Fall 2013

DNSR Newsletter

Canada's Nuclear Regulator

Administrative Monetary Penalties Regulations Come into Force

The *Canadian Nuclear Safety Commission's new Administrative Monetary Penalties (AMPs) Regulations* came into force on July 3, 2013.

AMPs are monetary penalties that can be imposed for violations of regulatory requirements. They are part of the CNSC's approach to compliance and enforcement, which comprises a number of tools, including orders, revocation of licence and prosecution of an offence.

The AMP regulations state that non-compliance with the *Nuclear Safety and Control Act* could incur fines of up to $25,000 for individuals and $100,000 for corporations. This is in addition to the compliance and enforcement measures already available to CNSC inspectors.

How will this impact the Directorate of Nuclear Substance Regulation Licensees?

AMPs are now part of the CNSC's enforcement toolbox, and may be issued to DNSR licensees in a variety of situations including, but not limited to:

- An Annual Compliance Report is not submitted or is submitted late.
- A required safety system is not installed properly and/or not tested for functionality, and the facility had been previously cited for the same non-compliance.
- A facility has been operated without a functioning radiation survey meter.
- A CNSC licensee permits unauthorized persons access to nuclear substances.
- Failure to decontaminate an area where contamination is found above licence limits.
- Failure to provide a patient with information on how to reduce the exposure of others from the radiation administered to the patient.
- Leaving a portable gauge unattended and unsecured at a job site.
- Not following lock-out and isolation procedures for entries into vessels on which nuclear gauges are mounted at an industrial facility.

Visit the CNSC's Web site for more information on Administrative Monetary Penalties and the CNSC's Approach to Compliance Verification, and Enforcement.

In this issue

Shipping Documents - What Should be Included

When it comes to the transportation of radioactive materials, packaging plays a crucial safety role. However, in the event of an accident, it is important for responders to be aware of all potential hazards, allowing them to operate in a safe and secure manner. For this reason, Transport Canada's *Transportation of Dangerous Goods Regulations* and the CNSC's *Packaging and Transport of Nuclear Substances Regulations* require the consignor to provide the carrier with detailed shipping documents related to the consignment.

Every shipment of dangerous goods which includes a Class 7 radioactive material must be accompanied by a shipping document that includes:

- the name and address of the consignor's place of business in Canada
- the date when the shipping document (or an electronic copy of it) was prepared or was first given to a carrier
- the proper shipping name of the dangerous goods (example: Radioactive Material, Type A package, Special Form)
- the class number of the dangerous good (example: Class 7)
- the United Nations number (example: UN3332)
- the name or symbol of the radionuclide (example: Cs-137, Am-241)
- the form of the material (example: Special Form)
- the maximum activity (in becquerel units)
- the category of package (example: II Yellow)
- the transport index (TI)
- the applicable identification mark for each approval certificate
- the number of packages requiring labels
- a 24-hour emergency response number available when the dangerous goods are in transport
- the shipper's declaration, including signature (initials are not acceptable)

Over the past few years, incomplete shipping documentation was often the reason for a non-compliance rating, especially a missing shipper's declaration. Here is an example of a shipper's declaration for ground transportation:

> *"I hereby declare that the contents of this consignment are fully and accurately described by the proper shipping name, that they are classified, packed, marked, labelled, and are, in all respects, in the proper condition for transport by ground, according to the applicable international and national government regulations."*
>
> *Signature* *Date*

It is important for carriers to maintain the shipping document in the location specified by the regulations, to ensure that in the event of an accident, responders are easily able to locate the document.

Every consignor, carrier and consignee involved in the transport of radioactive material must ensure that:

- all aspects of the regulations are met
- safety marks are properly displayed
- any accidents or incidental release are reported to the CNSC

For more details on the *Packaging and Transport of Nuclear Substances Regulations*, please visit the CNSC Web site at nuclearsafety.gc.ca.

Security of Sealed Sources

In May 2013, the Commission approved *REGDOC 2.12.3, Security of Nuclear Substances: Sealed Sources* for publication and use following the presentation made at a Commission meeting.

This document sets out the minimum security measures that licensees must implement to prevent the loss, sabotage, illegal use, illegal possession or illegal removal of sealed sources during their entire lifecycle. This applies to sources that are in storage, or in transport by road. In addition to setting requirements, REGDOC-2.12.3 provides information and guidance on how to meet the minimum security measures.

