

SCHEDULE 1

Regulation 2(1)

**DOSES OF IONISING RADIATION WITHIN THE MEANING OF “RADIATION EMERGENCY”**

1. An effective dose of 5 mSv in the period of one year immediately following the radiation emergency.
2. Without prejudice to paragraph 1—
  - (a) an equivalent dose for the lens of the eye of 15 mSv in the period of one year immediately following the radiation emergency; and
  - (b) an equivalent dose for the skin of 50 mSv in the period of one year immediately following the radiation emergency over 1cm<sup>2</sup> area of skin, regardless of the area exposed.
3. In this Schedule—
  - (a) any reference to an effective dose means the sum of the effective dose to the whole body from external radiation and the committed effective dose from internal radiation;
  - (b) any reference to equivalent dose to a human tissue or organ includes the committed equivalent dose to that tissue or organ from internal radiation;
  - (c) “external radiation” means, in relation to a person, ionising radiation coming from outside the body of that person; and
  - (d) “internal radiation” means, in relation to a person, ionising radiation coming from inside the body of that person.

SCHEDULE 2

Regulation 3(1) and (2)

**SPECIFIED QUANTITIES OF RADIONUCLIDES ON PREMISES**

**PART I**

**Table of radionuclides**

<b>Radionuclide name, symbol</b>	<b>Radionuclide form</b>	<b>Quantity (Bq)</b>
Actinium		
Ac-224		2 10 <sup>11</sup>
Ac-225		3 10 <sup>9</sup>
Ac-226		2 10 <sup>10</sup>
Ac-227		4 10 <sup>7</sup>
Ac-228		5 10 <sup>11</sup>
Aluminium		
Al-26		7 10 <sup>10</sup>

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Americium		
Am-237		4 10 <sup>12</sup>
Am-238		6 10 <sup>12</sup>
Am-239		2 10 <sup>12</sup>
Am-240		4 10 <sup>12</sup>
Am-241		3 10 <sup>8</sup>
Am-242		1 10 <sup>12</sup>
Am-242m		3 10 <sup>8</sup>
Am-243		3 10 <sup>8</sup>
Am-244		2 10 <sup>12</sup>
Am-244m		2 10 <sup>14</sup>
Am-245		2 10 <sup>12</sup>
Am-246		1 10 <sup>12</sup>
Am-246m		2 10 <sup>12</sup>
Antimony		
Sb-115		2 10 <sup>12</sup>
Sb-116		2 10 <sup>12</sup>
Sb-116m		2 10 <sup>12</sup>
Sb-117		1 10 <sup>13</sup>
Sb-118m		7 10 <sup>12</sup>
Sb-119		1 10 <sup>13</sup>
Sb-120	(long lived isotope)	3 10 <sup>12</sup>
Sb-120	(short lived isotope)	2 10 <sup>12</sup>
Sb-122		2 10 <sup>12</sup>
Sb-124		4 10 <sup>11</sup>
Sb-124m		4 10 <sup>12</sup>
Sb-125		4 10 <sup>11</sup>
Sb-126		1 10 <sup>12</sup>
Sb-126m		2 10 <sup>12</sup>

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Sb-127		2 10 <sup>12</sup>
Sb-128	(long lived isotope)	2 10 <sup>12</sup>
Sb-128	(short lived isotope)	1 10 <sup>12</sup>
Sb-129		2 10 <sup>12</sup>
Sb-130		1 10 <sup>12</sup>
Sb-131		2 10 <sup>12</sup>
Argon		
Ar-37	(gas)	4 10 <sup>17</sup>
Ar-39	(gas)	2 10 <sup>16</sup>
Ar-41	(gas)	4 10 <sup>13</sup>
Arsenic		
As-69		7 10 <sup>11</sup>
As-70		1 10 <sup>12</sup>
As-71		3 10 <sup>12</sup>
As-72		9 10 <sup>11</sup>
As-73		8 10 <sup>12</sup>
As-74		2 10 <sup>12</sup>
As-76		9 10 <sup>11</sup>
As-77		2 10 <sup>12</sup>
As-78		7 10 <sup>11</sup>
Astatine		
At-207		4 10 <sup>12</sup>
At-211		2 10 <sup>11</sup>
Barium		
Ba-126		2 10 <sup>13</sup>
Ba-128		1 10 <sup>13</sup>
Ba-131		6 10 <sup>12</sup>
Ba-131m		3 10 <sup>12</sup>
Ba-133		4 10 <sup>11</sup>

