

The Swedish Radiation Safety Authority's Code of Statutes

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The Swedish Radiation Safety Authority's Regulations on Nuclear Safeguards

Adopted on DD MMMM 202Y.

The Swedish Radiation Safety Authority stipulates the following¹ pursuant to Sections 2 and 20a of the Ordinance (1984:14) on nuclear activities.

Chapter 1. Scope and definitions

Scope

Section 1 These Regulations contain provisions on safeguards that must be observed by anyone who:

1. has a permit under the Nuclear Activities Act (1984:3) to construct, possess or operate a nuclear facility until the safeguards have been discontinued;
2. acquires, possesses, transfers, handles, stores, disposes of or imports into Sweden nuclear material or nuclear waste subject to safeguards;
3. manufactures, assembles or otherwise produces nuclear equipment covered by Annex I to the Additional Protocol;
4. imports into Sweden or exports from Sweden nuclear-related equipment covered by Annex II to the Additional Protocol; or
5. conducts research or development activities subject to notification pursuant to Section 7a of the Nuclear Activities Act (1984:3).

Certain basic provisions on nuclear safeguards for those who have a permit under the Nuclear Activities Act (1984:3) are also found in the Swedish Radiation Safety Authority's Regulations (SSMFS 2018:1) on basic provisions for activities involving ionising radiation that require a permit, and in the Swedish Radiation Safety Authority's Regulations

¹ See Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services.

(SSMFS 2021:5) on the assessment and reporting of radiation safety for nuclear power reactors.

Section 2 The Regulations do not apply to:

1. end products used for non-nuclear purposes which incorporate nuclear materials that are in practice irrecoverable;
2. naturally occurring nuclear material not subject to international control pursuant to Commission Regulation (Euratom) 2025/974 of 26 May 2025 on the application of Euratom safeguards; or
3. other nuclear material which, by decision of the European Commission, is exempt from safeguards.

Words and expressions in the Regulations

Section 3 Words and expressions in these Regulations have the same meaning as in the Nuclear Activities Act (1984:3) and the Swedish Radiation Safety Authority's Regulations (SSMFS 2018:1) on basic provisions for activities involving ionising radiation that require a permit.

Section 4 For the purposes of these Regulations, *Additional Protocol* means the Additional Protocol of 22 September 1998 to the Agreement between the Republic of Austria, the Kingdom of Belgium, the Kingdom of Denmark, the Republic of Finland, the Federal Republic of Germany, the Hellenic Republic, Ireland, the Italian Republic, the Grand Duchy of Luxembourg, the Kingdom of the Netherlands, the Portuguese Republic, the Kingdom of Spain, the Kingdom of Sweden, the European Atomic Energy Community and the International Atomic Energy Agency in implementation of Article III(1) and (4) of the Treaty on the Non-proliferation of Nuclear weapons of 1 July 1968² (SÖ 2000:29).

Section 5 For the purposes of these Regulations, *category of nuclear material*, *material balance area*, *IC code* and *batch* mean the same as in Commission Regulation (Euratom) 2025/974 of 26 May 2025 on the application of Euratom safeguards.

For the purposes of these Regulations, *complementary access* means the same as in the Additional Protocol.

Section 6 For the purposes of these Regulations, *obligation code* means the code for the particular safeguards obligations as referred to in Article 19 of Commission Regulation (Euratom) 2025/974 of 26 May 2025 on the application of Euratom safeguards.

Chapter 2. General provisions

Organisation

Section 1 Anyone who is covered by exemptions under Sections 4 to 10 of the Ordinance (1984:14) on nuclear activities, or who has been granted an exemption from the permit requirement under the Nuclear Activities Act (1984:3), shall have an organisation for safeguards with sufficient competence and sufficient financial and human resources.

There shall be documented procedures adapted to the nature and scope of the activities in order to perform tasks that are important for safeguards.

Provisions concerning organisation, management and control for permit holders under Section 5 of the Nuclear Activities Act (1984:3) are found in Chapter 3 of the Swedish Radiation Safety Authority's Regulations (SSMFS 2018:1) on basic provisions for activities involving ionising radiation that require a permit.

Safeguards function

Section 2 Anyone holding a permit under the Nuclear Activities Act (1984:3) shall have a safeguards function that is adapted to the nature and scope of the activity and which has the power to report directly to the top management of the activity.

