

# NORWAY

## Act on Radiation Protection and Use of Radiation<sup>\*</sup>

adopted on 12 May 2000

### Chapter I

#### PURPOSE, SCOPE AND DEFINITIONS

##### *Section 1*

###### **Purpose of the Act**

The purpose of this Act is to prevent the harmful effects of radiation on human health and to contribute to the protection of the environment.

##### *Section 2*

###### **Scope of the Act**

The Act applies to any production, import, export, transport, transfer, possession, installation, use, handling and waste management of radiation sources.

The Act also applies to human activity which causes increased levels of naturally-occurring ionising radiation in the environment.

The Act also applies to planning and emergency preparedness against incidents and accidents.

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\* Unofficial translation kindly provided by the Norwegian authorities.

### ***Section 3***

#### **Definitions**

In this Act –

- a) radiation – means ionising and non-ionising radiation.
- b) ionising radiation – means radiation from radioactive substances, x-ray radiation and particle radiation.
- c) non-ionising radiation – means optical radiation, radio frequency radiation, electrical and magnetic fields or other radiation with analogous biological effects and ultrasound.
- d) radiation sources – means radioactive substances, goods or equipment containing such substances, as well as installations, apparatus or equipment which may emit radiation.
- e) medical use of radiation – means the application of radiation to persons for the purpose of medical examination and treatment, in research or for examinations in a legal context.
- f) waste management – means any disposal of radiation sources after their use has been completed, including storage, release, deposit, recycling or treatment as ordinary waste.

### ***Section 4***

#### **Territorial scope of the Act**

The King may provide by regulations that this Act shall apply in Svalbard, Jan Mayen and Norwegian dependencies, and may lay down special rules as regards local conditions.

The Act applies to devices and any installation deployed on the Norwegian part of the continental shelf and on Norwegian ships and aircraft in areas that are not subject to the sovereignty of any other State.

## Chapter II

### GENERAL PROVISIONS

#### *Section 5*

##### **The justification requirement and basic principles governing radiation protection and use of radiation**

All production, import, export, transport, transfer, possession, installation, use, handling and waste management of radiation sources shall be justifiable to ensure that risks are not caused to those performing any such activity, to other persons or to the environment. Furthermore, human activity causing increased levels of naturally ionising radiation in the environment shall be justifiable. In the assessment of the justification, importance shall be given *inter alia* to whether the benefits of the activity outweigh the risks associated with the radiation, and to whether the activity is carried out in such a way as to avoid acute injury to health and to minimise the risk of future injury as far as is reasonably possible. Radiation doses shall not exceed established limits.

Apparatus or devices that may emit radiation shall be designed and shall function properly.

#### *Section 6*

##### **Approval and notification**

The Ministry\*\* may, in regulations, lay down requirements regarding approval or notification of any production, import, export, transport, transfer, possession, installation, use, handling and waste management of radiation sources. Approval or notification requirements may also apply to human activity causing increased levels of naturally-occurring ionising radiation in the environment. The regulations may prescribe requirements as to the content of applications and notifications.

Where an approval or notification requirement has been prescribed, an undertaking subject to such a requirement shall not commence activities until approval is given or notification carried out. An undertaking may not be expanded or materially changed in relation to the existing approval or notification.

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\*\* In this Act, the term “Ministry” refers to the Ministry for Health and Social Affairs.

## *Section 7*

### **Instruction and training**

In undertakings under the ambit of this Act, the employees and other associated persons shall have such instruction or training as is necessary to ensure that they have sufficient qualifications or knowledge in radiation protection and on the safe use of radiation.

Visitors and others with access to the undertaking shall, where necessary in the interest of radiation protection, be provided with information about the precautions that must be taken.

The Ministry may lay down supplementary regulations concerning training, qualification requirements and instructions for persons who use or come into contact with radiation.

## *Section 8*

### **Protective measures**

Undertakings subject to this Act shall take the necessary measures to protect the employees, other associated persons and the environment against radiation. Persons who, due to their young age, pregnancy or for other reasons, are particularly sensitive to radiation, shall either be assigned tasks that do not involve exposure to radiation, or be protected by other appropriate measures.

The Ministry may lay down supplementary regulations concerning factors as mentioned in the first Paragraph, including a minimum age for workers exposed to radiation, as well as medical examination of persons who are exposed to radiation.

## *Section 9*

### **Special provisions on radioactive waste and radiation-emitting apparatus that is discarded**

In order to ensure the safe management of radioactive waste with respect to radiation protection, the Ministry may lay down supplementary regulations on storage, deposit, release into the environment, recycling and treatment as ordinary waste. The regulations may prescribe a duty for suppliers of radioactive substances to establish recycling schemes for radioactive waste, and likewise a duty for undertakings to establish and utilise such recycling schemes. The provisions of this Paragraph also apply to waste, equipment or packaging that contains or is contaminated by radioactive substances.