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Ba-133m		2 10 <sup>12</sup>
Ba-135m		2 10 <sup>12</sup>
Ba-139		11, <sup>012</sup>
Ba-140		2 10 <sup>12</sup>
Ba-141		1 10 <sup>12</sup>
Ba-142		2 10 <sup>12</sup>
Berkelium		
Bk-245		3 10 <sup>12</sup>
Bk-246		6 10 <sup>12</sup>
Bk-247		3 10 <sup>8</sup>
Bk-249		2 10 <sup>11</sup>
Bk-250		2 10 <sup>12</sup>
Beryllium		
Be-7		2 10 <sup>13</sup>
Be-10		6 10 <sup>11</sup>
Bismuth		
Bi-200		2 10 <sup>12</sup>
Bi-201		2 10 <sup>12</sup>
Bi-202		3 10 <sup>12</sup>
Bi-203		4 10 <sup>12</sup>
Bi-205		2 10 <sup>12</sup>
Bi-206		2 10 <sup>12</sup>
Bi-207		1 10 <sup>11</sup>
Bi-210		2 10 <sup>11</sup>
Bi-210m		6 10 <sup>9</sup>
Bi-212		7 10 <sup>11</sup>
Bi-213		7 10 <sup>11</sup>
Bi-214		1 10 <sup>12</sup>

#### Bromine

Note: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Br-74		8 10 <sup>11</sup>
Br-74m		6 10 <sup>11</sup>
Br-75		2 10 <sup>12</sup>
Br-76		1 10 <sup>12</sup>
Br-77		4 10 <sup>13</sup>
Br-80		1 10 <sup>12</sup>
Br-80m		5 10 <sup>12</sup>
Br-82		3 10 <sup>12</sup>
Br-83		2 10 <sup>12</sup>
Br-84		7 10 <sup>11</sup>
Cadmium		
Cd-104		1 10 <sup>13</sup>
Cd-107		4 10 <sup>12</sup>
Cd-109		2 10 <sup>12</sup>
Cd-113		2 10 <sup>11</sup>
Cd-113m		1 10 <sup>11</sup>
Cd-115		2 10 <sup>12</sup>
Cd-115m		2 10 <sup>12</sup>
Cd-117		2 10 <sup>12</sup>
Cd-117m		2 10 <sup>12</sup>
Caesium		
Cs-125		2 10 <sup>12</sup>
Cs-127		1 10 <sup>13</sup>
Cs-129		2 10 <sup>13</sup>
Cs-130		2 10 <sup>12</sup>
Cs-131		6 10 <sup>13</sup>
Cs-132		9 10 <sup>12</sup>
Cs-134		7 10 <sup>10</sup>
Cs-134m		4 10 <sup>12</sup>

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Cs-135		$9 \times 10^{11}$
Cs-135m		$8 \times 10^{12}$
Cs-136		$8 \times 10^{11}$
Cs-137		$1 \times 10^{11}$
Cs-138		$8 \times 10^{11}$
Calcium		
Ca-41		$3 \times 10^{13}$
Ca-45		$3 \times 10^{12}$
Ca-47		$2 \times 10^{12}$
Californium		
Cf-244		$2 \times 10^{12}$
Cf-246		$5 \times 10^{10}$
Cf-248		$2 \times 10^9$
Cf-249		$3 \times 10^8$
Cf-250		$7 \times 10^8$
Cf-251		$3 \times 10^8$
Cf-252		$1 \times 10^9$
Cf-253		$2 \times 10^{10}$
Cf-254		$4 \times 10^8$
Carbon		
C-11		$2 \times 10^{12}$
C-11	(vapour)	$1 \times 10^{14}$
C-11	(dioxide gas)	$1 \times 10^{14}$
C-11	(monoxide gas)	$1 \times 10^{14}$
C-14		$3 \times 10^{12}$
C-14	(vapour)	$4 \times 10^{13}$
C-14	(dioxide gas)	$3 \times 10^{15}$
C-14	(monoxide gas)	$1 \times 10^{16}$