The document is aligned with international guidelines and standards, and applies to all categories of sealed radioactive sources as defined in the *International Atomic Energy Agency (IAEA) Code of Conduct on the Safety and Security of Radioactive Sources* and the *IAEA Categorization of Radioactive Sources*. It does not apply to unsealed nuclear substances.

In accordance with the Commission's decision to approve this document, licensees that possess sealed sources must implement the requirements in this document within 2 years for those who possess category 1 and 2 sources and within 5 years for those who are in possession of category 3, 4 or 5 sources. This document will now be referenced in all licences where the possession of nuclear substances is authorized.

In order to reference this document in licences, a licence condition will be added to the affected licences. The CNSC will be in touch with licensees to further describe the process that will be followed to include this new regulatory document in the licence.

New Training Program and Inspector Trainees for Operations Inspection Division

In July 2012, the CNSC approved a new systematic and formalized approach to train its inspectors. This approach provides a standardized method for training inspectors, allowing trainees to experience inspection activities prior to being designated as an inspector. Trainees engage in on-the-job training under a seasoned inspector, who serves as their mentor. There is no set number of inspections that must be completed; however, a trainee will participate in inspections until the evaluation criteria established for the on-the-job training program is met to the satisfaction of the CNSC.

DNSR is pleased to introduce Jafir Jaferi, the first inspector to graduate from the new training program as well as two new inspector trainees who have joined the Operations Inspection Division (OID) this past year.

Jafir Jaferi
Southern Ontario Regional Office
"I have been at the CNSC since October 1991, as a Project Officer/ Pollution Control Specialist, and performed licensing and compliance-related activities in regulating uranium processing facilities. In November 2012, I joined the Southern Ontario regional office of the CNSC. Since then, I have been working with senior inspectors to complete my on-the-job training.

I enjoy working as an inspector, as I believe that inspectors make meaningful contributions to improving nuclear safety in general at the CNSC's licensed nuclear facilities. At home, I find joy doing gardening and landscaping work in my spare time and weekends. I am often caught talking about the good people at the CNSC and in my community."

Ethan Thanabalasingam
Southern Ontario Regional Office
"For the past four-and-a-half years at the CNSC, I have been working as a Project Officer for nuclear fuel cycle and research reactor facilities. I have a B.Eng. (Hon.) in Nuclear Engineering, and am currently enrolled in graduate program at the University of Ontario Institute of Technology. In March 2013, I joined the Southern Ontario regional office of the CNSC.

Having experience in performing inspections at various nuclear facilities, I am grateful for the ability to expand my knowledge in the area of nuclear substances, and eventually become an expert in the overall CNSC compliance process. I enjoy working as an inspector, because I get to interact with the real world applications of nuclear substances and radiation devices. One of my greatest passions is helping others. When I was younger, I often helped my father with household repairs. As I grew older, that habit continued, and so did my desire to help others."

Charles Croy
Western Regional Office
"I have been with OID for just over a year. My background includes a B.Sc. (Hon.) in Medical Radiation Science, which is how I originally became aware of the CNSC. I worked professionally as a nuclear medicine technologist before making the jump to the CNSC.

I find the constant introduction to new industries and applications of nuclear substances and technology the most exciting part of the job. I am also grateful for the opportunity to travel to parts of the country that I would not normally have a chance to visit.

In my leisure time, I enjoy alpine ski-touring and rock climbing. For the second year in a row, I have been accepted to the Calgary Climbing Centre Adult Competitive Team."

Public Information and Disclosure Programs for Class II Facilities

In March 2012, the Canadian Nuclear Safety Commission (CNSC) published *RD/GD-99.3, Public Information and Disclosure*.

The purpose of this document is to set out the CNSC's regulatory requirements for public information and disclosure by licensees. It requires that uranium mines and mills, Class I nuclear facilities and certain types of Class II nuclear facilities develop and implement a public information and disclosure program (PIDP). The intent of the PIDP is to improve the public's level of understanding concerning the proposed or licensed nuclear facility and its activities. Each public information program and its disclosure protocol should be designed to address the information needs of the licensee's target audiences.

Applicability to Class II facilities
RD/GD-99.3 applies only to certain Class II nuclear facilities such as pool type irradiators, as indicated in table 1 on the following page. Other Class II facilities may be required to develop and implement a public information and disclosure program, depending on the extent and nature of the nuclear materials and activities they engage in.

