eDraft Regulations laid before Parliament and the National Assembly for Wales under section 2(8) and (9)(d) and (e) of the Pollution Prevention and Control Act 1999 for approval by resolution of each House of Parliament and of the Assembly.

DRAFT STATUTORY INSTRUMENTS

2011 No. 0000

ENVIRONMENTAL PROTECTION, ENGLAND AND WALES

The Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2011

Made - - - - ***

Coming into force in accordance with regulation 1(1)(b)

These Regulations are made in exercise of the powers conferred by section 2 of, and Schedule 1 to, the Pollution Prevention and Control Act 1999(a).

The Secretary of State, in relation to England, and the Welsh Ministers, in relation to Wales, have in accordance with section 2(4) of that Act consulted(**b**)—

- (a) the Environment Agency;
- (b) such bodies or persons appearing to them to be representative of the interests of local government, industry, agriculture and small businesses respectively as they consider appropriate; and
- (c) such other bodies or persons as they consider appropriate.

A draft of this instrument has been approved by a resolution of each House of Parliament and by the National Assembly for Wales pursuant to section 2(8) and (9)(d) and (e) of that Act(c).

Accordingly, the Secretary of State in relation to England, and the Welsh Ministers in relation to Wales, make the following Regulations.

⁽a) 1999 c. 24. Functions of the Secretary of State under section 2 (except in relation to offshore oil and gas exploration and exploitation), so far as exercisable in relation to Wales, were transferred to the National Assembly for Wales by article 3 of S.I. 2005/1958. Those functions were then transferred to the Welsh Ministers by paragraph 30 of Schedule 11 to the Government of Wales Act 2006 (c. 32).

⁽b) The requirement in that section to consult the bodies and persons mentioned was transferred from the National Assembly for Wales to the Welsh Ministers by paragraph 30 of Schedule 11 to the Government of Wales Act 2006 (c. 32). The consultation carried out by the National Assembly for Wales has effect as if it were carried out by the Welsh Ministers by virtue of paragraph 39(3) of that Schedule to that Act.

⁽c) The reference in section 2(8) to approval by each House of Parliament has effect in relation to exercise of functions by the Welsh Ministers as if it were a reference to approval by the National Assembly for Wales by virtue of paragraph 33 of Schedule 11 to the Government of Wales Act 2006 (c. 32).

PART 1

General

Citation and commencement

- 1. These Regulations—
 - (a) may be cited as the Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2011;
 - (b) come into force on xx yyy 2011; and
 - (c) extend to England and Wales only.

Interpretation

- **2.**—(1) In these Regulations, "the 2010 Regulations" means the Environmental Permitting (England and Wales) Regulations 2010(a).
 - (2) Terms defined in the 2010 Regulations have the same meaning in these Regulations.

PART 2

Amendments to the 2010 Regulations

Amendment of the Environmental Permitting (England and Wales) Regulations 2010

3. The Environmental Permitting (England and Wales) Regulations 2010 are amended in accordance with regulations 3 to 14.

CHAPTER 1

Amendments to the main body of the Regulations

Amendment of regulation 2 (interpretation: general)

- **4.**—(1) Paragraph (1) of regulation 2 (interpretation: general) is amended as follows.
- (2) After the definition of "the Basic Safety Standards Directive", insert—
 - ""Bq" means Becquerels;".
- (3) After the definition of "radioactive substances activity", insert—
 - "radioactive substances exemption" means an exemption under Part 6 of Schedule 23 from the requirement for an environmental permit in regulation 12;".

Amendment of regulation 12 (requirement for an environmental permit)

- **5.**—(1) Regulation 12 (requirement for an environmental permit) is amended as follows.
- (2) After paragraph (2), add—
 - "(2A) In respect of a radioactive substances activity, a person does not require an environmental permit to the extent that a radioactive substances exemption applies to that person.".
- (3) For paragraph (3), substitute—

⁽a) S.I. 2010/675.

- "(3) Paragraph (4) applies where a person ("A") would, except for this paragraph, require an environmental permit to—
 - (a) receive radioactive waste from another person ("B") for the purposes of disposing of that waste; and
 - (b) subsequently dispose of that waste.".
- (4) After paragraph (3), add—
 - "(4) Where this paragraph applies, A does not require a permit—
 - (a) for the receipt of waste from B, where B holds an environmental permit which allows B to dispose of the waste to A; and
 - (b) for the subsequent disposal of that waste by A, where the waste is disposed of in accordance with the environmental permit held by B.".

Substitution of new regulation 72

6. For regulation 72, substitute—

"Previously excluded radioactive material and radioactive waste

72.—(1) Where at the applicable time a person is carrying on a radioactive substances activity—

- (a) described in paragraph 5(2)(a) or 5(5) of Part 2 of Schedule 23 to these Regulations (interpretation: radioactive substances activity);
- (b) in relation to a substance or article which—
 - (i) immediately before the applicable time was not categorised as radioactive material; and
 - (ii) becomes so categorised at the applicable time by virtue of the amendments made at that time to these Regulations,

that person is exempt from the requirement to hold an environmental permit under regulation 12 (requirement for an environmental permit) in relation to that activity until the date referred to in paragraph (3).

- (2) Where at the applicable time a person is carrying on a radioactive substances activity—
 - (a) described in paragraph 5(2)(b) or (c) or 5(4) of Part 2 of Schedule 23 to these Regulations (interpretation: radioactive substances activity);
 - (b) in relation to a substance or article which—
 - (i) immediately before the applicable time was not categorised as radioactive waste; and
 - (ii) becomes so categorised at the applicable time by virtue of the amendments made at that time to these Regulations,

that person is exempt from the requirement to hold an environmental permit under regulation 12 (requirement for an environmental permit) in relation to that activity until the date referred to in paragraph (3).

- (3) The date referred to in this regulation is—
 - (a) where, before the day that is 6 months after the applicable time, an environmental permit is applied for under regulation 13 (grant of an environmental permit) in relation to the radioactive substances activity carried on at the applicable time—
 - (i) if the application is granted, the date of grant;
 - (ii) if the application is refused and—

- (aa) the applicant appeals against the refusal under regulation 31 (appeals to an appropriate authority), the date on which the appeal is determined or withdrawn:
- (bb) the applicant is entitled to appeal against the refusal in accordance with regulation 31 (appeals to an appropriate authority), but does not do so, the date which is the day after the last appeal date; or
- (cc) the applicant is not entitled to appeal against the refusal in accordance with regulation 31 (appeals to an appropriate authority), the date on which the appeal is refused; or
- (b) where no such application is made, the earlier of—
 - (i) the day that is 6 months after the applicable time;
 - (ii) where, in relation to the radioactive substances activity in paragraph (1) that is being carried on, a radioactive substances exemption begins to apply to that person, the day after that person first becomes so exempted; or
 - (iii) the day on which the radioactive substances activity ceases.
- (4) Where, in relation to the radioactive substances activity carried on at the applicable time, the person applies for a variation of an environmental permit under regulation 20 (variation of an environmental permit) instead of applying for a new environmental permit under regulation 13, paragraph (3) applies in relation to calculating the date referred to in this regulation but with references in that paragraph to an application under regulation 20 substituted for references to regulation 13.
 - (5) In this regulation—
 - (a) the "appeal date" means the last day on which an appeal against a refusal to grant an environmental permit could have been brought under regulation 31 (appeals to an appropriate authority), determined in accordance with paragraph 3(1) of Schedule 6 (time limit for making an appeal), but not including any extension of that period granted by the appropriate authority under sub-paragraph (2) of that paragraph);
 - (b) the "applicable time" means the time at which the Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2011 come into force;
 - (c) "article" and "substance" have the meaning given to them in Schedule 23 to these Regulations.".

Insertion of regulation 72A

7. After regulation 72, insert—

"Previously exempt radioactive substances activities

72A.—(1) This regulation applies to a person ("A") carrying on a radioactive substances activity at the applicable time ("the continuing activity") where—

- (a) the radioactive substances activity is described in paragraph 5(2), (4) or (5) of Part 2 of Schedule 23 (interpretation: radioactive substances activity); and
- (b) immediately before the applicable time that person was exempted under a radioactive substances exemption order from the requirement to hold an environmental permit in regulation 12 (requirement for an environmental permit) in relation to that activity.
- (2) In relation to the continuing activity, the exemption described in paragraph (1)(b) continues to have effect in relation to A, subject to any conditions specified in the radioactive substances exemption order in which that exemption is contained, until the date calculated in accordance with paragraph (3).
 - (3) The date referred to in paragraph (2) is—

- (a) where A does not become exempt in relation to the continuing activity under a radioactive substances exemption before the date that is six months after the applicable time—
 - (i) where, before the day that is 6 months after the applicable time, A applies for an environmental permit under regulation 13 (grant of an environmental permit) in relation to the continuing activity—
 - (aa) if the application is granted, the date of grant;
 - (bb) if the application is refused and—
 - (cc) A appeals against the refusal under regulation 31 (appeals to an appropriate authority), the date on which the appeal is determined or withdrawn;
 - (dd) A is entitled to appeal against the refusal in accordance with regulation 31 (appeals to an appropriate authority), but does not do so, the date which is the day after the last appeal date; or
 - (ee) A is not entitled to appeal against the refusal in accordance with regulation 31 (appeals to an appropriate authority), the date on which the appeal is refused; or
 - (ii) where no such application is made, the earlier of—
 - (aa) the day that is 6 months after the applicable time;
 - (bb) the day on which the continuing activity ceases;
- (b) where A does become so exempted before the date that is 6 months after the applicable time, the day on which A first becomes so exempted.
- (4) Where, in relation to the continuing activity, A applies for a variation of an environmental permit under regulation 20 (variation of an environmental permit) instead of applying for a new environmental permit under regulation 13, paragraph (3) applies in relation to calculating the date referred to in this regulation but with references in that paragraph to an application under regulation 20 substituted for references to regulation 13.
 - (5) In this regulation—
 - (a) the "appeal date" means the last day on which an appeal against a refusal to grant an environmental permit could have been brought under regulation 31 (appeals to an appropriate authority), determined in accordance with paragraph 3(1) of Schedule 6 (time limit for making an appeal), but not including any extension of that period granted by the appropriate authority under sub-paragraph (2) of that paragraph);
 - (b) the "applicable time" means the time at which the Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2011 come into force;
 - (c) "article" and "substance" have the meaning given to them in Schedule 23.".

CHAPTER 2

Amendments to Schedule 23 (radioactive substances activities)

Amendment to paragraph 1 of Part 2 of Schedule 23 (interpretation)

- **8.**—(1) Paragraph 1 of Part 2 of Schedule 23 (interpretation) is amended as follows.
- (2) After the definition of "disposal", insert—
 - ""m" where it appears after a radionuclide means a radionuclide in a metastable state of radioactive decay in which gamma photons are emitted;".
- (3) After the definition of "mobile radioactive apparatus", insert—
 - ""NORM industrial activity" has the meaning given in paragraph 3A;".

- (4) In the definition of "nuclear site", insert the words "nuclear site licence" before the words "and "period of responsibility"".
 - (5) After the definition of "premises", insert—
 - "sec" where it appears after a radionuclide means that all radionuclides in the decay chain in secular equilibrium have been taken into account for the purposes of radiological impact assessment,".
 - (6) After the definition of "waste", insert—
 - ""+" where it appears after a radionuclide means that the radionuclide includes such of its daughter radionuclides in the decay chain as are relevant for the purposes of radiological impact assessment,".