#### Cerium

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Ce-134		1 10 <sup>13</sup>
Ce-135		2 10 <sup>12</sup>
Ce-137		2 10 <sup>13</sup>
Ce-137m		2 10 <sup>12</sup>
Ce-139		2 10 <sup>12</sup>
Ce-141		2 10 <sup>12</sup>
Ce-143		2 10 <sup>12</sup>
Ce-144		3 10 <sup>11</sup>
Chlorine		
Cl-36		2 10 <sup>12</sup>
Cl-38		6 10 <sup>11</sup>
Cl-39		1 10 <sup>12</sup>
Chromium		
Cr-48		4 10 <sup>13</sup>
Cr-49		2 10 <sup>12</sup>
Cr-51		3 10 <sup>13</sup>
Cobalt		
Co-55		2 10 <sup>12</sup>
Co-56		2 10 <sup>11</sup>
Co-57		1 10 <sup>12</sup>
Co-58		6 10 <sup>11</sup>
Co-58m		2 10 <sup>13</sup>
Co-60		6 10 <sup>10</sup>
Co-60m		7 10 <sup>12</sup>
Co-61		2 10 <sup>12</sup>
Co-62m		9 10 <sup>11</sup>
Copper		
Cu-60		1 10 <sup>12</sup>
Cu-61		2 10 <sup>12</sup>

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Cu-64		$4 \times 10^{12}$
Cu-67		$3 \times 10^{12}$
Curium		
Cm-238		$5 \times 10^{12}$
Cm-240		$7 \times 10^9$
Cm-241		$5 \times 10^{11}$
Cm-242		$4 \times 10^9$
Cm-243		$4 \times 10^8$
Cm-244		$4 \times 10^8$
Cm-245		$2 \times 10^8$
Cm-246		$2 \times 10^8$
Cm-247		$3 \times 10^8$
Cm-248		$7 \times 10^7$
Cm-249		$2 \times 10^{12}$
Cm-250		$1 \times 10^7$
Dysprosium		
Dy-155		$1 \times 10^{13}$
Dy-157		$1 \times 10^{14}$
Dy-159		$8 \times 10^{12}$
Dy-165		$2 \times 10^{12}$
Dy-166		$3 \times 10^{12}$
Einsteinium		
Es-250		$1 \times 10^{13}$
Es-251		$6 \times 10^{12}$
Es-253		$8 \times 10^9$
Es-254		$2 \times 10^9$
Es-254m		$5 \times 10^{10}$
Erbium		
Er-161		$6 \times 10^{12}$

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Er-165		2 10 <sup>14</sup>
Er-169		3 10 <sup>12</sup>
Er-171		2 10 <sup>12</sup>
Er-172		3 10 <sup>12</sup>
Europium		
Eu-145		4 10 <sup>12</sup>
Eu-146		3 10 <sup>12</sup>
Eu-147		4 10 <sup>12</sup>
Eu-148		4 10 <sup>11</sup>
Eu-149		8 10 <sup>12</sup>
Eu-150	(long lived isotope)	1 10 <sup>11</sup>
Eu-150	(short lived isotope)	2 10 <sup>12</sup>
Eu-152		1 10 <sup>11</sup>
Eu-152m		2 10 <sup>12</sup>
Eu-154		1 10 <sup>11</sup>
Eu-155		2 10 <sup>12</sup>
Eu-156		2 10 <sup>12</sup>
Eu-157		2 10 <sup>12</sup>
Eu-158		1 10 <sup>12</sup>
Fermium		
Fm-252		7 10 <sup>10</sup>
Fm-253		6 10 <sup>10</sup>
Fm-254		3 10 <sup>11</sup>
Fm-255		9 10 <sup>10</sup>
Fm-257		3 10 <sup>9</sup>
Fluorine		
F-18		2 10 <sup>12</sup>
Francium		
Fr-222		1 10 <sup>12</sup>

