ICELAND

Act on Radiation Protection*

of 8 April 2002

CHAPTER I

Objectives and scope

Section 1

The objective of this Act is to ensure adoption of the necessary safety measures to protect against radiation from radioactive materials and radiological equipment and to limit the detrimental effects of such radiation. An effort shall be made to ensure that all exposure to radiation resulting from any practice covered by this Act shall be as low as reasonably achievable, taking into account economic and social factors.

The objectives of the Act shall be attained through specific measures, for example, the inspection of radioactive materials and radiological equipment, studies and research, monitoring of radioactive substances in the environment, measures against radiological emergencies, and through education and guidelines on radiation protection.

Section 2

The Act applies to:

1. safety measures against ionising radiation in respect of any practices that could cause a risk of radiation exposure to persons, for example, the production, import, export, delivery, possession, installation, use, handling and disposal of radioactive substances and radiological equipment;
2. safety measures against ionising radiation in practices that result in increased levels of natural radiation in the environment;
3. safety measures against ionising radiation from radioactive substances and radiological equipment insofar as this is not governed by other legislation pursuant to international conventions;
4. monitoring and research in respect of radioactive substances in the environment and foodstuffs;
5. radiological aspects of measures concerning radiological and nuclear emergencies.

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* Unofficial translation kindly provided by the Icelandic authorities.

Section 3

In this Act, the terms listed below are defined as follows:

1. *radiation:* ionising and non-ionising radiation;
2. *ionising radiation:* radiation from radioactive substances, X-rays, or other radiation with similar biological effects;
3. *non-ionising radiation:* ultraviolet radiation and all other electromagnetic radiation with longer wavelength, for example, microwaves or other electromagnetic waves that have similar biological effects, as well as electromagnetic fields;
4. *radiological equipment:* electrical equipment producing radiation, for example, X-ray equipment and sun lamps;
5. *medical irradiation:* any irradiation of individuals for diagnosis or treatment of disease, for scientific research or forensic purposes;
6. *practice:* work activity that may cause ionising radiation exposure to individuals;
7. *effective dose:* a measure of the quantity of ionising radiation where the health risk of an individual constitutes the basis;
8. *designated supervisor:* an employee with appropriate education and experience, who is appointed by an owner to act on his behalf as being responsible for radiation protection practices;
9. *quality assurance:* any organised or planned measure deemed necessary to create sufficient trust that the facilities, system, system parts, or measures work in a satisfactory manner and in accordance with accepted standards;
10. *quality control:* the part of the quality assurance that applies to measures (planning, coordination, implementation) intended to maintain or improve quality. Quality control entails control, assessment and observance of set limits in respect of any characteristic factors regarding the effectiveness of equipment that may be defined, measured and monitored.

CHAPTER II

The Icelandic Radiation Protection Institute

Section 4

The Icelandic Radiation Protection Institute is an institute under the auspices of the Minister of Health and Social Security. The Institute's role is to implement safety measures against ionising radiation from radioactive substances and radiological equipment.

The Minister appoints the Director of the Icelandic Radiation Protection Institute for a term of five years. The Director shall have a university degree in the Institute's sphere of activity. The Director is in charge of the management of the Institute. He/she shall ensure that it is operated in accordance with existing laws and regulations at all times, and is responsible for its daily operation.

Section 5

The Icelandic Radiation Protection Institute is responsible for:

1. monitoring and supervising the implementation of this Act and its implementing rules and regulations;
2. any inspections and research deemed necessary pursuant to this Act and its implementing rules and regulations;
3. monitoring workers' exposure to ionising radiation, and maintaining a dose register of the results of the dose estimates for every worker;
4. regular assessment of the total ionising radiation exposure of the general public from practices under this Act;
5. regular assessment of patients' exposure to ionising radiation from practices under this Act;
6. monitoring and researching radioactive substances in foodstuffs and the environment;
7. courses in radiation protection for workers who work with radiation, as well as dissemination of information to the general public and the mass media;
8. research in the field of radiation protection;
9. the radiological part of measures concerning radiological and nuclear emergencies, including the operation of emergency response and radiation measuring systems, and other measures relating thereto.
10. collaborating with foreign institutions in relation to radiation protection and nuclear issues;
11. other factors pertaining to the implementation of this Act, and other projects in the field of radiation protection in accordance with further decisions thereon by the Minister.