Where apparatus or equipment which may emit radiation is discarded or finally taken out of service, the owner or the responsible party shall prevent subsequent harmful use of such apparatus or equipment by ensuring that it can no longer emit radiation.

## ***Section 10***

### **Naturally-occurring ionising radiation**

The Ministry may lay down regulations establishing limitations, including dose limits, for work or periods spent in places where the radiation levels from naturally-occurring ionising radiation are increased due to human activity.

## ***Section 11***

### **Internal control**

The King may in further regulations lay down provisions concerning internal control and internal control systems to ensure compliance with requirements laid down in or pursuant to this Act.

## ***Section 12***

### **Regulations on radiation protection and use of radiation etc.**

In order to promote the purpose of this Act and to ensure proper radiation protection and use of radiation, the Ministry may lay down regulations to supplement the provisions of this Act. Such regulations may *inter alia* lay down requirements with regard to:

- a) the organisation of radiation protection, including the designation of a responsible radiation protection officer, and requirements as regards the registration of information necessary for the purpose of internal control or supervision.
- b) shielding measures in the form of design and outfit of premises and workplaces, work procedures and use of personally fitted protective equipment. Requirements may also be laid down for the design and function of radiation-emitting equipment.
- c) marking of radiation sources and information about the application, handling and storage of radiation sources. Requirements may also be laid down as to warning signs in premises or areas where radiation sources or radioactive waste are present which may entail a health risk. Requirements may also be laid down to inform involved persons and the general public about the use of radiation and radiation protection.
- d) measurement of radiation levels, including personal dosimetry.
- e) dose limits for relevant types of radiation.
- f) transport of radiation sources, including radioactive waste and equipment containing such sources.
- g) follow up of protective measures in connection with the carrying out of repairs, maintenance or alteration of a radiation source or installation.

## **Chapter III**

### **SPECIAL PROVISIONS FOR MEDICAL USE OF RADIATION**

#### ***Section 13***

##### **Justification and optimisation**

The medical use of radiation shall be performed in accordance with good medical examination and treatment practices, including provisions for radiation protection.

For the medical use of radiation, the professionally responsible person shall assess whether the use of radiation is justified. In the assessment, account shall be taken *inter alia* of whether the benefits outweigh the potentially harmful effect due to the use of radiation. Account shall be taken of the benefit to the individual, the benefit to society and whether alternative techniques can be applied. The use of radiation shall be avoided in cases where the same result can be achieved by other means without material inconvenience, for example by using other methods or by obtaining results from previous examinations.

When radiation is applied, the person professionally responsible for the examination or treatment shall ensure that the applied radiation doses are as low as may reasonably be achieved, viewed in light of the purpose of the irradiation, available equipment and resources, and similar circumstances.

The undertaking shall at regular intervals verify that the emitted radiation dose matches the dose calculated. This does not apply to examination or treatment involving radioactive substances being administered to the patient.

The ministry may lay down supplementary regulations with requirements for the medical use of radiation.

#### ***Section 14***

##### **Duty to inform about radiation protection precautions**

Where, in connection with the medical use of radiation, radiation protection measures are taken that require a particular conduct on the part of the person being examined or treated, the professionally responsible or authorised person shall inform the person in question how to act in order to fully benefit from such measures. This also applies to attendants who support the person at the treatment or examination. Information as mentioned may be omitted where there is no reason to expect the person to be able to make use of it.

Where radioactive substances are administered to patients, the professionally responsible person shall inform about precautions that should be taken to protect other persons against radiation.

The Ministry may make supplementary regulations concerning the duty to provide information about radiation protection precautions.

## **Chapter IV**

### **PLANNING OF INCIDENT AND ACCIDENT MANAGEMENT. EMERGENCY PREPAREDNESS**

#### ***Section 15***

##### **Duty to plan**

The Ministry may, by regulations or individual decisions, impose on undertakings subject to this Act a duty to plan for the handling of incidents and accidents, and requirements with regard to exercises. The decision may include a duty to notify rescue service agencies and the supervisory authority about special risks of which the rescue service and the supervisory authority should be aware in order to handle incidents or accidents.

Undertakings may be required to notify physical and legal persons in their immediate vicinity of special risks that may arise. Physical and legal persons who do not themselves conduct an activity subject to this Act, but who may be affected by past incidents or accidents, may have a separate duty imposed on them to plan how to limit harmful effects.

#### ***Section 16***

##### **Emergency preparedness in respect of nuclear accidents**

The King organises emergency preparedness in respect of nuclear accidents.

In the acute phase of a nuclear accident the King may, notwithstanding the allocation of authority under other Acts, order state and municipal agencies to implement evacuation, area access restriction, as well as measures to safeguard foodstuffs, including drinking water and protection of animals. The King may also order private and public undertakings to perform analyses and gather information for the assessment of the situation.

