(Text in force on: 20/11/2013)

Regulation of the State Secretary for Housing, Spatial Planning and the Environment and the State Secretary for Social Affairs and Employment, M. Rutte, of 16 April 2003, no. MJZ2003014180 containing rules on the manner of detecting and recording the presence of ionizing radiation in scrap metal and the skills and capabilities required for this purpose (Radioactively Contaminated Scrap Metal (Detection) Regulation)

The State Secretary for Housing, Spatial Planning and the Environment and the State Secretary for Social Affairs and Employment, M. Rutte,

Having regard to Articles 4, 5 and 6 of the Radioactively Contaminated Scrap Metal (Detection) Decree;

Hereby order:

Article 1

In this Regulation the following terms are defined as follows:

Decree: Radioactively Contaminated Scrap Metal (Detection) Decree;

Annex: the Annex to this Regulation;

detection limit: as defined in ISO-11929;

integration time: the period over which the number of pulses is aggregated and on the basis of which the count rate is calculated;

Minister: the Minister of Housing, Spatial Planning and the Environment;
environmental dose equivalent rate: as defined in the Radiation Protection Decree;

count rate: the total number of pulses per unit of time collected by a detector;

elevated radiation level: level of the environmental dose equivalent rate equal to or higher than 10 nSv.h-1 above the environmental dose equivalent rate of the background level.

Article 2

1. Detection equipment shall comply with the rules on the subject laid down in Part I of the Annex or, if it has been lawfully manufactured or marketed in another European Union Member State or a state that is party to the Agreement on the European Economic Area, with those rules or at least equivalent technical requirements.

2. Measurements shall be carried out in the manner and under the conditions stated in Part I of the Annex.

Article 3

Recording of the results of the measurements shall comply with the rules on the subject laid down in Part II of the Annex.

Article 4

1. A person as referred to in Article 6 (1) of the Decree shall possess the skills and capabilities laid down in Part III of the Annex.

2. He shall demonstrate possession of those skills and capabilities by submitting a statement from a body as stated in Part III of the Annex indicating that he has taken one of the courses designated in that part of the Annex provided by that body.

Article 5

1. The Minister may grant exemption from the rules laid down in Part I and Part II of the Annex insofar as this is not in conflict with the interests of protection against ionizing radiation.

2. Rules may be attached to the exemption concerning the measuring equipment to be used, the method of measurement, the conditions under which the measurements are to be carried out, and the recording of the measurement data.

3. The Minister may withdraw the exemption if this is necessary in the interests of protection against ionizing radiation.

Article 6

1. An application for exemption pursuant to Article 5 shall be submitted to the Minister.

2. It shall contain a description of the departures from the requirements laid down in the Annex proposed by the person running the plant as regards the:

   (i) measuring equipment to be used,
   (ii) method of measuring,
   (iii) conditions under which the measurements are to be carried out,
   (iv) recording of the measurement data.

Article 7

This Regulation shall enter into effect on the second day after the date of the Government Gazette in which it is published.

Article 8

This Regulation shall be cited as the ‘Radioactively Contaminated Scrap Metal (Detection) Regulation’.

This Regulation shall be published with its Explanatory Notes in the Government Gazette.

The Hague, 16 April 2003

The State Secretary for Housing, Spatial Planning and the Environment,
P.L.B.A. van Geel

The State Secretary for Social Affairs and Employment,
M. Rutte

Annex to the Radioactively Contaminated Scrap Metal (Detection) Regulation

Part I. Rules concerning the detection equipment to be used, the method of measurement and the conditions under which the measurements are to be carried out

Equipment

1. If a consignment of scrap metal is brought into the plant by road or rail, that consignment shall be measured using a portal detector.
2. If a consignment of scrap metal is brought in by ship in bulk, that consignment shall be measured:
   a. using a crane detector or
   b. using a portal detector once the consignment of scrap metal has been transferred to one or more containers.

