



Commission canadienne
de sûreté nucléaire

Canadian Nuclear
Safety Commission

Operations Inspection Division: Perspective on Compliance



December 2009

Overview



1. Regulatory Framework
2. Compliance Program
3. Risk Assessment
4. Grading System

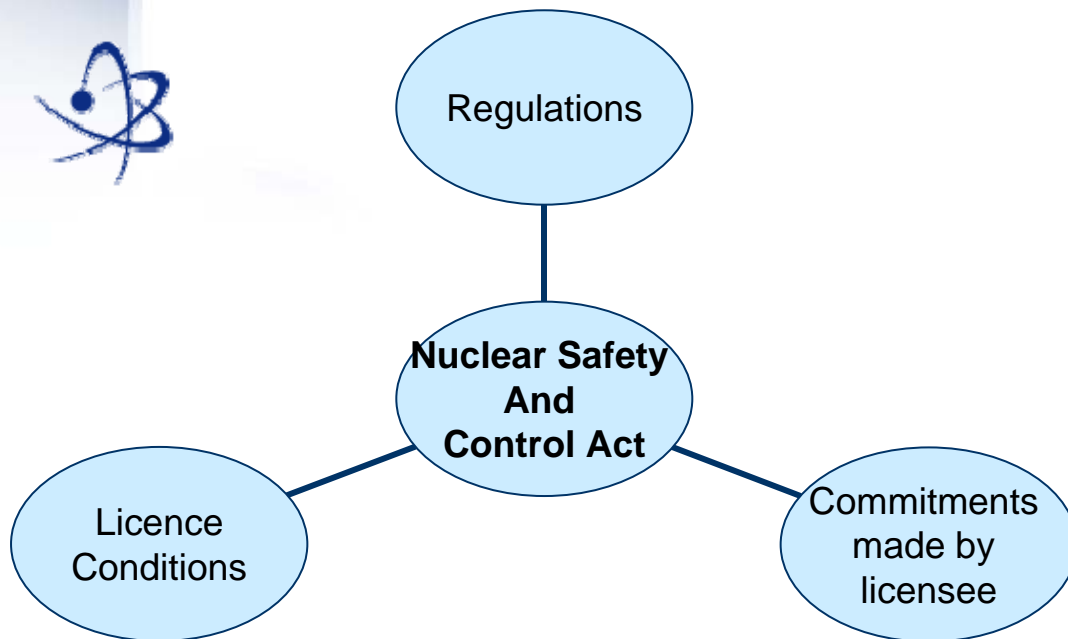
CNSC Mandate



The Canadian Nuclear Safety Commission (CNSC) protects the health, safety and security of Canadians as well as the environment, and respects Canada's international commitments on the peaceful use of nuclear energy.



Regulatory Framework



Regulatory Philosophy

Licensees responsible for the protection of health, safety, security, and the environment and respecting Canada's international commitments

CNSC responsible for regulating licensees, assessing whether licensees are compliant with the NSCA, regulations, and international obligations

Nuclear Regulation is a Federal Responsibility !

Nuclear Regulations

1. General Nuclear Safety & Control (*GN*)
2. Nuclear Substances & Radiation Devices (*NSRD*)
3. Radiation Protection (*RP*)
4. Packaging & Transport of Nuclear Substances (*PTNS*)
5. Nuclear Security Regulation