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Fr-223		$2 \cdot 10^{12}$
Gadolinium		
Gd-145		$2 \cdot 10^{12}$
Gd-146		$2 \cdot 10^{12}$
Gd-147		$5 \cdot 10^{12}$
Gd-148		$9 \cdot 10^8$
Gd-149		$6 \cdot 10^{12}$
Gd-151		$5 \cdot 10^{12}$
Gd-152		$1 \cdot 10^9$
Gd-153		$2 \cdot 10^{12}$
Gd-159		$2 \cdot 10^{12}$
Gallium		
Ga-65		$1 \cdot 10^{12}$
Ga-66		$9 \cdot 10^{11}$
Ga-67		$5 \cdot 10^{12}$
Ga-68		$2 \cdot 10^{12}$
Ga-70		$1 \cdot 10^{12}$
Ga-72		$2 \cdot 10^{12}$
Ga-73		$2 \cdot 10^{12}$
Germanium		
Ge-66		$3 \cdot 10^{12}$
Ge-67		$7 \cdot 10^{11}$
Ge-68		$1 \cdot 10^{12}$
Ge-69		$2 \cdot 10^{12}$
Ge-71		$7 \cdot 10^{14}$
Ge-75		$2 \cdot 10^{12}$
Ge-77		$1 \cdot 10^{12}$
Ge-78		$2 \cdot 10^{12}$
Gold		

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Au-193		7 10 <sup>12</sup>
Au-194		1 10 <sup>13</sup>
Au-195		3 10 <sup>12</sup>
Au-198		2 10 <sup>12</sup>
Au-198m		2 10 <sup>12</sup>
Au-199		3 10 <sup>12</sup>
Au-200		1 10 <sup>12</sup>
Au-200m		2 10 <sup>12</sup>
Au-201		2 10 <sup>12</sup>
Hafnium		
Hf-170		4 10 <sup>12</sup>
Hf-172		5 10 <sup>11</sup>
Hf-173		6 10 <sup>12</sup>
Hf-175		2 10 <sup>12</sup>
Hf-177m		2 10 <sup>12</sup>
Hf-178m		4 10 <sup>10</sup>
Hf-179m		2 10 <sup>12</sup>
Hf-180m		2 10 <sup>12</sup>
Hf-181		1 10 <sup>12</sup>
Hf-182		7 10 <sup>10</sup>
Hf-182m		2 10 <sup>12</sup>
Hf-183		2 10 <sup>12</sup>
Hf-184		2 10 <sup>12</sup>
Holmium		
Ho-155		2 10 <sup>12</sup>
Ho-157		4 10 <sup>12</sup>
Ho-159		6 10 <sup>12</sup>
Ho-161		1 10 <sup>13</sup>
Ho-162		5 10 <sup>12</sup>

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Ho-162m		4 10 <sup>12</sup>
Ho-164		2 10 <sup>12</sup>
Ho-164m		4 10 <sup>12</sup>
Ho-166		1 10 <sup>12</sup>
Ho-166m		8 10 <sup>10</sup>
Ho-167		2 10 <sup>12</sup>
Hydrogen		
H-3	(tritiated water)	7 10 <sup>13</sup>
H-3	(organically bound tritium)	1 10 <sup>14</sup>
H-3	(tritiated water vapour)	1 10 <sup>15</sup>
H-3	(gas)	1 10 <sup>18</sup>
H-3	(tritiated methane gas)	1 10 <sup>17</sup>
H-3	(organically bound tritium gas/ vapour)	6 10 <sup>14</sup>
Indium		
In-109		7 10 <sup>12</sup>
In-110	(long lived isotope)	2 10 <sup>13</sup>
In-110	(short lived isotope)	1 10 <sup>12</sup>
In-111		9 10 <sup>12</sup>
In-112		2 10 <sup>12</sup>
In-113m		5 10 <sup>12</sup>
In-114		1 10 <sup>12</sup>
In-114m		9 10 <sup>11</sup>
In-115		6 10 <sup>10</sup>
In-115m		3 10 <sup>12</sup>
In-116m		2 10 <sup>12</sup>
In-117		2 10 <sup>12</sup>
In-117m		2 10 <sup>12</sup>
In-119m		9 10 <sup>11</sup>

