



REGULATORY  
GUIDE

**Entry to Protected  
and Inner Areas**

G-205

November 2003

## REGULATORY DOCUMENTS

The legal framework within which the Canadian Nuclear Safety Commission (CNSC) operates includes the Nuclear Safety and Control 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 which 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.

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Canadian Nuclear Safety Commission  
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## ENTRY TO PROTECTED AND INNER AREAS

### 1.0 PURPOSE

The purpose of this regulatory guide is to help licensees and regulated persons understand and meet their obligations to control entry to protected and inner areas, in accordance with those provisions of the *General Nuclear Safety and Control Regulations* and the *Nuclear Security Regulations* that apply in respect of (a) Category I nuclear material, Category II nuclear material and Category III nuclear material; and (b) a nuclear facility consisting of a nuclear reactor that may exceed 10 MW thermal power during normal operation.

### 2.0 SCOPE

This guide identifies the regulatory provisions referred to above, and describes how regulated persons and licensees can meet their associated obligations.

### 3.0 DEFINITIONS

A “protected area” is an area that meets the requirements of sections 9, 10 and 11 of the *Nuclear Security Regulations*.

An “inner area” is an area that meets the requirements of sections 12, 13 and 14 of the *Nuclear Security Regulations*

Category I, II and III nuclear material are defined in the Appendix to this guide.

Other specialized terms used in this guide are defined in the Glossary located near the end of the document.

### 4.0 BACKGROUND

#### 4.1 Regulatory framework

The Canadian Nuclear Safety Commission (CNSC) is the federal agency that regulates nuclear facilities and materials to protect health, safety, security and the environment and to respect Canada’s international commitments on the peaceful use of nuclear energy.

The *Nuclear Safety Control Act (NSC Act, Act)* requires persons or organizations to be licensed by the CNSC in order to carry out the activities referred to in Section 26 of the *Act*, unless otherwise exempted. The associated regulations stipulate prerequisites for CNSC licensing and the obligations of licensees and workers.

#### 4.2 **The CNSC licensing process**

The CNSC typically applies a phased process to its licensing of nuclear facilities and activities. For major facilities, this process begins with a consideration of the environmental impacts of the proposed project, and proceeds progressively through site preparation, construction, operation, decommissioning, and abandonment phases.

The Act and regulations require licence applicants to provide certain information at each licensing stage. The type and level of detail of this information will vary to accommodate the licensing stage and specific circumstances.

At all licensing stages, applications may incorporate (directly or by reference) new or previously-submitted information, in accordance with legislated requirements and the best judgement of the applicant. An application that is submitted at one licensing stage can become a building block for the next stage.

Upon receipt of an application that is complete, the CNSC reviews it to determine whether the applicant is qualified to carry on the proposed activity, and has made adequate provision for the protection of the environment, the health and safety of persons, and the maintenance of national security and measures required to implement international obligations to which Canada has agreed. If satisfied, the CNSC may issue, renew, amend or replace a licence that contains relevant conditions. Typically, this licence will incorporate the applicant's undertakings, and will contain other conditions that the CNSC considers necessary, possibly including a condition that incorporates or relates to security.

#### 4.3 **Relevant legislation**

The *Nuclear Security Regulations* (SOR/2000-209, made by the CNSC pursuant to section 44 of the *NSC Act*) apply in respect of (a) Category I nuclear material, Category II nuclear material and Category III nuclear material; and (b) any nuclear facility consisting of a nuclear reactor that may exceed 10 MW thermal power during normal operation.

The *Nuclear Security Regulations* contain various requirements that are relevant to controlling entry to protected and inner areas. These requirements include:

- section 7, which requires every licensee:
  - o to process, use and store Category I nuclear material in an inner area;
  - o to process, use and store Category II nuclear material in a protected area; and
  - o to process, use and store Category III nuclear material in a protected area, a place that is under the direct visual surveillance of the licensee, or a secure place to which access is controlled by the licensee, and that is designed and constructed to prevent persons from gaining unauthorized access to the Category III nuclear material by using hand-held tools.
- section 8, which stipulates that every nuclear facility consisting of a nuclear reactor that may exceed 10 MW thermal power during normal operation shall be located in a protected area.
- section 9, which states that every protected area shall be enclosed by a barrier that is located at its perimeter, and describes how the barrier must be designed constructed, secured and illuminated to inhibit or deter any unauthorized entry into the protected area.
- section 10, which requires that every protected area be surrounded by an unobstructed area that is:
  - o located outside the barrier required by section 9 of the regulations and that extends at least five metres away from every point of the barrier;
  - o free of any structure, equipment or other obstruction that could be used to penetrate or surmount the barrier or to restrict observation of the unobstructed area; and
  - o continuously illuminated at an intensity sufficient to permit clear observation of any person within the restricted area.
- section 11, which requires that every protected area be
  - o equipped with certain intrusion detection devices; or
  - o kept under the direct visual surveillance of a nuclear security guard who is equipped with a device that can set off a continuous alarm signal that is both audible and visible in a security monitoring room, and that can be stopped only by a security guard from the security monitoring room.



