STATUTORY RULES OF NORTHERN IRELAND

# 2011 No. 290

# ATOMIC ENERGY AND RADIOACTIVE SUBSTANCES

## The Radioactive Substances Act 1993 (Amendment) Regulations (Northern Ireland) 2011

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| *Made - - - -* | *26th July 2011* |
| *Coming into operation* | *1st October 2011* |

The Department of the Environment being a Department designated (**1**) for the purposes of section 2(2) of the European Communities Act 1972(**2**) in relation to the making of measures relating to basic safety standards for health protection of the general public and workers against the dangers of ionising radiation, in exercise of the powers conferred by that section makes the following Regulations:

### Citation and commencement

**1.** These Regulations may be cited as the Radioactive Substances Act 1993 (Amendment) Regulations (Northern Ireland) 2011 and shall come into operation on 1st October 2011.

### Interpretation

**2.**—(1) In these Regulations "the Act" means the Radioactive Substances Act 1993(**3**).

(2) The Interpretation Act (Northern Ireland) 1954(**4**) shall apply to these Regulations as it applies to an Act of the Northern Ireland Assembly.

### Insertion of sections 1A to 1J of the Act

**3.** For sections 1 and 2 of the Act substitute—

"**1A. Meaning of "radioactive material" and "radioactive waste"**

In this Act, except as provided by sections 1E, 1F, 1G and 1H—

(**1**) 1991 No. 2289
(**2**) 1972 c. 68
(**3**) 1993 c.12
(**4**) 1954 c.33 (N.I.)

"radioactive material" means a substance or article which is not waste, and which satisfies the requirements of any of sections 1B, 1C and 1D as they apply to such a substance or article;

"radioactive waste" means a substance or article which is waste, and which satisfies the requirements of any of sections 1B, 1C and 1D; and

"Table 1", "Table 2", "Table 3" and "Table 4" mean the tables with those numbers in Schedule 1.

**1B. NORM industrial activities**

(1) Subsection (2) applies to a substance or article which—

(a) arises from or is used in a NORM industrial activity listed in Part 1 of Table 1;

(b) is waste which arises from a NORM industrial activity listed in Part 2 of Table 1; or

(c) is contaminated by a substance or article described in paragraph (a) or (b), including where such contamination occurs indirectly through another contaminated substance or article.

(2) A substance or article to which this subsection applies is radioactive material or radioactive waste where it has a concentration of radioactivity which exceeds the following values in Table 2—

(a) for a solid substance or article or a relevant liquid substance, the value specified in column 2;

(b) for any other liquid substance, the value specified in column 3; or

(c) for a gaseous substance, the value specified in column 4.

**1C. Processed radionuclides of natural terrestrial or cosmic origin**

**1C.** A substance or article is radioactive material or radioactive waste where—

(a) it contains one or more of the radionuclides of natural terrestrial or cosmic origin which are listed in column 1 of Table 3;

(b) the substance or article—

(i) is processed or is intended to be processed for the radioactive, fissile or fertile properties of those radionuclides; or

(ii) is contaminated by a substance or article to which sub-paragraph (i) applies, including where such contamination occurs indirectly through another contaminated substance or article; and

(c) the substance or article is—

(i) a solid or a relevant liquid and it has a concentration of radioactivity which exceeds the value specified in column 2 of Table 3; or

(ii) any other liquid or a gas.

**1D. Radionuclides not of natural terrestrial or cosmic origin**

**1D.** A substance or article which contains one or more radionuclides that are not of natural terrestrial or cosmic origin is radioactive material or radioactive waste where—

(a) it is a solid or a relevant liquid and it has a concentration of radioactivity which exceeds the value specified in column 2 of Table 3; or

(b) it is any other liquid or a gas.

**1E. Radionuclides with a short half-life**

**1E.** A substance or article is not radioactive material or radioactive waste where none of the radionuclides which it contains or which it consists of has a half-life exceeding 100 seconds.

**1F. Radionuclides not of natural terrestrial or cosmic origin in background radioactivity**

(1) A substance or article is not radioactive material or radioactive waste where—

(a) it is contaminated as a result of a climatic process, or a combination of such processes, by radionuclides which—

(i) are not of natural terrestrial or cosmic origin; and

(ii) are not present in the substance or article at a concentration that exceeds that found normally in such a substance or article in the United Kingdom; and

(b) in the absence of such contamination, the substance or article would not otherwise be radioactive material or radioactive waste under this Act.

(2) In this section, a "climatic process" includes wind, precipitation and the general circulation of the atmosphere and oceans.

**1G. Contaminated substances or articles**

(1) Subject to subsection (2), a substance or article is not radioactive material where—

(a) it is contaminated, but has not been so contaminated with the intention of utilising its radioactive, fissile or fertile properties; and

(b) in the absence of such contamination, the substance or article would not otherwise be radioactive material under this Act.

(2) Subsection (1) only applies while the substance or article is kept on the premises on which the contamination occurred.