The function shall, as far as possible and reasonable, be able to operate independently of other activities.

The person(s) performing the safeguards function shall be provided with the conditions necessary for the performance of their duties.

Contact person

Section 3 The Swedish Radiation Safety Authority shall be informed of the persons who are responsible for contacts with the Authority in matters relating to safeguards and of their contact details.

Chapter 3. Inspections and complementary access

Accessibility for representatives of the activity

Section 1 At each inspection, representatives of the activity shall be available, who shall have sufficient competence and authority to enable the inspectors from the Swedish Radiation Safety Authority, the International Atomic Energy Agency and from the European Commission to perform their duties.

If there are other operators in an area referred to in Chapter 4, Sections 1 to 3, they shall be informed that an inspection is to be carried out in the area.

Section 2 If, during an ongoing inspection, the International Atomic Energy Agency requests complementary access in accordance with the Additional Protocol, representatives of the activity with access to and knowledge of the buildings declared in accordance with Chapter 4, Sections 1 to 3, shall be available within two hours.

If inspectors from the Swedish Radiation Safety Authority are not present during the inspection, the Authority shall be contacted immediately after such a request has been made.

Rights of international inspectors

Section 3 In the event of an international inspection or complementary access that has been announced in advance by the Swedish Radiation Safety Authority, inspectors who have presented identification documents shall be granted access without delay to the locations where the inspection is to take place.

The inspectors have the right to:

1. obtain the information and access the documents necessary for the supervision;
2. carry and use equipment to the extent necessary for the supervision;
3. send samples for their own analysis; and
4. take the necessary photographs for documentation.

Photographs may be taken and reviewed by the operator.

Samples and documentation that the inspectors do not wish to or are not permitted to take with them shall be stored under seal applied by the inspectors.

The installation of equipment for safeguards shall be carried out in consultation with international inspectors and the Swedish Radiation Safety Authority.

Section 4 If an international inspection, complementary access or the use of equipment needs to be restricted in order not to jeopardise safety or the protection of human health or the environment, the operator shall, in consultation with international inspectors and the Swedish Radiation Safety Authority, propose alternative measures so that the purpose of the supervision can still be achieved.

The first paragraph shall also apply to the protection of commercial or other particularly sensitive information.

Section 5 If international inspectors request access that has not been pre-announced by the Swedish Radiation Safety Authority, the Authority shall be contacted immediately.

Section 6 International inspectors shall not be subject to requirements regarding confidentiality, drug testing, training or reporting of dosage information.

Reporting and procedures

Section 7 At each inspection that has been pre-announced by the Swedish Radiation Safety Authority, the operator shall be able to report the holdings of nuclear material and nuclear waste subject to safeguards for the entire material balance area in grams, in total and broken down by obligation code and category of the nuclear material.

Operators that are part of a material balance area administered by the Swedish Radiation Safety Authority need only be able to report their own holdings.

Section 8 An international inspection or complementary access that has been carried out without the presence of the Swedish Radiation Safety Authority shall be reported to the Authority within five working days of the completion of the inspection or access.

The report shall include a brief description of the activities carried out and any observations and agreements made.

Section 9 There shall be documented procedures for the measures that the operator needs to take in connection with an inspection or complementary access carried out by national or international inspectors.

Chapter 4. Area description

Section 1 A person who has a permit under the Nuclear Activities Act (1984:3) to own or operate a nuclear installation shall, in consultation with the Swedish Radiation Safety Authority, define an area covering the nuclear installation and draw up an area description.

The area description shall include:

1. all buildings, including underground spaces, within the area, as well as buildings directly connected to the installation that provide or utilise services essential to the operation;
2. other buildings that are directly adjacent to the installation and which have been identified by the Swedish Radiation Safety Authority;
3. identifier, size and area of use of all buildings; and
4. a map of the area showing:
 - a) the area limitation;
 - b) buildings with their identifier;
 - c) any roads, fences and waterlines; and
 - d) scale, north direction and geographical coordinates of at least one reference point within the area.

The area description shall be submitted to the Swedish Radiation Safety Authority.

Section 2 Anyone who has been granted a permit under the Nuclear Activities Act (1984:3) to construct a nuclear installation shall, at the request of and in consultation with the Swedish Radiation Safety Authority, draw up an area description as referred to in Section 1.

