

SCHEDEULE 23

Radioactive substances activities

PART 6

Radioactive substances activity exemptions

*SECTION 9**Tables and summation rules in this Part***Table 5**

26.—(1) The Table 5 referred to in Sections 2 and 4 of this Part is—

Table 5**Radionuclides: values of quantities and concentrations**

Radionuclides	Maximum radioactivity (Bq)	quantity on any premises	Maximum concentration (Bq/g)
H-3	10 ⁹		10 ⁶
Be-7	10 ⁷		10 ³
C-14	10 ⁷		10 ⁴
O-15	10 ⁹		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	10 ⁸		10 ⁵
S-35	10 ⁸		10 ⁵
Cl-36	10 ⁶		10 ⁴
Cl-38	10 ⁵		10
Ar-37	10 ⁸		10 ⁶
Ar-41	10 ⁹		10 ²
K-42	10 ⁶		10 ²
K-43	10 ⁶		10

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Ca-45	10^7	10^4
Ca-47	10^6	10
Sc-46	10^6	10
Sc-47	10^6	10^2
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	10^9	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	10^8	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	10^8	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	10^9	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	10^4	10^5
Kr-85m	10^{10}	10^3
Kr-87	10^9	10^2
Kr-88	10^9	10^2
Rb-86	10^5	10^2
Sr-85	10^6	10^2
Sr-85m	10^7	10^2
Sr-87m	10^6	10^2
Sr-89	10^6	10^3
Sr-90+	10^4	10^2
Sr-91	10^5	10
Sr-92	10^6	10
Y-90	10^5	10^3
Y-91	10^6	10^3
Y-91m	10^6	10^2
Y-92	10^5	10^2

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Y-93	10^5	10^2
Zr-93+	10^7	10^3
Zr-95	10^6	10
Zr-97+	10^5	10
Nb-93m	10^7	10^4
Nb-94	10^6	10
Nb-95	10^6	10
Nb-97	10^6	10
Nb-98	10^5	10
Mo-90	10^6	10
Mo-93	10^8	10^3
Mo-99	10^6	10^2
Mo-101	10^6	10
Tc-96	10^6	10
Tc-96m	10^7	10^3
Tc-97	10^8	10^3
Tc-97m	10^7	10^3
Tc-99	10^7	10^4
Tc-99m	10^7	10^2
Ru-97	10^7	10^2
Ru-103	10^6	10^2
Ru-105	10^6	10
Ru-106+	10^5	10^2
Rh-103m	10^8	10^4
Rh-105	10^7	10^2
Pd-103	10^8	10^3
Pd-109	10^6	10^3
Ag-105	10^6	10^2
Ag-108m+	10^6	10
Ag-110m	10^6	10
Ag-111	10^6	10^3

Cd-109	10^6	10^4
Cd-115	10^6	10^2
Cd-115m	10^6	10^3
In-111	10^6	10^2
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	10^4	10^2
Sb-124	10^6	10
Sb-125	10^6	10^2
Te-123m	10^7	10^2
Te-125m	10^7	10^3
Te-127	10^6	10^3
Te-127m	10^7	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	10^7	10^2
Te-133	10^5	10
Te-133m	10^5	10
Te-134	10^6	10
I-123	10^7	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

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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+	10^4	10
Cs-138	10^4	10
Ba-131	10^6	10^2
Ba-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
Ce-144+	10^5	10^2
Pr-142	10^5	10^2
Pr-143	10^6	10^4
Nd-147	10^6	10^2
Nd-149	10^6	10^2
Pm-147	10^7	10^4
Pm-149	10^6	10^3
Sm-151	108	10^4
Sm-153	10^6	10^2
Eu-152	10^6	10

Eu-152m	10^6	10^2
Eu-154	10^6	10
Eu-155	10^7	10^2
Gd-153	10^7	10^2
Gd-159	10^6	10^3
Tb-160	10^6	10
Dy-165	10^6	10^3
Dy-166	10^6	10^3
Ho-166	10^5	10^3
Er-169	10^7	10^4
Er-171	10^6	10^2
Tm-170	10^6	10^3
Tm-171	10^8	10^4
Yb-175	10^7	10^3
Lu-177	10^7	10^3
Hf-181	10^6	10
Ta-182	10^4	10
W-181	10^7	10^3
W-185	10^7	10^4
W-187	10^6	10^2
Re-186	10^6	10^3
Re-188	10^5	10^2
Os-185	10^6	10
Os-191	10^7	10^2
Os-191m	10^7	10^3
Os-193	10^6	10^2
Ir-190	10^6	10
Ir-192	10^4	10
Ir-194	10^5	10^2
Pt-191	10^6	10^2
Pt-193m	10^7	10^3

