



DRAFT  
REGULATORY  
GUIDE

**CNSC Type II Inspections of Activities  
and Devices for Nuclear Substances and  
Radiation Device Licensees  
Group 3.5 Licensees**

G-303-3.5

(Use Types: 817, 822, 823, 830, 864, 866, 917)

July 2004

## REGULATORY DOCUMENTS

The legal framework within which the Canadian Nuclear Safety Commission (CNSC) operates includes the *Nuclear Safety and Control Act (Act)*, its Regulations and other legal instruments such as licences, certificates and orders. The legal framework is supported by regulatory documents issued by the CNSC, the main classes of which are:

**Regulatory Policy (P):** a document that describes the philosophy, principles or fundamental factors that underlie the CNSC's approach to its regulatory mission. It provides direction to CNSC staff and information to stakeholders.

**Regulatory Standard (S):** a document that describes CNSC requirements. It imposes obligations on the regulated party, once it is referenced in a licence or other legally enforceable instrument.

**Regulatory Guide (G):** a document that indicates acceptable ways of meeting CNSC requirements, as expressed in the *Act*, Regulations, regulatory standard or other legally-enforceable instrument. It provides guidance to licensees and other stakeholders.

**Regulatory Notice (N):** a document that provides licensees and other stakeholders with information about significant matters that warrant timely action.

# DRAFT REGULATORY GUIDE

## CNSC Type II Inspections of Activities and Devices for Nuclear Substances and Radiation Device Licensees Group 3.5 Licensees

**G-303-3.5**

July 2004

### About this Document

The purpose of the proposed Regulatory Guide is to help Nuclear Substance and Radiation Device Licensees to understand the typical elements of a Canadian Nuclear Safety Commission (CNSC) Type II inspection of licensed activities and devices. The information is provided through the inclusion in the Guides of facsimiles of the worksheets that CNSC inspectors use to capture and document the results of their respective inspections.

### Comments

The CNSC invites affected stakeholders and interested persons to assist in the further development of this draft regulatory document by commenting in writing on the document's content and usefulness. The draft regulatory guide is being issued for a one year public consultation and trial use period.

Direct your comments to the postal or e-mail address below by **June 30, 2005**, referencing file 1-8-8-303, and guide G-303-3.5. The CNSC will take the comments received on this draft into account when developing it further. These comments will be subject to the provisions of the federal *Access to Information Act*.

### Document Availability

This document and other similar guides can be viewed on the CNSC Website at [www.nuclearsafety.gc.ca](http://www.nuclearsafety.gc.ca). To order a printed copy of the document in English or French, please contact:

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**REGULATORY GUIDE**

**Group 3.5 Licenses  
G-303-3.5**

**CNSC TYPE II INSPECTIONS OF ACTIVITIES AND DEVICES  
FOR NUCLEAR SUBSTANCES AND RADIATION DEVICE  
LICENSEES**

Issued for public consultation and trial use by the  
Canadian Nuclear Safety Commission  
July 2004

# CNSC TYPE II INSPECTIONS OF ACTIVITIES AND DEVICES FOR NUCLEAR SUBSTANCES AND RADIATION DEVICE LICENSEES

## 1.0 DOCUMENT PURPOSE

The purpose of this Regulatory Guide is to help Nuclear Substance and Radiation Device licensees understand the typical elements of a Canadian Nuclear Safety Commission (“CNSC”, “Commission”) “Type II” inspection of licensed activities and devices, carried out pursuant to the *Nuclear Safety and Control Act* (“NSC Act”, “Act”), the applicable regulations and specific licence conditions authorized by the *Act* and regulations.

## 2.0 DOCUMENT SCOPE

This Regulatory Guide sets out, for Nuclear Substance and Radiation Device licensees, the typical elements of a CNSC “Type II” inspection of various licensed activities and devices. The pertinent information is provided through the inclusion in the Guides of facsimiles of the respective worksheets that CNSC inspectors use to capture and document the results of their respective inspections.

## 3.0 DEFINITION

A “Type II inspection” means all verification activities related to routine (item by item) checks and rounds.

## 4.0 RELEVANT LEGISLATION

The facsimiles of the inspection worksheets for the licensed activities or radiation devices reference, for each listed element of the respective Type II inspection, the relevant provision of the *Act*, the regulations, or various licence conditions.

## 5.0 DISCLAIMER

CNSC licensees may use these worksheets voluntarily to ascertain the CNSC’s general expectations regarding regulatory requirements. Such requirements would generally be assessed during a Type II inspection of licences issued pursuant to the Nuclear Substances and Radiation Devices Regulations. The expectations listed for each regulatory requirement are only provided as a guide. Similar worksheets will be used by CNSC staff for inspections. Inspections, will, however, be carried out on a case-by-case basis in the context of the licensed activities and the circumstances of individual situations. These worksheets are not intended to limit the scope of CNSC inspections or the powers of CNSC inspectors. Licensees should contact the CNSC to obtain information regarding their specific regulatory requirements.

# CNSC INSPECTIONS OF ACTIVITIES AND DEVICES FOR NUCLEAR SUBSTANCES AND RADIATION DEVICE LICENSEES

## Explanatory Information for Type I and Type II Inspection Worksheets

Type I and Type II Inspection worksheets are intended for use by CNSC Inspectors who are familiar with the terminology and abbreviations appearing on the worksheets. The information below is provided for the benefit of licensees and others who may be interested in the documents.

### Worksheet Columns

#### Risk Column:

provides the Safety and Control Area numbering (SCA 1, SCA 2, SCA 3, etc.) and the level of risk associated with the requirement.