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Iodine		
I-120		6 10 <sup>11</sup>
I-120	(elemental vapour)	2 10 <sup>13</sup>
I-120	(methyl iodide vapour)	2 10 <sup>13</sup>
I-120m		7 10 <sup>11</sup>
I-120m	(elemental vapour)	2 10 <sup>13</sup>
I-120m	(methyl iodide vapour)	2 10 <sup>13</sup>
I-121		4 10 <sup>12</sup>
I-121	(elemental vapour)	1 10 <sup>14</sup>
I-121	(methyl iodide vapour)	1 10 <sup>14</sup>
I-123		9 10 <sup>12</sup>
I-123	(elemental vapour)	5 10 <sup>13</sup>
I-123	(methyl iodide vapour)	6 10 <sup>13</sup>
I-124		2 10 <sup>12</sup>
I-124	(elemental vapour)	9 10 <sup>11</sup>
I-124	(methyl iodide vapour)	1 10 <sup>12</sup>
I-125		1 10 <sup>11</sup>
I-125	(elemental vapour)	1 10 <sup>12</sup>
I-125	(methyl iodide vapour)	1 10 <sup>12</sup>
I-126		8 10 <sup>11</sup>
I-126	(elemental vapour)	5 10 <sup>11</sup>
I-126	(methyl iodide vapour)	6 10 <sup>11</sup>
I-128		1 10 <sup>12</sup>
I-128	(elemental vapour)	2 10 <sup>14</sup>
I-128	(methyl iodide vapour)	5 10 <sup>14</sup>
I-129		1 10 <sup>10</sup>
I-129	(elemental vapour)	2 10 <sup>11</sup>
I-129	(methyl iodide vapour)	2 10 <sup>11</sup>
I-130		3 10 <sup>12</sup>

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
I-130	(elemental vapour)	5 10 <sup>12</sup>
I-130	(methyl iodide vapour)	6 10 <sup>12</sup>
I-131		9 10 <sup>10</sup>
I-131	(elemental vapour)	6 10 <sup>11</sup>
I-131	(methyl iodide vapour)	7 10 <sup>11</sup>
I-132		2 10 <sup>12</sup>
I-132	(elemental vapour)	2 10 <sup>13</sup>
I-132	(methyl iodide vapour)	3 10 <sup>13</sup>
I-132m		2 10 <sup>12</sup>
I-132m	(elemental vapour)	4 10 <sup>13</sup>
I-132m	(methyl iodide vapour)	5 10 <sup>13</sup>
I-133		2 10 <sup>12</sup>
I-133	(elemental vapour)	2 10 <sup>12</sup>
I-133	(methyl iodide vapour)	3 10 <sup>12</sup>
I-134		2 10 <sup>12</sup>
I-134	(elemental vapour)	3 10 <sup>13</sup>
I-134	(methyl iodide vapour)	4 10 <sup>13</sup>
I-135		2 10 <sup>12</sup>
I-135	(elemental vapour)	9 10 <sup>12</sup>
I-135	(methyl iodide vapour)	1 10 <sup>13</sup>
Iridium		
Ir-182		1 10 <sup>12</sup>
Ir-184		2 10 <sup>12</sup>
Ir-185		3 10 <sup>12</sup>
Ir-186	(long lived isotope)	3 10 <sup>12</sup>
Ir-186	(short lived isotope)	2 10 <sup>12</sup>
Ir-187		6 10 <sup>12</sup>
Ir-188		5 10 <sup>12</sup>
Ir-189		9 10 <sup>12</sup>

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Ir-190		2 10 <sup>12</sup>
Ir-190m	(long lived isotope)	3 10 <sup>12</sup>
Ir-190m	(short lived isotope)	1 10 <sup>13</sup>
Ir-192		6 10 <sup>11</sup>
Ir-192m		4 10 <sup>11</sup>
Ir-193m		4 10 <sup>12</sup>
Ir-194		1 10 <sup>12</sup>
Ir-194m		1 10 <sup>11</sup>
Ir-195		2 10 <sup>12</sup>
Ir-195m		2 10 <sup>12</sup>
Iron		
Fe-52		2 10 <sup>12</sup>
Fe-55		8 10 <sup>12</sup>
Fe-59		8 10 <sup>11</sup>
Fe-60		4 10 <sup>10</sup>
Krypton		
Kr-74	(gas)	5 10 <sup>13</sup>
Kr-76	(gas)	1 10 <sup>14</sup>
Kr-77	(gas)	6 10 <sup>13</sup>
Kr-79	(gas)	2 10 <sup>14</sup>
Kr-81	(gas)	7 10 <sup>15</sup>
Kr-81m	(gas)	5 10 <sup>14</sup>
Kr-83m	(gas)	3 10 <sup>16</sup>
Kr-85	(gas)	1 10 <sup>16</sup>
Kr-85m	(gas)	4 10 <sup>14</sup>
Kr-87	(gas)	7 10 <sup>13</sup>
Kr-88	(gas)	3 10 <sup>13</sup>
Lanthanum		
La-131		2 10 <sup>12</sup>