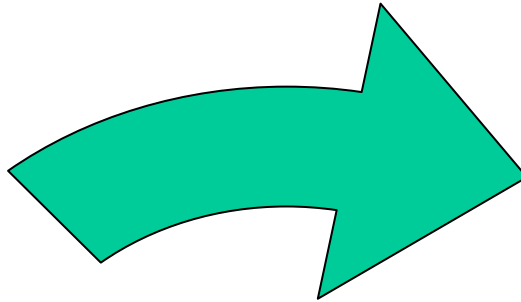


CNSC Compliance Program



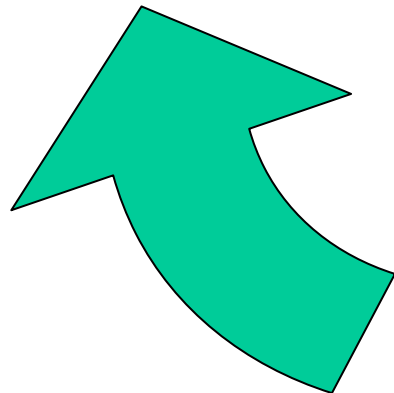
Promotion

encourages voluntary compliance
with regulatory requirements



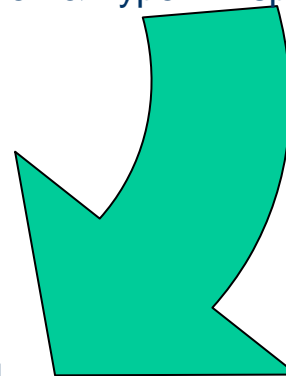
Verification

assess actual level
of compliance:
Annual Compliance Report
Type I & Type II Inspections



Enforcement

graduated approach
for
non-compliance



Verification: Annual Compliance Report

Licence Condition 2916:

The licensee shall submit to the commission a written annual compliance report.

The Annual Compliance Report (ACR) is used to:

- Report routine performance data
- Report changes to RP program
- Report changes to inventory
- Report annual dose exposures



Keep us updated and informed!

Verification: Annual Compliance Report (Cont'd)

Annual Compliance Reports should not be used for the initial reporting of:



- ✿ Change in RSO (*GN 15*)
- ✿ Reportable events (*NSRD 38*)
- ✿ Dangerous Occurrences (*PTNS 19*)
- ✿ Exceeded exposure limits (*RP 16*)
- ✿ Health and Safety incidents (*GN 29*)
- ✿ Accidental release of radioactive substances (*GN 29*)
- ✿ Contamination in excess of prescribed limits (*NSCA 45*)

Verification: Type I Inspection

On-site audit of licensee's programs, processes and practices.

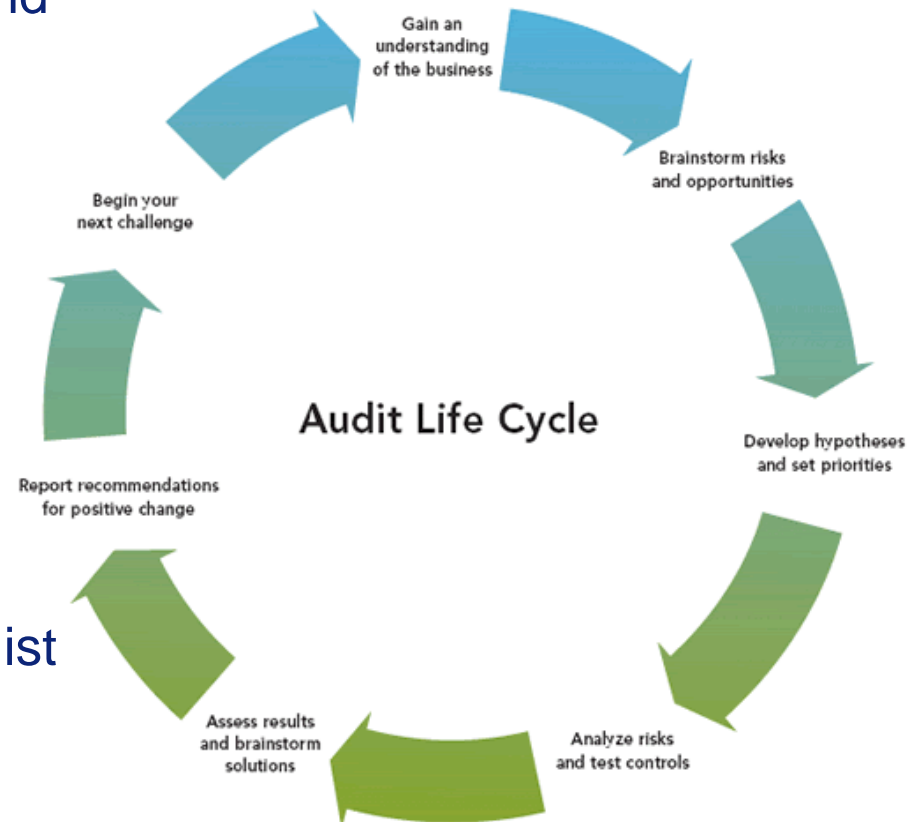


Frequency: Generally 2-5 years based on risk.