Safety and Control Area numbering is as follows:

1. Radiation Protection
2. Emergencies and Unplanned Events
3. Environmental Protection
4. Fire Protection
5. Training and Qualification
6. Operational Procedures
7. Organization and Management
8. Quality Management
9. Non-Radiological Health and Safety
10. Public Information Programs
11. Security
12. International Obligations/Safeguards
13. Packaging and Transport

Levels of Risk are as follows:

- High (Risk Group 3) – immediate health, safety, or security risk
- Medium (Risk Group 2) – health, safety or security risk, but not immediate
- Low (Risk Group 1) – not health, safety or security risks - administrative issues

#### Description Column:

provides a brief written description of the regulatory requirement

**Requirements Column:**

provides the source of the regulatory requirement (Act, regulations, licence conditions)

**Order Column:**

boxes marked with a check mark mean that non-compliance with the particular requirement could result in an Order being issued by the CNSC

**Compliance Expectations Column:**

provides brief instructions to the Inspector on what to verify

**Other Relevant Information****Compliance Expectations**

in some cases, the information will be licensee specific, so details will not be listed on the worksheets. For example, when verifying Radiation Protection Program components, the CNSC Licensing Specialist (LS) may highlight the components of the program requiring verification. This particular information is available to the Inspector from written submissions by the licensee.

**Other Abbreviations**

in addition to the abbreviations listed at the top of the worksheets, prefixes have been added to many of the regulatory requirements under the *Packaging and Transport of Nuclear Substances Regulations* (PTNS) and the *Transport of Dangerous Goods Regulations* (TDG) identified in the Requirements column. These prefixes have been added to provide further clarification on the particular area of interest for the requirement.

The prefixes are:

- CoO – consignor
- D – document
- EP – excepted package
- T – training
- TA – Type ‘A’ package
- TB – Type ‘B’ package
- TD – transport document
- TM – transport mode

Other abbreviations appearing in the worksheets are:

- LC – licence condition
- LS – licensing specialist
- TS – technical specialist

# Type II Inspection Worksheet

**Rating** A - Exceeds requirements  
 B - Meets requirements  
 C - Below requirements  
 D - Significantly below requirements  
 E - Unacceptable  
 N/A - Not Applicable  
 N/C - Not Checked

**Abbreviations**

RP - Radiation Protection  
 SCA - Safety and Control Area  
 LC - Licence Condition

GN - General Nuclear Safety and Control  
 TS-R-1 - IAEA Safety Standard 1996 Edition (Revised)  
 PTNS - Packaging and Transport of Nuclear Substances  
 TDG - Transport of Dangerous Goods Regulations

NSCA = Nuclear Safety and Control Act  
 NSRD - Nuclear Substances and Radiation Devices  
 CII - Class II Nuclear Facility and Prescribed Equipment

**Use Type:** 817, 822, 823, 830, 864, 866, 917

Licensee No/Name:

Report Number:

Licence Number:

Inspection Date:

Address:

Inspector Name:

City:

Province:

Postal Code:

Usetype Number: 822

Person Seen:

Risk Group: 3.00

Phone Number:

Risk	Description	Requirements	Order	Compliance Expectations
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**SCA: 1 Radiation Protection**

H	Survey meter Rating:	LC 2058-0 Comments:	<input type="checkbox"/>	Verify that a survey meter is readily available and that it functions correctly.
H	Access control (storage) Rating:	LC 2575-0 (a) Comments:	<input type="checkbox"/>	Verify that, when in storage, access to nuclear substances or radiation devices is restricted to persons authorized by the licensee. Verify that there is no possible access to that area when it is unattended.
H	Dose control (storage) Rating:	LC 2575-0 (b) Comments:	<input type="checkbox"/>	Verify that the dose rates are < 2.5 µSv/h (± 20%) at all normally occupied areas.
H	Survey meter provided Rating:	NSRD 30 (3) (a) Comments:	<input checked="" type="checkbox"/>	For exposure devices only. Verify that the workers are provided with a survey meter that meets the requirements of the regulations.
H	TLD provided Rating:	NSRD 30 (3) (c) Comments:	<input checked="" type="checkbox"/>	For exposure devices only. Verify that the workers are provided with a dosimeter that meets the requirements of the regulations.
H	DRD provided Rating:	NSRD 30 (3) (d) Comments:	<input checked="" type="checkbox"/>	For exposure devices only. Verify that workers are provided with a dosimeter (DRD) that meets the requirements of the regulations and is capable of recording at least 3 mSv at the beginning of a work shift.
H	Alarming dosimeter provided Rating:	NSRD 30 (3) (e) Comments:	<input checked="" type="checkbox"/>	For exposure devices only. Verify that workers are provided with an alarming dosimeter that: emits an alarm at 5 mSv/h or at a total dose of 2 mSv or emits an audible alarm signal that increases with the dose rate, is designed so alarm settings can not be changed voluntarily, has been calibrated (within +/- 20% of true dose) within the past 12 months and can be worn on the trunk of the body.

**SCA: 1 Radiation Protection**

H	Trefoil signs provided Rating:	NSRD 30 (3) (f) Comments:	<input checked="" type="checkbox"/>	For exposure devices only. Verify that the workers are provided with sufficient radiation warning symbols (RWS) or signs.
H	Survey meter used Rating:	NSRD 31 (1) (a) Comments:	<input checked="" type="checkbox"/>	For exposure devices only. Verify that the worker is using a survey meter that meets the requirements of the regulation.
H	TLD used Rating:	NSRD 31 (1) (c) Comments:	<input checked="" type="checkbox"/>	For exposure devices only. Verify that all operators on site wear their TLD on the trunk of their body and that the TLDs meet the requirements of the regulation (NSRD 30 (3)(c)).
H	DRD used Rating:	NSRD 31 (1) (d) Comments:	<input checked="" type="checkbox"/>	For exposure devices only. Verify that all operators on site wear a direct reading dosimeter (DRD), on the trunk of their body, and that it meets the requirements of the regulation (NSRD 30 (3)(d)).
H	Alarming dosimeter used Rating:	NSRD 31 (1) (f) Comments:	<input checked="" type="checkbox"/>	For exposure devices only. Verify that all operators on site wear an alarming dosimeter, on the trunk of their body, and that it meets the requirements of this regulation.
H	Source returned Rating:	NSRD 31 (1) (h) Comments:	<input checked="" type="checkbox"/>	For exposure devices only. Verify that the operator has used the survey meter to confirm that the source has returned to the fully shielded position by taking readings all around the exposure device.
H	Exposure to non NEW Rating:	NSRD 31 (1) (i) Comments:	<input checked="" type="checkbox"/>	For exposure devices only. Operators must keep exposure to a non-NEW below 0.1 mSv/week and 0.5 mSv/year. The inspector will verify the dose rates and occupancy factors.
H	Barriers Rating:	NSRD 31 (1) (j) Comments:	<input checked="" type="checkbox"/>	For exposure devices only. Verify that, for devices in use or waiting to be used, access is controlled by either persons or barriers all around the work area, to a maximum of 0.1 mSv/h when the source is in its normal exposed position.
H	Signs at barriers Rating:	NSRD 31 (1) (k) Comments:	<input type="checkbox"/>	For exposure devices only. Verify that prominent radiation warning symbols (RWS) are posted and visible from each direction leading into an area exceeding 100 $\mu$ Sv/h. Signs posted at 25 $\mu$ Sv/h and barriers erected at 100 $\mu$ Sv/h is acceptable. Signs do not have to be at both limits.
H	R.P. Program Rating:	RP 04 (a) Comments:	<input type="checkbox"/>	Verify that radiation protection information identified by the Licensing Specialist has been implemented by the licensee.
H	Ascertaining of dose directly Rating:	RP 05 (2) (a) Comments:	<input type="checkbox"/>	Verify that the licensee is determining their worker radiation dose through direct monitoring, if applicable (use of dosimeters and/or bioassays).
H	Dose limits/body Rating:	RP 13 (1) Comments:	<input type="checkbox"/>	Verify that the effective dose limits have not been exceeded for NEWs, non-NEWs (< 1 mSv/y), pregnant NEWs (< 4 mSv/balance of pregnancy).
H	Container/device source details Rating:	RP 20 (1) (b) Comments:	<input type="checkbox"/>	Verify that containers and devices with >1EQ are labeled with the radionuclide name, quantity and date of source measurement.