- section 12, which stipulates that every inner area shall be located within a protected area.
- section 13, which requires that every inner area be totally enclosed by a structure or barrier, and describes how the structure or barrier must be designed, constructed, located or secured in order to prevent, alone or in combination with other structures or barriers, persons from completing both of the following actions before a response force can make an effective intervention:
  - o gaining unauthorized access to Category I nuclear material by using hand-held tools, firearms or explosives; and
  - o removing the nuclear material from the inner area.
- sections 17 to 29, which cover:
  - o entry into a protected area;
  - o entry, with Commission authorization, into an inner area;
  - o refusal of the Commission to authorize entry into an inner area;
  - o entry, without Commission authorization, into an inner area;
  - o revocation by the licensee of an authorization to enter a protected or inner area;
  - o revocation by the Commission of an authorization to enter a protected or inner area;
  - o unlocking and opening means of entry into an inner area;
  - o preventing and reporting unauthorized entry to a protected or inner area;
  - o preventing entry of weapons or explosives to a protected or inner area;
  - o preventing unauthorized removal of category I, II, or III nuclear material;
  - o searches of persons and possessions prior to entry or exit from a protected or inner area;
  - o prohibited activities; and
  - o exceptions for designated inspectors.
- sections 30 to 34, which deal with the provision, authorization, training and use of nuclear security guards for the purposes of the *Nuclear Security Regulations*, including controlling entry to protected and inner areas.
- section 37, which requires every licensee to “keep”, “retain” and “make available” certain records pertaining to:
  - o entry to a protected or inner area;
  - o the duties and responsibilities of nuclear security guards; and
  - o the training received by nuclear security guards.

## 5.0 ENTRY TO PROTECTED AND INNER AREAS

### 5.1 Introduction

This section summarizes the obligations of licensees under the *Nuclear Security Regulations*, with respect to entry, by persons other than designated inspectors under section 29 of the *NSC Act*, to protected and inner areas, and includes advice on how to meet certain of these obligations. The section also covers exceptions for CNSC-designated inspectors, the keeping of records related to the entry of persons to protected and inner areas, the monitoring of persons and vehicles that enter or exit inner or protected areas, the role of security guards in controlling entry to protected and inner areas, and the role of workers and other persons in assuring and maintaining adequate security at a protected area or an inner area.

The advice provided below does not preclude other approaches that satisfy regulatory requirements, nor does it address any additional requirements imposed by CNSC licences or Orders.

### 5.2 General responses

Sections 17 to 22 of the *Nuclear Security Regulations* provide for the entry by authorized persons, other than CNSC-designated inspectors under section 29 of the *NSC Act*, to protected and inner areas. The related requirements, exceptions and obligations vary in accordance with the regulations and the specific situations addressed. However, the following generalizations apply:

- If a licensee has any reason to doubt the identity of a person seeking entry to a protected or inner area, the licensee should take appropriate action to establish or confirm the person's identity before authorizing the person to enter the area. For example, if the person seeking entry is a worker employed by an external contractor, the licence could contact the employer in order to confirm the identity of the person, and to verify that the person has been assigned to enter the protected or inner area on behalf of the employer.
- It is good practice for all licensees to require advance notifications from any person desiring authorization to enter a protected or inner area. Advance notifications help provide the licensee with the extra time that may be required to complete any verifications or other actions that are necessary in order that the person may be authorized to enter.

- When issuing an authorization to enter a protected or an inner area, the licensee should place appropriate limits on the authorization. For example, the times and periods of entry could be limited to those necessary to accomplish the related objectives, such as to specific hours or days. The authorization could have an expiry date, after which time the person would be denied further entry unless the authorization was extended, renewed or replaced with a new authorization.
- For situations involving escorted entry of visitors to a protected or inner area, the licensee should assure adequate supervision and control of visiting groups, by establishing clearly defined “visitor” to “escort” ratios that typically do not exceed 10 to 1. These ratios should take into account the persons to be escorted and the areas to be visited, and should be reduced where warranted in the interests of safety and security
- The licensee should ensure, in the interests of the safety of visitors and the security of the facility, that workers or staff who escort persons during entry to protected or inner areas maintain adequate supervision and control of the persons being escorted. This supervision should be continuous over the period of entry, including during meal and other breaks.