The Minister may request the Institute to address certain matters or projects relating to its duties under this Act.

The Institute shall prepare, apply for and maintain accreditation regarding certain elements of research and inspections it carries out.

The Institute is authorised to enter into agreements on certain elements of the implementation of this Act with parties who meet the professional criteria of the Institute.

Parties engaging in practices covered by this Act shall provide the Institute with the necessary information to facilitate the assessment of items 4 and 5 above in as realistic a manner as possible.

Section 6

The Minister shall appoint the Radiation Protection Council, which is a professional advisory body for the Icelandic Radiation Protection Institute. The Council shall consist of three persons with expertise in the Institute's field of work.

CHAPTER III

Permits for import, production, ownership, sale and delivery of radioactive materials

Section 7

The production, import, ownership, storage, delivery or disposal of radioactive substances, whether pure, mixed with other substances or installed in equipment, are subject to licensing by the Icelandic Radiation Protection Institute. The granting of licences is subject to conditions set out by the Institute, including provisions governing the handling of radioactive substances at the end of their use. Applications for such licences shall be submitted on the Institute's forms or in another format acceptable by the Institute.

A licence is not required in respect of radioactive substances if their total content or concentration per mass unit is under the exemption limits as determined by the Icelandic Radiation Protection Institute. Additionally, such licences are not required for phosphorescence watches, pocket compasses, meters, and other such equipment containing very small quantities of radioactive substances, to be determined by further decisions of the Icelandic Radiation Protection Institute.

The import of radiological equipment capable of producing ionising radiation is subject to reporting requirements. Importers shall dispatch a notification to the Icelandic Radiation Protection Institute on any such equipment imported. The reports shall be made on the Institute's form or in another format acceptable by the Institute.

The Minister may decide by means of a regulation that the import of certain categories of radiation equipment capable of producing non-ionising radiation, be subject to reporting.

CHAPTER IV

Assessment of the benefits and risks of using radiation

Section 8

Any new types or categories of practices that may cause ionising radiation exposure to people shall be assessed in advance with respect to the economic, social or other benefits in comparison with the risk of detrimental health impact such radiation may have. Parties intending to commence such a practice shall send a report to the Icelandic Radiation Protection Institute for an assessment of the proposed practice. Commencing such a practice prior to receiving the consent of the Icelandic Radiation Protection Institute is prohibited. An evaluation by the Directorate General of Public Health is also necessary in respect of medical activities. A review shall be made of a practice already taking place pursuant to an assessment as described in paragraph 1, when new essential information is available on its benefits or consequences.

CHAPTER V

Use of radioactive substances and radiological equipment

Section 9

Any use of radioactive substances or radiological equipment shall be in accordance with this Act and its implementing rules and regulations. The use of radioactive substances or radiological equipment with ionising radiation is prohibited without a licence from the Icelandic Radiation Protection Institute. Changes in practices that affect radiation protection are also subject to the authorisation of the Icelandic Radiation Protection Institute. The issue of a licence is subject to conditions as set out by the Institute. Applications for such licences shall be made on the Institute's forms or in another format acceptable by the Institute. In the case of a new practice, an assessment of the use shall be performed pursuant to Section 8.

By means of a regulation, the Minister may decide that the use of certain categories of radiological equipment emitting non-ionising radiation be subject to authorisation.

Section 10

The owner shall ensure that the use of radioactive substances and radiological equipment, and instruments, equipment and radiation protection practices are in accordance with this Act and its implementing rules and regulations.

With regard to practices using ionising radiation, the owner shall appoint a designated supervisor who has the appropriate education and experience. The Icelandic Radiation Protection Institute shall be informed of his/her name, education and experience. The appointment of the designated supervisor is subject to the approval of the Icelandic Radiation Protection Institute. The designated supervisor, who is mandated by the owner for this purpose, is responsible for ensuring that practices are in accordance with this Act and its implementing rules and regulations.

With regard to practices using ionising radiation, an appropriate internal control scheme shall be implemented for radiation protection.