Amendment to paragraph 2 of Part 2 of Schedule 23 (interpretation: radioactive material)

- **9.**—(1) Paragraph 2 of Part 2 of Schedule 23 (interpretation: radioactive material) is amended as follows.
 - (2) For paragraph 2, substitute—

"Interpretation: radioactive material and radioactive waste

- 2. Except as provided by any of paragraph 2D, 2E, 2F or 2G—
 - (a) "radioactive material" means a substance or article which satisfies the requirements of any of paragraph 2A, 2B, or 2C, where that substance or article is not waste, and
 - (b) "radioactive waste" means any such substance or article where it is waste.".

Insertion of paragraphs 2A to 2F of Part 2 of Schedule 23

10. Insert the contents of Schedule 1 to these Regulations after paragraph 2 of Part 2 of Schedule 23 (interpretation: radioactive material and radioactive waste).

Insertion of paragraph 3A of Part 2 of Schedule 23 (interpretation: NORM industrial activity)

11. After paragraph 3 of Part 2 of Schedule 23 (interpretation: waste), insert—

"Interpretation: NORM industrial activity

- **3A.** In this Schedule, "NORM industrial activity" means any of the following industrial activities involving radionuclides of natural terrestrial or cosmic origin—
 - (a) extraction, production and use of rare earth elements and rare earth element alloys;
 - (b) production and use of thorium, thorium compounds and products where thorium is deliberately added;
 - (c) mining and processing of ores other than uranium ore;
 - (d) production of oil and gas;
 - (e) removal and management of radioactive scales and precipitates from equipment associated with industrial activities;
 - (f) manufacture of phosphorous, phosphates and phosphoric acid;
 - (g) manufacture of titanium dioxide pigments;
 - (h) the extraction and refining of zircon and manufacture of zirconium compounds;
 - (i) production of tin, copper, aluminium, zinc, lead, and iron and steel;
 - (j) activities related to coal mine de-watering plants;

- (k) water treatment associated with provision of drinking water and remediation of past work activities;
- (1) china clay extraction; and
- (m) production and use of Uranium other than for its radioactive, fertile and fissile properties.".

Amendment of paragraph 4 of Part 2 of Schedule 23 (interpretation: radioactive waste)

12. Omit paragraph 4 of Part 2 of Schedule 23 (including the title to that paragraph).

Insertion of new Part 6 of Schedule 23

13. Insert the contents of Schedule 2 to these Regulations as Parts 6 and 7 of Schedule 23.

Repeals

14. The Radioactive Substances Act 1993 is repealed.

Revocations

15. The instruments in Schedule 3 are revoked.

Savings

16. Despite their revocation, the instruments in Schedule 3 (except the Radioactive Substances (Clocks and Watches) (England and Wales) Regulations 2001(a) continue in force for the purposes of, and to the extent provided by, regulations 72A and 72B of the 2010 Regulations.

Name
Minister of State,
Department of Energy and Climate Change

Date

⁽a) S.I. 2001/4005.

SCHEDULE 1

Regulation 10

New paragraphs 2A to 2F of Part 2 of Schedule 23 to the 2010 Regulations

"NORM industrial activities

2A.—(1) A substance or article which is used in or arises from a NORM industrial activity or which has been contaminated by radionuclides which arise from such an activity is radioactive material or radioactive waste where—

- (a) the concentration of any radionuclide of natural terrestrial or cosmic origin listed in column 1 of table 1 in that substance or article exceeds the following values in table 1 in respect of that radionuclide—
 - (i) for a solid substance or article, or a non-aqueous liquid substance or article, the value specified in column 2;
 - (ii) for any other liquid substance or article, the value specified in column 3;
 - (iii) for a gaseous substance or article, the value specified in column 4; or
- (b) the sum of the quotient values of all such radionuclides in the substance or article, as determined by the table 1 summation rule, is greater than one.
- (2) In this paragraph—
 - (a) table 1 referred to—

Table 1
Concentration levels of radionuclides: NORM industrial activities

Radionuclide	Solid or non- aqueous liquid concentration level in becquerels per gram (Bq/g)	Any other liquid concentration level in becquerels per litre (Bq/l)	Gaseous concentration level in becquerels per cubic metre (Bq/m³)
U-238sec including Th-234, Pa-234m, Pa-234, U-234, Th- 230, Ra-226, Rn- 222, Po-218, Pb- 214, Bi-214, Po-214, Pb-210, Bi-210, Po- 210	0.5	0.1	0.001
U-238+ including U-238, Th-234, Pa- 234m, Pa-234	5	10	0.01
U-234	5	10	0.01
Th-230	10	10	0.001
Ra-226+ including Rn-222, Po-218, Pb- 214, Bi-214, Po-214	0.5	1	0.01
Pb-210+ including Bi-210, Po-210	5	0.1	0.01
Po-210	5	0.1	0.01

U-235sec including Th-231, Pa-231, Ac-227, Th-227, Fr-223, Ra-223, Rn-219, Po-215, Pb-211, Bi-211,	Solid or non-aqueous liquid concentration level in becquerels per gram (Bq/g)	Any other liquid concentration level in becquerels per litre (Bq/l)	Gaseous concentration level in becquerels per cubic metre (Bq/m³) 0.0001
Tl-207, Po-211 U-235+ including Th-231	5	10	0.01
Pa-231	5	1	0.001
Ac-227+ including Th-227, Fr-223, Ra- 223, Rn-219, Po- 215, Pb-211, Bi-211, Tl-207, Po-211	1	0.1	0.0001
Th-232sec including Ra-228, Ac-228, Th- 228, Ra-224, Rn- 220, Po-216, Pb- 212, Bi-212, Po-212, Tl-208	0.5	0.1	0.001
Th-232	5	10	0.001
Ra-228+ including Ac-228	1	0.1	0.01
Th-228+ including Ra-224, Rn-220, Po- 216, Pb-212, Bi-212, Tl-208	0.5	1	0.001

- (b) "the table 1 summation rule" means the sum of the quotient A/B where—
 - (i) "A" means the quantity of each radionuclide listed in column 1 of table 1 that is present in the substance or article; and
 - (ii) "B" means the quantity of that radionuclide specified in—
 - (aa) column 2 of table 1 where the substance or article is a solid or a non-aqueous liquid;
 - (bb) column 3 of table 1 where the substance or article is any other liquid; or
 - (cc) column 4 of table 1 where the substance or article is a gas.

Processed radionuclides of natural terrestrial or cosmic origin

- 2B.—(1) 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 2;
 - (b) it—
 - (i) is processed or is intended to be processed for the radioactive, fertile or fissile properties of those radionuclides; or
 - (ii) has been contaminated by the application of such a process to another substance or article; and

- (c) it is—
 - (i) a solid or a non-aqueous liquid and—
 - (aa) the concentration of any radionuclide listed in column 1 of table 2 in that substance or article exceeds the value specified in column 2 of table 2 in respect of that radionuclide; or
 - (bb) the sum of the quotient values of all such radionuclides in the substance or article, as determined by the table 2 summation rule, is greater than one; or
 - (ii) any other liquid or a gas.
- (2) In this paragraph and in paragraph 2C—
 - (a) table 2 referred to—

Table 2
Concentration levels of radionuclides

Concentration levels of radionucing	ics
Radionuclide	Concentration level in becquerels per gram
	$\frac{(Bq/g)}{10^2}$
H-3	
Be-7	10
C-14	10
F-18	1
Na-22	0.1
Na-24	0.1
Si-31	10^{2}
P-32	10^{2}
P-33	10^2
S-35	10^2
C1-36	1
C1-38	1
K-42	10
K-43	1
Ca-45	10^{2}
Ca-47	1
Sc-46	0.1
Sc-47	10
Sc-48	0.1
V-48	0.1
Cr-51	10
Mn-51	1
Mn-52	0.1
Mn-52m	1
Mn-53	10^{3}
Mn-54	0.1
Mn-56	1
Fe-52+ including Mn-52m	1
Fe-55	10^{2}
Fe-59	0.1
Co-55	1
Co-56	0.1
Co-57	1
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Radionuclide	Concentration level in becquerels per gram (Bq/g)
Co-58	0.1
Co-58m	10^{2}
Co-60	0.1
Co-60m	10^{3}
Co-61	10^{2}
Co-62m	1
Ni-59	10 ²
Ni-63	10^2
Ni-65	1
Cu-64	10
Zn-65	1
Zn-69	$\frac{1}{10^2}$
	1
Zn-69m+ including Zn-69	
Ga-72	1 10 ⁴
Ge-71	10° 10°
As-73	
As-74	1
As-76	1
As-77	10^{2}
Se-75	1
Br-82	0.1
Rb-86	10
Sr-85	1
Sr-85m	10
Sr-87m	10
Sr-89	10
Sr-90+ including Y-90	1
Sr-91+ including Y-91m	1
Sr-92	1
Y-90	10^{2}
Y-91	10
Y-91m	1
Y-92	10
Y-93	10
Zr-93	10
Zr-95+ including Nb-95m	0.1
Zr-97+ including Nb-97m, Nb-97	1
Nb-93m	10 ²
Nb-94	0.1
Nb-95	
	1
Nb-97+ including Nb-97m	1
Nb-98	1
Mo-90	1
Mo-93	10
Mo-99+ including Tc-99m	1
Mo-101+ including Tc-101	1
Tc-96	0.1
Tc-96m	10
Tc-97	10

Radionuclide	Concentration level in becquerels per gram (Bq/g)
Tc-97m	10
Tc-99	1
Tc-99m	10^{2}
Ru-97	1
Ru-103+ including Rh-103m	1
Ru-105+ including Rh-105m	1
Ru-106+ including Rh-106	1
Rh-103m	104
Rh-105	10
Pd-103+ including Rh-103m	10^3
Pd-109+ including Ag-109m	10^2
Ag-105	1
Ag-108m+ including Ag-108	0.1
Ag-110m+ including Ag-110	0.1
Ag-11011 Ag-110	10
Cd-109+ including Ag-109m	10
Cd-109+ including Ag-109iii Cd-115+ including In-115m	1
Cd-115# including In-115m	10
In-111	1
In-1113m	10
In-114m+ including In-114	1
In-115m	10
Sn-113+ including In-113m	1
Sn-125	1
Sb-122	1
Sb-124	0.1
Sb-125+ including Te-125m	1
Te-123m	1
Te-125m	10^2
Te-127	10^2
Te-127m+ including Te-127	10
Te-129	10
Te-129m+ including Te-129	10
Te-131	10
Te-131m+ including Te-131	1
Te-132+ including I-132	0.1
Te-133+ including I-133, Xe-133m, Xe-133	1
Te-133m+ including Te-133, I-133, Xe-133m, Xe-133	1
Te-134	1
I-123	10
I-125	1
I-126	1
I-129	0.1
I-130	1
I-131+ including Xe-131m	1
I-132	1
I-133	1
I-134	1

Radionuclide	Concentration level in becquerels per gram (Bq/g)
I-135	1
Cs-129	1
Cs-131	10^{3}
Cs-132	1
Cs-134	0.1
Cs-134m	10^{3}
Cs-135	10
Cs-136	0.1
Cs-137+ including Ba-137m	1
Cs-138	1
Ba-131	1
Ba-140	0.1
La-140	0.1
Ce-139	1
Ce-141	10
Ce-143	1
Ce-144+ including Pr-144, Pr-144m	10
Pr-142	10
Pr-143	10^{2}
Nd-147	10
Nd-149	10
Pm-147	10 ²
Pm-149	10^{2}
Sm-151	10^{2}
Sm-153	10
Eu-152	0.1
Eu-152m	10
Eu-154	0.1
Eu-155	10
Gd-153	10
Gd-159	10
Tb-160	0.1
Dy-165	10^{2}
Dy-166	10
Ho-166	10
Er-169	10^2
Er-171	10
Tm-170	10
Tm-171	10^2
Yb-175	10
Lu-177	10
Hf-181	
Ta-182	0.1
W-181	10
W-185	102
W-187	1
Re-186	10 ²
Re-188	10
Os-185	1