**SCA: 1 Radiation Protection**

H	Container/device labeled Rating:	RP 20(1)(a) Comments:	<input type="checkbox"/>	Verify that all containers and devices with > 1EQ are labeled with a radiation warning symbol (RWS) and appropriate wording.
M	Meter calibrated Rating:	NSRD 20 Comments:	<input type="checkbox"/>	If a survey meter is required by a licence condition or a regulation, verify that, on the day of use, the survey meter being used had been calibrated within the 12 month period preceding its use by: a) verifying the calibration certificate or; b) verifying the calibration sticker on the survey meter.
M	Doses measured Rating:	RP 05 (1) Comments:	<input type="checkbox"/>	Verify that the dose monitoring is as specified in the licence application and that it continues to be adequate considering changes to work practices and work load
M	Area posting Rating:	RP 21 (1) Comments:	<input type="checkbox"/>	Verify that prominent radiation warning symbols/signs and appropriate wording are posted at each entrance to an area, room, or enclosure where there is 100EQ or more of a nuclear substance or the dose rate equals or exceeds 25 µSv/h..
L	Radiation Warning Sign Rating:	RP 22 Comments:	<input type="checkbox"/>	Verify that radiation warning symbols (RWS) are in accordance with the regulation.

**SCA: 2 Emergencies and Unplanned Events**

H	Reportable incidents Rating:	GN 29 Comments:	<input type="checkbox"/>	Question staff about unusual or unplanned events that could involve situations listed in GN 29. Were these events immediately reported to the CNSC and a written report sent in 21 days?
H	Device incidents Rating:	NSRD 21 Comments:	<input checked="" type="checkbox"/>	If a device is involved in an incident, verify that a proper function test or inspection was performed before the device was returned to use.
H	Emergency material provided Rating:	NSRD 30 (3) (b) Comments:	<input checked="" type="checkbox"/>	For exposure devices only. Verify that the licensee has provided the worker with long handled tongs (1.5m), shielding (100x), and a tool capable of severing a guide tube and drive cable.
H	Emergency material available Rating:	NSRD 31 (1) (b) Comments:	<input checked="" type="checkbox"/>	Verify that the operator has long handled tongs (1.5m), shielding (100x), and cutters capable of severing a guide tube and drive cable at the work site.
H	Contact dose > 2 mSv/h Rating:	NSRD 31 (4) (b) Comments:	<input checked="" type="checkbox"/>	For exposure devices only. Verify that the contact dose rate on any surface of the exposure device does not exceed 2 mSv/h (including survey meter precision of ± 20%).
M	Radiation safety Rating:	NSRD 17 Comments:	<input type="checkbox"/>	Verify that the workers have a copy of the relevant work procedures and the emergency procedures at the worksite.
M	Failed leak test Rating:	NSRD 18 (3) Comments:	<input type="checkbox"/>	Verify through questions and examination of leak tests measurement results, if there were any leak test results > 200 Bq and if so that they were reported to the CNSC and the device was removed from use.

**SCA: 2 Emergencies and Unplanned Events**

M	Field devices I.D.	NSRD 22	<input type="checkbox"/>	Verify that each device used in the field has securely attached, a durable and legible label indicating the name or job title and 24-hr telephone number of an emergency contact person.
	Rating:	Comments:		
M	Contact details posted (storage)	NSRD 23	<input type="checkbox"/>	Verify that the name or job title and 24-hr telephone number of the emergency contact person is posted at or near the storage location (contact person does not need to be on site).
	Rating:	Comments:		
M	Adequate device operation	NSRD 31 (4) (a)	<input type="checkbox"/>	For exposure devices only. Verify that the device used is functioning normally. This includes all associated equipment that is part of the exposure device (eg- drive cables, cranks, pneumatic pumps, return springs, guide tubes, etc...)
	Rating:	Comments:		
L	Leak test/event	NSRD 18 (1) (c)	<input type="checkbox"/>	Verify that leak tests were performed immediately after any event that might have damaged the source, in accordance with the submitted procedure (reviewed by LS).
	Rating:	Comments:		