The Minister shall adopt by regulation further provisions regarding the education, experience and duties of designated supervisors, and on the arrangements for and execution of the internal control.

Section 11

Persons entrusted with this task pursuant to this Act shall organise the appropriate response to radiological accidents, and shall provide information on special risk factors according to further rules thereon established by the Icelandic Radiation Protection Institute. They shall notify the Icelandic Radiation Protection Institute if a radiological accident occurs. They shall conduct an initial assessment of the possible consequences, and shall take all the appropriate measures to limit such consequences.

Section 12

The storage and disposal of radioactive substances shall always take place in accordance with the rules set by the Icelandic Radiation Protection Institute. The same applies to other waste, equipment or packaging which contains or is contaminated by radioactive substances.

The Icelandic Radiation Protection Institute shall be notified when an instrument or equipment capable of producing ionising radiation is finally taken out of use. For as long as equipment contains radioactive substances or is capable of producing ionising radiation, it shall be kept in safe storage, and shall be safeguarded in accordance with the rules established by the Minister pursuant to Section 10, paragraph 4. The Radiation Protection Institute is authorised to demand the disposal or removal of radioactive substances and radiological equipment no longer in use. If the Institute's demands on disposal or removal are not met within a specified deadline, the Institute may carry out such actions at the owner's expense.

CHAPTER VI

Radiation protection in the workplace

Section 13

Any exposure to radiation by workers and members of the public from practices covered by this Act shall be as low as reasonably achievable, economic and social factors being taken into account.

In instances of practices where work takes place using both ionising and non-ionising radiation, measures shall be taken to protect the workers and others against radiation. Such measures shall be in accordance with the scope of the risk in question. In instances of practices using ionising radiation, appropriate monitoring of workers' exposure and that of other persons relating to the practice shall be carried out. The workers shall have adequate education and shall be given training and instruction to ensure that they have sufficient knowledge of radiation protection and the safe use of radiation. Visitors and others who have access to the workplace shall be provided with information on the rules by which they must abide for radiation protection purposes.

In the case of practices resulting in increased natural ionising radiation, appropriate measures shall be taken to protect employees against such radiation.

The Minister shall establish further provisions in a Regulation on Radiation Protection in the Workplace, including arrangements for radiation protection and safety measures to reduce radiation, the age limits of those working with ionising radiation, the effective dose to workers, apprentices and members of the public, the monitoring of effective doses, the medical monitoring of persons working with ionising radiation, the classification of work areas and warning signs, shielding and installations of premises, education, professional training, and instructions to persons using radiation, or who work at areas where radiation is used.

Measures for protecting workers against the detrimental effects of non-ionising radiation in the workplace are subject to the Act on the Working Environment, and Health and Safety in the Workplace and its implementing rules.

Section 14

The dose register to be maintained by the Icelandic Radiation Protection Institute on the results of individual radiation monitoring, pursuant to Section 5, paragraph 1, item 3, shall be subject to the Act on the Protection and Processing of Personal Data. The results shall be stored for the entire period during which the worker is subjected to ionising radiation at work, and until such time he/she reaches or would have reached the age of 75 and in any event for not less than 30 years after that worker stops working in the position causing exposure to ionising radiation. Special notes shall be made of results that are not based on individual monitoring. The effective dose of a radiation accident shall be especially recorded, as well as the circumstances of the radiation, and the measures taken.

The results of individual monitoring shall be accessible to the worker, his/her employer, and the workplace physician, as well as by the health authorities pursuant to further rules to be established by the Minister.

CHAPTER VII

Medical irradiation

Section 15

The designated supervisor pursuant to Section 10 is responsible for the use of medical irradiation. He/she shall ensure that only competent persons with recognised special education shall carry out medical irradiation.

Before any use of medical radiation, the designated supervisor, or the person requested to carry out such irradiation, shall consider whether the use of radiation is justifiable with respect to the objective of the exposure, the patient’s symptoms and condition.

Before any use of medical irradiation, the designated supervisor shall ensure that the radiation exposure is as low as reasonably achievable for the intended purpose of the exposure, the instruments and the equipment available, as well as other factors of impact.