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
La-132		2 10 <sup>12</sup>
La-135		2 10 <sup>14</sup>
La-137		2 10 <sup>12</sup>
La-138		2 10 <sup>11</sup>
La-140		2 10 <sup>12</sup>
La-141		1 10 <sup>12</sup>
La-142		1 10 <sup>12</sup>
La-143		7 10 <sup>11</sup>
Lead		
Pb-195m		2 10 <sup>12</sup>
Pb-198		4 10 <sup>12</sup>
Pb-199		6 10 <sup>12</sup>
Pb-200		3 10 <sup>12</sup>
Pb-201		8 10 <sup>12</sup>
Pb-202		6 10 <sup>11</sup>
Pb-202m		4 10 <sup>12</sup>
Pb-203		9 10 <sup>12</sup>
Pb-205		1 10 <sup>13</sup>
Pb-209		2 10 <sup>12</sup>
Pb-210		3 10 <sup>9</sup>
Pb-211		2 10 <sup>12</sup>
Pb-212		1 10 <sup>11</sup>
Pb-214		1 10 <sup>12</sup>
Lutetium		
Lu-169		6 10 <sup>12</sup>
Lu-170		3 10 <sup>12</sup>
Lu-171		4 10 <sup>12</sup>
Lu-172		3 10 <sup>12</sup>
Lu-173		2 10 <sup>12</sup>

Note: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.



Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Lu-174		1 10 <sup>12</sup>
Lu-174m		3 10 <sup>12</sup>
Lu-176		3 10 <sup>11</sup>
Lu-176m		2 10 <sup>12</sup>
Lu-177		3 10 <sup>12</sup>
Lu-177m		3 10 <sup>11</sup>
Lu-178		1 10 <sup>12</sup>
Lu-178m		1 10 <sup>12</sup>
Lu-179		2 10 <sup>12</sup>
Magnesium		
Mg-28		5 10 <sup>12</sup>
Manganese		
Mn-51		1 10 <sup>12</sup>
Mn-52		2 10 <sup>12</sup>
Mn-52m		8 10 <sup>11</sup>
Mn-53		1 10 <sup>14</sup>
Mn-54		3 10 <sup>11</sup>
Mn-56		1 10 <sup>12</sup>
Mendelevium		
Md-257		9 10 <sup>11</sup>
Md-258		4 10 <sup>9</sup>
Mercury		
Hg-193	(organic)	3 10 <sup>12</sup>
Hg-193	(inorganic)	3 10 <sup>12</sup>
Hg-193	(vapour)	2 10 <sup>13</sup>
Hg-193m	(organic)	2 10 <sup>12</sup>
Hg-193m	(inorganic)	2 10 <sup>12</sup>
Hg-193m	(vapour)	6 10 <sup>12</sup>
Hg-194	(organic)	3 10 <sup>11</sup>

Note: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

*Status: This is the original version (as it was originally made).*

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Hg-194	(inorganic)	1 10 <sup>12</sup>
Hg-194	(vapour)	6 10 <sup>11</sup>
Hg-195	(organic)	5 10 <sup>12</sup>
Hg-195	(inorganic)	5 10 <sup>12</sup>
Hg-195	(vapour)	1 10 <sup>13</sup>
Hg-195m	(organic)	3 10 <sup>12</sup>
Hg-195m	(inorganic)	3 10 <sup>12</sup>
Hg-195m	(vapour)	3 10 <sup>12</sup>
Hg-197	(organic)	7 10 <sup>12</sup>
Hg-197	(inorganic)	7 10 <sup>12</sup>
Hg-197	(vapour)	5 10 <sup>12</sup>
Hg-197m	(organic)	2 10 <sup>12</sup>
Hg-197m	(inorganic)	2 10 <sup>12</sup>
Hg-197m	(vapour)	4 10 <sup>12</sup>
Hg-199m	(organic)	2 10 <sup>12</sup>
Hg-199m	(inorganic)	2 10 <sup>12</sup>
Hg-199m	(vapour)	1 10 <sup>14</sup>
Hg-203	(organic)	3 10 <sup>12</sup>
Hg-203	(inorganic)	3 10 <sup>12</sup>
Hg-203	(vapour)	3 10 <sup>12</sup>
Molybdenum		
Mo-90		2 10 <sup>12</sup>
Mo-93		2 10 <sup>12</sup>
Mo-93m		4 10 <sup>12</sup>
Mo-99		2 10 <sup>12</sup>
Mo-101		2 10 <sup>12</sup>
Neodymium		
Nd-136		4 10 <sup>12</sup>
Nd-138		5 10 <sup>13</sup>