PIDP requirements for Class II facilities
The scope of the PIDP must be commensurate with the public's perception of risk and the level of public interest in the licensed activities. This may be influenced by the complexity of the facility's lifecycle and activities, and the risks (real or perceived) to public health, safety and the environment, associated with the facility and activities. The program can be as large or small as deemed necessary by the licensees, so long as it includes the required elements, and may be part of a larger public information or communications plan already developed by the licensee for its overall corporate activities. Many Class IB and Class II facilities are part of larger operations, which may already have corporate communications plans to address certain PIDP requirements.

In general, the expected elements of a PIDP for a Class II facility include the following:

- Measurable communications objectives: explained within the context of overall corporate objectives.
- Defined target audiences: who in the local community and/or other communities which may be impacted by the licensee's nuclear facility and related activities.
- Information on the opinions held by the public, media and target audiences, related to the licensed activities, and how this information was obtained and will be updated.
- A **public disclosure protocol** describing how the licensee will provide information to their target audiences, to keep them informed on matters of interest such as routine or non-routine events.

The **public disclosure protocol** must be shared with the licensee's key audiences, to solicit feedback and ensure it meets their information requirements. Elements of the protocol should include:

- A description of the operational, environmental, and safety information that will be shared with the public.
- Timelines for the release of information.
- Information products currently available or in development that will be used to disseminate the information (brochures, Web site, local information bulletins). Include samples if available.
- How the information products will be disseminated/ shared with targeted audiences.
- How licensees will respond to and record comments, questions or concerns expressed by their target audiences.

Licensees must inform the CNSC about disclosures made under the public disclosure protocol at the time of, or before, such disclosure.

Assessment of proposed PIDPs
With the incorporation of RD/GD 99.3 into the licence, through amendments made over time, licensees will be required to submit a description of their proposed PIDP, along with supporting documentation demonstrating how the program has been implemented to date. CNSC staff will review the information provided, and assess it against the components of RD/GD 99.3, to verify that:

- operational, environmental and safety information is readily available to the public
- public information is readily accessible and is commensurate with the level of public concern

This assessment will take into account the type of facility and activities being regulated, the licensee's compliance history, and the level of public interest and concern demonstrated. The review will be formally documented, and any concerns or recommendations for improving the program will be relayed to the licensee.

PIDP compliance verification for Class II facilities
Once an acceptable PIDP is in place, CNSC staff will monitor the PIDP implementation through normal inspection and compliance verification activities. This will include the review of any public disclosures made, as well as updates to public information materials.

For further information, please contact your CNSC licensing officer.

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Public Information and Disclosure Programs for Class II Facilities

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Table 1: Proposed Implementation Plan for Class II Facilities

CII Facility Type	Excluded	Included	Rationale for inclusion or exclusion
Isotope production accelerators (IPA)	Hospital based IPAs, provided that the licensee is the Hospital and not a third party and the IPA is not used for commercial purposes.	IPAs licensed to any organization other than a hospital regardless of location. This includes commercial licensees and universities	Exclusion: Section 1.2 of the document explicitly exempts Class II licensees such as hospitals and cancer treatment centres from the requirements set out in RD/GD 99.3 Inclusion: Commercial operations handle large volumes of activity, resulting in greater potential releases to the environment.
Pool type irradiators	None	All	Inclusion: Perceived risks from events (e.g., natural disasters) and perceived security risks
CII equipment development and testing facilities and/or research and industrial facilities	Facilities that do not produce environmental releases. (e.g., linear accelerators used for irradiation for product sterilization)	Facilities that could produce environmental releases. (e.g., facilities used for irradiating volatile targets)	Exclusion: Activities conducted in shielded facilities with no possibility of environmental releases or public exposure. Inclusion: The potential exists for environmental releases which could be of public concern and, under certain conditions, could result in public exposure.

Protected Information: What to Do, What to Avoid

The CNSC is subject to the *Privacy Act* and, therefore, can only collect personal information that is directly related to its programs and activities. Some licensees have been experiencing licensing delays with their electronic submissions, due to inclusion of personal information or other sensitive information that is not required by the CNSC for the evaluation of the application.

