

# ESTONIA

## Radiation Act\* <sup>1</sup>

Adopted on 24 March 2004

(RT<sup>2</sup> I 2004, 26, 173),

entered into force on 1 May 2004,

amended by the Act of 22 February 2005,

which entered into force on 3 April 2005 – RT I 2005, 15, 87

## CHAPTER 1

### General Provisions

#### *Section 1 – Scope of application of Act*

- (1) This Act provides for basic safety standards for the protection of persons and the environment against the dangers arising from ionising radiation and the rights, obligations and liability of persons upon the use of ionising radiation.
- (2) This Act regulates radiation practices and activities upon which the presence of natural radiation sources may lead to a significant increase in the exposure of workers or members of the public,

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\* Unofficial translation kindly provided by the Estonian authorities.

1. In implementation of the following texts: Council Directive 96/29/Euratom laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation (OJ No. L 159, 29.06.1996, p. 1), Council Directive 97/43/Euratom on health protection of individuals against the dangers of ionizing radiation in relation to medical exposure, and repealing Directive 84/466/Euratom (OJ No. L 180, 9.07.1997, p. 22), Council Directive 90/641/Euratom on the operational protection of outside workers exposed to the risk of ionizing radiation during their activities in controlled areas (OJ No. L 349, 13.12.1990, p. 21), Council Directive 92/3/Euratom on the supervision and control of shipments of radioactive waste between Member States and into and out of the Community (OJ No. L 35, 12.02.1992, p. 24), Council Directive 89/618/Euratom on informing the general public about health protection measures to be applied and steps to be taken in the event of a radiological emergency (OJ No. L 357, 7.12.1989, p. 31), 93/552/Euratom: Commission Decision establishing the standard document for the supervision and control of shipments of radioactive waste referred to in Council Directive 92/3/Euratom (OJ No. L 268, 29.10.1993, p. 83).
2. RT = *Riigi Teataja* = State Gazette.

intervention in cases of radiological emergencies or in cases of lasting exposure resulting from the after-effects of a radiological emergency or a past practice (hereinafter lasting exposure).

- (3) This Act does not apply to exposure to radon in dwellings, to cosmic radiation prevailing at ground level or to aboveground exposure to radionuclides present in the undisturbed earth's crust caused by human activity.
- (4) The provisions of the Administrative Procedure Act (RT I 2001, 58, 354; 2002, 53, 336; 61, 375; 2003, 20, 117; 78, 527) apply to the administrative procedure prescribed in this Act, taking into consideration the specifications arising from this Act.

### ***Section 2 – Radiation practices***

For the purposes of this Act, radiation practices are all activities which increase or may increase the exposure of humans to radiation emanating from an artificial source or from a natural radiation source in cases where natural radionuclides are processed in view of their radioactive, fissile or fertile properties. Such activities include, among others:

- 1) the production, processing, use, possession, storage, carriage, import to and export from the state, and interim or final disposal of radioactive substances;
- 2) the operation of any electrical equipment emitting ionising radiation and containing components operating at a potential difference of more than 5 kV.

### ***Section 3 – Fundamental principles of radiation safety***

- (1) All new radiation practices must be justified in advance by their economic, social or other benefits in relation to the health detriment they may cause. Such justification shall be reviewed whenever new and important evidence about the efficacy or consequences of existing classes or types of radiation practices is acquired.
- (2) It shall be ensured that, in the context of optimisation, all exposures shall be kept as low as reasonably achievable, economic and social factors being taken into account.
- (3) The sum of the doses from all relevant practices shall not exceed the dose limits laid down on the basis of this Act for exposed workers and members of the public. This principle does not apply to medical exposure.
- (4) The principle provided in subsection (2) of this section applies to exposure caused by all types of radiation practices specified in Section 2 of this Act.
- (5) The deliberate addition of radioactive substances in the production of foodstuffs, toys, personal ornaments and cosmetics, and the import or export of such goods which contain radioactive substances is prohibited.

#### ***Section 4 – Organisation of performance of activities related to radiation protection***

- (1) The performance of activities related to radiation protection shall be organised by the Ministry of the Environment within the limits of its competence through the Environmental Inspectorate and the Radiation Protection Centre.
- (2) The Radiation Protection Centre is a state agency within the area of government of the Ministry of the Environment the main functions of which are provided for in this Act or legislation established on the basis thereof, and which is authorised to perform activities related to radiation protection and advise the issuers of radiation practice licences and activity licences for qualified experts, and persons exercising supervision.

#### ***Section 5 – Obligations arising from international agreements***

Visiting inspectors authorised to verify compliance with the terms and conditions of the international agreements and conventions to which the Republic of Estonia is party, shall have access to all objects and information which fall within the scope of application of such agreements and conventions, and shall have the right to obtain samples.

#### ***Section 6 – Definitions used in Act***

In this Act, and legislation established on the basis thereof, the following definitions are used:

- 1) activity (A): the activity, A, of an amount of a radionuclide in a particular energy state at a given time is the quotient of  $dN$  by  $dt$ , where  $dN$  is the expectation value of the number of spontaneous nuclear transitions from that energy state in the time interval  $dt$ ;
- 2) accidental exposure: an exposure of individuals as a result of an accident which does not include emergency exposure;
- 3) decommissioning: all activities performed and measures taken to terminate, in part or in full, the operation of any facility which poses a radiation threat to individuals, including the deactivating and full or partial dismantling of the facility;
- 4) dose rate: dose, received per unit time;
- 5) dose limits: maximum references for the doses resulting from the exposure of workers and members of the public to ionising radiation that apply to the sum of the relevant doses from external exposures in the specified period and the 50-year committed doses (up to age 70 for childhood exposure) from intakes in the same period;
- 6) effective dose: the sum of the equivalent doses in all the tissues and organs of the body weighed by tissue weighting factors which characterise differences in sensitivities to radiation of human organs and tissues;
- 7) equivalent dose: the absorbed dose, in tissue or organ weighted for the type and quality of radiation;
- 8) members of the public: individuals, other than those occupationally or medically exposed;

- 9) reference group of the population: a group comprising individuals whose exposure to a source is reasonably uniform and representative of that of the individuals in the population who are the more highly exposed to that source;
- 10) public exposure: exposure incurred by members of the public from radiation sources, excluding any occupational or medical exposure and the normal background radiation, but including exposure from practices and from intervention situations authorised by a radiation practice licence;
- 11) emergency exposure: an exposure of volunteers implementing the necessary rapid action to bring help to endangered individuals, prevent exposure of a large number of people or save a valuable installation or goods, whereby one of the individual dose limits equal to that laid down for occupational exposure could be exceeded;
- 12) ionising radiation: the direct or indirect transfer of energy in the form of particles or electromagnetic waves of a wavelength of 100 nanometres or less;
- 13) supervised area: an area subject to appropriate supervision for the purpose of protection against ionising radiation;
- 14) radiation source: an apparatus, a radioactive substance or an installation capable of emitting ionising radiation or radioactive substances;
- 15) radiation weighting factor: a dimensionless factor used to weight the tissue or organ absorbed dose in such a way as to take into account extent of health detriment caused by different types of radiation;
- 16) radiological emergency: any situation caused by ionising radiation as a result of which a significant release of radioactive material occurs or is likely to occur, or as a result of which the dose limits of public exposure are likely to be exceeded;
- 17) radiation safety assessment: a review of those aspects of radiation practices which are connected to the protection of individuals and the safety of radiation sources, including an analysis of the safety means and devices within the sources themselves and used during their application, and an analysis of the doses and risks under normal working conditions and in emergency situations;
- 18) exposed workers: persons in an employment or service relationship with a person holding a radiation practice licence, including students, trainees, apprentices and outside workers, and subject to an exposure incurred at work from practices covered by this Act and liable to result in doses exceeding one or other of the dose levels equal to the dose limits for members of the public;
- 19) exposure: the process of being exposed to ionising radiation whereas the effect of exposure is measured by the quantity of the dose;
- 20) exposure pathway: a pathway in the environment that links a contaminant source to a receptor population;
- 21) sealed source: a source whose structure is such as to prevent, under normal conditions of use, any dispersion of the radioactive substances into the environment;

