### SCOTTISH STATUTORY INSTRUMENTS

# 2011 No. 147

## The Radioactive Substances Exemption (Scotland) Order 2011

## PART 1

General

#### Citation, commencement and extent

**1.**—(1) This Order may be cited as the Radioactive Substances Exemption (Scotland) Order 2011 and comes into force on 1st October 2011.

(2) This Order extends to Scotland only.

#### Interpretation

2.—(1) In this Order—

"the Act" means the Radioactive Substances Act 1993;

"Ba-137m eluting source" means a source which consists of Cs-137 in a sealed container which is designed and constructed to allow the elution of Ba-137m, and which is radioactive material or radioactive waste solely because of that Cs-137;

"Bq" means becquerels;

"Class A gaseous tritium light device" means such a device where the activity of the device does not exceed  $2 \times 10^{10}$  Bq of tritium;

"Class B gaseous tritium light device" means such a device which is installed or intended to be installed on premises and where the activity—

- (a) in each sealed container in the device does not exceed 8 x  $10^{10}$  Bq of tritium; and
- (b) of the device does not exceed  $1 \times 10^{12}$  Bq of tritium;

"Class C gaseous tritium light device" means such a device installed or intended to be installed—

- (a) in a vessel or aircraft; or
- (b) in a vehicle or other equipment used or intended to be used by the armed forces of the Crown;

"disposal permit" means-

- (a) an authorisation under the Act to dispose of waste;
- (b) a permit under the Environmental Permitting (England and Wales) Regulations 2010(1) in relation to the radioactive substances activity described in paragraph 5(2)(b) of Part 2 of Schedule 23 to those Regulations;

"electrodeposited source" means an article where radionuclides are electrodeposited onto a metal substrate and which is radioactive material or radioactive waste solely because it contains Ni-63 or Fe-55;

"gaseous tritium light device" means a sealed source in a device which is an illuminant, instrument, sign or indicator which—

- (a) incorporates tritium in one or more sealed containers constructed to prevent dispersion of that tritium in normal use; and
- (b) is radioactive material solely because it contains that tritium;

"landfill" has the meaning given to that term in Article 2(g) of Council Directive 1999/31/EC on the landfill of waste(2);

"luminised article" means an article which is made wholly or partly from a luminescent substance in the form of a film or a paint and which—

- (a) is radioactive material or radioactive waste solely because it contains Pm-147 or H-3; and
- (b) is not a sealed source;

"recovery" has the same meaning as given to that term in Article 3(15) of Directive 2008/98/ EC of the European Parliament and of the Council on waste(**3**);

"relevant river" means a river or a part of a river which-

- (a) is not a part of the sea; and
- (b) which at the time of any disposal into it of aqueous radioactive waste from a sewage treatment works or directly from premises, has a flow rate which is not less than 1m<sup>3</sup>s<sup>-1</sup>;

"relevant sewer" means-

- (a) a public sewer; or
- (b) a private sewer which leads to a sewage treatment works that—
  - (i) has the capacity to handle a minimum of  $100m^3$  of sewage per day; and
  - (ii) discharges treated sewage only to the sea or to a relevant river,

and "sewer", "public sewer", "private sewer", "sewage treatment works" and "sewage" have the same meanings as in the Sewerage (Scotland) Act 1968(4);

"relevant standard conditions" has the meaning given in paragraph 2 of Schedule 2;

"sea" includes any area submerged at mean high water springs and also includes, so far as the tide flows at mean high water springs, an estuary or arm of the sea and the waters of any channel, creek, bay or river;

"sealed source" means a radioactive source containing radioactive material where the structure is designed to prevent, under normal use, any dispersion of radioactive substances, excluding such a source where it is an electrodeposited source or a tritium foil source;

"stored in transit" means the storage in the course of transit of radioactive material or radioactive waste, but does not include any storage of such material or waste where it is removed from its container;

"Table 1", "Table 2", "Table 3", "Table 4" or "Table 5" means the table with that number in Schedule 1;

"a tritium foil source" means an article which-

<sup>(2)</sup> O.J. L 182, 16.7.1999, p.1, as last amended by Directive 2008/98/EC of the European Parliament and of the Council (O.J. L 312, 22.11.2008, p.3).