The King may also, notwithstanding the allocation of authority under other Acts, delegate his authority under the second Paragraph to a designated state agency for nuclear emergency preparedness.

Agencies assigned functions in the field of nuclear emergency preparedness are required to act according to a co-ordinated body of plans.

The King may order persons with central preparedness functions to be available in the event that an emergency situation arises.

### *Section 17*

#### **Special exemptions in rescue and civil emergency situations and with regard to national defence**

The King may in regulations establish exemptions from dose limits and other requirements laid down pursuant to this Act in situations where the implementation of a rescue or civil emergency operation makes this necessary. Personnel shall not be ordered to perform tasks at the risk of acute radiation injury.

The King may also make exemptions from provisions laid down in or pursuant to this Act in situations where this is necessary in the interest of national defence preparedness.

## **Chapter V**

### **ADMINISTRATIVE PROVISIONS, PENALTIES AND COMMENCEMENT**

### *Section 18*

#### **Supervision and decisions. The supervisory authority's right of access, information and to make measurements**

The Norwegian Radiation Protection Authority supervises compliance with provisions laid down in or pursuant to this Act, and may for this purpose make such individual decisions as are necessary.

The King may for delimited areas provide in regulations that other state supervisory agencies or municipalities shall carry out supervision and make necessary individual decisions in pursuance of this Act. Public agencies that are assigned authority under the provision of the first sentence may apply the enforcement provisions in the Act under the conditions laid down in the particular provision.

The supervisory authority shall be given free access to perform supervision, and shall be provided with information necessary for the performance of its functions under the provisions of this Act.

The supervisory authority shall be given access to undertake measurements and investigations. The undertaking shall hand over samples for supervisory purposes without charge. If it is demonstrated that provisions laid down in or pursuant to this Act have been infringed, the undertaking may be charged with the cost of supervision due to such infringement.

The Ministry may, by regulations, lay down charges for the payment of particular supervisory tasks.

### *Section 19*

#### **Rectification and cessation of an activity**

The Norwegian Radiation Protection Authority may demand rectification of an activity that conflicts with provisions laid down in or pursuant to this Act.

If a material risk to health exists, the Norwegian Radiation Protection Authority may order cessation of the activity in question, confiscate substances or equipment in whole or in part, or ensure discontinuation of further use by other means. The Norwegian Radiation Protection Authority may demand the closure of an undertaking that does not possess the required licence or has not submitted the required notification.

The police are, upon request, obliged to assist the process of cessation or confiscation.

## *Section 20*

### **Prohibition of import and sale**

The Norwegian Radiation Protection Authority may refuse the import or sale of any product or substance and any item that may involve a risk to health or environment due to radiation, provided that this is not in conflict with international agreements to which Norway is a Party.

## *Section 21*

### **Coercive fine**

The supervisory authority may impose a coercive fine in the form of a once-off fine or a daily fine on an undertaking that ignores a deadline for complying with an order. The coercive fine shall be fixed either at the time the order is made or when a new deadline is set for compliance.

The King may waive an imposed coercive fine when appropriate.

The Ministry may lay down supplementary regulations concerning the imposition and calculation of coercive fines.

## *Section 22*

### **Appeal**

The Ministry of Health and Social Affairs is the appeals body for individual decisions made by the Norwegian Radiation Protection Authority under provisions laid down in or pursuant to this Act.

Appeals concerning individual decisions made under provisions laid down in or pursuant to this Act by a State supervisory agency other than the Norwegian Radiation Protection Authority are decided by the administrative agency that is the immediate superior of the supervisory agency in question.

The county governor decides appeals concerning individual decisions made by the municipality under provisions laid down in or pursuant to this Act. Before an appeal is decided under this Paragraph, the county governor shall obtain a statement from the chief county medical officer.

### *Section 23*

#### **Penalties**

Anyone who wilfully or through negligence violates or contributes to the violation of provisions or orders made under the provisions of or pursuant to this Act, shall be punished by fines or imprisonment not exceeding three months.

If the violation has or could have caused grave danger to health or the environment, imprisonment not exceeding two years may be imposed.

If the violation has merely resulted in insignificant harm or inconvenience, public prosecution will take place only at the request of the supervisory authority.

### *Section 24*

#### **Commencement etc.**

This Act comes into force when the King decides.

Act No. 1 of 18 June 1938 relating to the Use of X-rays and Radium etc., will be repealed on the same date.

Regulations and other provisions and decisions made under the provisions of Act No. 1 of 18 June 1938 relating to the Use of X-rays and Radium etc., will apply also after the present Act has come into force insofar as they do not conflict with provisions laid down in or pursuant to this Act.

### *Section 25*

#### **Amendments to other Acts**

Act No. 28 of 12 May 1972 on Nuclear Energy Activities, Section 6, new second Paragraph shall read:

The King may, by regulations or individual decision, lay down further rules concerning internal control and internal control systems to ensure compliance with requirements laid down in or pursuant to this Act.