**1H. Substances or articles after disposal**

(1) Subject to subsections (2) and (3), a substance or article is not radioactive material or radioactive waste during the excluded period where—

(a) the substance or article has been disposed of lawfully, and at the time of the disposal no further act of disposal is intended in respect of it; or

(b) the substance or article—

(i) is contaminated by a substance or article to which paragraph (a) applies, including where such contamination occurs indirectly through another contaminated substance or article;

(ii) in the absence of such contamination, would not otherwise be radioactive material or radioactive waste under this Act; and

(iii) is not contaminated with the intention of using its radioactive, fissile or fertile properties.

(2) In subsection (1), "the excluded period" means the period—

(a) beginning at the relevant start time; and

(b) ending in the circumstances specified in subsection (4).

(3) The relevant start time is—

(a) where the substance or article has been disposed of and—

(i) is solid at the time of the disposal;

(ii) is disposed of by burial (whether underground or otherwise) on premises in relation to which an authorisation under section 13 of this Act is held at the time of disposal; and

(iii) is disposed of in accordance with that authorisation,

the time of the revocation of that authorisation;

(b) where the substance or article is contaminated by a substance or article to which paragraph (a) applies, including where such contamination occurs indirectly through another contaminated substance or article, the time of the revocation of the authorisation referred to in paragraph (a)(ii); or

(c) in relation to any other substance or article—

(i) the time of the disposal of it; or

(ii) where the substance or article is one to which subsection (1)(b) applies, the time of the disposal of the substance or article that caused it, directly or indirectly, to be contaminated.

(4) The excluded period ends where, after the beginning of the excluded period, the substance or article is subject to a process which leads to an increase in the radiation exposure of the public or any plant or animal, at the time of that increase.

**1J. Variation of tables in Schedule 1**

**1J.** The Department of the Environment may by order vary the provisions of Table 2 and Table 3, either by adding further entries to any column of those tables or by altering or deleting any entry for the time being contained in any column.".

**Amendments to section 15 of the Act**

**4.**—(1) Section 15(1) of the Act is repealed.

(2) In section 15(2)—

(a) for "Without prejudice to subsection (1), the" substitute "The";

(b) for "exclude" substitute "exempt"; and

(c) for "exclusion" substitute "exemption".

**Amendments to section 47 of the Act**

**5.**—(1) In section 47(1) of the Act insert, at the appropriate place in alphabetical order, the following definitions—

""m", where it appears after a radionuclide, means a radionuclide in a metastable state of radioactive decay in which gamma photons are emitted;";

""NORM industrial activity" means the industrial activities involving radionuclides of natural terrestrial or cosmic origin, which activities are listed in Table 1, but not including any such activity where radionuclides of natural terrestrial or cosmic origin are processed for their radioactive, fissile or fertile properties;";

""relevant liquid" means a liquid which—

(a) is non-aqueous; or

(b) is classified (or would be so classified in the absence of its radioactivity) under Council Regulation No.1272/2008(**5**) as having any of the following hazard classes and hazard categories (as defined in that Regulation)—

(i) acute toxicity: categories 1, 2 or 3;

(ii) skin corrosion/irritation: category 1 corrosive, sub-categories: 1A, 1B or 1C; or

(iii) hazardous to the aquatic environment: acute category 1 or chronic categories 1 or 2;".

(2) After section 47(5A) of the Act insert—

"(5B) Where any radionuclide carries the suffix "+" or "sec" in this Act—

(a) that radionuclide represents the parent radionuclide in secular equilibrium with the corresponding daughter radionuclides which are identified in column 2 of Table 4 in Schedule 1 adjacent to the description of that parent radionuclide; and

(b) a concentration value given in a table in Schedule 1 in relation to such a parent radionuclide refers to the value for the parent radionuclide alone, but already takes into account the daughter radionuclides present.

(5C) Where any reference is made to a substance or article possessing a concentration of radioactivity which exceeds the value shown in a particular column of a table in Schedule 1, that value is exceeded if—

(a) where only one radionuclide which is included in that table is present in the substance or article, the concentration of that radionuclide exceeds the concentration specified in the appropriate entry in the appropriate column of that table; or

(b) where more than one such radionuclide is present, the sum of the quotient values of all such radionuclides in the substance or article, as determined by the summation rule following that table as it applies to that column, is greater than one.".

**Amendments to section 48 of the Act**

**6.** In section 48 of the Act—

(a) after the entry for "local authority" insert—

"m section 47(1)";

(b) after the entry for "mobile radioactive apparatus" insert—

"NORM industrial activity section 47(1)";

(c) for the entries for "radioactive material" and "radioactive waste" substitute—

"radioactive material section 1A

radioactive waste section 1A

relevant liquid section 47(1);";

(d) after the entry for "substance" insert—

"Table section 1A

Table 2 section 1A

Table 3 section 1A

(**5**) O.J. No. L 353, 31.12.2008, p.1.