Specific entry scenarios and their corresponding requirements are discussed below, under relevant headings.

### **5.3 Prohibitions against unauthorized entry or presence, and required responses**

Section 24 of the *Nuclear Security Regulations* stipulates:

- “No licensee shall permit an unauthorized person to enter or remain in a protected or inner area.” [subsection 24(1)], and
- “If a person sees anyone in a protected area or an inner area who the person believes, on reasonable grounds, is not authorized to be in the area, the person shall immediately report that fact to the nearest nuclear security guard” [subsection 24(2)].

Accordingly, the Commission expects the licensee to take all reasonable actions to prevent, detect or respond to any unauthorized entry to a protected or inner area. If the licensee suspects that such an entry may pose a threat to health, safety, security, or the environment, the licensee should take immediate and appropriate steps to mitigate the threat.

A typical response to an unauthorized entry to a protected or inner area would be to notify the security guards provided in accordance with paragraph 30(e) of the *Nuclear Security Regulations* of the occurrence, and to have the guards:

- apprehend and detain any unarmed intruder until such time as the intruder can be turned over to the appropriate response force; or
- observe and report to the security monitoring room the movements of any armed intruder, until such time as the appropriate response force arrives to take control of the situation.

## 5.4 Entry to protected areas

### 5.4.1 Unescorted entry

Subsections 17(1), 17(2), 17(5) and 17(6) of the *Nuclear Security Regulations* set out certain conditions for unescorted entry to a protected area, and related obligations of licensees, as follows:

- No person shall enter a protected area without physical proof of the recorded authorization of the licensee [subsection 17(1)].
- A licensee shall, before issuing an authorization to a person to enter a protected area unescorted, prepare an identification report that contains the following information and documents:
  - o the person's name and date and place of birth;
  - o documentary proof of the person's lawful presence in Canada;
  - o the address of the person's principal residence;
  - o a photograph depicting a frontal view of the person's face; and
  - o the person's occupation [subsection 17(2)].
- A licensee shall issue an authorization to enter a protected area subject to any terms or conditions that are necessary to ensure the security of the area [subsection 17(5)].
- Every licensee shall give to a person who has sought an authorization to enter a protected area, on the person's request, a copy of any information or documents referred to in subsection 17(2) of the *Nuclear Security Regulations* that the licensee possesses [subsection 17(6)].

When granting authorizations to enter a protected area without an escort, the licensee should limit such entry to persons who are trustworthy and need to be there, such as certain staff, workers, and contractors.

Prior to authorizing a person to enter a protected area, the licensee must prepare an identification report that meets the requirements of subsection 17(2) of the *Nuclear Security Regulations*. To meet these requirements, the licensee should typically include:

- the person's complete name - writing, for example, "John Michael Smith", and not "J.M. Smith" or "John M. Smith";
- a description of the person's place of birth, including the names of the city or town, province and country;
- documentary proof of the person's lawful presence in Canada, such as a copy of:
  - o a Canadian birth certificate, citizenship certificate or passport,
  - o a proof of landed-immigrant status,
  - o a pre-1994 Quebec baptismal certificate, or
  - o a valid passport bearing the appropriate stamp or visa for entry to Canada;
- the complete address of the person's principal residence - i.e. the person's permanent home address, as well as any temporary address. (For urban residences, include the street name, and the house or apartment number, as applicable. For rural residences, include meaningful locators such as lot numbers, municipal concession numbers or rural-route numbers. For persons staying temporarily or residing longer-term at a location other than the person's home address - such as at a hotel, rooming house, inn or other non-permanent abode - obtain and record the corresponding address.);
- a clear, well defined photograph of the person that:
  - o is labelled with the person's full name; and
  - o consists of a full frontal view of the person's head, taken without a head covering; and

- a description of the person's occupation, as verified by checks with a current or former employer, or by consulting relevant records.

Since the identification report on a person provides information that can be used by the licensee to assess whether the person should be authorized to enter a protected area, the information must be accurate. Accordingly, when preparing an identification report, the licensee should take appropriate steps to verify the accuracy of all information obtained.

For example, the licensee should verify the permanent address of the person by consulting a credible official record, such as a valid driver's licence. In the case of a temporary residence or lodging, the licensee should verify the validity of the address of the hotel or residence by consulting a business or telephone directory or by visiting the premises.

Before allowing a person entry to a protected area, the licensee should confirm the identity of the person, and determine whether the person is trustworthy. Such determinations may be obtained through security checks involving current or former employers, police agencies, security organizations or other authorities.