Appropriate plans for quality assurance and quality control of the practice shall be established at any such place where medical irradiation is used.

Section 16

Persons intending to examine a group of people using ionising radiation, for scientific research for example, shall obtain an authorisation from the Icelandic Radiation Protection Institute. Such examinations may not commence until the Institute’s authorisation has been granted, and also subject to the opinion of the Directorate General of Public Health.

CHAPTER VIII

Inspection of radiological equipment and radioactive substances

Section 17

Pursuant to Section 5, the Icelandic Radiation Protection Institute conducts regular inspections of the use of radioactive substances and radiological equipment for which licences are required under this Act.

The personnel of the Icelandic Radiation Protection Institute are authorised access to any such location where radioactive substances and radiological equipment capable of producing ionising radiation are used or stored. An effort shall be made to ensure that such inspection causes as limited disturbance as possible of the daily operation of instruments and substances.

The Administration of Occupational Safety and Health conducts inspections and takes measures to prevent detrimental effects on employees of non-ionising radiation in accordance with the provisions of the Act on the Working Environment, Health and Safety in the Workplace and its implementing rules.

The Minister shall establish by regulation further provisions on arrangements for and implementation of the inspections by the Icelandic Radiation Protection Institute.

Section 18

Owners of radiological equipment and radioactive substances shall implement any improvements which the Icelandic Radiation Protection Institute deems necessary before a specified deadline, failing which further use of instruments and equipment shall not be permitted until such improvements are made.

In the event that the safety equipment is deemed significantly lacking, the Icelandic Radiation Protection Institute shall order that further use of radioactive substances and radiological equipment be suspended until such time as improvements have been made.

Section 19

The registered owner of radioactive substances or radiological equipment capable of producing ionising radiation shall pay a charge for the regular inspections by the Icelandic Radiation Protection Institute pursuant to Section 17, for the evaluation of applications for licences pursuant to Sections 7, 9 and 20, and for the monitoring of employees' radiation doses pursuant to Section 5, paragraph 1, item 3. The Minister shall establish a tariff for such control on the basis of proposals by the Icelandic Radiation Protection Institute. The tariff shall be based on the costs of such control.

CHAPTER IX

Installation, modifications and maintenance of radiological equipment

Section 20

The installation of radiological equipment capable of producing ionising radiation is subject to a licence from the Icelandic Radiation Protection Institute. Modification of such equipment with respect to ionising radiation is also subject to a permit from the Icelandic Radiation Protection Institute. Persons intending to install radiological equipment or who intend to modify such equipment with respect to ionising radiation, shall present the Icelandic Radiation Protection Institute with a plan on such a project using the Institute's forms, or in another manner acceptable by the Institute. Commencing such a project prior to receiving the Institute's licence is not permissible.

Only persons who meet the requirements of the Icelandic Radiation Protection Institute in respect of knowledge and experience may repair, install and modify radiological equipment capable of producing ionising radiation.

Persons involved in the installation of such radiological equipment, its maintenance or modification with respect to ionising radiation, shall ensure that the equipment's safety arrangement is in accordance with the applicable law and regulations, or other implementing rules, and shall immediately notify the Icelandic Radiation Protection Institute if this is not the case.

CHAPTER X

Miscellaneous provisions

Section 21

By means of a regulation, the Minister shall establish further provisions on the implementation of this Act and on the activities of the Icelandic Radiation Protection Institute, and shall establish a tariff for services provided by the Icelandic Radiation Protection Institute, subject to the Institute's recommendations.

Section 22

Breach of the provisions of this Act is subject to a fine or imprisonment for up to 2 years, unless another Act provides for a more severe criminal penalty. Matters arising due to breaches of this Act shall be subject to criminal procedure.

Section 23

This Act shall take effect immediately, with the exception of the provisions on non-ionising radiation, emergency response (Section 5, paragraph 1, item 9) and accreditation [Section 5(3)] which shall take effect on 1 January 2003. The Act's provisions on inspections shall be reviewed within 5 years of the Act's entry into force. Upon the entry into force of this Act, Act No. 117/1985 (the Radiation Protection Act) shall be repealed.