- 22) tissue weighting factor: a dimensionless factor which takes account of the different sensitivity which organs and tissues may have to radiation and which is used to weight the equivalent dose in a tissue or organ;
- 23) controlled area: an area subject to special rules for the purpose of protection against ionising radiation or of preventing the spread of radioactive contamination and to which access is controlled;
- 24) occupational exposure: exposure which an exposed worker incurs or is likely to incur in the course of his or her work performed on the basis of a radiation practice licence;
- 25) qualified experts: Persons having the knowledge and training needed to carry out tests enabling doses to be assessed, and to give advice to individuals in order to ensure the effective protection of the individuals and the correct operation of protective equipment, and whose capacity to act as a qualified expert is recognised pursuant to the established procedure;
- 26) natural exposure: exposure caused by natural radiation sources;
- 27) natural radiation source: source of ionising radiation from natural terrestrial or cosmic origin;
- 28) final disposal: placing of radioactive waste in waste disposal sites which conform to certain requirements or locations which are adapted for such purposes, without the intent to retrieve the waste later;
- 29) place of origin and place of destination: places situated in two different countries, accordingly called country of origin and country of destination of radioactive waste;
- 30) medical exposure: exposure of individuals as part of assessment of their state of health, their own medical diagnosis or treatment, exposure of individuals helping patients undergoing medical diagnosis or treatment, other than as part of their occupation and where such individuals are aware of the exposure, and exposure of volunteers participating in medical and biomedical research programmes;
- 31) medical radiological procedure: any procedure concerning medical exposure;
- 32) absorbed dose: the ionising radiation energy absorbed per unit mass; in this Act, absorbed dose denotes the dose averaged over a tissue or an organ;
- 33) potential exposure: exposure, that is not expected to be delivered with certainty, but with a probability of occurrence that can be estimated in advance;
- 34) radioactive substance: any substance that contains one or more radionuclides the activity or specific activity of which cannot be disregarded as far as radiation protection is concerned;
- 35) radioactive emissions: radioactive substances emitted in the course of radiation practices and released into the environment with the aim of their diffusion;
- 36) radioactive waste: any material or object which contains or is contaminated by radio-nuclides, the activity or specific activity of which exceeds the established clearance levels and for which no future use is foreseen;

- 37) radioactive waste storage facility: a facility conforming to the established requirements within the premises of a producer of radioactive waste, prescribed for the collection, storage, pre-treatment or packaging of radioactive waste;
- 38) conditioning of radioactive waste: all operations related to the production of packaging for radioactive waste performed with the aim of rendering the packaging easy to handle;
- 39) radioactive waste management: all types of activity, including decommissioning, related to the pre-treatment, treatment, conditioning, carriage, storage and interim or final disposal of radioactive waste;
- 40) radioactive waste management facility: a facility specifically intended for the receipt of radioactive waste from the producers thereof, and the collection, treatment, conditioning and interim or final disposal of radioactive waste;
- 41) packaging for radioactive waste: the final result of conditioning operations prepared in conformity with the requirements for managing, including mould castings and any containers or artificial barriers;
- 42) radionuclide: a type of atomic nucleus which is capable of spontaneous radioactive decay, distinguishable by its atomic mass and atomic number;
- 43) intervention: a human activity that prevents or decreases the exposure of individuals to radiation from sources which are not part of a practice or which are out of control, by acting on sources, transmission pathways and individuals themselves;
- 44) intervention level: a value of avertable equivalent dose or avertable effective dose, above which intervention measures should be considered, whereby the avertable dose is solely that associated with the exposure pathway and radiation source to which the intervention measure is to be applied;
- 45) intake: radionuclides entering the body via the respiratory tract, digestive tract or skin;
- 46) action level: value, expressed in terms of dose rate or activity concentrations limit, which when exceeded in emergency situations requires the implementation of measures to protect human health;
- 47) approved dosimetric service: a body responsible for the calibration of individual monitoring devices for exposed workers, or for the measurement of radioactivity in the human body or in biological samples, or for assessment of doses, and who holds an activity licence issued by a competent authority;
- 48) nuclear fuel cycle: all operations related to the production of nuclear energy, including the mining and treatment of ores containing nuclear materials, isotopic enrichment, manufacture, use and storage of nuclear fuel, recycling of spent nuclear fuel and treatment and final disposal of produced waste;
- 49) nuclear material: plutonium except that with isotopic concentration exceeding 80% in plutonium-238; uranium-233, uranium-235; uranium enriched in the isotopes 233 or 235; uranium containing the mixture of isotopes as occurring in nature other than in the form of ore or ore-residue, thorium; any material containing one or more of the foregoing;

- 50) clearance level: value, expressed in terms of activity concentrations or total activity, at or below which radioactive substances or materials containing radioactive substances arising from any practice subject to the requirement of a radiation practice licence may be exempt, pursuant to the procedure established by the Minister of the Environment, from the requirements of this Act;
- 51) waste acceptance criteria: criteria or characteristics which characterise the suitability of radioactive waste packaging for handling and interim or final disposal;
- 52) carriage: operations related to the transport of radioactive substances from the place of origin to the place of destination, including loading and unloading;
- 53) outside worker: any worker of category A, performing activities in any sort of controlled area, including repair or maintenance of radiation emitting parts of radiation sources, whether employed temporarily or permanently by an outside undertaking, including trainees, apprentices and students;
- 54) exemption value: value, expressed in terms of activity concentrations or total activity, at or below which radioactive substances may be exempt from the requirement of a radiation practice licence.

## CHAPTER 2

### **National Planning of Radiation Protection**

#### *Section 7 – National development plan for radiation protection*

- (1) Radiation protection shall be planned on the national level through the national development plan for radiation protection.
- (2) The national development plan for radiation protection shall address the situation in the area of radiation protection in Estonia, the planned objectives regarding the organisation and rationalisation of radiation protection, and measures to be taken to achieve such objectives.
- (3) The provisions of the Administrative Procedure Act concerning open proceedings apply to the preparation, amendment and repeal of the national development plan for radiation protection, taking account of the specifications provided for in this Act.

#### *Section 8 – Renewal of national development plan for radiation protection*

- (1) Renewal of the national development plan for radiation protection means the regular review and amendment of the development plan. The provisions concerning the procedure for preparation of the national development plan for radiation protection apply to the renewal of the development plan.
- (2) The national development plan for radiation protection shall be renewed once every ten years after the preparation or renewal of the development plan.

***Section 9 – Initiation of preparation of draft national development plan for radiation protection***

- (1) Preparation of a draft national development plan for radiation protection shall be initiated by the Minister of the Environment.
- (2) The notice concerning the intended preparation of the draft national development plan for radiation protection shall set out a brief overview of the planned content and objectives of the plan.
- (3) The main policies of the draft national development plan for radiation protection shall be published on the website of the Ministry of the Environment.