Radionuclide	Concentration level in becquerels per gram (Bq/g)
Os-191	10
Os-191m	10^{3}
Os-193	10
Ir-190	0.1
Ir-192	0.1
Ir-194	10
Pt-191	1
Pt-193m	10^{2}
Pt-197	10^2
Pt-197m	10^{2}
Au-198	1
Au-199	10
Hg-197	10
Hg-197m	10
Hg-203	1
T1-200	1
T1-201	10
T1-202	1
T1-204	10
Pb-203	1
Pb-210+ including Bi-210, Po-210	0.01
Pb-212+ including Bi-212, Tl-208	1
Bi-206	0.1
Bi-207	0.1
Bi-210	10
Bi-212+ including Tl-208	1
Po-203	1
Po-205	1
Po-207	1
Po-210	0.01
At-211	10^2
Ra-223+ including Rn-219, Po-215, Pb-211,	1
Bi-211, Tl-207	
Ra-224+ including Rn-220, Po-216, Pb-212,	1
Bi-212, Tl-208	
Ra-225	1
Ra-226+ including Rn-222, Po-218, Pb-214,	0.01
Bi-214, Po-214	
Ra-227	10
Ra-228+ including Ac-228	0.01
Ac-227+ including Th-227, Fr-223, Ra-223,	0.01
Rn-219, Po-215, Pb-211, Bi-211, Tl-207,	
Po-211	
Ac-228	1
Th-226+ including Ra-222, Rn-218, Po-214	10^2
Th-227	1
Th-228+ including Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Tl-208	0.1
Th-229+ including Ra-225, Ac-225, Fr-221, At-217, Bi-213, Tl-209, Pb-209	0.1

Radionuclide	Concentration level in becquerels per gram (Bq/g)
Th-230	0.1
Th-231	10^{2}
Th-232	0.01
Th-232+ including Ra-228, Ac-228, Th-	0.01
228, Ra-224, Rn-220, Po-216, Pb-212, Bi-	
212, TI-208	
Th-232sec including Ra-228, Ac-228, Th-228, Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Po-212, Tl-208	0.01
Th-234+ including Pa-234m, Pa-234	10
Pa-230	1
Pa-231	0.01
Pa-233	1
U-230+ including Th-226, Ra-222, Rn-218,	1
Po-214	
U-231	10
U-232+ including Th-228, Ra-224, Rn-220,	0.1
Po-216, Pb-212, Bi-212, Tl-208	
U-233	1
U-234	1
U-235+ including Th-231	1
U-235sec including Th-231, Pa-231, Ac-	0.01
227, Th-227, Fr-223, Ra-223, Rn-219, Po- 215, Pb-211, Bi-211, Tl-207, Po-211	
U-236	1
U-237	10
U-238+ including Th-234, Pa-234m, Pa-234	1
U-238sec including Th-234, Pa-234m, Pa-234, U-234, Th-230, Ra-226, Rn-222, Po-218, Pb-214, Bi-214, Po-214, Pb-210, Bi-210, Po-210	0.01
U-239	10^{2}
U-240+ including Np-240m, Np-240	10
Np-237+ including Pa-233	0.1
Np-239	10
Np-240	1
Pu-234	10^2
Pu-235	10^2
Pu-236	0.1
Pu-237	10
Pu-238	0.1
Pu-239	0.1
Pu-240	0.1
Pu-241	1
Pu-242	0.1
Pu-243	10^2
Pu-244+ including U-240, Np-240m, Np-240	0.1
Am-241	0.1
Am-241 Am-242	10^2
AIII-242	10

Radionuclide	Concentration level in becquerels per gram (Bq/g)
Am-242m+ including Np-238	0.1
Am-243+ including Np-239	0.1
Cm-242	1
Cm-243	0.1
Cm-244	0.1
Cm-245	0.1
Cm-246	0.1
Cm-247+ including Pu-243	0.1
Cm-248	0.1
Bk-249	10
Cf-246	10
Cf-248	1
Cf-249	0.1
Cf-250	0.1
Cf-251	0.1
Cf-252	0.1
Cf-253	1
Cf-253+ including Cm-249	1
Cf-254	0.1
Es-253	1
Es-254+ including Bk-250	0.1
Es-254m+ including Fm-254	1
Fm-254	10^2
Fm-255	10
Any other solid or non-aqueous liquid radionuclide that is not of natural terrestrial or cosmic origin	0.01, unless the concentration level which gives rise to the same 10 µSv/year dose criteria as used in column 2 of this table can be calculated using guidance by Euratom in RP 122 part 1(a) or any successor Euratom guidance or decision applying to the derivation of the levels in this table, in

- (b) "the table 2 summation rule" means the sum of the quotient A/B where—
 - (i) "A" means the concentration of each radionuclide listed in column 1 of table 2 that is present in the substance or article; and
 - (ii) "B" means the concentration of that radionuclide specified in column 2 of table 2.

Radionuclides not of natural terrestrial or cosmic origin

- **2C.** 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 non-aqueous liquid, and—
 - (i) the concentration of any radionuclide that is not of natural terrestrial or cosmic origin listed in column 1 of table 2 in that substance or article exceeds the value specified in column 2 of table 2 in respect of that radionuclide; or

⁽a) EC 2000. Radiation Protection 122: Practical use of the concepts of clearance and exemption. Report RP 122 Luxembourg. European Commission.

- (ii) the sum of the quotient values of all such radionuclides in the substance or article, as determined by the table 2 summation rule, is greater than one; or
- (b) it is any other liquid or a gas.

Radionuclides with a short half-life

2D. A substance or article is not radioactive material or radioactive waste where it does not contain or consist of any radionuclides with a half-life exceeding 100 seconds.

Radionuclides not of natural terrestrial or cosmic origin in background radioactivity

- 2E.—(1) A substance or article is not radioactive material or radioactive waste where—
 - (a) it has been contaminated by radionuclides which—
 - (i) are not of natural terrestrial or cosmic origin;
 - (ii) have been deposited as a result of environmental processes; and
 - (iii) 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 classed as radioactive material or radioactive waste under these Regulations.
- (2) In this paragraph an "environmental process" includes wind, precipitation and the general circulation of the atmosphere and oceans.

Contaminated substances or articles

- **2F.** A substance or article is not radioactive material where it is contaminated and—
 - (a) it has not been so contaminated with the intention of utilising its radioactive, fissile or fertile properties;
 - (b) in the absence of such contamination, it would not be classed as radioactive material under these Regulations; and
 - (c) the substance or article has not been moved off of the premises at which the contamination occurred.

Substances or articles disposed of in accordance with a permission

- **2G.**—(1) Subject to sub-paragraphs (2) and (3), a substance or article is not radioactive material or radioactive waste where it—
 - (a) has been disposed of in accordance with a disposal permission and at the time of the disposal no further act of disposal was intended in respect of it; or
 - (b) is contaminated by a substance or article described in paragraph (a), and in the absence of such contamination it would not otherwise be classed as radioactive material or radioactive waste under these Regulations.
 - (2) Sub-paragraph (1) ceases to apply where—
 - (a) the substance or article which was disposed of was disposed of in accordance with one of the disposal permissions detailed in sub-paragraph (4)(i) to (iv); and
 - (b) after the disposal or the contamination (as relevant), the substance or article is subject to a process which—
 - (i) was not taken into account by the permitting authority at the time the disposal permission was granted; and
 - (ii) leads to an increase in the radiation exposure of the public or the environment.

- (3) Sub-paragraph (1)(b) does not apply where the substance or article being contaminated is contaminated with the intention of using its radioactive, fertile or fissile properties.
 - (4) In this paragraph—
 - (a) "disposal permission" means—
 - (i) an authorisation under section 13 of the 1993 Act having effect at the time of disposal in any part of the United Kingdom;
 - (ii) an authorisation under section 6 of the Radioactive Substances Act 1960(a) having effect at the time of disposal in any part of the United Kingdom;
 - (iii) an environmental permit in relation to the radioactive substances activity described in paragraph 5(2)(b) of this Part;
 - (iv) an authorisation under section 5(4) of the Atomic Energy Authority Act 1954(**b**);
 - (v) an exemption or exclusion from the requirement to seek the authorisation detailed in sub-paragraph (i) or (ii) in an order made under section 15(2) of the 1993 Act or section 6(5) of the Radioactive Substances Act 1960 that applied to that disposal, having effect in any part of the United Kingdom; or
 - (vi) a radioactive substances exemption; and
 - (b) "permitting authority"—
 - (i) in relation to—
 - (aa) a disposal authorised under section 13 of the 1993 Act, or section 6 of the Radioactive Substances Act 1960, before the date on which these Regulations came into force; or
 - (bb) an environmental permit in relation to the disposal of radioactive waste, having effect in England and Wales, means the Agency;
 - (ii) in relation to a disposal at any time under an authorisation under section 13 of the 1993 Act or section 6 of the Radioactive Substances Act 1960 having effect in Scotland, means the Scottish Environmental Protection Agency;
 - (iii) in relation to an authorisation under section 13 of the 1993 Act or section 6 of the Radioactive Substances Act 1960 having effect in Northern Ireland, means the chief inspector;
 - (iv) in relation to a disposal under an authorisation under section 5(4) of the Atomic Energy Authority Act 1954, means the Minister of Housing and Local Government and the Minister of Agriculture and Fisheries."

⁽a) 1960 c. 34.

⁽b) 1954 c. 32.

SCHEDULE 2

Regulation 13

New Part 6 of Schedule 23 of the 2010 Regulations

"PART 6

Exemptions SECTION 1

General

Interpretation: general

1. In this Part—

"a Ba-137m eluting source" means a Ba-137m source which is generated from the decay of Cs-137 in a sealed container;

"a Class A gaseous tritium lighting device" means such a device where the activity of the device does not exceed 2x10¹⁰ Bq of tritium;

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

- (a) in each sealed container in the device does not exceed $8x10^{10}$ Bq of tritium; and
- (b) of the device does not exceed 1×10^{12} Bq of tritium;

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

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

"disposal activity" means the radioactive substances activity described in paragraph 5(2)(b) of Part 2 of this Schedule;

"an electrodeposited source" means an article where radionuclides are electrodeposited onto a metal substrate, and—

- (a) where such an article is fitted inside equipment; and
- (b) by virtue of that equipment the source would otherwise be classed as a sealed source,

the source is to be treated as an electrodeposited source rather than a sealed source for the purposes of these Regulations;

- "a gaseous tritium lighting 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;

"NORM waste" means a substance or article which is radioactive waste—

- (a) under paragraph 2A of Part 2 of this Schedule, where that radioactive waste is solid; or
- (b) under paragraph 2B of Part 2 of this Schedule, where the radioactive waste—
 - (i) is solid; and
 - (ii) arises from the remediation of land which was contaminated by the process described in paragraph 2B of Part 2 of this Schedule, but not including the remediation of land which is situated on a nuclear site:

"receiving activity" means the radioactive substances activity described in paragraph 5(4) of Part 2 of this Schedule;

"remediation" has the meaning given to that term in section 78A of the 1990 Act(a);

"a sealed source" means a radioactive source containing radioactive material where the structure is designed to prevent, under normal use, any dispersion of radioactive substances;

"the standard disposal route" means disposal to a person who disposes of substantial quantities of non-radioactive waste by burying it in landfill or by incinerating it, or who recycles substantial quantities of such waste, in each case where the radioactive waste is to be mixed with such non-radioactive waste for the purposes of such burial, incineration or recycling;

"stored in transit" means the storage in the course of transit of radioactive material or radioactive waste;

"a tritium foil source" means an article which—

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

Interpretation: radioactive material and accumulated radioactive waste tables

2. In this Part—

(a) a reference to table 3 is a reference to the following table—

Table 3
Radionuclides: values of quantities and concentrations

Radionuclides	Maximum quantity (Bq) on any premises	Maximum concentration (Bq/g)
H-3	109	10^{6}
Be-7	10 ⁷	10^{3}
C-14	10 ⁷	10^{4}
O-15	109	10^{2}
F-18	10^{6}	10
Na-22	10^{6}	10
Na-24	10 ⁵	10
Si-31	10 ⁶	10^{3}
P-32	10 ⁵	10^{3}
P-33	108	10^{5}
S-35	10 ⁸	10^{5}
Cl-36	10^{6}	10^{4}
Cl-38	10^{5}	10
Ar-37	108	10^{6}
Ar-41	10 ⁹	10^{2}
K-42	10^{6}	10^{2}
K-43	10^{6}	10
Ca-45	10 ⁷	10^{4}
Ca-47	10 ⁶	10
Sc-46	10^{6}	10
Sc-47	10^{6}	10^{2}

⁽a) 1990 c. 43. Sections 78A was inserted by the Environment Act 1995 (c. 25), section 57.