The CNSC has been receiving non-essential personal information in licence application forms, applicant authority forms, radiation safety manuals, annual compliance reports and dose reports (with names linked to specific doses). Examples of information that should not be included in these submissions to the CNSC include:

- personal information, such as home addresses and home telephone numbers
- social insurance numbers
- health information, such as an individual's personal dose information, or dose change request

Be aware that all companies, including CNSC licensees, also have legal obligations concerning personal information that they collect, use and disseminate during the course of business. The *Personal Information Protection and Electronic Documents Act (PIPEDA)* sets out ground rules for how private sector organizations can collect, use and/or disclose personal information in the course of commercial activities. For federally-regulated sectors (such as the nuclear sector), the act also applies to their employees' personal information. PIPEDA applies to all private sector organizations, except in provinces which have enacted legislation that is deemed to be substantially similar to the federal law. To date, Quebec, British Columbia, and Alberta have promulgated legislation deemed substantially similar to the federal law.

As such, licensees should familiarize themselves with their legal obligations for the handling of personal information. A detailed fact sheet is posted on the Office of the Privacy Commissioner of Canada's Web site.

There are instances where licensees are required to provide the CNSC with personal or classified information, such as a government-issued identification or security-related details. An example would be when CNSC staff is reviewing a dosimetry report during an exposure investigation, or when responding to a security inspection. In such cases, it is recommended that this information be sent by Canada Post or through a reliable courier. This is due to security concerns about sending documents electronically. Contact your licensing specialist if you are unsure about the nature of the information you are about to send to the CNSC.

Event Initial Report - Overexposure of a Member of the Public

The following event was presented by CNSC staff to the Commission on August 22, 2013.

Background
Industrial radiography is an activity that uses ionizing radiation to create an image of metallic objects that could not be observed otherwise. This activity is used primarily to assess the integrity of welds and the fabrication of metal piping, vessels and other objects. To create an image of the object, a high-activity radioactive sealed source is retracted from a radiography exposure device (a shielded container) for a short period of time so that the ionizing radiation emitted from the source, as a collimated beam, can penetrate the object and create an image on an x-ray film that can be used to evaluate the integrity of the object. After the exposure, the source is returned back into its shielded position inside the exposure device.

Event
On May 2, 2013, a certified exposure device operator (CEDO), employed by Les laboratoires d'essais Mequaltech, was performing a radiography exposure of a large size steel pipe (1.14 m diameter, 12.7 mm thick wall), at a metal fabrication facility in Montreal (Quebec). This industrial radiography company is licensed by the CNSC to conduct radiographic exposures for metal fabrication clients. The sealed source used for this exposure contained 1.3 TBq of Iridium-192. During the course of this activity, the CEDO inadvertently subjected a non-nuclear energy worker of the metal fabrication facility, who happened to be inside the pipe at that time, to a radiation dose of approximately 7 mSv. While this dose is below the CNSC regulatory dose limit of 50 mSv per year for a nuclear energy worker and well below the 100 mSv health effect level, it is above the regulatory limit for members of the public set at 1 mSv per year.

Before the CEDO proceeded with the radiographic exposure, he was told by the fabrication shop coordinator that the area had been cleared and went on to erect safety perimeter barriers around the radiographic set up. However, following the exposure the CEDO went inside the pipe to recover the exposed film and saw that a non-nuclear energy worker was still inside the pipe, doing some markings within the pipe.

The radiation exposure to the worker was limited by the following factors:

1. the short duration of the exposure, which was only two minutes
2. the shielding provided by the 12.7 mm (0.5 in) thick steel pipe wall
3. the distance between the worker and the exposed source (approximately 70 cm)

Actions Taken and Planned
CNSC staff in the Radiation Protection Division confirmed the dose received by the affected worker.

Les laboratoires d'essais Mequaltech issued a verbal warning to the CEDO and filed an event report with the CNSC. The company also contacted the exposed worker to inform the worker of the event and to let the worker know that there will likely be no health effects. The company has done additional follow-ups with its employees to prevent a similar event from re-occurring.

The CNSC is satisfied with the corrective measures taken by Les laboratoires d'essais Mequaltech in response to this event. As indicated during the August 22, 2013, presentation to the Commission, CNSC staff will perform an unannounced inspection in the following months to ensure that these safety measures have been implemented by the company. This event file is considered closed.

Free CNSC 101 Information Session

Join us on February 26, 2014, when Canadian Nuclear Safety Commission (CNSC) staff will be holding a free information session in Ottawa, Ontario.