The licensee should ensure that the identification report for a person who seeks repeat, or has continuing, entry to a protected area is maintained up to date, or updated as required to permit entry. The updates should include keeping the person's photograph current to reflect any significant cosmetic or physical changes in appearance (e.g., a change of hair colour, the growth of a beard).

Where a person applies for an authorization to permit immediate entry to a protected area, the licensee may not be able to determine, before the desired time of entry, whether the person is trustworthy. When authorizing a person to enter a protected area before determining that the person is trustworthy, the licensee should ensure that the authorization is for escorted entry only. The requirements for escorted entry to a protected area are discussed in 5.4.2 below.

#### 5.4.2 Escorted entry

The conditions for escorted entry to a protected area, and the related obligations of licensees, are set out in subsections 17(1), 17(3), 17(4), 17(5) and 17(6) of the *Nuclear Security Regulations*. These conditions and obligations include the following:

- No person shall enter a protected area without physical proof of the recorded authorization of the licensee [subsection 17(1)].
- A licensee may issue an authorization to enter a protected area without preparing an identification report if:
  - o the person provides the licensee with documentary proof of the person's name and address; and
  - o the authorization is issued subject to the condition that the person must be escorted within the protected area at all times by a person who has the recorded authorization of the licensee to enter that area and for whom the licensee has prepared an identification report [subsection 17(3)].
- A licensee shall issue an authorization to enter a protected area subject to any terms or conditions that are necessary to ensure the security of the area [subsection 17(5)].
- Every licensee shall give to a person who has sought an authorization to enter a protected area, on the person's request, a copy of any information or documents referred to in subsection 17(2) of the *Nuclear Security Regulations* that the licensee possesses [subsection 17(6)].

Situations may arise where a licensee wishes, in accordance with subsection 17(3) of the *Nuclear Security Regulations*, to authorize an occasional visitor, worker, contractor, or other person to enter a protected area, without first preparing an identification report for the person. To obtain the documentary proof of the person's name and address that is required under subsection 17(3), the licensee should request that the person seeking entry produce a credible record, such as a valid driver's licence that bears the person's name, address and photograph. Where the person is staying at a temporary address, such as that of a local hotel or residence, the licensee should obtain the address from the person, and should verify its accuracy through established security procedures.

## 5.5 Entry to inner areas

In accordance with subsections 18(1), 20(1) and 20(3) of the *Nuclear Security Regulations*, any person who wishes to enter an inner area must obtain a written authorization from the licensee to enter the protected area, and, depending on the circumstances, may also require the recorded authorization of the Commission to enter the protected area. In particular, a person may enter an inner area with only an authorization from the licensee if the person enters for the purpose of performing duties that are required by the licensee or the Commission, and the person is escorted at all times by a person who has the recorded authorization of the Commission to enter the inner area.

The licensee can help assure the security of the nuclear facility by restricting the entry of persons, escorted or unescorted, to the inner area of the facility to those persons who must enter to complete essential work, and to as few persons as possible. The licensee may also choose to implement the “two person rule,” which requires that a minimum of two authorized persons be present in the inner area during each entry occasion.

### 5.5.1 Unescorted entry with licensee and Commission authorizations

A person may enter an inner area, unescorted, if the person:

- has the recorded authorization of the licensee to enter the protected area, issued under section 17 of the *Nuclear Security Regulations* (See 5.3.2 of this regulatory guide); and
- has the recorded authorization of the Commission to enter the inner area.

Under subsection 18(2) of the *Nuclear Security Regulations*, an application to the Commission for an authorization to enter an inner area shall be signed by the licensee and the person for whom the authorization is sought, and shall contain the following information and documents:

- (a) a copy of the identification report referred to in subsection 17(2) of the *Nuclear Security Regulations*;
- (b) Personnel Security Clearance Questionnaire TBS/SCT 330 60, as amended from time to time, completed and signed by the person for whom the authorization is sought;
- (c) Personnel Screening Request and Authorization form TBS/SCT 330 23, as amended from time to time, completed and signed by the person for whom the authorization is sought;



- (d) a description of the purpose for which entry into the inner area is required;
- (e) a record emanating from the Canadian Police Information Centre, showing the results of the Centre's criminal record name check on the person for whom the authorization is sought; and
- (f) at the request of the Commission, any other information that the Commission requires for the purpose of subsection 18(3) of the *Nuclear Security Regulations*.

Subsection 18(3) states that the Commission shall issue an authorization to enter an inner area after receiving the above application if there are reasonable grounds to believe that the entry of the person into the inner area will not give rise to a risk to the security of the area.

When applying for CNSC authorization to enter an inner area, the licensee and person for whom the authorization is sought should ensure that the documents contained in the application are originals.