**SCA: 5 Training and Qualification**

H	Sufficient workers	GN 12 (1) (a)	<input type="checkbox"/>	Check that the # of qualified workers match the # submitted in the application. Can be found in the licence assessment summary.
	Rating:	Comments:		
H	Mandatory training	GN 12 (1) (b)	<input type="checkbox"/>	Verify that all workers have received appropriate training and that it was documented.
	Rating:	Comments:		
H	CEDO to operate	NSRD 24	<input checked="" type="checkbox"/>	For exposure devices only. Verify that the worker operating the exposure device is a Certified Exposure Device Operator (CEDO), or is being supervised by a CEDO.
	Rating:	Comments:		
H	Trainee knowledge	NSRD 33 (1)	<input checked="" type="checkbox"/>	For exposure devices only. Verify that CEDO is aware of the knowledge of his trainee through questioning of trainee and CEDO.
	Rating:	Comments:		
H	Trainee supervision	NSRD 33 (2)	<input checked="" type="checkbox"/>	For exposure devices only. Verify that the CEDO has continual visual surveillance of the trainee operating the device.
	Rating:	Comments:		
M	Licensee appointment for trainee	NSRD 32 (1)	<input type="checkbox"/>	Verify that the licensee has obtained the written consent of any competent CEDO requested to supervise a named trainee. The written request is required by NSRD 32(2).
	Rating:	Comments:		
M	Nuclear Energy Workers informed	RP	<input type="checkbox"/>	If the licensee has declared workers as NEW, check for a record of signed acknowledgement by each NEW.
	Rating:	Comments:		

**SCA: 6 Operational Procedure**

H	Use of equipment & procedures	GN 12 (1) (e)	<input type="checkbox"/>	Verify that the licensee has measures in place to ensure that equipment, clothing, devices and procedures are being used at any work site. This can be verified through observation, interviews, or by review of internal audits.
	Rating:	Comments:		
H	Authorized transfer	GN 13	<input type="checkbox"/>	Check that licensee has verified if the receiver has a valid CNSC licence.
	Rating:	Comments:		

**SCA: 6 Operational Procedure**

H	Worker's use of protection	GN 17 (a)	<input checked="" type="checkbox"/>	Verify through observation that workers are using the safety equipment, devices, facilities and clothing provided to them (by the licensee) in a reasonable and responsible manner.
	Rating:	Comments:		
H	Procedures followed	GN 17 (b)	<input checked="" type="checkbox"/>	Verify by observation that workers comply with licensee's procedures.
	Rating:	Comments:		
H	Device certification	NSRD 11 (1) (a)	<input checked="" type="checkbox"/>	Verify that all devices used are certified or covered by the appropriate CNSC licence (917). Check that no modifications have been made which may void the certification.
	Rating:	Comments:		
H	Uncertified device	NSRD 11 (1) (b)	<input checked="" type="checkbox"/>	For device testing only 917. Verify that any uncertified devices (on an 917 licence) are used for development purposes.
	Rating:	Comments:		
H	No transfer of uncertified device	NSRD 11 (2)	<input checked="" type="checkbox"/>	Verify that only devices which are certified have been transferred.
	Rating:	Comments:		
H	Locked device (licensee)	NSRD 30 (1) (b)	<input type="checkbox"/>	For exposure device only. Verify that the licensee keeps the exposure devices, when not in use, properly locked.
	Rating:	Comments:		
H	Initial check of equipment	NSRD 31 (1) (g)	<input type="checkbox"/>	For exposure device only. Verify that the operator has examined the sealed source assembly coupling and guide tube, the locking mechanism, the cranking device, the drive cable and the pneumatic pump, immediately before operating the device.
	Rating:	Comments:		
H	Locked device (worker)	NSRD 31 (1) (l)	<input type="checkbox"/>	For exposure device only. Verify that the workers keeps the exposure devices properly locked when: not in use, it is being moved, carried, visual contact with device cannot be maintained.
	Rating:	Comments:		
H	Source change survey	NSRD 34 (3)	<input type="checkbox"/>	For exposure device only. Verify that the worker who performed the source change has reported to the licensee, in writing, the radiation dose readings taken at each accessible surface of the exposure device.
	Rating:	Comments:		
H	Transfer records	NSRD 36 (1) (c)	<input type="checkbox"/>	Verify transfer records are maintained since the last inspection and that they include the date of transfer, recipient licence #, name/address of recipient, make/model, serial #, NS (nuclear substances) and quantity.
	Rating:	Comments:		
M	Device provided & maintained	GN 12 (1) (d)	<input type="checkbox"/>	Verify that the licensee provides and maintains, within manufacturer's specifications, emergency equipment, survey meters, dosimeters and all other devices required under the regulations. Verify by sampling. Devices include radiation devices (example of types of maintenance: service must be performed at frequency specified by the manufacturer; only approved equipment parts, lubricants, etc. can be used).
	Rating:	Comments:		
M	Transfer docs	NSRD 19 (2)	<input type="checkbox"/>	Verify that copies of valid leak test results were sent to recipients of sealed sources/shielding (D. U.).
	Rating:	Comments:		
M	Source tag (licensee)	NSRD 30 (1) (a)	<input type="checkbox"/>	For exposure device only. Verify that exposure devices are identified with a durable brass or steel tag that is readily visible and inscribed with source. The tag must be attached with metal fasteners.
	Rating:	Comments:		