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Pt-197	10^6	10^3
Pt-197m	10^6	10^2
Au-198	10^6	10^2
Au-199	10^6	10^2
Hg-197	10^7	10^2
Hg-197m	10^6	10^2
Hg-203	10^5	10^2
Tl-200	10^6	10
Tl-201	10^6	10^2
Tl-202	10^6	10^2
Tl-204	10^4	10^4
Pb-203	10^6	10^2
Pb-210+	10^4	10
Pb-212+	10^5	10
Bi-206	10^5	10
Bi-207	10^6	10
Bi-210	10^6	10^3
Bi-212+	10^5	10
Po-203	10^6	10
Po-205	10^6	10
Po-207	10^6	10
Po-210	10^4	10
At-211	10^7	10^3
Rn-220+	10^7	10^4
Rn-222+	10^8	10
Ra-223+	10^5	10^2
Ra-224+	10^5	10
Ra-225	10^5	10^2
Ra-226+	10^4	10
Ra-227	10^6	10^2
Ra-228+	10^5	10

Ac-228	10^6	10
Th-226+	10^7	10^3
Th-227	10^4	10
Th-228+	10^4	1
Th-229+	10^3	1
Th-230	10^4	1
Th-231	10^7	10^3
Th-232 sec	10^3	1
Th-234+	10^5	10^3
Pa-230	10^6	10
Pa-231	10^3	1
Pa-233	10^7	10^2
U-230+	10^5	10
U-231	10^7	10^2
U-232+	10^3	1
U-233	10^4	10
U-234	10^4	10
U-235+	10^4	10
U-236	10^4	10
U-237	10^6	10^2
U-238+	10^4	10
U-238 sec	10^3	1
U-239	10^6	10^2
U-240	10^7	10^3
U-240+	10^6	10
Np-237+	10^3	1
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

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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
Am-243+	10^3	1
Cm-242	10^5	10^2
Cm-243	10^4	1
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 other radionuclide that is:	10^3 , or the quantity given in respect of that radionuclide in the [^{F1} Public Health England] publication ' <i>Exempt Concentrations and Quantities for Radionuclides not Included in the European Basic Safety Standards Directive</i> '	1, or the concentration given in respect of that radionuclide in the publication referenced in column 2.
(a) not of natural terrestrial or cosmic origin, or		
(b) listed in Table 2 in this Schedule.		

- (2) The summation rule in respect of column 2 of Table 5 is the sum of the quotients A/B where—
- “A” means the quantity of each radionuclide listed in column 1 of Table 5 that is present in the material and waste, and
 - “B” means the quantity of that radionuclide specified in column 2 of Table 5.
- (3) The summation rule in respect of [^{F2}column 3] of Table 5 is the sum of the quotients C/D where—
- “C” means the concentration of each radionuclide listed in column 1 of Table 5 that is present in the material and waste, and
 - “D” means the concentration of that radionuclide specified in column 3 of Table 5.

Textual Amendments

F1 Words in Sch. 23 Pt. 6 para. 26(1) Table 5 substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 34(a)**

F2 Words in Sch. 23 Pt. 6 para. 26(3) substituted (2.5.2018) by [The Environmental Permitting \(England and Wales\) \(Amendment\) \(No. 2\) Regulations 2018 \(S.I. 2018/428\)](#), reg. 1, **Sch. para. 34(b)**

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Changes and effects yet to be applied to the whole Instrument associated Parts and Chapters:

Whole provisions yet to be inserted into this Instrument (including any effects on those provisions):