***Section 10 – Preparation of draft national development plan for radiation protection***

- (1) The Ministry of the Environment shall organise the preparation of the draft national development plan for radiation protection.
- (2) Representatives of relevant state agencies, undertakings, non-profit associations, foundations and civil law partnerships as well as other interested persons shall be involved in the preparation of the draft national development plan for radiation protection.

***Section 11 – Public display of draft national development plan for radiation protection and public meeting***

- (1) The Ministry of the Environment shall organise the public display of the draft national development plan for radiation protection, and shall call at least one public meeting to discuss the draft development plan.
- (2) The time and location of the public display of the draft national development plan for radiation protection shall be communicated at least two weeks prior to the beginning of the public display in the official publication *Ametlikud Teadaanded*<sup>3</sup>, in at least one national newspaper and on the website of the Ministry of the Environment. The duration of the public display of the draft national development plan for radiation protection shall be at least one month.
- (3) The time and location of the public meeting to discuss the draft national development plan for radiation protection shall be communicated at least two weeks prior to the public meeting in the official publication *Ametlikud Teadaanded*, in at least one national newspaper and the website of the Ministry of the Environment.

***Section 12 – Consideration of proposals and objections presented during public display of and at public meeting concerning draft national development plan for radiation protection***

- (1) The Ministry of the Environment shall organise the review of the proposals and objections which are presented during the public display of and at the public meeting concerning the draft national development plan for radiation protection and, if necessary, shall organise the amendment of the draft development plan.

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3. *Ametlikud Teadaanded* = *Official Notices*.



- (2) The Ministry of the Environment shall respond to proposals and objections that are not taken into consideration within two months after the end of the public display or the date of the public meeting.

***Section 13 – Approval of national development plan for radiation protection***

The national development plan for radiation protection shall be approved by a regulation of the government of the Republic.

**CHAPTER 3**

**Radiation Practice Licence**

***Section 14 – Radiation practice licence***

A radiation practice licence gives a person the right to engage in radiation practices.

***Section 15 – Issuer of radiation practice licences***

Radiation practice licences are issued by the Ministry of the Environment.

***Section 16 – Obligation to apply for radiation practice licence***

- (1) It is prohibited to commence radiation practices or to perform radiation work for which, pursuant to this Act, a radiation practice licence is required, without a radiation practice licence.
- (2) A radiation practice licence is required for radiation practices, including:
- 1) the operation, closure and decommissioning of any facility involved in the nuclear fuel cycle;
  - 2) the deliberate addition of radioactive substances in the production and manufacture of medical products and the import or export of such goods;
  - 3) the deliberate addition of radioactive substances in the production and manufacture of consumer goods and the import or export of such goods;
  - 4) the operation of radiation sources and administration of radioactive substances to persons or animals for the purpose of assessment of their state of health, for medical or veterinary diagnosis, treatment or research;
  - 5) the use of X-ray sets or radioactive sources for industrial radiography and roentgenography or processing of products or for research purposes and the use of accelerators except electron microscopes;
  - 6) work activities within which the presence of natural radiation sources leads to a significant increase in the exposure which cannot be disregarded from the radiation protection point of view;

- 7) managing of radioactive waste.

*Section 17 – Use of radiation sources without radiation practice licence*

- (1) A radiation practice licence is not required for activities upon which the activity concentrations or total activity of used radionuclides is less than the exemption value.
- (2) The bases for calculation of exemption values, and the exemption values for radionuclides shall be established by a regulation of the Government of the Republic.
- (3) An apparatus containing a radioactive substance in a quantity exceeding the exemption value may be used without a radiation practice licence, provided that it meets the following requirements simultaneously:
  - 1) the radioactive substance is a gamma radiation source which is constructed in the form of a sealed source;
  - 2) it does not cause, in normal operating conditions, a dose rate exceeding  $1 \mu\text{Sv h}^{-1}$  at a distance of 0.1 m from the surface of the apparatus;
  - 3) the apparatus has valid type approval;
  - 4) the plan for rendering the apparatus harmless upon termination of the use of the apparatus have been approved by the Ministry of the Environment.
- (4) The operation of any electrical equipment emitting ionising radiation is permitted without a radiation practice licence provided that this operation does not cause, in normal operating conditions as stated by the manufacturer in the user manual, a dose rate exceeding  $1 \mu\text{Sv h}^{-1}$  at a distance of 0.1 m from any point of the surface of the apparatus, and that the equipment has valid type approval.
- (5) The operation of any cathode ray tube intended for the display of visual images, or other electrical apparatus operating at a potential difference not exceeding 30 kV is permitted without a radiation practice licence, provided that this operation does not cause, in normal operating conditions as stated by the manufacturer in the user manual, a dose rate exceeding  $1 \mu\text{Sv h}^{-1}$  at a distance of 0.1 m from any accessible surface of the apparatus.
- (6) The requirements of this Act need not be applied to radioactive substances and materials contaminated therewith if the radioactive substances which result from radiation practices have activity concentrations or total activity so low as to not require, from the radiation protection point of view, their processing and storage as radioactive waste. Such decision shall be made by the Minister of the Environment based on the request of the holder of the radiation practice licence.
- (7) The clearance levels for radioactive substances and materials contaminated with radioactive substances resulting from radiation practices, and the requirements for their clearance, recycling and reuse shall be established by a regulation of the Minister of the Environment.

### *Section 18 – Application for radiation practice licence*

- (1) In order to obtain a radiation practice licence, an applicant shall submit an application to the Ministry of the Environment with the following information and documents:
  - 1) the business name or name, registry code or personal identification code, and contact details of the applicant;
  - 2) the objective and description of the radiation practice, the layout of the location and facility for the radiation practice, and information concerning the technology and equipment to be used;
  - 3) the justification for and description of the radiation practice;
  - 4) information on the radiation source;
  - 5) information on the radioactive waste or emissions created in the process of the radiation practice, and concerning the radioactive waste storage facility waste and waste acceptance criteria thereof;
  - 6) the plan for rendering the radiation source harmless after termination of the use of the radiation source which, in the case of radiation practice involving moderate or high risk, must be approved by a qualified expert;
  - 7) if the licence is applied for the managing of radioactive waste, information concerning the methods to be used upon the permanent termination of the operation of the management facility;
  - 8) a plan for radiation monitoring and information on the equipment to be used for radiation monitoring;
  - 9) (repealed – 22.02.2005 entered into force 03.04.2005 – RT I 2005, 15, 87);
  - 10) radiation safety assessment and measures for guaranteeing radiation safety;
  - 11) an emergency response plan in the case of radiation practices involving high risk;
  - 12) description of the radiation safety quality system;
  - 13) information on exposed workers and their professional training.
- (2) If a radiation practice licence is applied for in order to import radioactive substances into the Republic of Estonia, the applicant for the licence shall submit the information specified in clauses (1) 1), 3) and 4) of this section.
- (3) Radiation practices are divided into the following risk categories depending on the risk presented by the radiation practice or the radiation source:
  - 1) low risk radiation practices, through which an exposed worker receives or is liable to receive an effective dose of up to 1 mSv in a year;

- 2) moderate risk radiation practices, through which an exposed worker receives or is liable to receive an effective dose of up to 6 mSv in a year;
  - 3) high risk radiation practices, through which an exposed worker receives or is liable to receive an effective dose exceeding 6 mSv in a year.
- (4) The Ministry of the Environment shall preserve the documents presented together with an application for a radiation practice licence for at least ten years after termination of the activity described in the licence.

