canada Company, a company based in Calgary, AB that services the oil and gas industry. The company holds a CNSC licence authorizing the possession and use of nuclear substances in fixed gauges mounted on vehicles to monitor the physical properties of cement used in drilled oil wells.

The order was issued on May 21, 2015 following an inspection of the company's location in Redcliff, AB. The order required the company to stop using vehicles on which fixed nuclear gauges have been attached until the correct safety marks and labels are attached and its vehicles display appropriate transport placarding. The company was also required to update its transport documentation with corrected information about the gauges.

On June 23, 2015, the CNSC confirmed that Baker Hughes and Canada Company had complied with all terms and conditions of the order. CNSC staff reviewed the corrective measures implemented and found them satisfactory.

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Administrative monetary penalty issued to Mr. Mario Mignault

On June 3, 2015, the CNSC announced it had issued an AMP of \$23,149 to Mr. Mario Mignault of Pro Rayons-X Inc. The AMP was issued because of a violation under section 26 of the *Nuclear Safety and Control Act*.

The AMP was issued on June 2, 2015 after confirmation that a worker had illegally removed and used, on seven separate occasions in 2014 and 2015, a prescribed quantity of a nuclear substance (technetium-99m) from the Centre hospitalier universitaire de Québec without a CNSC licence to possess, use and store it. On July 2, 2015, the CNSC confirmed that the AMP had been paid.

Order issued to All Test International Inc.

On July 3, 2015, the CNSC announced it had issued an order to All Test International Inc., a company based in Brooks, AB that provides testing services to the industrial sector. The company holds a CNSC licence authorizing the possession and use of nuclear substances contained in industrial radiography exposure devices for the purpose of materials testing.

The order was issued on May 26, 2015 after an inspection identified deficiencies in the radiation protection and dose monitoring programs. The order required all nuclear substances to be placed in secure storage until deficiencies in the radiation protection and dose monitoring programs are addressed. The order required the company to implement corrective measures and address all areas of non-compliance.

All Test International Inc. has since complied with all terms and conditions of the order. CNSC staff reviewed the corrective measures implemented and found them satisfactory.

Order issued to J.K. Metals Ltd.

On August 6, 2015, the CNSC announced it had issued an order to J.K. Metals Ltd., a company based in Broadview, SK that collects scrap metal. The company previously held a CNSC licence to possess an X-ray fluorescence radiation device for identifying, testing and analyzing metals and alloys (that licence has since expired).

The order was issued on July 29, 2015, following an inspection of the company's location in Broadview, which confirmed that J.K. Metals Ltd. remained in possession of a nuclear device without a valid CNSC licence. The company was ordered to place the device in secure storage and either obtain a valid CNSC licence allowing possession or transfer the device to a licensed person.

On August 28, 2015, the CNSC confirmed that J.K. Metals Ltd. had complied with all terms and conditions of the order. CNSC staff reviewed the corrective measures implemented and found them satisfactory.

Order issued to Groupe ABS Inc.

On August 14, 2015, the CNSC announced it had issued an order to Groupe ABS Inc., a company based in Saint-Rémi, QC that offers geotechnical, environmental, civil and materials engineering services. The company holds a CNSC licence authorizing the possession, transfer, use and storage of portable nuclear gauges.

The order was issued on August 7, 2015 after an inspection of a work site in Ottawa, ON identified non-compliances related to the transport of a portable nuclear gauge at the work site. The inspection also found that the worker operating the gauge was not adequately trained to conduct the activities

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authorized under the licence. The order required the worker to immediately cease the use and transport of portable nuclear gauges until the CNSC is satisfied that the worker is adequately trained to do so.

On August 31, 2015, the CNSC confirmed that Groupe ABS Ltd. had complied with all terms and conditions of the order. CNSC staff reviewed the corrective measures implemented and found them satisfactory.

Order issued to Labo S.M. Inc.

On August 19, 2015, the CNSC announced it had issued an order to Labo S.M. Inc., a company based in Sherbrooke, QC that offers geotechnical, environmental, civil and materials engineering services. The company holds a CNSC licence authorizing the possession, transfer, use and storage of nuclear gauges.

The order was issued on August 12, 2015 after an inspection of a work site in Laval, QC identified non-compliances related to the security of a portable nuclear gauge used at the work site. The inspection also found that the worker operating the gauge was not adequately trained to conduct the activities authorized under the licence and did not follow company procedures. The order required the worker to immediately cease the use and transport of portable nuclear gauges until the CNSC is satisfied that the worker is adequately trained to do so.

On September 21, 2015, the CNSC confirmed that Labo S.M. Inc. had complied with all terms and conditions of the order. CNSC staff reviewed the corrective measures implemented and found them satisfactory.

Order issued to Stasuk Testing & Inspection Ltd.

On August 26, 2015, the CNSC announced it had issued an order to Stasuk Testing & Inspections Ltd., a company based in Burnaby, BC that provides testing services to the industrial sector. The company holds a CNSC licence authorizing the possession and use of nuclear substances contained in industrial radiography exposure devices for the purpose of materials testing.

The order was issued on August 19, 2015 after an inspection of a worksite in Maple Ridge, BC identified deficiencies in the way a worker was fulfilling their dose monitoring and radiation protection obligations. The order prohibited the worker from operating an exposure device or supervising a trainee operating an exposure device until corrective measures were implemented and non-compliances were addressed.

On September 30, 2015, the CNSC confirmed that Stasuk Testing & Inspection Ltd. had complied with all terms and conditions of the order. CNSC staff reviewed the corrective measures implemented and found them satisfactory. ✎

DNSR Newsletter

The *DNSR Newsletter* is a CNSC publication. If you have any suggestions on topics or issues that you would like to see covered, please do not hesitate to contact us.

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Canadian Nuclear Safety Commission
P.O. Box 1046, Station B
Ottawa, Ontario K1P 5S9
Telephone: 1-800-668-5284 (in Canada)
or 613-995-5894 (outside Canada)
Fax: 613-995-5086
Email: cnsccanada@canada.ca
Website: nuclearsafety.gc.ca