"CNSC 101: An Information Session" is your opportunity to learn more about how the CNSC ensures the safety and security of the nuclear sector and its activities, including nuclear power plants, uranium mines and mills, nuclear waste management, nuclear medicine, the manufacturing of medical isotopes, nuclear substances, and the transport of radioactive materials.

Attendance is limited, so register now by email at cnsc101-ccsn101@cnsc-ccsn.gc.ca or call us at 1-800-668-5284.

For more information, visit us at nuclearsafety.gc.ca or on Facebook.

CNSC Orders Issued

As part of its regulatory oversight, the Canadian Nuclear Safety Commission (CNSC) issues orders to licensees found in non-compliance, to protect the health and safety of workers, the public and the environment. These regulatory actions were taken by the CNSC between March 9, 2013, and September 31, 2013.

Order issued to Western Inspection Ltd.
On April 12, 2013, the CNSC announced that it had issued an order to Western Inspection Ltd., a company based in Calgary, Alberta, which 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 after Western Inspection Ltd. failed to safely conduct radiography operations involving exposure devices. The company's actions were not in accordance with applicable regulatory requirements, nor with the conditions of its CNSC licence, and resulted in increased risk to the health and safety of persons. Specifically, Western Inspection Ltd. failed to conduct the retrieval of a radioactive sealed source from one of its damaged exposure devices in a safe manner, consistent with regulatory requirements; this failure caused undue radiation exposure to its workers.

On July 5, 2013, the CNSC confirmed that Western Inspections Ltd. complied with all the terms and conditions of the order. The corrective measures implemented by the company were reviewed and found satisfactory by CNSC staff.

Order issued to Curtis Engineering Associates Ltd.
On April 26, 2013, the CNSC announced it had issued an order to Curtis Engineering Associates Ltd., based in Calgary, Alberta, which offer geotechnical, environmental, civil and materials engineering services. The company holds a CNSC licence that authorizes the possession, transfer, use and storage of portable nuclear gauges.

The CNSC issued the order on April 19, 2013, as a result of observations made during an inspection at one of the licensee's work sites in Calgary. The inspection identified numerous deficiencies, which included inadequate documentation and labelling for transport, and insufficient training for a worker transporting nuclear gauges.

The order required Curtis Engineering Associates Ltd. to remove the worker from the transport of portable nuclear gauges until the licensee provided the worker with adequate training to safely perform transport-related activities. The order also required the removal of the untrained worker from transport activities, to prevent any risks to the health and safety of other workers, as well as to the public and the environment.

On June 19, 2013, the CNSC confirmed that Curtis Engineering Associates Ltd. complied with all the terms and conditions of the order. The corrective measures implemented by the company were reviewed and found satisfactory by CNSC staff.

Order issued to 527979 Alberta Ltd.
On May 12, 2013, the CNSC announced that it had issued an order to 527979 Alberta Ltd., a company based in Leduc, Alberta, which provides testing services to the industrial sector. The company holds a CNSC licence authorizing the possession, transfer, use and storage of nuclear substances contained in industrial radiography exposure devices.

The CNSC issued the order on May 9, 2013, as a result of observations made during an inspection at the licensee's storage site in Leduc. The inspection identified numerous deficiencies, which include inadequate security measures and documentation, and the lack of an effective alarm response protocol to the intrusion alarm system whenever the sources were left unattended. The company's measures were not in accordance with paragraphs 12 (1) (c), (g) and (h) of the *General Nuclear and Safety Regulations*, nor with the conditions of its CNSC licence, and resulted in increased risk to the health, safety and security of persons.

The order requires 527979 Alberta Ltd. to relocate the exposure devices at a location that will provide security measures deemed acceptable to the CNSC.

At press time, 527979 Alberta Ltd. had not demonstrated compliance with all the terms and conditions of the order.

Order to Red River Equipment (2007) Inc.
On June 10, 2013, the CNSC announced it had issued an order to Red River Equipment (2007) Inc., operating as Canadian Gold Beverages (2012).

Red River Equipment (2007) Inc. is a company that operates a bottling plant in Marchand, Manitoba. The order was issued after the company ignored repeated requests

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by the CNSC to obtain a licence for the fixed nuclear gauge (a device used for measuring liquid levels on production lines) that is in their possession.