Simplified area description

Section 3 Anyone who is subject to a notification obligation under Sections 4, 5, 5a, 8 or 9 of the Ordinance (1984:14) on nuclear activities, or who has received an exemption from the permit obligation under the Nuclear Activities Act (1984:3) shall, at the request of and in consultation with the Swedish Radiation Safety Authority, define an area and draw up a simplified area description that includes:

1. the areas, buildings and parts of buildings where nuclear material or nuclear waste subject to nuclear safeguards is handled or stored, with any identifiers;
2. a description of the activities carried out; and
3. a map of the area and drawings of buildings, if any.

The simplified area description shall be submitted to the Swedish Radiation Safety Authority.

Changes to the area description

Section 4 An area description drawn up in accordance with Sections 1 to 3 shall be kept up to date.

Temporary buildings that are only erected for part of the year need not be entered in the area description, however their function must be able to be described in the event of an inspection.

Section 5 A statement of the changes in the area description during a calendar year shall be submitted to the Swedish Radiation Safety Authority no later than 28 February of the following year.

If the changes affect the map, a new map describing the situation on 31 December of the year to which the statement relates shall be attached.

If no changes have occurred during a calendar year, the Swedish Radiation Safety Authority must be informed of this by 28 February of the following year.

Procedures

Section 6 Anyone covered by Sections 1 or 2 shall have documented procedures for how an area description is drawn up and updated, and how it is to be submitted to the Swedish Radiation Safety Authority.

Chapter 5. Holdings of nuclear material and nuclear waste

Identification and verification

Section 1 Nuclear material or nuclear waste subject to safeguards shall, as far as possible and reasonable, be handled and stored in such a way that identification and verification can take place.

An operator who intends to final store nuclear material or nuclear waste subject to safeguards in a way that makes it difficult to access it for

identification and verification purposes shall ensure, before such storage takes place, that the material is checked to ensure that sufficient information is available to meet the safeguards requirements.

The information referred to in the second paragraph shall be documented and retained in accordance with Chapter 6, Section 9.

Inventory change

Section 2 Any change in the inventory in a material balance area with regard to the total amount of uranium, plutonium or thorium or the distribution of these elements between different obligation codes or nuclear material categories, shall be reported to the Swedish Radiation Safety Authority within three working days using an inventory change document (ICD) in accordance with Section 3.

Operators that are part of a material balance area administered by the Swedish Radiation Safety Authority need only be able to report changes in their own holdings.

An operator with digital records shall send the information electronically in the format set out in the Annex.

Section 3 An inventory change document in accordance with Section 2 shall contain:

1. the code of the issuing material balance area;
2. dates of inventory changes;
3. transaction ID in accordance with Section 4;
4. obligation code;
5. nuclear material category;
6. the code of the sending or receiving material balance area;
7. type of inventory change (IC code);
8. batch designation;
9. number of units;
10. weights in grams; and
11. other notes.

If any previously reported data needs to be corrected, it shall be done in a new inventory change document with reference to the previous transaction ID, obligation code and IC code.

Transaction ID

Section 4 A transaction ID shall consist of eight digits and constitute a unique identification of each individual transaction. The first two digits shall be the ID number assigned to the installation by the Swedish Radiation Safety Authority. Other digits shall be an ascending series of sequential numbers.

When nuclear material or nuclear waste subject to safeguards is received from another Swedish installation, the sender's transaction ID shall be used. When material from abroad is received, the recipient in Sweden shall create a transaction ID.

An operator whose installation has not been assigned an ID number shall contact the Swedish Radiation Safety Authority.

Disclosure requirements

Section 5 Anyone who sends nuclear material or nuclear waste subject to safeguards shall provide the recipient with the information specified in the inventory change document referred to in Section 3, as well as any other information necessary for the recipient to be able to meet the applicable requirements for safeguards.

Chapter 6. Notification, reporting and documentation

Notification according to the Ordinance on nuclear activities

Section 1 A notification under Sections 4 to 5b, 8 or 9 of the Ordinance (1984:14) on nuclear activities involving the acquisition, possession or import into Sweden of nuclear material or nuclear waste subject to safeguards shall contain information on:

1. the name, organisational or personal identification number, postal and visiting address and contact details of the notifier;
2. under which provision of the Ordinance on nuclear activities the notification is made;
3. the planned date of acquisition or import;
4. where the material is physically located or will be located;
5. the quantity of uranium, plutonium or thorium, enrichment, and the identifier; and
6. area of use if the notification concerns Sections 8 or 9 of the Ordinance on nuclear activities.