Any application for a renewal or an extension of the term of an existing CNSC authorization to enter an inner area should be submitted to the CNSC at least 6 months prior to expiry of the authorization.

If an application for CNSC authorization to enter an inner area, unescorted, is approved, the Commission will typically issue the requested authorization for a period of up to a five years, and will include any terms and conditions that it considers necessary to minimize the risk to the security of the area.

If a person for whom an authorization to enter an inner area has been sought requests a copy of any documents or information contained in the application for the authorization, the licensee must give the requested copy to the person.

#### **5.5.2 Escorted entry with licensee authorization only**

In accordance with subsection 20(1) of the *Nuclear Security Regulations*, a person may enter an inner area without the recorded authorization of the CNSC, if the person enters for the purpose of performing duties that are required by the licensee or the CNSC, and the person has a written authorization to enter issued by the licensee. To meet subsections 20(3) and 20(4) of the *Nuclear Security*

*Regulations*, this authorization can only be issued by the licensee, subject to the requirement that the person, while in the inner area, shall be escorted at all times by someone who is authorized by the Commission to enter the inner area.

Subsection 20(2) of the *Nuclear Security Regulations* requires the licensee to obtain the following information for individuals prior to granting a written authorization for escorted entry to inner areas:

- (a) the name of the person who is authorized,
- (b) the address of the person's principal residence, and
- (c) the name and business address of the person's employer.

## **5.6 Revocation of authorizations to enter a protected or an inner area**

### **5.6.1 Revocation by the licensee**

Pursuant to *Nuclear Security Regulations* section 21, a licensee has the authority at any time to revoke an individual's authorization to enter a protected area issued under section 17 or an authorization to enter an inner area issued under section 20. Accordingly, although a licensee may not revoke an authorization for unescorted entry to an inner area, the licensee can, for security reasons, deny entry to the inner area by revoking entry to the protected area.

In the event that the licensee utilizes this method to prevent an authorized person from entering the inner area, the licensee should immediately notify the Commission of the event.

### **5.6.2 Revocation by the Commission**

Under subsection 22(1) of the *Nuclear Security Regulations*, the Commission may revoke an authorization to enter a protected area that was issued by a licensee to a person under section 17 of the regulations, or an authorization to enter an inner area that was issued by a licensee or the Commission to a person under section 18 or 20 of the *Nuclear Security Regulations*, if there are reasonable grounds to believe that the entry of the person into the protected or inner area will give rise to a risk to the security of the area.

Under subsection 22(2) of the *Nuclear Security Regulations*, the Commission shall, if it revokes an authorization to enter a protected area or an inner area, immediately notify both the person whose authorization has been revoked, and the licensee concerned, of the revocation and the reasons for it.

**5.7 Identification of persons authorized to enter a protected or an inner area**

Each person who enters a protected area or an inner area of a nuclear facility should be provided with an “access-control” badge that clearly indicates the person’s specific entry privileges, including:

- whether the person is authorized to enter a protected area, an inner area, or the protected and inner areas, of the nuclear facility; and
- whether the wearer must be escorted during the authorized entry to the protected or inner areas of the facility.

In the interests of efficiency and security:

- access-control badges that authorize entry to a protected area, an inner area, or the protected and inner areas, respectively, of a nuclear facility should, for each type of entry, be sufficiently distinct in appearance that they are readily distinguishable from each other;
- access-control badges that authorize entry to a protected area or an inner area of a nuclear facility should be designed to prevent or deter the counterfeiting of facsimiles;
- the distribution and use of access-control badges that authorize entry to a protected area or an inner area of a nuclear facility should be carefully controlled, monitored and recorded by facility staff; and
- persons who are authorized to enter a protected area or an inner area of a nuclear facility should be required at all times during their stay in the protected or inner area, to wear any assigned access-control badges in a clearly-visible location on their person.

**5.8 Entry, by designated inspectors, to a protected or an inner area**

In accordance with section 29 of the *Nuclear Security Regulations*, sections 17 to 22 of the *Nuclear Security Regulations*, including those concerning entry to protected and inner areas, do not apply to, or in respect of an inspector who is designated under section 29 of the *NSC Act* to inspect a protected or an inner area of a nuclear facility. For such inspectors, the authority to inspect for the purpose of the *NSC Act*, including the authority to enter to inspect a protected or inner area of a nuclear facility derives from the designation of the inspector by the Commission, and the provision of a certificate in the prescribed form certifying the person’s designation, in accordance with section 29 of the *NSC Act*.