### ***Section 19 – Information and conditions set out in radiation practice licences***

- (1) A radiation practice licence shall set out the following:
- 1) the number and date of issue of the radiation practice licence;
  - 2) the business name and registry code, or name and personal identification code, and address of the holder of the radiation practice licence;
  - 3) the name of the radiation practice;
  - 4) the term of validity of the radiation practice licence;
  - 5) a description of the radiation sources;
  - 6) the location where the radiation practice takes place and a description of the facility and premises;
  - 7) the manners in which radioactive waste is managed, and the maximum quantities and management facilities for radioactive waste;
  - 8) the maximum quantities of radioactive emissions, and means of releasing them into the environment;
  - 9) the requirements for radiation safety and radiation monitoring arising from the given radiation practice and its specific character;
  - 10) the risk category of the radiation practice.
- (2) A radiation practice licence shall be issued in two original copies, one of which shall remain with the Ministry of the Environment and the other shall be retained by the holder of the radiation practice licence. A radiation practice licence shall be sent to the applicant by registered letter or shall be delivered against a signature by the administrative agency which issues the licence.

### ***Section 20 – Application of open proceedings***

- (1) In the case of the radiation practices specified in clauses 16 (2) 1), 6) and 7) of this Act, the provisions concerning open proceedings apply to the procedure for issue or amendment of radiation practice licences.

- (2) The provisions concerning open proceedings do not apply to the procedure for amendment of radiation practice licences upon amendment of the information specified in clause 18 (1) 1) of this Act, and to the procedure for revocation of radiation practice licences.

***Section 21 – Public display of applications for radiation practice licences  
and draft radiation practice licences***

The time and location of the public display of an application for a radiation practice licence and the draft radiation practice licence shall be communicated at least two weeks prior to the beginning of the public display in the official publication *Ametlikud Teadaanded*, in at least one national newspaper and on the website of the Ministry of the Environment.

***Section 22 – Refusal to issue radiation practice licences***

The Ministry of the Environment shall refuse to issue a radiation practice licence if:

- 1) the activity for which the radiation practice licence is applied involves or is likely to involve a risk to national or international security;
- 2) the activity for which the radiation practice licence is applied does not conform to the requirements provided by legislation;
- 3) false information is submitted in the application for the radiation practice licence;
- 4) the applicant for the radiation practice licence does not employ exposed workers with requisite professional training;
- 5) the location of the radiation practice set out in the application or other conditions do not allow for compliance with radiation safety requirements.

***Section 23 – Term of validity of radiation practice licences***

A radiation practice licence shall be issued for the term of up to five years.

***Section 24 – Obligation to notify of changes in radiation practice***

The holder of a radiation practice licence shall give prior notice to the Ministry of the Environment if the holder of the licence intends to:

- 1) implement new or additional radiation sources;
- 2) terminate the use of the radiation source specified in the radiation practice licence;
- 3) deliver the radiation source to another person or dispose of the source as radioactive waste;
- 4) change the radiation practice, or the manner of management, maximum quantities or management facility of produced radioactive waste determined by the radiation practice licence;

- 5) change the location, facilities or premises where the radiation practice is carried out;
- 6) employ a new radiation safety specialist;
- 7) change the radiation practice described in the licence in any other significant manner.

#### ***Section 25 – Amendment of radiation practice licences***

- (1) The Ministry of the Environment shall amend a radiation practice licence if:
  - 1) the holder of the licence has notified of a change specified in Section 24 of this Act;
  - 2) the legislation which constituted the basis for the requirements set by the radiation practice licence has been amended;
  - 3) the risk category of the radiation practice determined by the licence has changed as a result of measures applied in the course of the radiation practice;
  - 4) the information specified in clause 18 (1) 1) of this Act has changed.
- (2) In the cases specified in clauses 24 4), 5) and 7) of this Act which involve a significant change in terms of radiation protection, the Ministry of the Environment may require that the holder of the licence submit an application for a new radiation practice licence.
- (3) The Ministry of the Environment shall send a notice concerning amendment of a radiation practice licence or of the need to re-apply for a licence to the holder of the radiation practice licence by post.

#### ***Section 26 – Revocation of radiation practice licences***

- (1) The issuer of a radiation practice licence shall revoke a radiation practice licence, and give prior notice of the revocation to the holder of the radiation practice licence, if:
  - 1) the facts specified in Section 22 of this Act are ascertained with regard to the activities of the holder of the licence;
  - 2) the holder of the licence fails to comply with the requirements established by the radiation practice licence;
  - 3) the holder of the licence fails to perform the obligation provided in Section 27 of this Act;
  - 4) the activity of the holder of the licence who is a legal person is terminated or the holder of the licence who is a natural person is deceased;
  - 5) the Ministry of the Environment has required the holder of the licence to submit an application for a new licence arising from the provisions of subsection 25 (2) of this Act but the holder of the licence fails to re-apply.

- (2) A decision to revoke a radiation practice licence shall include the following information:
- 1) the business name and registry code, or name and personal identification code, and address of the holder of the radiation practice licence;
  - 2) the number of the radiation practice licence;
  - 3) the name of the permitted radiation practice;
  - 4) the reasons for revocation of the radiation practice licence and a reference to the legislation on the basis of which the radiation practice licence is revoked;
  - 5) the date on which the decision is made.

***Section 27 – Suspension of radiation practice by holder of radiation practice licence***

If doses exceeding the established dose levels are detected in the course of a radiation practice, the holder of the radiation practice licence shall suspend the radiation practice until the reasons for the overexposure are determined and eliminated.

***Section 28 – Time limits for proceedings to issue, amend or revoke radiation practice licences, specific requirements for and format of applications for radiation practice licences, and format of radiation practice licences***

The time limits for proceedings to issue, amend or revoke radiation practice licences, the specific requirements for and format of applications for radiation practice licences, and the format of radiation practice licences shall be established by a regulation of the Minister of the Environment.

***Section 29 – State fee for application for radiation practice licence***

Upon application for a radiation practice licence, the applicant shall pay a state fee pursuant to the rate provided for in the State Fees Act (RT I 1997, 80, 1344; 2001, 55, 331; 53, 310; 56, 332; 64, 367; 65, 377; 85, 512; 88, 531; 91, 543; 93, 565; 2002, 1, 1; 18, 97; 23, 131; 24, 135; 27, 151 and 153; 30, 178; 35, 214; 44, 281; 47, 297; 51, 316; 57, 358; 58, 361; 61, 375; 62, 377; 90, 519; 102, 599; 105, 610; 2003, 4, 20; 13, 68; 15, 84 and 85; 20, 118; 21, 128; 23, 146; 25, 153 and 154; 26, 156 and 160; 30, correction notice; 51, 352; 66, 449; 68, 461; 71, 471; 78, 527; 79, 530; 81, 545; 88, 589 and 591; 2004, 2, 7; 6, 31; 9, 52 and 53; 14, 91 and 92).