Rules concerning detectors

Rules in force concerning a detector:

1. A detector must be able to measure at least gamma radiation.
2. The detectors in a portal detector must comprise an integrated measuring system.
3. The horizontal distance between the detectors in a portal detector must not be more than 6 metres.
4. The detection limit of each individual detector shall be determined using the following formula: detection limit = 3.39 x âˆš background count rate (s^{-1}).
5. The alert level of a detector shall be set to no more than 10 nSv.h–1 above the detection limit.
6. The detector shall be designed and set in such a way that measurement of an increased radiation level is indicated by an acoustic or visual signal.
7. The person running the plant shall have the detectors on site tested for compliance with the rule laid down at (6) by an expert company at least once a year, ensuring that an increase in the environmental dose equivalent rate at any point on the surface of a detector by 10 nSv.h–1, caused by a static unshielded Cs-137 source, causes the acoustic or visual signal to be given.
8. If any irregularity is found when the test measurement referred to in Rule 7 is carried out, the person running the plant shall ensure that this is remedied as soon as possible.
9. Reports shall be drawn up on the determination of the detection limits and the test measurements.

Measuring a scrap metal consignment

Measurement using a portal detector shall be carried out as follows:

1. During measurement the scrap metal consignment being measured shall move between the detectors at a speed no higher than 10 km per hour.
2. The integration time during measurement shall not exceed one second.

Measurement using a crane detector shall be carried out as follows:

1. The radiation level shall be measured by measuring each crane grab of scrap metal, and no parts of the scrap metal may protrude or hang down so far from the grab that their radiation level cannot be measured.
2. The integration time during measurement shall not exceed one second.

Part II. Rules concerning the recording of measurement data

Data for each measurement

1. A register as referred to in Article 5 (1) of the Decree shall contain the following data on each measurement:
   the date of the measurement;
   the time of the measurement;
   the value of the measurement;
   the type of measuring equipment used to carry out the measurement, stating the brand and type of equipment.
2. If the alarm went off during a measurement, the following data shall also be recorded:
   the fact that the alarm went off;
   the background level measured at the time of the measurement;
   the alert level to which the detector was set at the time of the measurement;

the name and address of the supplier of the scrap metal consignment measured;
the name and address of the carrier of the scrap metal consignment measured;
the place and country of origin of the scrap metal consignment measured;
the registration number of the vehicle that brought the scrap metal consignment measured into the plant.

3. When measuring scrap metal using a crane detector, measurement of one crane grab of scrap metal shall be regarded as one measurement.
4. The records shall be organized in such a way that the data recorded on a measurement can be viewed in context.

Data retention period

The data recorded in the register shall be retained for at least five years.

Reports under Part I

The reports referred to in Part I of this Annex shall be included in the register.

Part III. Skills and capabilities

Skills and capabilities

A designated person as referred to in Article 6 (1) of the Decree shall possess the following skills and capabilities:

1. Demonstrable knowledge of the following subjects:
   a. the concept of ionizing radiation;
   b. types of ionizing radiation;
   c. parameters and units concerning ionizing radiation;
   d. radiation protection and risks of contamination;
   e. biological consequences of ionizing radiation;
   f. types of equipment for measuring ionizing radiation;
   g. external characteristics of objects that could present radiation risks;
   h. the Guideline on the Inspection of Metal and Scrap Metal Containing Radioactive Materials of 25 February 2003.
2. Practical experience of:
   a. the inverse square law of distance;
   b. determining types of ionizing radiation;
   c. determining the halving thickness;
   d. detecting and tracing a gamma radiation source, in a storage or transport container among other things.

Courses

The following shall be designated as courses as referred to in Article 4 (2):

a. '*Praktijkstudiedag Ioniserende Straling voor de Metaal & Schroothandel*' (Practical Day Seminar on Ionizing Radiation for the Metal and Scrap Metal Trade), developed by the Röntgen Technische Dienst BV (RTD) in collaboration with SBC/Elsevier opleiding en advies;
b. '*Omgaan met radioactiviteit met betrekking tot Metaal- en Schroothandelaren*' (Dealing with Radioactivity for Metal and Scrap Metal Dealers), developed by the Nuclear Research and consultancy Group v.o.f. (NRG).

A course held in another European Union Member State, or a state that is not a European Union Member State but is party to a Treaty wholly or partly to this effect that is binding on the Netherlands, which guarantees a level of training at least equivalent to the level that the national requirements are designed to achieve shall be equated with a course as referred to in Article 4 (2).