**SCA: 6 Operational Procedure**

M	DRD record Rating:	NSRD 31 (1) (e) Comments:	<input type="checkbox"/>	For exposure device only. Verify that the operator has kept a daily record of the DRD readings.
M	Trainee appointment form Rating:	NSRD 32 (2) Comments:	<input type="checkbox"/>	For exposure device only. Verify that the licensee has properly notified the CEDO in writing. This notification should include the name of the trainee, the type of device to be used, state section 33 of NSRD and a copy of the licence.
M	Inventory Rating:	NSRD 36 (1) (a) Comments:	<input type="checkbox"/>	Use the latest ACR to verify inventory, including model, S/N, radionuclide and location. Verify that an inventory is maintained and that it includes details of name, quantity, and location; for sealed source(s) the model and serial number of the source; for radiation device(s), the model and serial number of the device; for unsealed sources the quantity used and the manner in which it was used. Verify accuracy by sampling.
M	List of users Rating:	NSRD 36 (1) (b) Comments:	<input type="checkbox"/>	Verify that a list of persons authorized to handle nuclear substances and/or radiation devices is maintained. Verify the list accuracy by sampling.
M	Training records Rating:	NSRD 36 (1) (d) Comments:	<input type="checkbox"/>	Verify that records of training are maintained for all workers. Verify accuracy by sampling
M	Inspection/decom/test records Rating:	NSRD 36 (1) (e) Comments:	<input type="checkbox"/>	Verify results kept on file for at least 3 years [NSRD 36 (3)]. Verify accuracy by sampling of records.
M	Device inventory Rating:	NSRD 37 (a) Comments:	<input type="checkbox"/>	For exposure device only. Verify that the licensee keeps in record the description (name of manufacturer, model and serial numbers) of the devices in his possession (including loan and leased).
M	Log of usage Rating:	NSRD 37 (c) Comments:	<input type="checkbox"/>	For exposure device only. Verify that the licensee keeps a log detailing which device was used, when and where it was used.
M	Source change record Rating:	NSRD 37 (f) Comments:	<input type="checkbox"/>	For exposure device only. Verify that the licensee has recorded the source change request and consent forms required under NSRD 30 (5).
M	Trainee consent record Rating:	NSRD 37 (g) Comments:	<input type="checkbox"/>	For exposure device only. Verify that the licensee has recorded the trainee appointment forms and the consent signed by the CEDO.
M	Servicing records Rating:	NSRD 37 (h) Comments:	<input type="checkbox"/>	For exposure device only. Verify that the licensee has recorded all measurements, servicing, tests and calibrations required under these regulations.
M	Measurement records Rating:	NSRD 37 (i) Comments:	<input type="checkbox"/>	For exposure device only. Verify that the licensee has kept measurement records required by the regulations, such as source replacement surveys and after any incident that may have caused damages to the device or its shielding.
M	Source inventory Rating:	NSRD 37(b) Comments:	<input type="checkbox"/>	For exposure device only. Verify that the inventory includes the source description (depleted U is not to be recorded since it is part of the device shielding).

**SCA: 6 Operational Procedure**

M	Licensed dosimetry	RP 08	<input type="checkbox"/>	Order only applicable for exposure device. Where dosimetry is required (determined at licence application) verify that service is provided by a licensed dosimetry service.
	Rating:	Comments:		
M	Frivolous Posting of Signs	RP 23	<input type="checkbox"/>	Verify that no signs are used where there is no permanent presence of radiation or nuclear substances. Licensee is not expected to remove or cover RWS posted on permanent storage location when the nuclear substances or radiation devices are temporarily removed.
	Rating:	Comments:		
L	Post licence	GN 14 (1)	<input type="checkbox"/>	Verify that the CNSC licence or notice of licensing is posted at all locations of licensed activity including field operations.
	Rating:	Comments:		
L	Licence available	GN 14 (2)	<input type="checkbox"/>	Verify that a copy of the licence is available at the field location.
	Rating:	Comments:		
L	Record keeping	GN 27	<input type="checkbox"/>	Verify that the licensee has a copy of the application and any other submitted records.
	Rating:	Comments:		
L	Record retained	GN 28	<input type="checkbox"/>	Verify that no prescribed records have been disposed of without proper CNSC notification.
	Rating:	Comments:		
L	Leak test/routine	NSRD 18 , 18 (1), 18 (1) (a), 18 (1) (b), 18 (1) (d), 18 (1) (d) (i), 18 (1) (d) (ii)	<input type="checkbox"/>	Verify that leak tests were performed at the appropriate frequency and in accordance with the submitted procedure.
	Rating:	Comments:		
L	Number of forms	NSRD 30 (3) (g)	<input type="checkbox"/>	For exposure device only. Verify that the licensee has provided the workers with sufficient forms to record the DRD readings.
	Rating:	Comments:		
L	Authorized users list	NSRD 37 (e)	<input type="checkbox"/>	For exposure device only. Verify that the licensee maintains a record of all persons who have been authorized to use or possess an exposure device or any sealed source assembly.
	Rating:	Comments:		
L	List of NEWs	RP 24	<input type="checkbox"/>	Verify a list of NEW is up to date that includes names and job categories.
	Rating:	Comments:		

**SCA: 7 Organisation and Management**

H	Worker's precautions	GN 17 (e)	<input type="checkbox"/>	Verify by observation that workers are working safely and ensuring security.
	Rating:	Comments:		
H	Licence Details	NSCA 26	<input type="checkbox"/>	Verify that Section I is correct. Verify that all activities are included in Section III. Verify that all nuclear substances and radiation devices are included in Section IV. Verify that all locations are included in Section V. Verify that the possession limits have not been exceeded (sum total quantity for each nuclear substance, including waste). Verify that the licensee is not performing unlicensed activities.
	Rating:	Comments:		

**SCA: 7 Organisation and Management**

H	Device > 2 mSv/h (Licensee)	NSRD 30 (4) (b)	<input checked="" type="checkbox"/>	For exposure device only. Verify that the licensee has prevented the use of any device whose surface dose rate exceeds 2 mSv/h. Verify by sampling that no exposure device in use or available for use has a surface dose rate exceeding 2 mSv/h ( $\pm$ 20%)
	Rating:	Comments:		
M	Change notified	GN 15 (c)	<input type="checkbox"/>	Verify that changes in RSO, RP techs, RP manager have been reported to the CNSC within 15 days.
	Rating:	Comments:		
M	Installation/servicing approval	LC 2022-2	<input type="checkbox"/>	Verify that the Servicing Program submitted in the licence application and supporting documentation has been implemented by the licensee.
	Rating:	Comments:		
M	Servicing records	LC 2061-0	<input type="checkbox"/>	Verify that adequate servicing records are kept. They must contain the date, the device description, including the source, description of the work performed, the name of the client and its licence number.
	Rating:	Comments:		
M	Location notification	LC 2300-2	<input type="checkbox"/>	Verify that any location that will be used for > 90 days or whose use has been discontinued is reported to the CNSC within 7 days.
	Rating:	Comments:		
M	Source change consent	NSRD 30 (5)	<input type="checkbox"/>	For exposure device only. Verify that workers performing a source change were provided with an authorization from the licensee.
	Rating:	Comments:		
L	Act/Regs available	GN 12 (1) (k)	<input type="checkbox"/>	Verify that all workers have access to a paper or electronic copy of the Act and applicable regulations.
	Rating:	Comments:		