Radionuclides	Maximum quantity (Bq) on any premises	Maximum concentration (Bq/g)
Sc-48	10 ⁵	10
V-48	10 ⁵	10
Cr-51	10 ⁷	10^{3}
Mn-51	10 ⁵	10
Mn-52	10 ⁵	10
Mn-52m	10 ⁵	10
Mn-53	109	10^{4}
Mn-54	10^{6}	10
Mn-56	10 ⁵	10
Fe-52	10 ⁶	10
Fe-55	10 ⁶	10 ⁴
Fe-59	10^{6}	10
Co-55	10 ⁶	10
Co-56	10 ⁵	10
Co-57	10 ⁶	10^{2}
Co-58	10 ⁶	10
Co-58m	10 ⁷	10^{4}
Co-60	10 ⁵	10
Co-60m	10 ⁶	10^3
Co-61	10 ⁶	10^{2}
Co-62m	10 ⁵	10
Ni-59	10 ⁸	10 ⁴
Ni-63	108	10^{5}
Ni-65	10 ⁶	10
Cu-64	10 ⁶	10^{2}
Zn-65	10 ⁶	10
Zn-69	10 ⁶	10^{4}
Zn-69m	10 ⁶	10^{2}
Ga-72	10 ⁵	10
Ge-71	108	10^{4}
As-73	10 ⁷	10^{3}
As-74	10^{6}	10
As-76	10 ⁵	10^{2}
As-77	10 ⁶	10^{3}
Se-75	10^{6}	10^{2}
Br-82	10 ⁶	10
Kr-74	10 ⁹	10^{2}
Kr-76	109	10^{2}
Kr-77	10 ⁹	10^{2}
Kr-79	10 ⁵	10^{3}
Kr-81	10^7	10 ⁴
Kr-83m	10 ¹²	10 ⁵
Kr-85	104	10^{5}
Kr-85m	10 ¹⁰	10^3
Kr-87	109	10^2
Kr-88	109	10^2
Rb-86	10 ⁵	10^2
Sr-85	10 ⁶	10^2

Maximum quantity (Bq)	Maximum (Parks)
	concentration (Bq/g) 10^2
	10^2
	10^3
	10^2
10	10
105	10
	10
	10^3
	10^3
	10^2
	10^2
	10^2
	10^3
10	10
106	10
	10
10	10
10 ⁷	10 ⁴
	10
	10
	10
	10
	10
	10^3
	10^2
I .	10
	10
I .	10^3
	10^3
	10^{3}
10 ⁷	10 ⁴
	10^2
	10^2
	10^2
	10
	10^2
	10 ⁴
	10^2
	10^3
	10^3
	10^2
	10
	10
	10^3
10	10 ⁴
	10^2
10^6	10^3
	On any premises 107 106 106 104 105 106 105 106 107 106 106 105 107 106 106 106 106 107 107 107 107 107 107 107 107 108 107 108 107 108 107 108 107 108 107 108 107 108 107 108 107 108 107 108 107 108 107 108 107 108 107 108 106 10

Radionuclides	Maximum quantity (Bq) on any premises	Maximum concentration (Bq/g)
In-113m	10^6	10^2
In-114m	10 ⁶	10^2
In-115m	10 ⁶	10^2
Sn-113	10 ⁷	10^3
Sn-125	10^5	10^2
Sb-122	104	10^{2}
Sb-124	10^{6}	10
Sb-125	10^{6}	10^{2}
Te-123m	107	10^{2}
Te-125m	10 ⁷	10^3
Te-127	10 ⁶	10 ³
Te-127m	107	10^{3}
Te-129	10 ⁶	10^2
Te-129m	10^6	10^{3}
Te-131	10 ⁵	10^{2}
Te-131m	10^{6}	10
Te-132	107	10^{2}
Te-133	10 ⁵	10
Te-133m	10 ⁵	10
Te-134	10 ⁶	10
I-123	107	10^2
I-125	10^{6}	10^3
I-126	10^{6}	10^{2}
I-129	10 ⁵	10^{2}
I-130	10^{6}	10
I-131	10^{6}	10^{2}
I-132	10 ⁵	10
I-133	10^{6}	10
I-134	10 ⁵	10
I-135	10^{6}	10
Xe-131m	10 ⁴	10 ⁴
Xe-133	10^{4}	10^{3}
Xe-135	10 ¹⁰	10^{3}
Cs-129	10 ⁵	10^{2}
Cs-131	10^{6}	10^{3}
Cs-132	10 ⁵	10
Cs-134m	10 ⁵	10^{3}
Cs-134	10 ⁴	10
Cs-135	10 ⁷	10 ⁴
Cs-136	10 ⁵	10
Cs-137+ (including Ba-137)	10 ⁴	10
Cs-138	10 ⁴	10
Ba-131	10 ⁶	10^{2}
Ba-140+ (including La-140)	10 ⁵	10
La-140	10 ⁵	10
Ce-139	10 ⁶	10^{2}
Ce-141	10 ⁷	10^{2}
Ce-143	10^{6}	10^{2}

Maximum quantity (Bq) on any premises	Maximum concentration (Bq/g)
10 ⁵	10^2
	10^{2}
	10^{4}
10 ⁶	10^{2}
10^{6}	10^{2}
10 ⁷	10^{4}
10^{6}	10^{3}
108	10^{4}
10^{6}	10^{2}
10^{6}	10
10^{6}	10^{2}
	10
	10^{2}
10 ⁷	10^{2}
10 ⁶	10 ³
10^{6}	10
10^{6}	10^{3}
10^{6}	10^{3}
	10^3
	10 ⁴
10^{6}	10^{2}
	10 ³
	10 ⁴
	10^{3}
	10^{3}
	10
104	10
	10^{3}
	10^{4}
10^{6}	10^{2}
10^{6}	10^{3}
10 ⁵	10^{2}
10^{6}	10
107	10^{2}
107	10^{3}
10^{6}	10^{2}
10^{6}	10
10 ⁴	10
10 ⁵	10^{2}
10^{6}	10^{2}
10 ⁷	10^3
10^{6}	10^{3}
	10^2
	10^2
	10^{2}
	10^{2}
	10^2
10 ⁵	10^2
	on any premises 10 ⁵ 10 ⁶ 10 ⁶ 10 ⁶ 10 ⁶ 10 ⁸ 10 ⁶ 10 ⁶ 10 ⁶ 10 ⁷ 10 ⁶ 10 ⁶ 10 ⁶ 10 ⁶ 10 ⁷ 10 ⁶ 10 ⁷ 10 ⁷ 10 ⁷ 10 ⁶ <

Radionuclides	Maximum quantity (Bq) on any premises	Maximum concentration (Bq/g)
T1-200	10 ⁶	10
T1-201	10^{6}	10^{2}
T1-202	10 ⁶	10^2
T1-204	10 ⁴	10 ⁴
Pb-203	10 ⁶	10^2
Pb-210+ (including Bi-210, Po-210)	10 ⁴	10
Pb-212+ (including Bi-212, Tl-208,	10 ⁵	10
Po-212)	10	10
Bi-206	10 ⁵	10
Bi-207	10^{6}	10
Bi-207	10^{6}	10^3
Bi-212+ (including Tl-208, Po-212)	10 ⁵	10
Po-203	10^6	10
	10 ⁶	
Po-205	10^{6}	10
Po-207		10
Po-210	104	$\begin{array}{ c c }\hline 10\\\hline 10^3\\ \end{array}$
At-211	10 ⁷	-
Rn-220+ (including Po-216)	10 ⁷	104
Rn-222+ (including Po-218, Pb-214,	108	10
Bi-214, Po-214)	105	102
Ra-223+ (including Rn-219, Po-215,	10^5	10^2
Pb-211, Bi-211, Tl-207)	10 ⁵	10
Ra-224+ (including Rn-220, Po-216,	10	10
Pb-212, Bi-212, Tl-208, Po-212)	10 ⁵	10^{2}
Ra-225	10 ⁴	
Ra-226+ (including Rn-222, Po-218, Pb-214, Bi-214, Pb-210, Bi-210, Po-	10	10
210, Po-214)		
Ra-227	10^{6}	10^{2}
Ra-228+ (including Ac-228)	10 ⁵	10
Ac-228	10 ⁶	10
Th-226+ (including Ra-222, Rn-218,	10 ⁷	10^3
Po-214)	10	10
Th-227	104	10
Th-227 Th-228+ (including Ra-224, Rn-220,	10 ⁴	1
Po-216, Pb-212, Bi-212, Po-212, Tl-	10	
208)		
Th-229+ (including Ra-225, Ac-225,	10 ³	1
Fr-221, At-217, Bi-213, Po-213, Pb-		
209)		
Th-230	10 ⁴	1
Th-231	10 ⁷	10^{3}
Th-232 sec	10^{3}	1
(including Ra-228, Ac-228, Th-228,		
Ra-224, Rn-220, Po-216, Pb-212, Bi-		
212, Po-212, Tl-208)		
Th-234+	10 ⁵	10^{3}
(including Pa-234m)		
Pa-230	10^{6}	10
Pa-231	10^{3}	1

Radionuclides	Maximum quantity (Bq) on any premises	Maximum concentration (Bq/g)
Pa-233	10^7	10^2
U-230+	10 ⁵	10
(including Th-226, Ra-222, Rn-218,		10
Po-214)		
U-231	10^{7}	10^2
U-232+	10^{3}	1
(including Th-228, Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Tl-208, Po-212)		
U-233	10 ⁴	10
U-234	104	10
U-235+	10 ⁴	10
(including Th-231)	10	10
U-236	10 ⁴	10
U-237	10 ⁶	10^2
U-238+	104	10
(including Th-234, Pa-234m)		
U-238 sec	10 ³	1
(including Th-234, Pa-234m, U-234,		
Th-230, Ra-226, Rn-222, Po-218, Pb-214, Bi-214, Pb-210, Bi-210, Po-210, Po-214)		
U-239	10^{6}	10^{2}
U-240	10^{7}	10^{3}
U-240+	10 ⁶	10
(including Np-240)		
Np-237+	10^{3}	1
(including Pa-233)		
Np-239	10^{7}	10^2
Np-240	10^{6}	10
Pu-234	10^{7}	10^{2}
Pu-235	10 ⁷	10^{2}
Pu-236	10 ⁴	10
Pu-237	10^{7}	10^{3}
Pu-238	10 ⁴	1
Pu-239	10 ⁴	1
Pu-240	10^{3}	1
Pu-241	10^{5}	10^{2}
Pu-242	10 ⁴	1
Pu-243	10^{7}	10^{3}
Pu-244	10^{4}	1
Am-241	10 ⁴	1
Am-242	10^{6}	10^{3}
Am-242m+	10 ⁴	1
(including Am-242)		
Am-243+	10^{3}	1
(including Np-239)		
Cm-242	10^{5}	10^{2}
Cm-243	10 ⁴	1