- Sch. 9 Pt. 2 para. 2(3) inserted by [S.I. 2023/1156 reg. 2\(6\)](#)
- Sch. 9 Pt. 2 para. 4(5)(aa) inserted by [S.I. 2023/1156 reg. 2\(7\)\(c\)\(i\)](#)
- Sch. 9 Pt. 2 para. 4(6A) inserted by [S.I. 2023/1156 reg. 2\(7\)\(e\)](#)
- Sch. 9 Pt. 2 para. 5(6)(aa) inserted by [S.I. 2023/1156 reg. 2\(8\)\(c\)\(i\)](#)
- Sch. 9 Pt. 2 para. 5(6A) inserted by [S.I. 2023/1156 reg. 2\(8\)\(d\)](#)
- Sch. 9 Pt. 2 para. 5(7A) inserted by [S.I. 2023/1156 reg. 2\(8\)\(f\)](#)
- Sch. 9 Pt. 2 para. 5(11) inserted by [S.I. 2023/1156 reg. 2\(8\)\(i\)](#)
- Sch. 9 Pt. 2 para. 6(1)(ba) inserted by [S.I. 2023/1156 reg. 2\(9\)\(d\)](#)
- Sch. 9 Pt. 2 para. 6(1)(h) inserted by [S.I. 2023/1156 reg. 2\(9\)\(h\)](#)
- Sch. 9 Pt. 2 para. 8 inserted by [S.I. 2023/1156 reg. 2\(12\)](#)
- Sch. 9 Pt. 2 para. 7(3)(d)-(f) omitted by [S.I. 2023/1156 reg. 2\(11\)\(b\)\(iii\)](#)
- Sch. 9 Pt. 2 para. 7(4)(f)-(h) omitted by [S.I. 2023/1156 reg. 2\(11\)\(c\)\(vi\)](#)
- Sch. 9 Pt. 2 para. 7(5) omitted by [S.I. 2023/1156 reg. 2\(11\)\(d\)](#)
- Sch. 9 Pt. 2 para. 2(2)(a) substituted by [S.I. 2023/1156 reg. 2\(5\)\(b\)](#)
- Sch. 9 Pt. 2 para. 4(2) substituted by [S.I. 2023/1156 reg. 2\(7\)\(a\)](#)
- Sch. 9 Pt. 2 para. 5(2) substituted by [S.I. 2023/1156 reg. 2\(8\)\(a\)](#)
- Sch. 9 Pt. 2 para. 5(8) substituted by [S.I. 2023/1156 reg. 2\(8\)\(g\)](#)
- Sch. 9 Pt. 2 para. 6(1)(b) substituted by [S.I. 2023/1156 reg. 2\(9\)\(c\)](#)
- Sch. 9 Pt. 2 para. 6(1)(f) substituted by [S.I. 2023/1156 reg. 2\(9\)\(f\)](#)
- Sch. 9 Pt. 2 para. 4(6)(a)-(j) substituted for Sch. 9 Pt. 2 para. 4(6)(a)-(d) by [S.I. 2023/1156 reg. 2\(7\)\(d\)\(ii\)](#)
- Sch. 9 Pt. 2 para. 4(8)(9) substituted for Sch. 9 Pt. 2 para. 4(8) by [S.I. 2023/1156 reg. 2\(7\)\(g\)](#)
- Sch. 9 Pt. 2 para. 2(2)(b) word inserted by [S.I. 2023/1156 reg. 2\(5\)\(c\)](#)
- Sch. 9 Pt. 2 para. 6(1)(g) word inserted by [S.I. 2023/1156 reg. 2\(9\)\(g\)\(ii\)](#)
- Sch. 9 Pt. 2 para. 4(6) word omitted by [S.I. 2023/1156 reg. 2\(7\)\(d\)\(i\)\(bb\)](#)
- Sch. 9 Pt. 2 para. 5(7) word omitted by [S.I. 2023/1156 reg. 2\(8\)\(e\)\(ii\)](#)
- Sch. 9 Pt. 2 para. 6(1)(g) word omitted by [S.I. 2023/1156 reg. 2\(9\)\(g\)\(iii\)](#)
- Sch. 9 Pt. 2 para. 2(1) word substituted by [S.I. 2023/1156 reg. 2\(4\)\(a\)](#)
- Sch. 9 Pt. 2 para. 2(2) word substituted by [S.I. 2023/1156 reg. 2\(5\)\(a\)](#)
- Sch. 9 Pt. 2 para. 4(3) word substituted by [S.I. 2023/1156 reg. 2\(7\)\(b\)](#)
- Sch. 9 Pt. 2 para. 4(6) word substituted by [S.I. 2023/1156 reg. 2\(7\)\(d\)\(i\)\(aa\)](#)
- Sch. 9 Pt. 2 para. 1(2) words inserted by [S.I. 2023/1156 reg. 2\(3\)](#)
- Sch. 9 Pt. 2 para. 2(1) words inserted by [S.I. 2023/1156 reg. 2\(4\)\(b\)](#)
- Sch. 9 Pt. 2 para. 2(1) words inserted by [S.I. 2023/1156 reg. 2\(4\)\(g\)](#)
- Sch. 9 Pt. 2 para. 2(1) words inserted by [S.I. 2023/1156 reg. 2\(4\)\(h\)\(ii\)](#)
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- Sch. 9 Pt. 2 para. 2(1) words inserted by [S.I. 2023/1156 reg. 2\(4\)\(i\)](#)
- Sch. 9 Pt. 2 para. 4(5)(b) words inserted by [S.I. 2023/1156 reg. 2\(7\)\(c\)\(ii\)](#)
- Sch. 9 Pt. 2 para. 5(6)(b) words inserted by [S.I. 2023/1156 reg. 2\(8\)\(c\)\(ii\)](#)
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- Sch. 9 Pt. 2 para. 5(7) Table words inserted by [S.I. 2023/1156 reg. 2\(8\)\(e\)\(iii\)](#)
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- Sch. 9 Pt. 2 para. 6(1)(a) words inserted by [S.I. 2023/1156 reg. 2\(9\)\(b\)](#)