<sup>(</sup>**3**) O.J. L 312, 22.11.2008, p.3.

<sup>(4) 1968</sup> c. 47, as relevantly amended by the Water Industry (Scotland) Act 2002 (asp 3), schedule 5, paragraph 41(b)(iv) and the Water Environment and Water Services (Scotland) Act 2003 (asp 3), schedule 3, paragraph 23(a).

- (a) has a mechanically tough surface into which tritium is incorporated; and
- (b) is radioactive material or radioactive waste solely because of that tritium;

"uranium or thorium compound" means a substance or article which is radioactive material or radioactive waste solely because it is or contains metallic uranium or thorium or prepared compounds of uranium or thorium, and in respect of which metal or compound the proportion of—

(a) U-235 in the uranium it contains is no more than 0.72% by mass; and

(b) any isotope of thorium it contains is present in the isotopic proportions found in nature;

"waste permitted person" means, in respect of the radioactive waste where the term appears, a person who holds—

- (a) an authorisation under the Act to dispose of or accumulate that waste;
- (b) a permit in respect of that waste under the Environmental Permitting (England and Wales) Regulations 2010 in relation to the radioactive substances activity described in paragraph 5(2)(b) or (c) of Part 2 of Schedule 23 to those Regulations;

"week" means any period of seven consecutive days; and

"year" means a calendar year.

- (2) In this Order, where any radionuclide carries the suffix "+" or "sec"-
  - (a) that radionuclide represents the parent radionuclide in secular equilibrium with the corresponding daughter radionuclides which are identified in column 2 of Table 5 adjacent to that parent radionuclide; and
  - (b) a concentration or activity value given in respect of such a parent radionuclide is the value for the parent radionuclide alone, but already takes into account the daughter radionuclides in column 2 that are present.

(3) In this Order, where any reference is made to radioactive material or radioactive waste possessing a concentration or quantity of radioactivity which does not exceed the value shown in a particular column in Table 1 or Table 4, that value is not exceeded if—

- (a) where only one radionuclide which is listed or described in the relevant table is present in the material or waste, the concentration or quantity of that radionuclide does not exceed the concentration or quantity specified in the appropriate entry of that column in that table; or
- (b) where more than one radionuclide which is listed or described in the relevant table is present, the sum of the quotient values of all such radionuclides in the material or waste, as determined by the summation rule following that table that applies to that column, is less than or equal to one.
- (4) References in this Order to a section are to that section of the Act.

#### **Interpretation: NORM**

**3.**—(1) In this Order, "NORM waste" means a substance or article which is solid radioactive waste under—

- (a) section 1B; or
- (b) section 1C, where-
  - (i) the waste arises from the remediation of land; and
  - (ii) except where paragraph (2) applies, that land was contaminated by the process described in section 1C.

(2) Land is not contaminated under paragraph (1)(b)(ii) where the land is on a site in respect of which a nuclear site licence is or has been in force and the contamination occurred—

- (a) when that licence was in force; or
- (b) before that licence was granted, when the site was used for the purpose of installing or operating an installation described in subsection (1) of section 1 (restriction of certain nuclear installations to licensed sites) of the Nuclear Installations Act 1965(5) or in regulations made under that subsection.

(3) In this Order, "NORM waste concentration" means, in respect of radionuclides contained in NORM waste, the sum of the concentrations of the single radionuclide with the highest concentration in each of the natural decay chains beginning with—

- (a) U-238;
- (b) U-235; and
- (c) Th-232.

#### Tables of radionuclides and descriptions of radioactive material and radioactive waste

**4.**—(1) Schedule 1 (tables of radionuclides and descriptions of radioactive material and radioactive waste) has effect.

(2) Schedule 2 (relevant standard conditions under Parts 2 and 3 of this Order) has effect.

<sup>(5) 1965</sup> c.57, as relevantly amended by S.I. 1974/2056 and 1990/1918, Schedule 1, paragraph 1.