Before granting a person claiming to be a inspector designated by the Commission under section 29 of the *NSC Act* entry to a protected area or an inner area of a nuclear facility, the responsible security guard should:

- verify the identity of the person;
- request that the person show the certificate provided by the Commission that certifies that the person is a designated inspector for the purposes of the *NSC Act*, and lists the information required pursuant to subsection 29(2) of the *NSC Act*;
- verify that the certificate is valid, belongs to the bearer and authorizes entry as requested; and
- record the person's name, and the identifying details of the certificate.

### **5.9 Entry, by IAEA persons, to a protected or an inner area**

Representatives of the International Atomic Energy Agency (IAEA) periodically require entry to a protected area or an inner area of a nuclear facility, for the purposes of verifying that measures to which Canada has agreed under a safeguards agreement are implemented at the nuclear facility. These representatives include inspectors designated by the IAEA, and other persons acting on behalf of the IAEA.

In the case of an inspector designated by the IAEA or a person acting of behalf of the IAEA, the CNSC typically issues to the inspector or person a document that:

- names the inspector or person who is the holder;
- attests that the holder is an inspector designated by the IAEA, or a person acting on behalf of the IAEA, for the purposes of implementing measures to which Canada has agreed under a safeguards agreement;
- advises that the inspector or person, in carrying out duties and functions pursuant to a safeguards agreement, is deemed to be a Nuclear Energy Worker under the *NSC Act* and has met the site access requirements under the applicable authority; and
- provides the holder's IAEA address in Canada while carrying out the duties and functions pursuant to a safeguards agreement, and the holder's IAEA address in Vienna, Austria.

The document is signed by the designated officer of the Commission, and includes an expiry date.

Before granting, to a person claiming to be a inspector designated by the IAEA or a person acting of behalf of the IAEA, entry to a protected area or an inner area of a nuclear facility, the responsible security guard should:

- verify the identity of the person;
- request that the person show the document provided by the Commission that attests the person is inspector designated by the IAEA, or a person acting of behalf of the IAEA;
- verify that the attestation is valid and belongs to the bearer; and
- record the person's name, and the identifying details of the Commission attestation.

#### **5.10 Keeping and handling records of the names of persons authorized to enter protected or inner areas**

Section 37 *Nuclear Security Regulations* requires the licensee to:

- keep a record of the name of each person to whom an authorization to enter a protected area or an inner area has been issued;
- retain the record for one year after the authorization expires or is revoked; and
- make a copy of the record available to its nuclear security guards.

When keeping a paper or electronic record of the name of each person to whom an authorization to enter a protected area or an inner area has been issued, the licensee should ensure that these records are maintained current, and include the times of each entry and exit. In the case of persons authorized to enter with an escort, the name of the escort should be recorded also.

#### **5.11 Monitoring the entry and exit of persons, possessions and vehicles**

Paragraphs 27(2)(a) and (b) of the *Nuclear Security Regulations* prohibit the licensee from permitting a person who has an authorization to enter a protected area issued under section 17(3) of the *Nuclear Security Regulations*, or an authorization to enter an inner area of a nuclear facility issued under section 20 of the *Nuclear Security Regulations*, to:

- enter the protected area or the inner area unless the person and everything in the person's possession, including any vehicle, have been searched for weapons and explosives by a nuclear security guard; and
- leave the protected area or the inner area unless the person and everything in the person's possession, including any vehicle, have been searched for Category, I, II or III nuclear material by a nuclear security guard.

In accordance with paragraphs 27(2)(a) and (b) of the *Nuclear Security Regulations*, the search of a person who has an authorization to enter a protected area issued under section 17(3) of the *Nuclear Security Regulations*, or an authorization to enter an inner area of a nuclear facility issued under section 20 of the *Nuclear Security Regulations*, before entry of the person to the protected or inner area, shall include searches of the person, any vehicle and all items in the person's possession, such as briefcases, bags and coat, to detect explosives and weapons, such as firearms and any tool or object not specifically required for work in the area that could be used as a weapon or to cause damage. Similarly, the person, any vehicle and all items in the person's possession must be searched by a nuclear security guard before the person leaves the protected or inner area, for the purpose of detecting and preventing any unauthorized removal of Category I, II, or III nuclear material.

Searches of the person or possessions may involve direct inspections or the use of hand held, portable or stationary detection equipment, including metal detectors and x ray scanners similar to those used at airports. Where such equipment is used, the licensee should ensure that the users are properly trained in its operation, limitations, and applications for security purposes.

For example, if the alarm of a hand-held or walk-through scanner or detector appears to be triggered by a set of keys carried by a person, or steel-toed boots worn by the person, the nuclear security guard should have the person remove the keys or boots, and undergo repeat checks to verify that the keys or boots are the true and only cause for the alarm.