A notification under the first paragraph relating to acquisition or introduction shall be made no later than ten days before the acquisition or introduction is planned to take place.

If an activity is such that it is difficult to provide precise information in advance, estimates may be made. In that case, the notification shall state that it concerns estimated values.

Section 2 A notification pursuant to Section 10, Section 12 or Section 14(2) of the Ordinance (1984:14) on nuclear activities, concerning the transfer or import into Sweden of nuclear material, shall be received by the Swedish Radiation Safety Authority before the transfer or import, and shall contain information on:

1. the name, organisational or personal identification number, postal and visiting address and contact details of the notifier;
2. under which provision of the Ordinance on nuclear activities the notification is made;
3. the planned date of transfer or import;
4. where the material will be physically located, and

5. the quantity of uranium, plutonium or thorium, enrichment and the identifier.

If an activity is such that it is difficult to provide precise information in advance, estimates may be made. In that case, the notification shall state that it concerns estimated values.

Section 3 No special notification under Section 12 or Section 14(2) of the Ordinance (1984:14) on nuclear activities needs to be made if the information referred to in Section 2 has been received by the Swedish Radiation Safety Authority through an advance notification of shipment or an advance notification under Article 24 of Commission Regulation (Euratom) 2025/974 of 26 May 2025 on the application of Euratom safeguards.

Section 4 A notification pursuant to Section 14(1) of the Ordinance (1984:14) on nuclear activities concerning the acquisition of nuclear material in a country other than Sweden, shall be submitted to the Swedish Radiation Safety Authority no later than 30 days after the acquisition and shall contain information on:

1. the name, organisational or personal identification number, postal and visiting address and contact details of the notifier;
2. the acquisition date;
3. where the material is physically located or will be located;
4. the quantity of uranium, plutonium or thorium and enrichment; and
5. the purpose of the acquisition.

Notification according to the Nuclear Activities Act

Section 5 Anyone conducting research or development activities pursuant to Section 7a of the Nuclear Activities Act (1984:3) shall report this to the Swedish Radiation Safety Authority no later than 31 March of the following year.

A notification of activity that has commenced during the year shall:

1. indicate the name of the undertaking or institution and all addresses where the activity is carried out;
2. indicate the project title, project number or other reference to the activity;
3. contain a brief description of the research or development activity;
4. contain information on the purpose of the research or development activity;
5. include information on the duration and status in relation to targeted objectives;
6. provide the names and addresses of any partners and financiers; and
7. indicate whether the notified activity is linked to a previous notification.

If something has changed in a previously notified research or development activity, this must be notified to the Swedish Radiation Safety Authority no later than 31 March of the following year.

In the event that no changes have taken place in the research or development activity during a calendar year, this must be notified to the Swedish Radiation Safety Authority no later than 31 March of the following year.

Section 6 Anyone who manufactures, assembles or otherwise produces nuclear equipment in accordance with Section 7b of the Nuclear Activities Act (1984:3) shall report this to the Swedish Radiation Safety Authority no later than 31 March of the following year. A notification for a calendar year shall refer to equipment covered by Annex I to the Additional Protocol and shall include information on:

1. what equipment has been manufactured, produced or assembled;
2. the location where the activity has been carried out;
3. the annual capacity, and
4. the quantity of products manufactured, produced or assembled.

Section 7 Anyone who exports nuclear equipment in accordance with Section 7c of the Nuclear Activities Act (1984:3) shall notify the Swedish Radiation Safety Authority of this no later than five working days after export. The notification shall relate to equipment covered by Annex II to the Additional Protocol and shall specify:

1. the consignor's name and address;
2. the recipient's name and address;
3. the name and address of the end user, if different from the recipient;
4. the dates of export;
5. the quantity and type of equipment and materials exported;
6. the ID number according to the authorisation for export from the European Union or intra-Union transfer pursuant to Regulation (EU) 2021/821 of the European Parliament and of the Council of 20 May 2021 setting up a Union regime for the control of exports, brokering, technical assistance, transit and transfer of dual-use items; and
7. whether the export constitutes a partial delivery or a final delivery for the referenced authorisation pursuant to point 6.