Radionuclides	Maximum quantity (Bq) on any premises	Maximum concentration (Bq/g)
Cm-244	10 ⁴	10
Cm-245	10^{3}	1
Cm-246	10^{3}	1
Cm-247	10 ⁴	1
Cm-248	10^{3}	1
Bk-249	10^{6}	10^{3}
Cf-246	10^{6}	10^{3}
Cf-248	10 ⁴	10
Cf-249	10^{3}	1
Cf-250	10 ⁴	10
Cf-251	10 ³	1
Cf-252	10 ⁴	10
Cf-253	10 ⁵	10^2
Cf-254	10^{3}	1
Es-253	10^{5}	10^{2}
Es-254	10 ⁴	10
Es-254m	10^{6}	10^{2}
Fm-254	10 ⁷	10^{4}
Fm-255	10 ⁶	10^{3}
Any radionuclide not listed above	10 ³	1

- (b) "the table 3 first summation rule" means the sum of the quotient A/B where—
 - (i) "A" means the quantity of each radionuclide listed in column 1 of table 3 that is present in the substance or article; and
 - (ii) "B" means the quantity of that radionuclide specified in column 2 of table 3;
- (c) "the table 3 second summation rule" means the sum of the quotient C/D where—
 - (i) "C" means the concentration of each radionuclide listed in column 1 of table 3 that is present in the substance or article; and
 - (ii) "D" means the concentration of that radionuclide specified in column 3 of table 3; and
- (d) a reference to table 4 is a reference to the following table—

Table 4
Radioactive material and accumulated radioactive waste: values of maximum quantities

Radioactive material or accumulated radioactive waste	Maximum quantity of radionuclides for each item of material	Maximum quantity of radionuclides in items of that material on any premises or held by a person where the material is or is a part of a mobile radioactive apparatus
A sealed source	4x10 ⁵ Bq of alpha activity or 4x10 ⁶ Bq of other activity	$\sum Bq \text{ alpha/2x10}^7 + Bq$ other $/2x10^8 \le 1$
A Class A gaseous tritium lighting device	2x10 ¹⁰ Bq	$5x10^{12} \text{ Bq}$
A Class B gaseous tritium lighting device	1x10 ¹² Bq	$3x10^{13}$ Bq

Radioactive material or accumulated radioactive waste	Maximum quantity of radionuclides for each item of material	Maximum quantity of radionuclides in items of that material on any premises or held by a person where the material is or is a part of a mobile radioactive apparatus
A Class C gaseous tritium lighting device	1x10 ¹² Bq	No limit
Any sealed source containing solely tritium as the radioactive component	2x10 ¹⁰ Bq	5x10 ¹² Bq
A tritium foil source	2x10 ¹⁰ Bq	5x10 ¹² Bq
A smoke detector affixed to premises	4x10 ⁶ Bq	No limit
An electrodeposited source	6x10 ⁸ Bq Ni-63 or 2x10 ⁸ Bq Fe-55	6x10 ¹¹ Bq
A luminised article	8x10 ⁷ Bq Pm-147 or	4x10 ¹⁰ Bq Pm-147 or
(unsealed source)	$4x10^9$ Bq H-3	2x10 ¹¹ Bq H-3
Radioactive material which is or contains magnesium alloy or thoriated tungsten	4% thorium by mass	No limit
Radioactive material which is or contains metallic uranium or thorium, or prepared compounds of uranium or thorium in which the uranium-235 concentration is no more than 0.72% in the case of uranium, and the thorium is in its isotopic proportions found in nature	Not applicable	5Kg uranium or thorium
A Ba-137m eluting source	$4x10^4$ Bq Cs-137	$4x10^5$ Bq Cs-137

Interpretation: other radioactive waste tables

3. In this Part—

(a) a reference to table 5 is a reference to the following table—

Table 5
Radioactive waste: values of quantities and concentrations and disposal routes

Radioactive waste	1 ,	Maximum quantity	Disposal route
	or concentration of radionuclides	of waste to be disposed of in the	
	radioniciaes	period stated	
Solid radioactive	4x10 ⁵ Bq of all	2x10 ⁸ Bq/year	The standard
waste, with no	radionuclides		disposal route
single item $> 4 \times 10^4$	(except tritium and		
Bq	C-14) per 0.1 m ³		

Radioactive waste	Maximum quantity	Maximum quantity	Disposal route
	or concentration of radionuclides	of waste to be disposed of in the period stated	1
Solid radioactive waste containing tritium and C-14 only, with no single item > 4x10 ⁵ Bq	4x10 ⁶ Bq of tritium and C-14 per 0.1 m ³	2x10 ⁹ Bq/year	The standard disposal route
Individual sealed sources	2x10 ⁵ Bq of all radionuclides per 0.1 m ³	1x10 ⁷ Bq/year	The standard disposal route
Individual sealed sources containing only tritium as a radioactive component	2x10 ¹⁰ Bq of tritium per 0.1 m ³	1x10 ¹³ Bq/year	The standard disposal route
Luminised articles with no single item containing > 8x10 ⁷ Bq of Pm-147 or > 4x10 ⁹ of tritium	8x10 ⁷ Bq per 0.1 m ³ of Pm-147 or 4x10 ⁹ for tritium per 0.1 m ³	2x10 ⁹ Bq/year of Pm-147 or 1x10 ¹¹ Bq/year of tritium	The standard disposal route
Sealed sources (other than those listed in the rows above)	No limit	No limit	Only to a person lawfully entitled to receive them
Radioactive waste in aqueous solution being human excreta	No limit	1x10 ¹⁰ Bq/year Tc- 99m and 5x10 ⁹ Bq/year of all other radionuclides	To a sewer
Radioactive waste in aqueous solution	1x10 ² Bq/ml	1x10 ⁸ Bq/year for the sum of the following radionuclides: H-3, C-11, C-14, F-18, P- 32, P-33, S-35, Ca- 45, Cr-51, Fe-55, Ga-67, Sr-89, Y-90, Tc-99m, In111, I- 123, I-125, I-131, Sm-153, Tl-201 and 1x10 ⁶ Bq/ year of all other radionuclides	To a sewer
Radioactive waste which consists of organic solutions and liquids containing only tritium and C- 14	1x10 ² Bq/ml	1x10 ⁶ Bq/year	By incineration
Radioactive waste which consists of magnesium alloy, thoriated tungsten or dross from hardener alloy	4% thorium by mass	No limit	The standard disposal route

Radioactive waste	Maximum quantity or concentration of radionuclides	Maximum quantity of waste to be disposed of in the period stated	Disposal route
Radioactive waste which is or contains uranium or thorium or prepared compounds of uranium or thorium in which the uranium-235 concentration is no more than 0.72% in the case of uranium, and the thorium is in its isotopic proportions found in nature	No limit	0.5Kg uranium or thorium per week	Where the waste is a solid, the standard disposal route; Where the waste is an aqueous liquid, to a sewer

(b) a reference to table 6 is a reference to the following table—

Table 6
Aqueous radioactive waste values

Radionuclide	Concentration level in Bq / litre
H-3	10^{3}
Be-7	1
C-14	0.1
F-18	0.1
Na-22	1
Na-24	1
Si-31	10
P-32	0.001
P-33	0.001
S-35	10
C1-36	10
Cl-38	0.1
K-42	0.01
K-43	0.01
Ca-45	1
Ca-47	0.1
Sc-46	0.001
Sc-47	0.01
Sc-48	0.001
V-48	1
Cr-51	10
Mn-51	0.001
Mn-52	0.001
Mn-52m	0.001
Mn-53	1
Mn-54	0.01
Mn-56	0.001

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Radionuclide	Concentration level in Bq / litre
Fe-52	0.01
Fe-55	1
Fe-59	0.01
Co-55	0.001
Co-56	0.001
Co-57	0.1
Co-58	0.1
C0-58m	1
Co-60	0.01
Co-60m	1
Co-61	0.1
Co-62m	0.001
Ni-59	1
Ni-63	10^{2}
Ni-65	0.01
Cu-64	0.1
Zn-65	0.1
Zn-69	10
Zn-69m	0.1
Ga-67	0.1
Ga-72	0.001
Ge-71	1
As-73	10
As-74	1
As-76	1
As-77	1
Se-75	0.1
Br-82	0.1
Rb-86	0.1
Sr-85	0.1
Sr-85m	0.1
Sr-87m	0.1
Sr-89	1
Sr-90+ (including Y-90)	0.1
Sr-91	0.01
Sr-92	0.01
Y-90	1
Y-91	1
Y-91m	0.01
Y-92	0.1
Y-93	0.1
Zr-93	10
Zr-95+ (including Nb-95)	0.001
Zr-97	0.01
Nb-93m	10
Nb-94	0.1
Nb-95	1
Nb-97	1
Nb-98	0.1
Mo-90	0.1
IVIU-YU	U.1

Radionuclide	Concentration level in Bq / litre
Mo-93	1
Mo-99	0.1
Mo-101	0.01
Tc-96	1
Tc-96m	100
Tc-97	100
Tc-97m	10
Tc-99	10
Tc-99m	10
Ru-97	0.01
Ru-103	0.01
Ru-105	0.01
Ru-106+ (including Rh-106)	0.1
Rh-103m	10
Rh-105	1
Pd-103	0.1
Pd-109	0.1
Ag-105	1
Ag-108m	0.1
Ag-110m	0.1
Ag-111	10
Cd-109	1
Cd-115	0.1
Cd-115m	1
In-111	0.01
In-113m	0.01
In-114m	0.01
In-115m	0.01
Sn-113	0.1
Sn-125	0.01
Sb-122	0.1
Sb-124	0.1
Sb-125	1
Te-123m	1
Te-125m	1
Te-127	10
Te-127m	1
Te-129	10
Te-129m	1
Te-131	1
Te-131m	1
Te-132	0.1
Te-133	1
Te-133m	1
Te-134	1
I-123	1
I-125	1
I-126	0.1
I-129	0.1
I-130	0.1

Radionuclide	Concentration level in Bq / litre
I-131	0.1
I-132	0.1
I-133	0.1
I-134	0.1
I-135	0.1
Cs-129	0.01
Cs-131	0.1
Cs-132	0.01
Cs-134	0.01
Cs-134m	0.1
Cs-135	0.1
Cs-136	0.001
Cs-137+ (including Ba-137m)	0.01
Cs-138	0.001
Ba-131	0.1
Ba-140	0.1
La-140	0.001
Ce-139	0.1
Ce-141	0.1
Ce-143	0.01
Ce-143	0.1
Pr-142	0.1
Pr-143	10
Nd-147	0.01
Nd-147 Nd-149	0.01
Pm-147	10
Pm-149	1
Sm-151	100
Sm-153	0.1
Eu-152	0.01
Eu-152 Eu-152m	0.01
Eu-152m Eu-154	0.01
	0.1
Eu-155	0.1
Gd-153 Gd-159	0.1
Tb-160	0.01
Dy 166	0.1
Dy-166	0.1
Ho-166	0.1
Er-169	10
Er-171	0.01
Tm-170	1
Tm-171	10
Yb-175	0.1
Lu-177	0.1
Hf-181	0.01
Ta-182	0.001
W-181	0.1
W-185	1
W-187	0.01