**CHAPTER 4**

**Obligations of Holders of Radiation Practice Licences**

***Section 30 – Principal obligations of holders of radiation practice licences***

The holder of a radiation practice licence has the obligation to:

- 1) be responsible for radiation safety and guarantee the physical protection of the radiation sources in the holder's possession;

- 2) prepare the rules necessary for performing radiation practices and instructing exposed workers;
- 3) organise the treatment and conditioning of radioactive waste if such activity is necessary for modifying the properties of the radioactive waste prior to its release into the environment, and to arrange the interim storage or final disposal of the radioactive waste;
- 4) take an annual inventory of the radiation sources and submit the results of the inventory to the Radiation Protection Centre by 1 March of the following year;
- 5) provide training and radiation safety instruction for exposed workers commensurate with the nature of their work and workplace conditions;
- 6) organise the medical examination of exposed workers;
- 7) upon a change of ownership of a radiation source, provide the new owner with comprehensive information to ensure radiation safety;
- 8) immediately inform the Radiation Protection Centre and the alarm centre of the Rescue Board of accidents which take place in the course of radiation practices and of events of exposure in doses exceeding the dose limits;
- 9) alleviate the consequences of emergencies;
- 10) ensure the regular control and calibration of measuring instruments used and be responsible for their fitness for use and appropriate use;
- 11) ensure the monitoring of the doses incurred by exposed workers and submission of the obtained information to the dose registry;
- 12) guarantee that all building design documentation concerning facilities is reviewed, and that new radiation sources to be used are approved beforehand by a qualified expert;
- 13) render a radiation source harmless after its use is terminated pursuant to the plan for rendering the radiation source harmless submitted in the application for the licence;
- 14) provide certification, at the request of competent authorities, of the legality of the possession of radioactive substances or radiation apparatuses containing radioactive substances;
- 15) prepare an emergency plan if the person engages in high risk radiation practices and test the plan pursuant to the requirements and with the frequency established by legislation;
- 16) improve the technologies, equipment and techniques used;
- 17) develop and implement a radiation safety quality system.

### ***Section 31 – Radiation safety specialist***

- (1) The holder of a radiation practice licence may appoint a radiation safety specialist with the duty to organise compliance with radiation safety requirements. Appointment of a radiation safety expert is mandatory if the holder of a licence employs more than ten exposed workers.



- (2) Appointment of a radiation safety specialist does not release the holder of a radiation practice licence of the responsibility to guarantee radiation safety.

### ***Section 32 – Radiation safety quality system***

- (1) The holder of a radiation practice licence shall prepare a radiation safety quality system to ensure compliance with the requirements provided for in this Act and legislation established on the basis thereof and with the conditions set by the radiation practice licence.
- (2) A radiation safety quality system shall set out the following:
  - 1) planned and systematic activity aimed at ensuring radiation safety;
  - 2) an analysis of the duties of workers and the requirements for the skills needed to operate the radiation source;
  - 3) a system for controlling compliance with the radiation safety requirements;
  - 4) a description of the procedures for the supply and use of materials, and of the procedures for supervision over radiation safety and controlling the functioning of safety systems.

### ***Section 33 – Maintaining records on nuclear material and notification of nuclear material***

- (1) A person in possession of nuclear material is required to maintain records on the nuclear material used in the person's undertaking from the time of its acquisition until the time of its storage as radioactive waste, rendering the material harmless or change of ownership, and to appoint a person responsible for maintaining the records of nuclear material.
- (2) A person in possession of nuclear material shall immediately inform the Radiation Protection Centre of changes in the quantity of the nuclear material.

### ***Section 34 – Safety of radioactive source***

- (1) The holder of a radiation practice licence shall guarantee the safety of a radiation source by its correct installation, appropriate location in the premises, and by marking the premises and the radiation source as required, and by using adequate protection devices.
- (2) Radiation sources may be installed, repaired and maintained by persons who hold a radiation practice licence. Repair and maintenance work not related to the radiation emitting parts of radiation sources may be performed without a radiation practice licence.
- (3) The requirements for the premises where radiation sources are located, the marking of such premises and the radiation sources, and the rules for the performance of radiation practices shall be established by a regulation of the Minister of the Environment.

### ***Section 35 – Carriage of radioactive substances and apparatuses containing radioactive substances***

- (1) Radioactive substances and apparatuses containing radioactive substances in which the activity concentrations or total activity of radionuclides is greater than the exemption value shall be carried by road, railway, air or waterway pursuant to the procedure provided by legislation concerning transport of dangerous goods. Transboundary movement of the above shall be compatible with international agreements binding on the Republic of Estonia and pursuant to the legislation of the Republic of Estonia.
- (2) The possessor of radioactive substances or apparatuses containing radioactive substances shall guarantee that:
  - 1) the packages conform to the established safety requirements;
  - 2) the mode of transport used ensures safety;
  - 3) the carrier has been informed of the safety requirements set for the carriage of the radioactive substances or the apparatuses containing radioactive substances.

### ***Section 36 – Radiation safety instructional materials***

The Radiation Protection Centre shall issue instructional materials for persons holding radiation practice licences, in order to ensure compliance with the requirements of this Act through the implementation of methods, procedures and other actions involved in good practice.

## CHAPTER 5

### **Guarantee of Radiation Safety**

#### *Division 1*

#### *Protection of Members of Public and Exposed Workers*

### ***Section 37 – Radiation sources register and nuclear material register***

- (1) The radiation sources register and the nuclear material register are state agency databases within the meaning of the Databases Act (RT I 1997, 28, 423; 1998, 36/37, 552; 1999, 10, 155; 2000, 50, 317; 57, 373; 92, 597; 2001, 7, 17; 17, 77; 2002, 61, 375; 63, 387; 2003, 18, 107; 26, 158).
- (2) The Radiation Protection Centre shall maintain the registers of radiation sources and nuclear material.
- (3) The Radiation Protection Centre shall enter information concerning existing radiation sources, and radiation sources imported into the Republic of Estonia in the radiation sources register. Entries shall be made either for the import or use of a radiation source based on the information contained in the radiation practice licence.
- (4) The Radiation Protection Centre shall make entries in the nuclear materials register based on the information submitted by the persons in possession of nuclear material.

### ***Section 38 – Dose limits***

The limits for effective doses for exposed workers and members of the public, and the limits for equivalent doses for the lens of the eye, the skin and extremities shall be established by a regulation of the government of the Republic.

### ***Section 39 – Guarantee of radiation safety in the workplace***

- (1) For the purposes of radiation protection, where there is a possibility that radiation arising from a radiation practice could cause exposure to ionising radiation in excess of the effective doses for members of the public or equivalent doses for exposed workers established by this Act to the extent of more than one tenth of such values per year, the holder of a radiation practice licence shall consult with a qualified expert on the need to apply additional safety measures.
- (2) Workplaces shall be divided into the following areas depending on the type of premises and building in which the radiation source is located, the category of the radiation source, and the radiation risk category:
  - 1) controlled areas;
  - 2) supervised areas.
- (3) The holder of a radiation practice licence shall guarantee radiation monitoring of controlled areas and supervised areas in compliance with the requirements provided for in subsection (4) of this section.
- (4) Depending on the need, monitoring of controlled and supervised areas shall include:
  - 1) monitoring of dose rates;
  - 2) monitoring of levels of radioactive contaminants in the air and on surfaces together with testing the properties of the radioactive waste, and determining their physical and chemical status.
- (5) The holder of a radiation practice licence shall register the results of monitoring and shall preserve the results during the entire period of operation in the area of radiation practices.

### ***Section 40 – Categories of exposed workers***

Exposed workers are categorised as follows:

- 1) exposed category A workers: those exposed workers who are liable to receive an effective dose greater than 6 mSv or an equivalent dose greater than three tenths of the dose limits for the lens of the eye, skin and extremities established on the basis of this Act;
- 2) exposed category B workers: those exposed workers who are not classified as exposed category A workers.