Section 8 Any person who imports nuclear equipment pursuant to Section 7c of the Nuclear Activities Act (1984:3) shall document the import. The documentation shall relate to equipment covered by Annex II to the Additional Protocol and contain information on:

1. the consignor's name and address;
2. the recipient's name and address;
3. the name and address of the end user, if different from the recipient;
4. the date of import; and
5. the quantity and type of equipment and materials received.

If requested by the Swedish Radiation Safety Authority, the information shall be provided to the Authority.

Copies to the Swedish Radiation Safety Authority

Section 9 An operator shall, at the latest within five working days, send copies to the Swedish Radiation Safety Authority of documents that are relevant to safeguards and that have:

1. been received from or sent to the International Atomic Energy Agency (IAEA); or
2. been received from or sent to the European Commission.

Documentation and archiving

Section 10 Documentation that may be relevant to nuclear safeguards shall, until the safeguards have been discontinued, be preserved in such a way that it is accessible to authorised persons, legible and traceable when necessary.

Section 11 Anyone subject to the notification obligation under Sections 7a to 7c of the Nuclear Activities Act (1984:3) shall keep documents accessible in an orderly and listed archive for at least five years if they relate to:

1. nuclear research and development activities;
2. the manufacture, assembly or other production of nuclear equipment covered by Annex I to the Additional Protocol; or
3. the export from or import into Sweden of nuclear equipment covered by Annex II to the Additional Protocol.

Section 12 Documents and records covered by Sections 10 or 11 shall be stored in Sweden.

Chapter 7. Exemptions

Section 1 The Swedish Radiation Safety Authority may grant exemptions from these Regulations if there are special reasons for doing so and if this can be done without compromising the purpose of the Regulations.

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1. These Regulations shall enter into force on 1 September 2026.
 2. The Regulations repeal the Swedish Radiation Safety Authority's Regulations (SSMFS 2008:3) and general advice on safeguards etc.

THE SWEDISH RADIATION SAFETY AUTHORITY

MICHAEL KNOCHENHAUER

Ulf Yngvesson

Annex

Data file for inventory changes

No	Field name/ field description	Field type	Field length	Ref. **
1.*	Reporting material balance area (MBA)	Character	4	#1
2.	Date of inventory change	Date (YYYYMMDD)	8	#23
3.*	Transaction ID	Numerical	Unlimited	#9
4.*	MBA from	Character	4	#17
5.*	MBA to	Character	4	#18
6.	Key measurement point (KMP)	Can be left blank	2	#12
7.*	IC code	Character	2	#10
8.*	Material description code	Character	4	#14 #15 #16
9.*	Obligation code (commitment)	Character	5	#30
10.*	Number of items	Numerical	Unlimited	#24
11.*	Nuclear material category	Character	1	#25
12.*	Weight of the element	Numerical	24.3 dec	#26
13.*	Isotope	Character	1	#27
14.*	Weight of fissile isotope	Numerical	24.3 dec	#28
15.	Original transaction ID	Character	8	–
16.	Correction	Character	1	#37
17.	Original date	Date YYYYMMDD	8	#20
18.	Container ID	Character	20	#36
19.		To be left blank	8	–
20.	Gross weight	Can be left blank	10	–
21.	Tare mass	Can be left blank	10	–
22.*	Batch	Character	20	#11
23.	Material description	Can be left blank	20	–

No	Field name/ field description	Field type	Field length	Ref. **
	free text			
24.	ID number (if any) in accordance with the export permit	Character	16	–
25.	Advance notification	Can be left blank	12	#44
26.	Shipping document number	Character	8	–
27.	Project ID (where applicable)	Character	6	–
28.*	Burn-up	Numerical	Unlimited	#41
29.	Comments	Character	256	#40
30.	Net weight	Numerical, can be left blank	10	–
31.	Uranium content	Numerical, can be left blank	2.5 dec	–
32.	Enrichment, medium	Numerical, can be left blank	2.5 dec	–
33.		To be left blank	4	–
34.		To be left blank	9	–
35.		To be left blank	9	–
36.		To be left blank	9	–

*) Mandatory field.

**) See Annex III to Commission Regulation (Euratom) 2025/974 of 26 May 2025 on the application of Euratom safeguards.

The data file shall be generated as an ASCII file with commas as field separators and CR/LF as record terminators. The fields do not need to be filled to their full length. Note that commas cannot be used in the fields.