Radionuclide	Concentration level in Bq / litre
Re-186	1
Re-188	1
Os-185	0.01
Os-191	0.1
Os-191 Os-191m	1
Os-191111 Os-193	0.1
Ir-190	0.001
Ir-192	0.01
Ir-194	0.1
Pt-191	0.01
Pt-193m	1
Pt-197	0.1
Pt-197m	0.1
Au-198	1
	1
Au-199 Hg-197	1
Hg-197m	0.1
	0.1
Hg-203 Tl-200	0.1
	0.01
TI-201	0.01
TI-202	
Tl-204	0.1
Pb-203	0.01
Pb-210	0.001
Pb-212	0.1
Bi-206	0.01
Bi-207	0.1
Bi-210	10
Bi-212	1
Po-203	0.001
Po-205	0.001
Po-207	0.001
Po-210	0.001
At-211	1
Ra-223	0.01
Ra-224+ (including Pb212)	0.1
Ra-225	0.01
Ra-226+ (including Rn-222, Po-218, Pb-214, B-214, Po-214)	0.01
Ra-227	1
Ra-228	0.01
Ac-227	0.1
Ac-228	0.001
Th-226	
Th-227	0.01
Th-228	1
Th-229	0.01
Th-230	1
Th-231	0.1
Th-232	1

Radionuclide	Concentration level in Bq / litre
Th-234	0.1
Pa-230	0.01
Pa-231	0.01
Pa-233	0.1
U-230	0.1
U-231	10
U-232	0.1
U-233	0.1
U-234	0.1
U-235+ (including Th-231)	0.1
U-236	0.1
U-237	10
U-238+ (including Th-234, Pa-234m, Pa-	0.1
234)	0.1
U-239	10
U-240	10
Np-237	0.1
Np-239	1
Np-240	0.1
Pu-234	0.01
Pu-235	0.01
Pu-236	1
Pu-237	0.1
Pu-238	0.1
Pu-239	0.1
Pu-240	0.1
Pu-241	10
Pu-242	0.1
Pu-243	0.1
Pu-244	0.1
Am-241	0.1
Am-242	0.1
Am-242m	0.1
Am-243	0.1
Cm-242	1
Cm-243	0.1
Cm-244	0.1
Cm-245	0.01
Cm-246	0.1
Cm-247	0.01
Cm-248	0.1
Bk-249	100
Cf-246	1
Cf-248	1
Cf-249	0.01
Cf-250	0.1
Cf-251	0.01
Cf-251	0.1
Cf-253	10
Cf-254	0.0001
C1 2JT	0.0001

Radionuclide	Concentration level in Bq / litre
Es-253	1
Es-254	0.1
Es-254m	0.01
Fm-254	1
Fm-255	0.1
Any other radionuclide that is not of natural terrestrial or cosmic origin (where that radionuclide emits alpha particles)	0.0001 That concentration level which gives rise to the same 10 µSv/ year dose criteria as used in this table, calculated using methods adopted by the Health Protection Agency in their document X published on Y
Any other radionuclide that is not of natural terrestrial or cosmic origin (where that radionuclide emits beta particles)	0.001 That concentration level which gives rise to the same 10 µSv/ year dose criteria as used in this table, calculated using methods adopted by the Health Protection Agency in their document X published on Y

- (c) "the table 6 summation rule" means the sum of the quotient A/B where—
 - (i) "A" means the concentration of each radionuclide listed in column 1 of table 6 that is present in the substance or article; and
 - (ii) "B" means the concentration of that radionuclide specified in column 2 of table 6.

SECTION 2

Exemption for keeping and using radioactive material

Exemption: radioactive material

- **4.** A person is exempt from the requirement for an environmental permit where that person carries on the radioactive substances activity described in paragraph 5(2)(a) of Part 2 of this Schedule in relation to—
 - (a) subject to paragraph 7, the radioactive material in paragraph 5, where that person complies with the conditions in paragraph 6;
 - (b) radioactive material stored in transit, where that person complies with the conditions in regulation 29.

Radioactive material

- **5.** Radioactive material referred to in paragraph 4(a) means any of the following radioactive material—
 - (a) material where—
 - (i) the material is not material—
 - (aa) described in column 1 of table 4; or
 - (bb) which satisfies sub-paragraph (d);
 - (ii) the quantity of any radionuclide listed in column 1 of table 3 in all such material on a premises does not exceed the value specified in column 2 of that table adjacent to that radionuclide; and
 - (iii) the sum of the quotient values of all such radionuclides in all such material on a premises, as determined by the table 3 first summation rule, is less than or equal to one;

- (b) material where—
 - (i) the material is not material—
 - (aa) described in column 1 of table 4; or
 - (bb) which satisfies sub-paragraph (d);
 - (ii) the concentration of any radionuclide listed in column 1 of table 3 in all such material on a premises does not exceed the value specified in column 3 of that table adjacent to that radionuclide; and
 - (iii) the sum of the quotient values of all such radionuclides in all such material on a premises, as determined by the table 3 second summation rule, is less than or equal to one;
- (c) material described in column 1 of table 4 which is not mobile radioactive apparatus and where the quantity of radionuclides—
 - (i) in any item of that material does not exceed the value specified in column 2 of that table; and
 - (ii) in items of that material on the premises where it is kept or used does not exceed the value specified in column 3 of that table;
- (d) material—
 - (i) which is not a sealed source;
 - (ii) which is intended for use for medical or veterinary diagnosis or treatment or clinical or veterinary trials; and
 - (iii) where the quantity on the premises of—
 - (aa) Tc-99m in that material does not exceed 1x10⁹ Bq; and
 - (bb) any other radionuclides in that material does not exceed 1x10⁸ Bq in total.

Conditions in respect of radioactive material

- **6.** A person to whom paragraph 4(a) applies must—
 - (a) keep an adequate record of the radioactive material which the person keeps or uses on any premises, and the location within those premises where it is kept or used;
 - (b) ensure that where practicable such material is marked or labelled as radioactive material;
 - (c) when not in use, store the radioactive material safely and securely to prevent, so far as practicable, accidental removal, loss or theft from the premises where the person keeps or uses the material;
 - (d) in respect of an incident of loss or theft, or suspected loss or theft, of the radioactive material which the person keeps or uses on any premises, notify the incident to the regulator as soon as practicable;
 - (e) where any unintentional loss of containment takes place or is suspected to have taken place, notify the incident to the regulator as soon as practicable;
 - (f) in respect of a sealed source or packaged radioactive material, not modify or mutilate that source or package or cause a loss of containment such that radioactive material may be released outside the source or package;
 - (g) allow the regulator access to such records or such premises as the regulator may request in order to determine that the above conditions are complied with; and
 - (h) not bring any mobile radioactive apparatus onto any premises where this would cause the value specified in column 3 of table 4 to be exceeded in respect of the combined quantities of radionuclides in—
 - (i) items of radioactive material described in column 1 of table 4 which are kept or used on the premises but which are not mobile radioactive apparatus; and

(ii) items of that material which are mobile radioactive apparatus and which are on the premises.

Scope of exemption

- 7.—(1) This paragraph applies to a person ("A") who has an environmental permit in relation to the radioactive substances activity described in paragraph 5(2)(a) of Part 2 of this Schedule.
- (2) Paragraph 4(a) does not apply to A in relation to material described in paragraph 5(a) or (b) where the environmental permit of A applies to radioactive material which is being kept or used and which is—
 - (a) described in paragraph 5(a)(i) in respect of which the value in paragraph 5(a)(ii) or 5(a)(iii) is exceeded; or
 - (b) described in paragraph 5(b)(i) in respect of which the value in paragraph 5(b)(ii) or 5(b)(iii) is exceeded.
- (3) Paragraph 4(a) does not apply to A in relation to any items of a particular class of radioactive material described in one of the rows of table 4 where—
 - (a) the environmental permit of A relates to the keeping or using of an item or items of that class (not being mobile radioactive apparatus); and
 - (b) in respect of the item or items of that class covered by the environmental permit (not being mobile radioactive apparatus) in relation to that activity the values in paragraph 5(c)(i) or (ii) are exceeded.
- (4) Paragraph 4(a) does not apply to A in relation to the material that meets the description in both paragraph 5(d)(i) and (ii) where—
 - (a) the environmental permit of A relates to the keeping or using of that type of material; and
 - (b) in respect of all such material covered by the environmental permit in relation to that activity the values in paragraph 5(d)(iii)(aa) or (bb) are exceeded.

SECTION 3

Exemption for keeping and using mobile radioactive apparatus

Exemption: mobile radioactive apparatus

- **8.** A person is exempt from the requirement for an environmental permit where that person carries on the radioactive substances activity described in paragraph 5(5) of Part 2 of this Schedule in relation to—
 - (a) subject to paragraph 11, mobile radioactive apparatus in paragraph 9, where that person complies with the conditions in paragraph 10;
 - (b) mobile radioactive apparatus stored in transit, where that person complies with the conditions in paragraph 29.

Radioactive material: mobile radioactive apparatus

- **9.** Mobile radioactive apparatus referred to in paragraph 8(a) means the radioactive material described in column 1 of table 4 where the quantity of radionuclides—
 - (a) in any item of that material does not exceed the value specified in column 2 of that table; and
 - (b) in items of that material held by a person does not exceed the value specified in column 3 of that table, in relation only to items which are mobile radioactive apparatus.

Conditions in respect of mobile radioactive apparatus

- 10. A person to whom paragraph 8(a) applies must—
 - (a) keep an adequate record of the mobile radioactive apparatus which the person keeps or uses, and the location at which it is kept or used;
 - (b) ensure that where practicable such mobile radioactive apparatus is marked or labelled as radioactive material;
 - (c) when not in use, store the mobile radioactive apparatus safely and securely to prevent, so far as practicable, accidental removal, loss or theft of the apparatus;
 - (d) in respect of an incident of loss or theft, or suspected loss or theft, of the mobile radioactive apparatus which the person keeps or uses, notify the incident to the regulator as soon as practicable;
 - (e) where any unintentional loss of containment takes place or is suspected to have taken place, notify the incident to the regulator as soon as practicable;
 - (f) in respect of a sealed source, not modify or mutilate that source or cause a loss of containment such that radioactive material may be released outside the source; and
 - (g) allow the regulator access to such records or such premises as the regulator may request in order to determine that the above conditions are complied with.

Scope of exemption

- 11.—(1) Sub-paragraph (2) applies to a person ("A") who has an environmental permit in relation to the radioactive substances activity described in paragraph 5(5) of Part 2 of this Schedule.
- (2) Paragraph 8(a) does not apply to A in relation to any items of a particular class of radioactive material described in one of the rows of table 4 where—
 - (a) the environmental permit of A relates to an item or items of that class (being mobile radioactive apparatus); and
 - (b) in respect of such item or items of that class covered by the environmental permit the values in paragraph 9(a) or (b) are exceeded.

SECTION 4

Exemption for disposing of solid radioactive waste

Exemption: disposal of solid radioactive waste

- **12.** Subject to paragraph 15, a person is exempt from the requirement for an environmental permit in respect of radioactive waste which satisfies paragraph 13, in relation to—
 - (a) a disposal activity where that person complies with the conditions in paragraph 14; or
 - (b) a receiving activity.