### ***Section 41 – Age limits for radiation work***

Persons under the age of eighteen years shall not be permitted to perform any radiation practices.

### ***Section 42 – Estimation of effective and equivalent doses***

- (1) The Radiation Protection Centre shall guarantee the estimation of effective and equivalent doses incurred by members of the public and reference groups of the population.
- (2) The procedure for monitoring and estimation of effective doses incurred by exposed workers and members of the public, and the dose coefficient values, and radiation and tissue weighting factor values for doses resulting from radionuclide intake shall be established by a regulation of the Minister of the Environment.

### ***Section 43 – Individual monitoring***

- (1) Individual monitoring of exposed workers shall be carried out by a recognised dosimetric service.
- (2) Individual monitoring at the workplace shall be systematic for exposed category A workers. In cases where exposed category A workers are liable to receive significant internal contamination due to inhalation or ingestion of radionuclides, the monitoring system specified in subsection 39 (4) of this Act must enable assessment thereof.
- (3) Monitoring for exposed category B workers shall be sufficient to demonstrate that such workers are correctly classified in category B.

### ***Section 44 – Dose register***

- (1) Data concerning the individual monitoring of exposed workers shall be maintained in the national dose register for exposed workers.
- (2) The national dose register for exposed workers shall be established by the Government of the Republic.
- (3) The national dose register for exposed workers is a state register as defined in the Databases Act.
- (4) The national dose register for exposed workers shall be maintained by the Radiation Protection Centre.
- (5) Data in the national dose register for an exposed worker shall be preserved during the entire time the exposed worker is engaged in radiation practices. After that, the data concerning a person shall be preserved until the time that the person attains or would have attained 75 years of age, but not for a shorter period than thirty years after the person no longer engages in radiation practices.
- (6) The following person shall have access to the results of the personal monitoring of exposed workers:

- 1) an exposed worker himself or herself, with regard to data concerning his or her person;
- 2) a specialist providing occupational health services to an exposed worker;
- 3) the holder of a radiation practice licence, with regard to information concerning the exposed workers employed thereby;
- 4) persons carrying out radiation safety inspection;
- 5) persons engaged in the research of radiation and its effects.

#### *Section 45 – Qualified expert*

- (1) A natural person who holds an activity licence of a qualified radiation expert (hereinafter activity licence) has the right to operate as a qualified expert.
- (2) The Ministry of the Environment shall issue an activity licence to an applicant on the basis of an application.
- (3) An activity licence may be applied for by any natural person who:
  - 1) has acquired higher education in an institution of higher education or university which holds an education licence issued by the Ministry of Education and Research or which grants documents attesting education which are recognised in the Republic of Estonia;
  - 2) has at least five years of practical experience in the field of radiation safety;
  - 3) is knowledgeable of the procedure for radiation protection and of legislation of the Republic of Estonia and international legislation concerning radiation.
- (4) Activity licences shall be granted for a period of five years.
- (5) An activity licence shall be denied if:
  - 1) the applicant does not have the required qualifications;
  - 2) the applicant has through his or her earlier economic activities during the three years preceding his or her application for a licence violated the requirements established by legislation;
  - 3) an earlier activity licence held by the applicant has been revoked during the three years preceding his or her application for a licence.
- (6) In the following cases, the Ministry of the Environment shall suspend the validity of an activity licence or revoke a licence, giving prior written notice thereof to the holder of the licence:
  - 1) the applicant for the activity licence has submitted inaccurate information;
  - 2) the person to whom the activity licence was issued fails to comply with the requirements for estimation of doses, or radiation safety requirements;

- 3) facts specified in subsection (5) of this section become evident.
- (7) The format of activity licences of qualified experts and applications therefor and the procedure for the issue, extension, suspension and revocation of activity licences shall be established by a regulation of the Minister of the Environment.

#### ***Section 46 – Medical surveillance of exposed workers***

- (1) The holder of a radiation practice licence shall guarantee the medical surveillance of exposed category A workers.
- (2) In each case where one of the established dose limits has been exceeded, the holder of a radiation practice licence shall immediately have the exposed workers concerned undergo a medical examination.
- (3) Medical surveillance of exposed workers shall be carried out pursuant to the procedure provided for in the Occupational Health and Safety Act (RT I 1999, 60, 616; 2000, 55, 362; 2001, 17, 78; 2002, 47, 297; 63, 387; 2003, 20, 120).

#### ***Section 47 – Guaranteeing safety of outside workers and individual monitoring of outside workers***

- (1) The holder of a radiation practice licence shall guarantee radiation safety for outside workers on equal grounds with exposed workers employed thereby, and provide outside workers with training and instruction on radiation protection, taking account of the specific nature of their work and the conditions on their workplace.
- (2) The requirements for the results of individual monitoring of outside workers, and for formalising such results, and for the standard format for the dose chart of outside workers shall be established by a regulation of the Minister of the Environment.

#### ***Section 48 – Radiation safety training of outside workers***

The requirements for radiation safety training of outside workers shall be established by a regulation of the Minister of the Environment.

#### ***Section 49 – Increased natural radiation***

- (1) Work activities within which the presence of natural radiation sources may lead to a significant increase in the exposure of workers or of members of the public are the following:
  - 1) work at mineral springs, in caves, mines or underground constructions;
  - 2) work with substances which contain radioactive substances occurring in nature;
  - 3) work of air crews in high-altitude flights.
- (2) The Radiation Protection Centre shall ensure the identification, by means of surveys or by any other appropriate means, of work activities where workers are likely to incur doses in excess of

the annual effective dose limit of public exposure established by this Act. Such activities shall be deemed to be radiation practices and a radiation practice licence shall be obtained for the performance thereof.

- (3) In order to protect air crew who, due to exposure to cosmic radiation, are liable to be subject to exposure in excess of the annual effective dose limit of public exposure established by this Act, the employer shall:
- 1) organise assessment of the doses resulting from the exposure;
  - 2) take into account the assessed exposure when organising work schedules;
  - 3) inform the workers concerned of the health risks their work involves;
  - 4) apply special measures for the protection of the health of female workers during pregnancy and breastfeeding.

*Division 2  
Radiation Safety upon Medical Exposure*

***Section 50 – Duties of health care professionals upon radiation practices***

Health care professionals administering medical radiological procedures are required to:

- 1) administer the medical radiological procedures in compliance with the principles of justification and optimisation;
- 2) inform patients of the risk of ionising radiation;
- 3) obtain information, based on documentation in their possession, of previous medical radiological procedures administered to the patient;
- 4) to ensure the safety of radiation sources and good working order of the protective systems;
- 5) ensure that radiation is administered only in necessary amounts and to the appropriate parts of the body;
- 6) ensure that radioactive substances are administered to patients in correct doses.

***Section 51 – Protection of persons undergoing medical exposure***

Radiation protection requirements set for medical radiological procedures and requirements for protection of persons undergoing medical exposure shall be established by a regulation of the Minister of Social Affairs.

## CHAPTER 6

### Intervention

#### *Section 52 – Principles of implementation of intervention*

- (1) In cases of radiological emergencies or in cases of lasting exposure, intervention shall be undertaken if the reduction in detriment due to radiation is sufficient to justify the harm and costs of the intervention.
- (2) The form, scale and duration of the intervention shall be optimised so that the benefit of the reduction in health detriment less the detriment associated with the intervention, will be maximised.