The order, issued on June 4, 2013, required Red River Equipment (2007) Inc. to immediately secure the nuclear gauge in its facility, to prevent unauthorized access to the device. The company was required to transfer the gauge by June 14, 2013, to a person authorized by the CNSC to possess such a device, and was to provide evidence to the satisfaction of the CNSC that this transfer had taken place.

The company failed to comply with the order. On July 10, 2013, the CNSC brought the nuclear gauge under regulatory control. On October 23, 2013, the CNSC issued an administrative monetary penalty to the company in the amount of $14,860 for failure to comply with a CNSC order.

Order to NOVA Chemicals Corporation
On July 4, 2013, the CNSC announced it had issued an order to NOVA Chemicals Corporation, a company that operates an industrial research and technology centre in Calgary, Alberta. The order was issued after a CNSC inspection identified several instances where NOVA Chemicals Corporation was not complying with regulatory requirements. These non-compliances included an ineffective radiation protection program for the operation of fixed nuclear gauges (devices used for measuring material thickness for research purposes) at the licensee's location.

The order, issued on June 26, 2013, required NOVA Chemicals Corporation to immediately cease all operations of its nuclear gauges. The company was required to implement an effective radiation protection program deemed satisfactory to the CNSC, before it was to be permitted to resume operating the nuclear gauges.

On November 1, 2013, the CNSC confirmed that NOVA Chemicals Corporation complied with all the terms and conditions of the order. The corrective measures implemented by this company were reviewed and found satisfactory by CNSC staff.

Order to Soil Probe Ltd.
On August 21, 2013, the CNSC announced it had issued an order to Soil Probe Ltd. based in Scarborough, Ontario, which offers geotechnical, environmental, civil and materials engineering services. The company holds a CNSC licence that authorizes the possession, transfer, use and storage of portable nuclear gauges.

The CNSC issued the order on August 15, 2013, as a result of observations made during an inspection at one of the licensee's work sites in Vaughan, Ontario. The order required Soil Probe Ltd. to immediately place all of its portable nuclear gauges in secure storage and remove all of its workers from the operation of the gauges until the company had provided the workers with adequate training to safely operate portable nuclear gauges. Soil Probe Ltd. was also required to correct all items of non-compliance observed during the inspection.

On August 27, 2013, the CNSC confirmed that Soil Probe Ltd. complied with all the terms and conditions of the order. The corrective measures implemented by the company were reviewed and found satisfactory by CNSC staff.

Order to LVM Inc.
On August 27, 2013, the CNSC announced it had issued an order to LVM Inc. based in Laval, Quebec, which offers geotechnical, environmental, civil and materials engineering services. The company holds a CNSC licence that authorizes the possession, transfer, use and storage of portable nuclear gauges.

The CNSC issued the order on August 20, 2013, as a result of observations made during an inspection, which revealed an employee had left a nuclear gauge unattended for several minutes.

The order required LVM Inc. to remove the worker from operating the device until it has provided the worker with adequate training to safely operate portable nuclear gauges.

On Semptember 4, 2013, the CNSC confirmed that LVM Inc. complied with all the terms and conditions of the order. The corrective measures implemented by the company were reviewed and found satisfactory by CNSC staff.

Order to the City of Estevan, Saskatchewan
On September 4, 2013, the CNSC announced it had issued an order to the City of Estevan, Saskatchewan. The City holds a CNSC licence that authorizes the possession, transfer, use and storage of portable nuclear gauges. The City uses these gauges for geotechnical, civil and materials engineering testing and verification.

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The CNSC issued the order on August 28, 2013, as a result of observations made during an inspection at the licensee's location. The order requires the City to immediately place its portable nuclear gauge in secure storage and remove all of its workers from the operation of the gauge until the City has demonstrated that an effective radiation protection program has been implemented. The City is also required to correct all items of non-compliance observed during the inspection.

At press time, the City of Estevan had not demonstrated compliance with all the terms and conditions of the order.

Order to Parkland Geotechnical Consulting Ltd.
On September 11, 2013, CNSC announced it had issued an order to Parkland Geotechnical Consulting Ltd. which holds a CNSC licence that authorizes the possession, transfer, use and storage of portable nuclear gauges. Parkland Geotechnical Consulting uses these gauges for geotechnical, civil and materials engineering testing and verification. The CNSC issued the order on September 5, 2013, as a result of observations made during an inspection at the licensee's Medicine Hat, Alberta location.