Solid radioactive waste

- **13.** Radioactive waste referred to in paragraph 12 means radioactive waste described in column 1 of table 5 where—
 - (a) the waste is solid;
 - (b) the quantity or concentration level of any radionuclide which the waste contains does not exceed the value specified in column 2 of that table adjacent to the type of waste; and

(c) the quantity of the waste or, as applicable, the quantity of any radionuclide which that waste contains, does not exceed the value specified in column 3 of that table adjacent to the type of waste during the period stated in that column,

but not such waste which has been subject to a process of dilution intended to ensure that sub-paragraph (b) or (c) is met.

Conditions in respect of solid radioactive waste

- **14.**—(1) Subject to sub-paragraphs (2) and (3), a person to whom paragraph 12 or paragraph 21 applies must—
 - (a) keep an adequate record of the solid radioactive waste which the person disposes of on or from any premises;
 - (b) where any unintended loss of containment takes place or is suspected to have taken place, notify the incident to the regulator as soon as practicable;
 - (c) dispose of the waste by the route described in column 4 of table 5, except—
 - (i) in relation to NORM waste to which no exemption under paragraph 12 applies but an exemption in paragraph 21 applies; or
 - (ii) where the solid radioactive waste is disposed of to a person who holds—
 - (aa) an authorisation under section 13 (disposal of radioactive waste) or 14 (accumulation of radioactive waste) of the 1993 Act to dispose of or accumulate that waste having effect in Scotland or Northern Ireland; or
 - (bb) an environmental permit in relation to the radioactive substances activity in paragraph 5(2)(b) or (c) of Part 2 of this Schedule to dispose of or accumulate that waste;
 - (d) ensure that where practicable any marking or labelling of the waste or its container is removed before the person disposes of that waste as provided under (c);
 - (e) where the waste is a disused high-activity source, notify the details of the disposal to the regulator within 14 days of the disposal; and
 - (f) allow the regulator access to such records or such premises as the regulator may request in order to determine that the above conditions are complied with.
- (2) Sub-paragraph (1) does not apply to a person who receives radioactive waste for disposal where in respect of the premises on which the disposal takes place, that person manages, treats or disposes of substantial quantities of waste which is not radioactive.
 - (3) Sub-paragraph (1)(e) does not apply in relation to a gaseous tritium lighting device.

Scope of exemption

- **15.** Where a person ("A") holds an environmental permit in relation to solid or non-aqueous liquid radioactive waste described in column 1 of table 5 in respect of which the value in paragraph 13(b) or (c) is exceeded, and in relation to that activity that permit relates to—
 - (a) a disposal activity, then paragraph 12(a) of this Part does not apply to A; or
 - (b) a receiving activity, then paragraph 12(b) of this Part does not apply to A.

SECTION 5

Exemption for disposal of aqueous radioactive waste

Exemption: disposal of aqueous radioactive waste

16. Subject to paragraph 19, a person is exempt from the requirement for an environmental permit in respect of aqueous radioactive waste which satisfies paragraph 17 in relation to—

- (a) a disposal activity, where that person complies with the conditions in paragraph 18; or
- (b) a receiving activity.

Aqueous radioactive waste

- 17. Aqueous radioactive waste referred to in paragraph 16 means—
 - (a) aqueous radioactive waste which contains any radionuclide listed in column 1 of table 6 where—
 - (i) the concentration level of any such radionuclide in that waste does not exceed the value specified in column 2 of that table adjacent to the radionuclide; and
 - (ii) the sum of the quotient values of all such radionuclides in that waste, as determined by the table 6 summation rule, is less than or equal to one, or
 - (b) aqueous radioactive waste described in column 1 of table 5 where—
 - (i) the quantity or concentration level of any radionuclide which the waste contains does not exceed the value specified in column 2 of that table adjacent to the type of waste; and
 - (ii) the quantity of the waste or, as applicable, the quantity of any radionuclide which that waste contains, does not exceed the value specified in column 3 of that table adjacent to the type of waste during the period stated in that column,

but not such waste which has been subject to a process of dilution intended to ensure that sub-paragraph (a) or (b) is met.

Conditions in respect of aqueous radioactive waste

- **18.**—(1) Subject to paragraph 18(2), a person to whom paragraph 16 applies must—
 - (a) not dispose of more than a total of 3000 m³ of aqueous waste under the exemption in article 16 in any twelve month period;
 - (b) keep an adequate record of the aqueous radioactive waste which the person disposes of on or from any premises;
 - (c) dispose of the radioactive waste which satisfies paragraph 17(a) by sending it from the premises where the disposal occurs using a pipeline;
 - (d) dispose of the radioactive waste which satisfies paragraph 17(b) from the premises where the disposal occurs by the route specified in column 4 of table 5; and
 - (e) allow the regulator access to such records or such premises as the regulator may request in order to determine that the above conditions are complied with.
- (2) Paragraph 18(1)(b) and (c) does not apply where the aqueous radioactive waste is disposed of to a person who holds—
 - (a) an authorisation under section 13 (disposal of radioactive waste) or 14 (accumulation of radioactive waste) of the 1993 Act to dispose of or accumulate that waste having effect in Scotland or Northern Ireland; or
 - (b) an environmental permit in relation to the radioactive substances activity in paragraph 5(2)(b) or (c) of Part 2 of this Schedule to dispose of or accumulate that waste.

Scope of exemption

- 19. Where a person ("A") holds an environmental permit in relation to radioactive waste in respect of which the value in paragraph 17(a) or 17(b) of this Part is exceeded, and in relation to that activity that permit relates to—
 - (a) a disposal activity, then paragraph 16(a) of this Part does not apply to A; or

(b) a receiving activity, then paragraph 16(b) of this Part does not apply to A.

SECTION 6

Exemption for disposal of gaseous waste

Exemption: disposal of gaseous waste

- **20.**—(1) Subject to paragraph 20(2), a person is exempt from the requirement for an environmental permit in relation to a disposal activity in respect of gaseous radioactive waste which arises from a process which is applied to solid or liquid radioactive material described in paragraph 5 or paragraph 9 of this Part if where practicable, that person—
 - (a) in respect of waste which arises in a building, causes the waste to be disposed of by an extraction system which removes the waste from the area where it arose and which vents the waste into the atmosphere;
 - (b) prevents the entry or, where (a) applies, the re-entry, of the waste into a building.
- (2) Paragraph 20(1) does not apply where the main purpose of the process applied to the solid or liquid material is the generation of the gaseous radioactive waste.

SECTION 7

Exemption for disposal of NORM waste

Exemption from authorisation under section 13 for NORM waste

- **21.**—(1) Subject to paragraph 24, a person is exempt from the requirement for an environmental permit in relation to a disposal activity in respect of—
 - (a) NORM waste described in paragraph 22(1) where—
 - (i) that person complies with paragraph 14; and
 - (ii) the NORM waste is disposed of to the standard disposal route, except where the NORM waste is disposed of to a person who holds—
 - (aa) an authorisation under section 13 (disposal of radioactive waste) or 14 (accumulation of radioactive waste) of the 1993 Act to dispose of or accumulate that waste having effect in Scotland or Northern Ireland; or
 - (bb) an environmental permit in relation to the radioactive substances activity in paragraph 5(2)(b) or (c) of Part 2 of this Schedule to dispose of or accumulate that waste;
 - (b) NORM waste described in paragraph 22(2) where—
 - (i) that person complies with the conditions in paragraphs 14 and 23; and
 - (ii) the NORM waste is disposed of to the standard disposal route, except where the NORM waste is disposed of to a person who holds—
 - (aa) an authorisation under section 13 (disposal of radioactive waste) or 14 (accumulation of radioactive waste) of the 1993 Act to dispose of or accumulate that waste having effect in Scotland or Northern Ireland; or
 - (bb) an environmental permit in relation to the radioactive substances activity in paragraph 5(2)(b) or (c) of Part 2 of this Schedule to dispose of or accumulate that waste.
- (2) Subject to paragraph 24, a person is exempt from the requirement for an environmental permit in relation to a receiving activity in respect of—
 - (a) NORM waste described in paragraph 22(1); or
 - (b) NORM waste described in paragraph 22(1).

Exemption from authorisation under section 13: other NORM waste

- **22.**—(1) The NORM waste referred to in paragraph 21(1)(a) means NORM waste where—
 - (a) the sum of the concentration levels of the single radionuclide with the highest concentration in each of the natural decay chains beginning with—
 - (i) U-238;
 - (ii) U-235; and
 - (iii) Th-232,

contained in that waste does not exceed 5 Bq/g; and

- (b) the product of A and B does not exceed $5x10^4$ where—
 - (i) "A" means the total quantity of a NORM waste that satisfies paragraph (a) disposed of per year in metric tonnes; and
 - (ii) "B" means the actual sum of the concentration levels in Bq/g of radionuclides contained within that waste calculated in accordance with paragraph (a).
- (2) The NORM waste referred to in paragraph 21(1)(b) means NORM waste where—
 - (a) the sum of the concentration levels of the radionuclides contained in that waste calculated in accordance with paragraph 22(1)(a) exceeds 5 Bq/g but does not exceed 10 Bq/g; or
 - (b) the sum of the concentration levels of the radionuclides contained in that waste calculated in accordance with paragraph 22(1)(a) does not exceed 5 Bq/g but paragraph 22(1)(b) is not satisfied.

Conditions in respect of NORM waste to which paragraph 22(2) applies

- **23.** A person to whom paragraph 21(1)(b) applies—
 - (a) must make a written radiological assessment of the reasonably foreseeable pathways for the exposure of workers and the public to radiation in respect of the place where the waste is disposed of;
 - (b) must be satisfied that the assessment demonstrates that radiation doses are not expected to exceed—
 - (i) 1mSv a year to workers at the place of disposal; and
 - (ii) 300µSv a year to the public;
 - (c) must provide that assessment to the regulator at least 28 days before the first disposal is made; and
 - (d) must not dispose of that waste if an objection is made in writing by the regulator to that assessment.

Scope of exemption

- **24.**—(1) Sub-paragraphs (2) and (3) apply to a person ("A") who has an environmental permit in relation to a disposal activity.
- (2) Paragraph 21(1)(a) does not apply to A where the environmental permit applies to the disposal of NORM waste in respect of which—
 - (a) paragraph 22(1)(a) is not satisfied; or
 - (b) paragraph 22(1)(a) is satisfied but paragraph 22(1)(b) is not satisfied.
- (3) Paragraph 21 does not apply to A where the environmental permit applies to the disposal of NORM waste in respect of which the sum of the concentration levels of the radionuclides contained in that waste calculated in accordance with paragraph 22(1)(a) exceeds 10 Bq/g.

- (4) Sub-paragraphs (5) and (6) apply to a person ("A") who has an environmental permit in relation to a receiving activity.
- (5) Paragraph 21(1)(a) does not apply to A where the environmental permit applies to the receipt of NORM waste in respect of which—
 - (a) paragraph 22(1)(a) is not satisfied; or
 - (b) paragraph 22(1)(a) is satisfied but paragraph 22(1)(b) is not satisfied.
- (6) Paragraph 21 does not apply to A where the environmental permit applies to the receipt of NORM waste in respect of which the sum of the concentration levels of the radionuclides contained in that waste calculated in accordance with paragraph 22(1)(a) exceeds 10 Bq/g.

SECTION 8

Exemption for accumulation of radioactive waste

Exemption: accumulation of radioactive waste

- **25.** A person is exempt from the requirement for an environmental permit in relation to the radioactive substances activity described in paragraph 5(2)(c) of Part 2 of this Schedule in respect of—
 - (a) subject to paragraph 28, radioactive waste in paragraph 26, where that person complies with the conditions in paragraph 27;
 - (b) radioactive waste stored in transit, where that person complies with the conditions in paragraph 29.