#### *Section 53 – Intervention preparation*

- (1) A crisis management plan for responding to a radiological emergency shall be prepared pursuant to the Emergency Preparedness Act (RT I 2000, 95, 613; 2002, 61, 375; 63, 387; 2003, 88, 594).
- (2) The Radiation Protection Centre shall participate in the preparation of the national crisis management plan for responding to a radiological emergency, the testing of such plan and the practical management of possible crises.
- (3) Intervention levels and action levels, and limits for emergency exposure which constitute the basis for preparation of the national crisis management plan for responding to a radiological emergency and implementation of measures for protecting the public shall be established by a regulation of the Minister of the Environment.

#### *Section 54 – Intervention in cases of lasting exposure*

- (1) The Radiation Protection Centre shall guarantee, in the course of monitoring, the ascertainment of areas contaminated as a result of lasting exposure.
- (2) In co-operation with the agencies involved in dealing with emergencies, the Radiation Protection Centre shall ensure that:
  - 1) the areas contaminated by radiation and high radiation areas are demarcated;
  - 2) arrangements are made for the monitoring of the demarcated areas;
  - 3) any appropriate intervention is implemented;
  - 4) access to the demarcated area is regulated.



### ***Section 55 – Potential exposures upon radiation emergencies***

The Radiation Protection Centre shall organise the estimation of the temporal and spatial distribution of radioactive substances dispersed in the event of a possible radiological emergency and of the corresponding potential exposures and, depending on the extent of a radiological emergency, shall advise the units directing the management of radiation emergencies.

### ***Section 56 – Monitoring of persons participating in intervention operations or incurring emergency exposure***

- (1) Persons directing the responding to emergencies within the meaning of the Emergency Preparedness Act shall ensure that the volunteers participating in intervention operations and persons present in the area of accidental exposure undergo individual monitoring.
- (2) In the case of accidental exposure or emergency exposure, the Radiation Protection Centre shall guarantee the assessment of individual doses as necessary, and reporting of the results of assessment to the doctor conducting the individual monitoring.
- (3) The cost of individual monitoring shall be covered from the reserve capital of the Government of the Republic and subsequently shall be collected from the person who was responsible for the emergency.

### ***Section 57 – System for early warning of transboundary radiation hazard***

The Radiation Protection Centre shall ensure the operation of the system for early warning of transboundary radiation hazard.

## **CHAPTER 7**

### **Radioactive Waste and Emissions**

#### ***Section 58 – General requirements for managing of radioactive waste and radioactive emissions***

- (1) The holder of a radiation practice licence shall guarantee the safe management of radioactive waste and radioactive emissions created in the course of radiation practices and shall make sure that:
  - 1) radioactive waste is managed such that the estimated harmful effect on future generations of such practices will not exceed the effect permitted by this Act or legislation established on the basis thereof;
  - 2) the activity and quantities of created radioactive waste and emissions are as low as possible;
  - 3) the biological, chemical and other risks are taken into account, considering the reciprocal effect that different stages in radioactive waste production have on the management thereof;

- 4) radioactive waste is delivered to radioactive waste management facilities not later than within five years after their production.
- (2) The holder of a radiation practice licence issued for the management of radioactive waste shall ensure the safety of the radioactive waste management facility during the entire time of its operation.
- (3) The Ministry of the Environment may make proposals for the improvement of the radiation safety of radioactive waste management facilities to the holders of radiation practice licences. In doing so, it must be taken into consideration that the decrease achieved in the harmful effect must justify the cost of the measures taken.
- (4) Producers of radioactive waste shall cover all costs incurred upon the management of the radioactive waste.
- (5) The classification of radioactive waste and the specific requirements for registration, management and delivery of radioactive waste shall be established by a regulation of the Minister of the Environment.
- (6) Radioactive waste acceptance criteria shall be established by a regulation of the Minister of the Environment.

#### ***Section 59 – Delivery of radioactive waste***

- (1) In cases where radioactive waste cannot be released into the environment with the aim of their diffusion, or, within a period of five years after their production, cannot be exempted from the requirements of this Act or legislation established on the basis thereof, the person who produced the radioactive waste shall deliver them to a radioactive waste management facility.
- (2) A person who produces radioactive waste shall guarantee that the packaging in which waste is delivered complies with the waste acceptance criteria established for packaging for radioactive waste.

#### ***Section 60 – Seizure of radioactive waste by state***

- (1) In cases where the owner of radioactive substances or radioactive waste is unknown, or the person responsible for their production cannot be established, or in the case of illegal possession of radioactive waste, or if an emergency could be created as a result of possession of radioactive waste, the state shall seize the radioactive waste.
- (2) In the case of illegal possession of radioactive waste, or if an emergency could be created as a result of possession of radioactive waste, the owner of the radioactive waste shall cover the costs related to the seizure and management of the waste by the state.
- (3) Further management of radioactive substances and radioactive waste seized by the state shall be decided by the Minister of the Environment in each individual case based on the crisis management plan prepared by the Ministry of the Environment.

### *Section 61 – Import, export and transit of radioactive waste*

- (1) The following are documents for the import, export or transit of radioactive waste:
  - 1) application for transport permit;
  - 2) authorisation by competent authorities;
  - 3) transport permit;
  - 4) list of materials and their type of packaging;
  - 5) notice on receipt of radioactive waste.
- (2) The formats for documents for the import, export or transit of radioactive waste are set out in the Commission Decision 93/552/Euratom of 1 October 1993 establishing the standard document for the supervision and control of shipments of radioactive waste referred to in Council Directive 92/3/Euratom (OJ L 268, 29.10.1993, p. 83).
- (3) Transport permits for radioactive waste shall be issued and transit thereof shall be authorised by the Minister of the Environment.
- (4) The owner of radioactive waste shall apply for a transport permit for the import of radioactive waste into the Republic of Estonia for the handling or conditioning thereof, and for the export of radioactive waste from the Republic of Estonia if the activity concentrations or total activity of the radioactive waste radionuclides exceeds the exemption value.
- (5) In order to obtain a transport permit, an applicant shall submit a standard format application to the Ministry of the Environment.
- (6) An application may be submitted concerning more than one shipment provided that:
  - 1) the radioactive waste for the carriage of which the application is submitted have similar physico-chemical and radioactive properties;
  - 2) the shipment is from the same possessor of radioactive waste to the same recipient, and the transport documents have been authorised and issued by the same competent authorities;
  - 3) the shipment is made through the same border checkpoints and transit countries.
- (7) The Ministry of the Environment shall send a request for authorisation to the competent authorities of the country of destination and of all transit countries.
- (8) After receipt of all necessary authorisations, the Ministry of the Environment shall issue a transport permit.
- (9) A transport permit shall be issued for one shipment and for a specified term. A multiple transport permit shall be valid for a term of up to three years.
- (10) The Ministry of the Environment shall not issue a transport permit or authorise the transit of radioactive waste if:

- 1) it involves or may result in danger to national or international security;
  - 2) the country of destination of the radioactive waste is located south of latitude 60° south;
  - 3) the country of destination is not a Member State of the European Union but it has entered in an agreement prohibiting the import or transit of radioactive waste with the European Union;
  - 4) there is reason to believe that it is not possible to manage radioactive waste safely in the country of destination;
  - 5) the import, export or transit of radioactive waste is likely to present an environmental or health hazard;
  - 6) the radioactive waste is to be brought into Estonia for final disposal.
- (11) The transport permit specified in clause (1) 3) of this section is not required in the case where the holder of a radiation practice licence is returning a sealed radiation source to the manufacturer of the source.
- (12) If it is not possible to complete the transport of radioactive waste or if the conditions under which the transport operation is carried out do not meet the conditions of the application for the transport permit or the terms set out in the transport permit, the Ministry of the Environment shall apply substitutive enforcement in the form of returning the radioactive waste to its original owner pursuant to the procedure provided for in the Substitutive Enforcement and Penalty Payment Act (RT I 2001, 50, 283; 94, 580).
- (13) Where necessary, the Radiation Protection Centre shall provide international organisations with relevant information on the import, export or transit of radioactive waste.
- (14) The specifications for processing the documents for the import, export or transit of radioactive waste based on the countries of origin and destination of the waste shall be established by a regulation of the Government of the Republic.