Duration: Several days

Auditors: Team consists of audit leader, licence specialist and inspectors

Worksheet: Available to public on CNSC website



Verification: Type II Inspection

Snapshot of current activities.



Frequency: based on risk and inspection history

Duration: several hours to several days

Participant: 1-2 inspectors

Worksheet: Available to public on CNSC website



Verification: Type II Inspections (Cont'd)

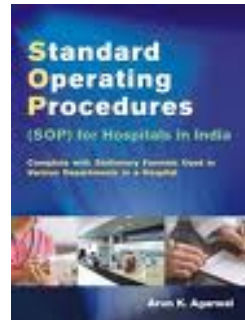
Based on Safety and Control area (SCA):



Radiation Protection



Training and Qualification



Operational Procedures



Packaging and Transport



Graduated Enforcement

The CNSC has a number of regulatory tools to enforce compliance:

- ✿ Administrative measures

Ex. Written reports, notices, warnings

- ✿ Requests for information

i.e. GN 12

- ✿ Orders

i.e. Compel licensee to take remedial action within specified time frame

- ✿ Legal actions

Ex. Legal investigations and court prosecution



Risk Assessment

Licence use-types are ranked by risk:



- ✿ Based on nature of licence activity, source type and source activity
- ✿ Radiological risk (potential dose exposure)

Low	<1 mSv/yr
Medium	1mSv to 5 mSv/yr
High	>5mSv/yr
- ✿ Complexity of Radiation Protection Program

Risk Assessment- Examples



High Risk	Medium Risk	Low Risk
<ul style="list-style-type: none">•Industrial Radiography•Consolidated•Logging•Servicing•Processing	<ul style="list-style-type: none">•Portable gauges•Laboratory Studies•Fixed gauges•Distribution•Diagnostic/ Therapeutic Nuclear Medicine•Research•Veterinary Nuclear Medicine	<ul style="list-style-type: none">•Analyzers•Electron capture detectors•Low Risk Sealed Sources & Radiation devices

Inspection Worksheets are Risk-Based

Each regulatory requirement is ranked by the impact of its non-compliance.



High Risk

Immediate health, safety, or security issue

Ex. Training & RP Program



Medium Risk

Potential Health, safety or security issue

Ex. Device Maintenance



Low Risk

No health, safety or security issues (administrative issues)

Ex. Posted Licence



Grading System

Purpose of Grading:



- ❖ To communicate performance in a consistent transparent manner
- ❖ To allow trend analysis of individual licence performance
- ❖ To monitor performance of
 - Licence use-types
 - CNSC's regulatory program



Grading System- Example only



A- Licensee exceeds compliance requirements.

*Ex. Regulations require 1 functional survey meter;
licensee has a functional meter in each lab.*

B- Licensee meets compliance requirements.

*Ex. Regulations require 1 functional survey meter;
licensee has 1 functional survey meters.*

C- Licensee below compliance requirements.

*Ex. Regulations require 1 functional survey meter;
licensee has 1 un-calibrated survey meters.*

D- Licensee significantly below compliance requirements.

*Ex. Regulations require 1 functional survey meter;
licensee does not have a survey meter.*

E- Breakdown or Loss of Control

*Ex. Breakdown of RP program and Immediate risk to health &
safety*

The CNSC Will Not Compromise Safety



It's In Our DNA





Commission canadienne
de sûreté nucléaire

Canadian Nuclear
Safety Commission

nuclearsafety.gc.ca

Henry Rabski
henry.rabski@cnscccsn.gc.ca
1-888-229-2672



Canada 