All detection equipment should be tested regularly and properly maintained by trained technicians, in accordance with the manufacturer's recommendations.

Where a nuclear security determines that a frisk-search, extending from head to foot, down the front and rear of the body, and around the legs and inside the clothing folds, pockets and footwear of a person, is necessary in order to maintain security, the search shall be conducted by a person of the same sex as the person being inspected, in accordance with paragraph 27(5)(b) of the *Nuclear Security Regulations*. Frisk searches should typically be conducted when the results of searches by other means are or would be inconclusive or suspect.

The entry of a vehicle, whether owned or operated by the licensee, the licensee's staff, or contractors, to a protected or inner area of a nuclear facility, should only be allowed when absolutely necessary, and following a thorough search by a nuclear security guard to detect and prevent the entry of any

weapons and explosives. A vehicle that, following searching by a nuclear security guard, is allowed to enter a protected or an inner area must be thoroughly searched again before it leaves the area in order to prevent the unauthorized removal of nuclear material.

All searches of vehicles before they enter or leave a protected area or an inner area of a nuclear facility should be designed and conducted for the purpose of detecting any weapons, explosives, or significant quantity of category I, II or III nuclear material, in accordance with the applicable provisions of the *Nuclear Security Regulations*. Typically, the search of the vehicle should include thorough inspections of the passenger compartment, the engine compartment, the cargo compartment, the top and the underside of the vehicle, and any contents of the vehicle. Where necessary in the interests of thoroughness or to facilitate proper inspection, the security staff should enter the cargo compartment to inspect the cargo, or the cargo should be moved or unloaded.

Where a vehicle owned by the licensee requires frequent entry to a protected area or an inner area, it may be preferable to keep the vehicle within the designated protected area at all times for use as a “shuttle” vehicle.

Parking for visitors and workers should not be provided inside the protected area. To address the needs of persons with disabilities, the licensee should ensure that the workplace is suitably accessible without compromising security requirements.

#### **5.12 Refusal of a person to be searched**

A person who has an authorization to enter a protected area issued under section 17(3) of the *Nuclear Security Regulations*, or an authorization to enter an inner area of a nuclear facility issued under section 20 of the *Nuclear Security Regulations*, may refuse to submit to a search by a nuclear security guard of their person and everything in their possession, including any vehicle before entry to, or exit from, a protected or inner area. However, under subsection 28(1) of *Nuclear Security Regulations*, a person who refuses to submit to a search required by section 27 of the *Nuclear Security Regulations* may not enter or leave the protected or inner area. A refusal by such a person to submit to the required search when leaving the protected or inner area could be construed by a nuclear security guard as reasonable grounds for detaining the person and calling the local law enforcement agency.

**5.13 The role of nuclear security guards**

Nuclear security guards play an important role with respect to persons entering or leaving a protected area or an inner area of a nuclear facility. These guards are employed by the licensee, with the written consent of the Commission (section 31 of the *Nuclear Security Regulations*) to perform the duties laid out in section 30 of the *Nuclear Security Regulations*:

- to control the movement of persons, material and vehicles;
- to conduct searches of persons, material and vehicles for weapons, explosives and category I, II or III nuclear material;
- to conduct preventive foot and vehicle patrols of the nuclear facility and the perimeter of the protected area to inspect for security breaches and vulnerabilities;
- to respond and assess alarm incidents;
- to apprehend and detain unarmed intruders;
- to observe and report on the movements of armed intruders; and
- to operate security equipment and systems.

Other requirements and provisions that reflect the important role of nuclear security guards are laid out in sections 31 to 34 of the *Nuclear Security Regulations*.

**5.14 The role of other workers and persons**

Workers other than nuclear security guards can also contribute to the maintenance of security in all areas of a nuclear facility, including at a protected area or an inner area. The *General Nuclear Safety and Control Regulations* and the *Nuclear Security Regulations* recognize the importance of this role by requiring that:

- the licensee instruct the workers on the physical security program at the site of licensed activity and on their obligations under that program [paragraph 12(1)(j) of the *General Nuclear Safety and Control Regulations*];
- every worker promptly inform the licensee or the worker's supervisor of any situation in which the worker believes there may be certain threats, including "a threat to the maintenance of security or an incident with respect to security" or "an act of sabotage, theft, loss, or illegal use or possession of a nuclear substance, prescribed equipment or prescribed information" [paragraphs 17(c)(ii) and (iv) of the *General Nuclear Safety and Control Regulations*];



- every worker “take all reasonable precautions to ensure the worker’s own safety, the safety of the other persons at the site of the licensed activity, the protection of the environment, the protection of the public and the maintenance of security” [paragraph 17(e) of the *General Nuclear Safety and Control Regulations*]; and
- if a person sees anyone in a protected area or an inner area who the worker believes, on reasonable grounds, is not authorized to be in the area, the person shall immediately report that fact to the nearest security guard [subsection 24(2) of the *Nuclear Security Regulations*].