The order required Parkland Geotechnical Consulting to immediately place its portable nuclear gauges in secure storage. The licensee was required to remove all workers from operation of the gauges at this location until it had demonstrated that an effective radiation protection program has been implemented and that workers have been provided with adequate training to safely operate portable nuclear gauges. Parkland Geotechnical Consulting was also required to correct all items of non-compliance observed during the inspection.

On October 24, 2013, the CNSC confirmed that Parkland Geotechnical Consulting Ltd. complied with all the terms and conditions of the order. The corrective measures implemented by the company were reviewed and found satisfactory by CNSC staff.

Order to GEM Testing Ltd.
On September 12, 2013, the CNSC announced it had issued an order to GEM Testing Ltd. based in Dunmore, Alberta, which offers geotechnical, environmental, civil and materials engineering services. The company holds a CNSC licence that authorizes the possession, transfer, use and storage of portable nuclear gauges.

The CNSC issued the order on September 6, 2013, as a result of observations made during inspections at two of the licensee's work sites in Medicine Hat, Alberta. The order required GEM Testing Ltd. to immediately prohibit two of its workers from transporting portable nuclear gauges until it was demonstrated that these workers have been effectively retrained in the proper transport of radioactive devices and packages.

On November 5, 2013, the CNSC confirmed that GEM Testing Ltd. complied with all the terms and conditions of the order. The corrective measures implemented by the company were reviewed and found satisfactory by CNSC staff.

Order to WSA Engineering Limited
On September 23, 2013, the CNSC announced it had issued an order to WSA Engineering Limited which holds a CNSC licence that authorizes the possession, transfer, use and storage of portable nuclear gauges. WSA Engineering Limited uses these gauges for geotechnical, civil and materials engineering testing and verification.

The CNSC issued the order on September 16, 2013, as a result of observations made during an inspection at the licensee's Castlegar, British Columbia location.

The order requires WSA Engineering Limited to immediately cease the use and transport of its portable nuclear gauges until it can be demonstrated to the CNSC that the company has the required qualifications and knowledge to implement and maintain an effective radiation protection program.

At press time, WSA Engineering Limited had not demonstrated compliance with all the terms and conditions of the order.

Order to P. Machibroda Engineering Ltd.
On September 24, 2013, the CNSC announced it had issued an order to P. Machibroda Engineering Ltd. based in Saskatoon, Saskatchewan, which offers geotechnical, environmental, civil and materials engineering services. The company holds a CNSC licence that authorizes the possession, transfer, use and storage of portable nuclear gauges.

The CNSC issued the order on September 17, 2013, as a result of observations made during an inspection at one of the licensee's work sites in Saskatoon. The order

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required P. Machibroda Engineering Ltd. to immediately remove one of its workers, Mr. Bradley Hibbard, from activities involving portable nuclear gauges until it was demonstrated that he has been effectively retrained in all aspects of the safe operation of portable nuclear gauges. The licensee was also required to correct all items of non-compliance identified during the inspection.

On October 30, 2013, the CNSC confirmed that P. Machibroda Engineering Ltd. complied with all the terms and conditions of the order. The corrective measures implemented by this company were reviewed and found satisfactory by CNSC staff.

On December 4, 2013, the CNSC issued an Administrative Monetary Penalty to Mr. Bradley Hibbard in the amount of $300, as a result of his failure to comply with paragraph 17(b) of the *General Nuclear Safety and Control Regulations*.

Order to Groupe Qualitas Inc.
On September 30, 2013, the CNSC announced that it had issued an order to Groupe Qualitas Inc. located in Montreal, Quebec, which offers geotechnical, environmental and materials engineering services across the province. The company holds a CNSC licence that authorizes the possession, transfer, use and storage of portable nuclear gauges.

The CNSC issued the order on September 24, 2013, following an inspection in Val-d'Or, Quebec. The inspection showed that a portable nuclear gauge had been left unattended by an employee.

The order required the employee in question to cease using the device immediately and to refrain from using it until Groupe Qualitas Inc. had given the employee the necessary training with respect to the nuclear gauge.

On October 10, 2013, the CNSC confirmed that Groupe Qualitas Inc. complied with all the terms and conditions of the order. The corrective measures implemented by the company were reviewed and found satisfactory by CNSC staff.

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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