**SCA: 11 Security**

H	Security	GN 12 (1) (g)	<input type="checkbox"/>	Verify that unless in use or under surveillance by an authorized user, nuclear substances and radiation devices are under locked storage restricting access to authorized users. Any compromise of physical security must be detectable.
	Rating:	Comments:		
H	Sabotage	GN 12 (1) (h)	<input type="checkbox"/>	Verify that the licensee has measures in place to provide warning of any sabotage that may have taken place.
	Rating:	Comments:		

**SCA: 12 International Obligations/Safeguards**

H	Import restrictions	LC 2402-0	<input type="checkbox"/>	Verify no import of tritium, thorium, plutonium or uranium above quantities specified in the licence condition without appropriate approvals and documentation.
	Rating:	Comments:		
H	Export restrictions	LC 2403-2	<input type="checkbox"/>	Verify no export of nuclear substances in excess of quantities specified in the licence condition without appropriate approvals and documentation.
	Rating:	Comments:		

**SCA: 13 Packaging and Transport**

H	Immediate reporting of dangerous occurrence & contamination Rating:	D-PTNS 19, TS-R-1 508, 509 Comments:	<input type="checkbox"/>	Verify any dangerous occurrences and if preliminary and full reports were sent to the CNSC (verification of licensee's copy of the said report).
H	Accidental releases immediate report Rating:	D-PTNS 20, TDG 8.1(1) Comments:	<input type="checkbox"/>	Incident specific, Verify through general questions if workers encountered accidental releases conditions as follow: (a) 10 mSv/h (+/- 20%) on the external surface of a package that is being transported under exclusive use, 2 mSv/h (+/- 20%) on the surface of the conveyance, and 0.1 mSv/h (+/- 20%) at a distance of 2 m from the surface of the conveyance; and  (b) 2 mSv/h (+/- 20%) on the external surface of a package that is not being transported under exclusive use, 0.1 mSv/h (+/- 20%) at a distance of 1 m from the package, 2 mSv/h (+/- 20%) on the surface of the conveyance, and 0.1 mSv/h (+/- 20%) at a distance of 2 m from the surface of the conveyance.
H	Misleading Safety Marks Rating:	TA-PTNS 15(1) TDG 4.2 Comments:	<input checked="" type="checkbox"/>	Safety marks on package and/or vehicles must be displayed in accordance with regulation. Note: Radiation safety and intent must be taken into account when determining the non-compliance consequence and stopping a package.
H	Type A Content / Activity Rating:	TA-PTNS 16 (1), TS-R-1 413, 414 Comments:	<input checked="" type="checkbox"/>	Verify with TS-R-1 table I (A1 for special form and A2 non-special form) that the package activity is within the limits.
H	Package Surface contamination Rating:	TA-PTNS 16 (4) TS-R-1 508, 509 Comments:	<input type="checkbox"/>	When a package is being shipped, verify records showing non-fixed contamination tests results. Note: The inspector is not expected to verify the package contamination level unless the inspection is at a manufacturer or unsealed sources user. If applicable, verify by sampling.
H	Transport Index Measurements Rating:	TA-PTNS 16 (4) TS-R-1 526, 527, 530 Comments:	<input checked="" type="checkbox"/>	Observe worker's determination of T.I.
H	Pkg dose rate < 2 mSv/h Rating:	TA-PTNS 16 (4) TS-R-1 531, 532 Comments:	<input checked="" type="checkbox"/>	Applicable only if package is not exclusive use. Verify that the maximum dose rate on the surface of the package or overpack does not exceed 2 mSv/h (+/- 20%) (dose rate may be higher for shipments under exclusive use).
H	Labels (I-W, II-Y, III-Y) description and location Rating:	TA-PTNS 16 (4) TS-R-1 533, 541,542 Comments:	<input checked="" type="checkbox"/>	Verify the presence of two correct and clearly visible labels on opposite sides of the package.
H	Information on Labels Rating:	TA-PTNS 16 (4) TS-R-1 543 & (TDG 4.14) Comments:	<input type="checkbox"/>	Verify that the name(s) of radionuclide(s) or symbol(s), activity (SI units) and transport index (where applicable) are correctly displayed on the primary class labels. Note: In a mixed shipment, the most restrictive radionuclide is listed first. The activity stated on the label is the maximum activity in the package during transport.
H	Shipping Name & UN number on the package Rating:	TA-PTNS 16 (4), TS-R-1 535 Comments:	<input checked="" type="checkbox"/>	Verify that the proper shipping name and UN number are displayed on the package.

**SCA: 13 Packaging and Transport**

H	Type A packages requirements	TA-PTNS 16(1) TS-R-1 633 (606-616)	<input checked="" type="checkbox"/>	Verify that dangerous goods are transported in the appropriate type of package. Check package for damage, modifications or degradation that may compromise the design integrity of the package. For damaged packages, before issuing order, package leakage and risk of nuclear substance dispersion must be verified.
	Rating:	Comments:		
H	Safety Marks (visibility legibility and colour)	TA-TDG 4.6, 4.7 (2)	<input type="checkbox"/>	Verify that safety marks includes labels, UN numbers and shipping name. Verify that all safety marks are legible, durable, weather resistant and of proper colour. Minimum size for the proper shipping name and UN number is 30 mm.
	Rating:	Comments:		
H	Misleading Safety Marks	TB-PTNS 15(1) TDG 4.2	<input checked="" type="checkbox"/>	Safety marks on package and/or vehicles must be displayed in accordance with regulation. Note: Radiation safety and intent must be taken into account when determining the non-compliance consequence and stopping a package.
	Rating:	Comments:		
H	Type B packages requirements	TB-PTNS 16 (1) TS-R-1 650, 665 (606-616), 806	<input checked="" type="checkbox"/>	Verify that dangerous goods are transported in the appropriate type of package. Check package for damage, modifications or degradation that may compromise the design integrity of the package. Use the Type B package certificate as a reference.
	Rating:	Comments:		
H	Type B Content / Activity	TB-PTNS 16 (1), TS-R-1 415, 416	<input checked="" type="checkbox"/>	Verify that the radionuclides, form and activity limit stated in the Type B certificate are respected (activity limits are different for air).
	Rating:	Comments:		
H	Package Surface contamination	TB-PTNS 16 (4) TS-R-1 508, 509	<input type="checkbox"/>	When a package is being shipped, verify records showing non- fixed contamination test results. Note: The inspector is not expected to verify the package contamination level unless the inspection is at a manufacturer or unsealed sources user. If applicable, verify by sampling.
	Rating:	Comments:		
H	Transport Index Measurements	TB-PTNS 16 (4) TS-R-1 526, 527, 530	<input checked="" type="checkbox"/>	Measure T.I and verify that it corresponds with the consignor's results. Verify by sampling.
	Rating:	Comments:		
H	Pkg dose rate < 2 mSv/h	TB-PTNS 16 (4) TS-R-1 531, 532	<input checked="" type="checkbox"/>	Applicable only if package is not exclusive use. Verify that the maximum dose rate on the surface of the package or overpack does not exceed 2 mSv/h (+/- 20%) (dose rate may be higher for shipments under exclusive use).
	Rating:	Comments:		
H	Labels (I-W, II-Y, III-Y) description and location	TB-PTNS 16 (4) TS-R-1 533, 541,542	<input checked="" type="checkbox"/>	Verify the presence of two correct and clearly visible labels on opposite sides of the package.
	Rating:	Comments:		
H	UN number on the package, next to label (TDG)	TB-PTNS 16 (4) TS-R-1 535 (TDG 4.12)	<input checked="" type="checkbox"/>	Verify that the UN number is displayed next to the primary class labels on two opposing sides of the package.
	Rating:	Comments:		
H	"TYPE B" markings on Pkg	TB-PTNS 16 (4) TS-R-1 538 (c)	<input type="checkbox"/>	Verify that the certified type B package is identified with the marking " TYPE B" . Capital letters are required.
	Rating:	Comments:		