- Sch. 9 Pt. 2 para. 6(1)(c) words inserted by [S.I. 2023/1156 reg. 2\(9\)\(e\)](#)
- Sch. 9 Pt. 2 para. 6(1)(d) words inserted by [S.I. 2023/1156 reg. 2\(9\)\(e\)](#)
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- Sch. 9 Pt. 2 para. 6(2)(a) words inserted by [S.I. 2023/1156 reg. 2\(10\)\(a\)](#)
- Sch. 9 Pt. 2 para. 7(2)(a) words inserted by [S.I. 2023/1156 reg. 2\(11\)\(a\)](#)
- Sch. 9 Pt. 2 para. 7(3)(a) words inserted by [S.I. 2023/1156 reg. 2\(11\)\(b\)\(i\)](#)
- Sch. 9 Pt. 2 para. 7(3)(c) words inserted by [S.I. 2023/1156 reg. 2\(11\)\(b\)\(ii\)](#)
- Sch. 9 Pt. 2 para. 7(4)(c) words inserted by [S.I. 2023/1156 reg. 2\(11\)\(c\)\(iv\)](#)
- Sch. 9 Pt. 2 para. 7(4)(e) words inserted by [S.I. 2023/1156 reg. 2\(11\)\(c\)\(v\)](#)
- Sch. 9 Pt. 2 para. 2(1) words omitted by [S.I. 2023/1156 reg. 2\(4\)\(d\)](#)
- Sch. 9 Pt. 2 para. 7(4) words omitted by [S.I. 2023/1156 reg. 2\(11\)\(c\)\(i\)](#)
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- Sch. 9 Pt. 2 para. 2(1) words substituted by [S.I. 2023/1156 reg. 2\(4\)\(f\)](#)
- Sch. 9 Pt. 2 para. 2(1) words substituted by [S.I. 2023/1156 reg. 2\(4\)\(h\)\(i\)](#)
- Sch. 9 Pt. 2 para. 4(7) words substituted by [S.I. 2023/1156 reg. 2\(7\)\(f\)](#)
- Sch. 9 Pt. 2 para. 5(5) words substituted by [S.I. 2023/1156 reg. 2\(8\)\(b\)](#)
- Sch. 9 Pt. 2 para. 5(10) words substituted by [S.I. 2023/1156 reg. 2\(8\)\(h\)](#)
- Sch. 9 Pt. 2 para. 6(1)(g) words substituted by [S.I. 2023/1156 reg. 2\(9\)\(g\)\(i\)](#)
- Sch. 9 Pt. 2 para. 6(2)(b) words substituted by [S.I. 2023/1156 reg. 2\(10\)\(b\)](#)
- Sch. 9 Pt. 2 para. 7(4)(a) words substituted by [S.I. 2023/1156 reg. 2\(11\)\(c\)\(ii\)](#)
- Sch. 9 Pt. 2 para. 7(4)(b) words substituted by [S.I. 2023/1156 reg. 2\(11\)\(c\)\(iii\)](#)