The workers referred to above should be deemed by the licensee to include full-time and part-time staff and workers, including contractors.

**GLOSSARY****escort**

An individual (normally a staff member or a nuclear security guard) who is authorized by the Commission and licensee to have entry to the protected or inner area of a nuclear facility, and who has been assigned to accompany persons granted escorted entry to the area by the licensee. The escort is expected to maintain control over the activity of the person(s) under escort at all times.

**external worker**

A person, employed by a firm or organization other than the licensee who performs work that is referred to in a licence

**inner area**

An area that meets the requirements of sections 12, 13 and 14 of the *Nuclear Security Regulations*.

**nuclear security guard**

A person who is authorized by a licensee, in accordance with section 31 of the *Nuclear Security Regulations*, to act as a nuclear security guard at a nuclear facility referred to in paragraph 2(b) of the *Nuclear Security Regulations*.

**off-site response forces**

A local, provincial or federal police force detachment, a Canadian Armed Forces unit, or any other force trained in the use of firearms, that is authorized under any Act or regulation to carry firearms and is qualified to use them.

**protected area**

An area that meets the requirements of sections 9, 10 and 11 of the *Nuclear Security Regulations*.

**worker**

A person who performs work that is referred to in a licence.

**REFERENCES**

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## APPENDIX

Category I, II and III nuclear material are defined as follows in section 1 of the *Nuclear Security Regulations*, and in its Schedule.

- **Category I nuclear material** means “a nuclear substance listed in column 1 of the schedule [*see below*] that is in the corresponding form set out in column 2 and the corresponding quantity set out in column 3 of the schedule.”
- **Category II nuclear material** means “a nuclear substance listed in column 1 of the schedule [*see below*] that is in the corresponding form set out in column 2 and the corresponding quantity set out in column 4 of the schedule.”
- **Category III nuclear material** means “a nuclear substance listed in column 1 of the schedule [*see below*] that is in the corresponding form set out in column 2 and the corresponding quantity set out in column 5 of the schedule.”

	<i>Column 1</i>	<i>Column 2</i>	<i>Column 3</i>	<i>Column 4</i>	<i>Column 5</i>
Item	Nuclear substance	Form	Quantity (Category I) <sup>1</sup>	Quantity (Category II) <sup>1</sup>	Quantity (Category III) <sup>1</sup>
1	Plutonium <sup>2</sup>	Unirradiated <sup>3</sup>	2 kg or more	Less than 2 kg, but more than 500 g	500 g or less, but more than 15 g
2	Uranium 235	Unirradiated <sup>3</sup> — uranium enriched to 20% <sup>235</sup> U or more	5 kg or more	Less than 5 kg, but more than 1 kg	1 kg or less, but more than 15 g
3	Uranium 235	Unirradiated <sup>3</sup> — uranium enriched to 10% <sup>235</sup> U or more, but less than 20% <sup>235</sup> U	N/A	10 kg or more	Less than 10 kg, but more than 1 kg
4	Uranium 235	Unirradiated <sup>3</sup> — uranium enriched above natural, but less than 10% <sup>235</sup> U	N/A	N/A	10 kg or more
5	Uranium 233	Unirradiated <sup>3</sup>	2 kg or more	Less than 2 kg, but more than 500 g	500 g or less, but more than 15 g
6	Fuel consisting of depleted or natural uranium, thorium or low-enriched fuel (less than 10% fissile content) <sup>4</sup>	Irradiated	N/A	More than 500 g of plutonium	500 g or less, but more than 15 g of plutonium

**Source:** *Nuclear Security Regulations*, Schedule.

1. The quantities listed refer to the aggregate of each kind of nuclear substance located at a facility, excluding the following (which are considered separate quantities):
  - (a) any quantity of the nuclear substance that is not within 1000 m of another quantity of the nuclear substance; and
  - (b) any quantity of the nuclear substance that is located in a locked building or a structure offering similar resistance to unauthorized entry.
2. All plutonium except that with isotopic concentration exceeding 80% in plutonium 238.
3. Material not irradiated in a reactor or material irradiated in a reactor but with a radiation level equal to or less than 1 Gy/h at 1 m unshielded.
4. Other fuel that by virtue of its original fissile content is classified as Category I or II before irradiation may be reduced one category level while the radiation level from the fuel exceeds 1 Gy/h at 1 m unshielded.