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H	Fire resistant trefoil on Pkg (type B) Rating:	TB-PTNS 16 (4) TS-R-1 539 Comments:	<input checked="" type="checkbox"/>	Verify that the Type B package is identified with fire/water resistant trefoil sign. Order if no signs are present
H	Information on Labels Rating:	TB-PTNS 16 (4) TS-R-1 543 & (TDG 4.14) Comments:	<input type="checkbox"/>	Verify that the name(s) of radionuclide(s) or symbol(s), activity (SI units) and transport index (where applicable) are correctly displayed on the primary class labels. Note: In a mixed shipment, the most restrictive radionuclide is listed first. The activity stated on the label is the maximum activity in the package during transport.
H	Shipping Name on the package next to label (TDG) Rating:	TB-PTNS 16 (4), TS-R-1 535 (TDG 4.11) Comments:	<input checked="" type="checkbox"/>	Verify that the proper shipping name is displayed next to the primary class labels on two opposing sides of the package.
H	Safety Marks (visibility legibility and colour) Rating:	TB-TDG 4.6, 4.7 (2) Comments:	<input type="checkbox"/>	Verify that safety marks includes labels, UN numbers and shipping name. Verify that all safety marks are legible, durable, weather resistant and of proper colour. Minimum size for the proper shipping name and UN number is 30 mm
H	Transport Document Requirement Rating:	TD-PTNS 17 (3), TDG 3.1 Comments:	<input checked="" type="checkbox"/>	Verify that the package is accompanied by a transport document.
H	Transport Document (see detailed check sheet) Rating:	TD-TDG 3.5, 3.6 / TD-PTNS 15 (2)(550, 552, 553, 555, 556, 557, 17(1) 549) Comments:	<input checked="" type="checkbox"/>	See detailed check list for complete list of requirements and expectations (The shipping document contains information such as: consignor's name and business address, date of preparation, shipping name, Class, UN number, quantity (activity) of dangerous goods in SI units, number of packages for each shipping name, 24 hour phone number, the name and symbol of each radionuclide, form, category (I-W, II-Y, III-Y), transport index (for II-Y and III-Y), the package design approval certificate number(s) (if applicable) and the special form certificate number(s) (if applicable), special instructions, consignor's declaration and, if applicable, the words "Exclusive Use Shipment". Shipping name, Class and UN number must be noted together, in that order.)
H	Segregation from vehicle occupant max dose of 5 mSv and 1 mSv Rating:	TM-PTNS 15(5) 562 (306), 573 Comments:	<input checked="" type="checkbox"/>	Radioactive material to be segregated from places occupied by persons and undeveloped photographic film (limits are 5 mSv/y for workers, 1 mSv/y for public).
H	Passengers with II-Y & III-Y Rating:	TM-PTNS 15(5) 563 Comments:	<input checked="" type="checkbox"/>	Category II-YELLOW or III-YELLOW packages or overpacks shall not be carried in compartments occupied by passengers, except those exclusively reserved for couriers specially authorized to accompany such packages or overpacks.
H	Pkg opened/repackaged by trained person (or supervised) Rating:	TM-PTNS 21 (1), (2) Comments:	<input checked="" type="checkbox"/>	Verify through general questioning if there were any instances where package had been opened before reaching the consignee. If possible, verify the measures that were put in place to ensure the safety of the workers. The package must also be returned to its original state before continuing its transportation to the consignee.
H	Pkg check for damages Rating:	TM-PTNS 21 (3) Comments:	<input type="checkbox"/>	Review of documented procedures. Record review if instances of damaged packages.