#### ***Section 62 – Commissioning of radioactive waste management facilities***

- (1) The Ministry of the Environment shall issue a radiation practice licence for the management of radioactive waste after the Ministry has certified, based on the proposal of the Radiation Protection Centre, that the management facility is in conformity with radiation safety requirements.
- (2) The holder of a radiation practice licence shall collect and analyse data on the use of the radioactive waste management facility and shall forward such information to the Radiation Protection Centre for storage.

***Section 63 – Safety of radioactive waste management facility  
after termination of operation***

After the termination of the operation of a radioactive waste management facility, the Radiation Protection Centre shall:

- 1) preserve the documents concerning the location and design of the radioactive waste management facility, and the inventory of radioactive waste for an indefinite time;
- 2) organise radiation monitoring and control the restriction of access as necessary;
- 3) organise intervention if, based on monitoring results or upon inspection, release of radioactive materials into the environment is established.

**CHAPTER 8**

**Liability**

***Section 64 – Violation of terms of radiation practice licence***

- (1) Violation of the requirements determined by a radiation practice licence is punishable by a fine of up to 300 fine units.
- (2) The same act, if committed by a legal person, is punishable by a fine of up to 50 000 Estonian kroons (EEK).

***Section 65 – Addition of radioactive substances to products and import or export of such goods***

- (1) The addition of radioactive substances in the production of foodstuffs, toys, personal ornaments and cosmetics, and the import or export of such goods are punishable by a fine of up to 100 fine units.
- (2) The same act, if committed by a legal person, is punishable by a fine of up to EEK 50 000.

***Section 66 – Conveyance of radiation sources containing radioactive substances  
and conveyance of radioactive waste across state border without appropriate permit***

- (1) Conveyance of radiation sources containing radioactive substances and conveyance of radioactive waste across the state border without an appropriate permit is punishable by a fine of up to 300 fine units.
- (2) The same act, if committed by a legal person, is punishable by a fine of up to EEK 50 000.

***Section 67 – Delivery of radiation sources containing radioactive substances and delivery of radioactive waste to person who does not hold radiation practice licence***

- (1) Delivery of radiation sources containing radioactive substances and delivery of radioactive waste to a person who does not hold a radiation practice licence is punishable by a fine of up to 300 fine units.
- (2) The same act, if committed by a legal person, is punishable by a fine of up to EEK 50 000.

***Section 68 – Supervision over radiation safety***

The Environmental Inspectorate shall conduct supervision over radiation safety on the basis of the Environmental Supervision Act (RT I 2001, 56, 337; 2002, 61, 375; 99, 579; 110, 653; 2003, 88, 591).

***Section 69 – Proceedings***

- (1) The provisions of the General Part of the Penal Code (RT I 2001, 61, 364; 2002, 86, 504; 82, 480; 105, 612; 2003, 4, 22; 83, 557; 90, 601; 2004, 7, 40) and of the Code of Misdemeanour Procedure (RT I 2002, 50, 313; 110, 654; 2003, 26, 156; 83, 557; 88, 590) apply to the misdemeanours provided for in this Chapter.
- (2) Extra-judicial proceedings concerning the misdemeanours provided for in this Chapter shall be conducted by the Environmental Inspectorate.

**CHAPTER 9**

**Final Provisions**

***Section 70 – Amendment of State Fees Act***

Section 183 of the State Fees Act (RT I 1997, 80, 1344; 2001, 55, 331; 53, 310; 56, 332; 64, 367; 65, 377; 85, 512; 88, 531; 91, 543; 93, 565; 2002, 1, 1; 18, 97; 23, 131; 24, 135; 27, 151 and 153; 30, 178; 35, 214; 44, 281; 47, 297; 51, 316; 57, 358; 58, 361; 61, 375; 62, 377; 90, 519; 102, 599; 105, 610; 2003, 4, 20; 13, 68; 15, 84 and 85; 20, 118; 21, 128; 23, 146; 25, 153 and 154; 26, 156 and 160; 30, correction notice; 51, 352; 66, 449; 68, 461; 71, 471; 78, 527; 79, 530; 81, 545; 88, 589 and 591; 2004, 2, 7; 6, 31; 9, 52 and 53; 14, 91 and 92) is amended by adding subsection (2<sup>7</sup>) worded as follows:

“(2<sup>7</sup>) A state fee of 2000 kroons shall be paid for the issue or amendment of a radiation practice licence.”

***Section 71 – Amendment of Emergency Preparedness Act***

The Emergency Preparedness Act (RT I 2000, 95, 613; 2002, 61, 375; 63, 387; 2003, 88, 594) is amended as follows:

- 1) clause 7 (2) 8) is amended and worded as follows: “8) the Ministry of the Environment – organisation of radiation and environmental protection, and radiation and environmental monitoring.”;

- 2) subsection 26 (1) is amended and worded as follows: “(1) Undertakings whose enterprises are dangerous shall perform risk assessments and prepare emergency plans for the enterprises pursuant to the Chemicals Act (RT I 1998, 47, 697; 1999, 45, 512; 2002, 53, 336; 61, 375; 63, 387; 2003, 23, 144; 51, 352; 75, 499; 88, 591).”;
- 3) subsection (1<sup>1</sup>) is added to Section 26 and worded as follows: “(1<sup>1</sup>)In the case of high risk radiation practices, the holder of a radiation practice licence shall perform a risk assessment and shall prepare an emergency plan on the basis of the Radiation Act.”;
- 4) subsection 26 (2) is amended and worded as follows: “(2) On the basis of the risk assessments of rural municipalities and cities, the rural municipality and city governments shall designate the enterprises and agencies which, in addition to those specified in subsection (1) and (1<sup>1</sup>) of this section, shall prepare emergency plans.”

#### ***Section 72 – Term of validity of radiation practice licences***

- (1) The holder of a radiation practice licence issued prior to the entry into force of this Act shall submit an application for a licence that is in conformity with the requirements of this Act to the Ministry of the Environment within six months after the entry into force of this Act.
- (2) Radiation practice licences issued prior to the entry into force of this Act shall expire after six months after the entry into force of this Act, except in the cases where the holder of a radiation practice licence has submitted an application for a licence specified in subsection (1) of this section.

#### ***Section 73 – Preparation of national development plan for radiation protection***

The national development plan for radiation protection shall be prepared within two years after entry into force of this Act.

#### ***Section 74 – Repeal of existing Radiation Act***

The Radiation Act (RT I 1997, 37/38, 569; 1998, 97, 1520; 1999, 88, 804; 2000, 102, 670; 2001, 56, 337; 2002, 9, 46; 61, 375; 63, 387) is repealed.

#### ***Section 75 – Entry into force of Act***

This Act enters into force on 1 May 2004.