Radioactive waste

- **26.**—(1) Radioactive waste referred to in paragraph 25(a) means any of the following radioactive waste—
 - (a) subject to sub-paragraph (2), waste where—
 - (i) the quantity of any radionuclide listed in column 1 of table 3 in that waste together with any radioactive material on the premises where the waste is accumulated does not exceed the value specified in column 2 of that table adjacent to that radionuclide; and
 - (ii) the sum of the quotient values of all such radionuclides in that waste and material, as determined by the table 3 first summation rule, is less than or equal to one;
 - (b) subject to sub-paragraph (2), waste where—
 - (i) the concentration of any radionuclide listed in column 1 of table 3 in that waste together with any radioactive material on the premises where the waste is accumulated does not exceed the value specified in column 3 of that table; and
 - (ii) the sum of the quotient values of all such radionuclides in that waste and material, as determined by the table 3 second summation rule, is less than or equal to one;
 - (c) waste described in column 1 of table 4 where the quantity of radionuclides—
 - (i) in any item of that waste does not exceed the value specified in column 2 of that table; and
 - (ii) in items of that waste, together with any items of the same class which are radioactive material, on the premises where it is accumulated does not exceed the value specified in column 3 of that table;

- (d) waste which arises from the use of radioactive material for medical or veterinary diagnosis or treatment or clinical or veterinary trials which is not a sealed source where the quantity of radionuclides in that waste, together with the quantity of radionuclides in radioactive material that meets the descriptions in paragraph 5(d)(i) and (ii) on the premises where the waste is accumulated does not exceed—
 - (i) in respect of Tc-99m in that waste and material, $1x10^9$ Bq; and
 - (ii) in respect of any other radionuclides in that waste and material, $1x10^8$ Bq in total;
- (e) NORM waste where the sum of the concentration levels of the radionuclides contained in that waste calculated in accordance with paragraph 22(1)(a) does not exceed $1x10^{10}$ Bq.
- (2) Items listed in column 1 of table 4 are not considered radioactive material or radioactive waste for the purposes of sub-paragraph (1)(a) or (b).

Conditions in respect of the accumulation of radioactive waste

- 27.—(1) Subject to sub-paragraph (2), a person to whom paragraph 25(a) applies must—
 - (a) keep an adequate record of the radioactive waste which the person accumulates;
 - (b) ensure that where practicable the radioactive waste or the container of such waste is marked or labelled as radioactive waste;
 - (c) except where (d) applies, dispose of the radioactive waste as soon as practicable after it has become waste;
 - (d) dispose of a sealed source, a tritium foil source or an electrodeposited source within 26 weeks of it becoming waste unless the regulator advises in writing that a longer period of accumulation may take place;
 - (e) store safely and securely the radioactive waste to prevent, so far as practicable—
 - (i) accidental removal, loss or theft from the premises where the person accumulates it; or
 - (ii) loss of containment;
 - (f) in respect of an incident of loss or theft, or suspected loss or theft, of the radioactive waste, notify the incident to the regulator as soon as practicable;
 - (g) where any loss of containment takes place or is suspected to have taken place, notify the incident to the regulator as soon as practicable;
 - (h) allow the regulator access to such records or such premises as the regulator may request in order to determine that the above conditions are complied with; and
 - (i) not bring any mobile radioactive apparatus onto any premises where this would cause the value specified in column 3 of table 4 to be exceeded in respect of the combined quantities of radionuclides in the sum of—
 - (i) items of radioactive material described in column 1 of table 4 which are kept or used on the premises but which are not mobile radioactive apparatus;
 - (ii) items of radioactive waste described in column 1 of table 4 which are accumulated on the premises; and
 - (iii) items of that material which are mobile radioactive apparatus and which are on the premises.
- (2) Sub-paragraph (1) does not apply to a person who receives radioactive waste for accumulation where in respect of the premises on which the accumulation takes place, that person manages, treats or disposes of substantial quantities of waste which is not radioactive.

Scope of exemption

- **28.**—(1) Sub-paragraph (2) applies to a person ("A") who has an environmental permit in relation to the radioactive substances activity described in paragraph 5(2)(c) of Part 2 of this Schedule.
- (2) Paragraph 25(a) does not apply to A where the environmental permit of A applies in relation to that activity—
 - (a) to radioactive waste in respect of which the value in paragraph 26(a), (b) or (c) is exceeded;
 - (b) to NORM waste in respect of which the value in paragraph 26(d) is exceeded.

SECTION 9

Radioactive material and radioactive waste stored in transit

Conditions in respect of radioactive material or radioactive waste stored in transit

- **29.** A person to whom paragraph 4(b), 8(b) or 25(b) applies must, in respect of the radioactive material or radioactive waste stored in transit,—
 - (a) in respect of material or waste which is contained in a package or container, not remove the material or waste from the package or container;
 - (b) in respect of an incident of loss or theft, or suspected loss or theft, of such material or waste, notify the incident to the regulator as soon as practicable;
 - (c) where any loss of containment takes place or is suspected to have taken place such that it may increase—
 - (i) the dose of radiation to the public; or
 - (ii) the concentration of radionuclides in the environment,

notify the incident to the regulator as soon as practicable; and

(d) allow the regulator access to such records or such premises as the regulator may request in order to determine that the above conditions are being complied with.

PART 7

Radioactivity to be disregarded SECTION 1

Provisions

Interpretation

- 1. In this Part—
 - "statutory provision" means a provision, whether of a general or a special nature—
 - (a) contained in, or
 - (b) in any document made or issued under,
 - any Act, whether of a general or a special nature;
 - "local enactment" means—
 - (a) a local or private Act, or
 - (b) an order confirmed by Parliament or the Welsh Assembly or brought into operation in accordance with special parliamentary or Assembly procedure;
 - "disposal" in relation to a statutory provision means—
 - (a) the discharge or deposit of a substance, or

(b) allowing a substance to escape or to enter a stream or other place, as may be mentioned in that provision.

Radioactivity disregarded: statutory provisions

- 2. For the purposes of—
 - (a) the operation of any statutory provision to which this paragraph applies; and
 - (b) the exercise or performance of any power or duty conferred or imposed by, or for the enforcement of, any such statutory provision,

no account must be taken of any radioactivity possessed by any substance or article or by any part of any premises.

Statutory provisions including local enactments

- 3. Paragraph 2 applies—
 - (a) to any statutory provision contained in, or for the time being having effect by virtue of, any of the enactments specified in section 2 of this Part, or any enactment for the time being in force whereby an enactment so specified is amended, extended or superseded; and
 - (b) to any statutory provision contained in, or for the time being having effect by virtue of, a local enactment—
 - (i) whether passed or made before or after these Regulations come into force; and
 - (ii) in whatever terms the provision is expressed,
 - and where the matters contained in paragraph 4 apply in relation to such statutory provision.

Disposals and accumulations

- **4.** The matters referred to in paragraph 3(b) in relation to a statutory provision described in that paragraph are—
 - (a) the provision prohibits or restricts the disposal or accumulation of—
 - (i) waste or any description of waste;
 - (ii) any substance—
 - (aa) which is a nuisance or so as to be a nuisance;
 - (bb) which is, or so as to be, prejudicial to health, noxious or polluting; or
 - (cc) of any similar description to that described in (aa) or (bb); or
 - (b) the provision confers a power or imposes a duty on a public authority or officer of such authority for preventing, restricting or abating such disposals or accumulations contained in sub-paragraph (a).

SECTION 2

Statutory provisions to which paragraph 3(a) refers

Statutory provisions

5.—(1) The statutory provisions in respect of the enactments referred to in paragraph 3(a) are those listed in the table in this section.

(2) References to provisions of the Water Resources Act 1991(a) have effect subject to the power conferred by section 98 of that Act.

Table 7 Statutory provisions in respect of which radioactivity is to be disregarded

Act	Provisions
Public Health Act 1936 (c. 49)	Sections 48, 79, 81, 82, 141, 259 and 261
Clean Air Act 1993 (c. 11)	Section 16
Sea Fisheries Regulation Act 1966 (c. 38)	Section 5
Salmon and Freshwater Fisheries Act 1975	Section 4
(c. 51)	
Building Act 1984 (c. 55)	Section 59
The Planning (Hazardous Substances) Act	The whole Act
1990 (c. 10)	
Environmental Protection Act 1990 (c. 43)	Part III
Water Industry Act 1991 (c. 56)	Sections 72, 111, and 113(6);
	In Part IV, Chapter III;
	In Schedule 8, paragraphs 2 to 4 so far as
	they re-enact provisions of sections 43 and
	44 of the Control of Pollution Act 1974(b)
Water Resources Act 1991 (c. 57)	Sections 82, 84, 92, 93, 99, 161, 190, 202, and 203;
	In Schedule 25, paragraph 6
Water Act 1945 (c. 42)	Section 18 so far as it continues to have
	effect by virtue of Schedule 2 to the Water
	Consolidation (Consequential Provisions)
	Act 1991(c) or by virtue of provisions of the
	Control of Pollution Act 1974 not having
	been brought into force
Marine and Coastal Act 2009 (c. 23)	Section 155"

⁽a) 1991 c. 57.(b) 1974 c. 40.(c) 1991 c. 60.

SCHEDULE 3

Revocations

Statutory Instrument Number	Citation
S.I. 1962/2645	The Radioactive Substances (Exhibitions) Exemption Order 1962
S.I. 1962/2646	The Radioactive Substances (Storage in Transit) Exemption Order 1962
S.I. 1962/2648	The Radioactive Substances (Phosphatic Substances, Rare Earths etc) Exemption Order 1962
S.I. 1962/2649	The Radioactive Substances (Lead) Exemption Order 1962
S.I. 1962/2710	The Radioactive Substances (Uranium and Thorium) Exemption Order 1962
S.I. 1962/2711	The Radioactive Substances (Prepared Uranium and Thorium Compounds) Exemption Order 1962
S.I. 1962/2712	The Radioactive Substances (Geological Specimens) Exemption Order 1962
S.I. 1963/1831	The Radioactive Substances (Waste Closed Sources) Exemption Order 1963
S.I. 1963/1832	The Radioactive Substances (Schools etc) Exemption Order 1963
S.I. 1963/1836	The Radioactive Substances (Precipitated Phosphate) Exemption Order 1963
S.I. 1967/1797	The Radioactive Substances (Electronic Valves) Exemption Order 1967
S.I. 1980/953	The Radioactive Substances (Smoke Detectors) Exemption Order 1980
S.I. 1985/1047	The Radioactive Substances (Gaseous Tritium Light Devices) Exemption Order 1985
S.I. 1985/1048	The Radioactive Substances (Luminous Articles) Exemption Order 1985
S.I. 1986/1002	The Radioactive Substances (Substances of Low Activity) Exemption Order 1986
S.I. 1990/2512	The Radioactive Substances (Hospitals) Exemption Order 1990
S.I. 1991/477	The Radioactive Substances (Smoke Detectors) Exemption (Amendment) Order 1991
S.I. 1992/647	The Radioactive Substances (Substances of Low Activity) Exemption (Amendment) Order 1992
S.I. 1992/1685	The Radioactive Substances (Records of Convictions) Regulations 1992
S.I. 1995/2395	The Radioactive Substances (Hospitals) Exemption (Amendment) Order 1995
S.I. 2001/4005	The Radioactive Substances (Clocks and Watches)(England and Wales) Regulations 2001
S.I. 2002/1177	The Radioactive Substances (Natural Gas) Exemption Order 2002
S.I. 2006/1500	The Radioactive Substances (Testing Instruments) Exemption (England and Wales) Order 2006

EXPLANATORY NOTE

(This note is not part of the Regulations)

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