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H	Shipping doc location Rating:	TM-TDG 3.7 Comments:	<input checked="" type="checkbox"/>	Verify that the shipping document is in a pocket mounted on the vehicle door or the document is within reach of driver.
H	Vehicle Placarded Rating:	TM-TDG 4.15 Comments:	<input checked="" type="checkbox"/>	Verify that the placards are posted on the large means of containment (e.g. container, trailer, vehicle, etc.). Required only for III-Y packages, exposure devices and LSA-I under exclusive use (PTNS 16(5)).
H	Pkg secured in vehicle Rating:	TM-TDG 5.4 / TM-PTNS 15 (5) / 564, 572 (a) (ii) Comments:	<input checked="" type="checkbox"/>	Verify that the dangerous goods are properly secured in the means of containment (package). Then, verify that the means of containment is properly secured in the vehicle. Category II-Y and III-Y shall not be carried in the passenger compartment.
H	Radiation protection training for transport Rating:	T-PTNS 18 (1) (C) Comments:	<input type="checkbox"/>	Document review for compliance.
H	Person Trained and possessing TDG training certificate or directly supervised Rating:	T-TDG 6.1 Comments:	<input type="checkbox"/>	Verify that the employer has provided training to all workers who handle, offer for transport or transport dangerous goods and that they hold a TDG certificate of training or that they perform these duties under direct supervision of a trained worker who holds a TDG certificate of training.
H	TDG & PTNS training Rating:	T-TDG 6.2, 6.7 GN 12 (1)(b) Comments:	<input checked="" type="checkbox"/>	Document review for compliance.
M	Type IP-2, IP-3 and Type A technical specification Rating:	CoO-PTNS 23 (1) Comments:	<input type="checkbox"/>	Applicable if consignor has used these types of packages. Certified devices with packages tested by the manufacturer are a low priority. Electronic records or paper records are acceptable.
M	Keep records on QA Rating:	D-PTNS 13 (b) TS-R-1 310 Comments:	<input type="checkbox"/>	Verify program results by sampling of records.
M	Retaining QA results Rating:	D-PTNS 13 (c) TS-R-1 310 Comments:	<input type="checkbox"/>	Verify that if records were disposed of, the CNSC was informed 90 days prior to disposal (GN 28).
M	Competent authority certificates Rating:	D-PTNS 15 (2) 556 Comments:	<input type="checkbox"/>	Verify that the consignor has special form certificates in his/her possession before making a shipment of a source to which the certificates pertain. Verify that the consignor has a copy of the Type B, Type C, Type H & Fissile packages design approval certificate and a copy of the instructions with regard to the proper closing of the package and other preparations for shipment.
M	File damage report in 21 days Rating:	D-PTNS 21 (4), (5) (6 & 7) Comments:	<input type="checkbox"/>	Incident specific. Verify through general questioning if workers encountered damaged or tampered packages. In the case of damaged package, a full report has to be sent to the CNSC in 21 days. For tampered packages, an immediate preliminary report has to be sent to the consignor, holder of the package and the CNSC. A full report must be filed within 21 days.

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M	Type IP-2, IP-3 and Type A Package documentation retention Rating:	D-PTNS 23 (2) Comments:	<input type="checkbox"/>	Documents required under PTNS 23(1) are required to be kept for 2 years after last use of package.
M	Shipping doc kept 2 Y Rating:	D-TDG 3.11 Comments:	<input type="checkbox"/>	Applicable to consignor and carrier. Verify that the shipping documents were kept for two years after transport (electronic or paper). ELS shipping documents must be kept for two years after they cease to be used. For exemptions see 3.11 (4) ( eg. custom brokers).
M	Consignor/carrier package checks Rating:	TA-PTNS 16 (4) 502 (a) Comments:	<input type="checkbox"/>	Verify that the consignor/carrier has ensured that packages have been properly prepared for transport and inspector will look for visible signs of package damages or deficiencies.
M	VRI code on Type A package Rating:	TA-PTNS 16 (4) 537 (c) Comments:	<input type="checkbox"/>	Vehicle Registration Code (VRI) of the country of origin of package design and the name of the manufacturer are required on the Type A package.
M	Consignor or consignee's identification on Type A package Rating:	TA-PTNS 16(4) TS-R-1 534 Comments:	<input type="checkbox"/>	Name of the consignor and/or consignee is expected to be clearly displayed on the package. (Waybill attached to the package, stating the consignor/consignee name is adequate in the case of return shipments following service).
M	Gross mass, design number and S/N on Type A package Rating:	TA-PTNS 16(4) TS-R-1 536, 537(b) & (c) Comments:	<input type="checkbox"/>	Verify that the package is marked with "TYPE A" in a legible and durable manner. Gross mass legibly and durably marked on package if >50 kg.
M	Consignor or consignee's identification on Type B package Rating:	TB-PTNS 16 (4) TS-R-1 534 Comments:	<input type="checkbox"/>	Name of the consignor and/or consignee has to be clearly displayed on the package.
M	Gross mass, design number and S/N on Type B package Rating:	TB-PTNS 16 (4) TS-R-1 536, 538 (a) & (b) Comments:	<input type="checkbox"/>	Verify that the certified Type B package has its certificate number, design number, competent authority mark (e.g. CDN ...) and the serial numbers clearly marked on the package.
M	Competent authority certificates Rating:	TM-PTNS 15 (2) 556 Comments:	<input type="checkbox"/>	The applicable competent authority certificates need not necessarily accompany the consignment. The consignor shall make them available to the carrier(s) before loading and unloading.
M	TDG training certificate issuance & content Rating:	T-TDG 6.3, 6.5 Comments:	<input type="checkbox"/>	Verify that the employer has provided all TDG trained workers with a TDG certificate of training that includes: the name and business address of the employer, the employee's name, the expiry date of the certificate (road-36 months; air-24 months), aspects of handling, offering for transport and transporting. Certificate must be signed by the employee and the employer.
M	Produce certificate on request Rating:	T-TDG 6.8 Comments:	<input type="checkbox"/>	A worker engaged in handling, offering for transport, transporting or directly supervising another person engaged in such activities must immediately produce a copy of their TDG training certificate to an inspector upon request.

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L	Type B, C, H, Fissile & LDRM package certification & Special form certificates (consignor)	D-PTNS 15 (2) TS-R-1 561	<input type="checkbox"/>	Verify that the package certificate is available at the head office location. Certificates must be available for every type of certified package used.
	Rating:	Comments:		
L	TDG training certificate on file	T-TDG 6.6	<input type="checkbox"/>	Verify that the employer has kept records of training and copies of all issued TDG training certificates (until two years after the date of expiry).
	Rating:	Comments:		

**Disclaimer - CNSC licensees may use this worksheet voluntarily to ascertain the CNSC's general expectations regarding regulatory requirements. Such requirements would generally be assessed during a Type I and Type II Inspection of licences issued pursuant to the Nuclear Substances and Radiation Devices Regulations. The expectations listed for each regulatory requirement are only provided as a guide. Similar worksheets will be used by CNSC staff for on-site inspections. Inspections, will, however, be carried out on a case-by-case basis in the context of the licensed activities and the circumstances of individual situations. This worksheet is not intended to limit the scope of CNSC inspections or the powers of CNSC inspectors. Licensees should contact the CNSC to obtain information regarding their specific regulatory requirements.**