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Nd-139		2 10 <sup>12</sup>
Nd-139m		3 10 <sup>12</sup>
Nd-141		2 10 <sup>13</sup>
Nd-147		2 10 <sup>12</sup>
Nd-149		2 10 <sup>12</sup>
Nd-151		1 10 <sup>12</sup>
Neon		
Ne-19	(gas)	6 10 <sup>13</sup>
Neptunium		
Np-232		3 10 <sup>12</sup>
Np-233		2 10 <sup>14</sup>
Np-234		5 10 <sup>12</sup>
Np-235		2 10 <sup>13</sup>
Np-236	(long lived isotope)	3 10 <sup>9</sup>
Np-236	(short lived isotope)	3 10 <sup>12</sup>
Np-237		5 10 <sup>8</sup>
Np-238		2 10 <sup>12</sup>
Np-239		1 10 <sup>12</sup>
Np-240		7 10 <sup>11</sup>
Nickel		
Ni-56		4 10 <sup>12</sup>
Ni-56	(carbonyl vapour)	1 10 <sup>13</sup>
Ni-57		2 10 <sup>12</sup>
Ni-57	(carbonyl vapour)	2 10 <sup>13</sup>
Ni-59		4 10 <sup>13</sup>
Ni-59	(carbonyl vapour)	2 10 <sup>13</sup>
Ni-63		1 10 <sup>13</sup>
Ni-63	(carbonyl vapour)	1 10 <sup>13</sup>
Ni-65		1 10 <sup>12</sup>

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**Status:** This is the original version (as it was originally made).

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Ni-65	(carbonyl vapour)	4 10 <sup>13</sup>
Ni-66		5 10 <sup>12</sup>
Ni-66	(carbonyl vapour)	1 10 <sup>13</sup>
Niobium		
Nb-88		7 10 <sup>11</sup>
Nb-89	(long lived isotope)	1 10 <sup>12</sup>
Nb-89	(short lived isotope)	8 10 <sup>11</sup>
Nb-90		2 10 <sup>12</sup>
Nb-93m		1 10 <sup>13</sup>
Nb-94		1 10 <sup>11</sup>
Nb-95		2 10 <sup>12</sup>
Nb-95m		2 10 <sup>12</sup>
Nb-96		2 10 <sup>12</sup>
Nb-97		2 10 <sup>12</sup>
Nb-98		1 10 <sup>12</sup>
Nitrogen		
N-13	(gas)	6 10 <sup>13</sup>
Osmium		
Os-180		1 10 <sup>13</sup>
Os-181		3 10 <sup>12</sup>
Os-182		6 10 <sup>12</sup>
Os-185		7 10 <sup>11</sup>
Os-189m		1 10 <sup>13</sup>
Os-191		4 10 <sup>12</sup>
Os-191m		7 10 <sup>12</sup>
Os-193		2 10 <sup>12</sup>
Os-194		2 10 <sup>11</sup>
Palladium		
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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Pd-100		7 10 <sup>12</sup>
Pd-101		8 10 <sup>12</sup>
Pd-103		4 10 <sup>13</sup>
Pd-107		3 10 <sup>13</sup>
Pd-109		2 10 <sup>12</sup>
Phosphorus		
P-32		1 10 <sup>11</sup>
P-33		3 10 <sup>12</sup>
Platinum		
Pt-186		9 10 <sup>13</sup>
Pt-188		6 10 <sup>12</sup>
Pt-189		6 10 <sup>12</sup>
Pt-191		7 10 <sup>12</sup>
Pt-193		1 10 <sup>14</sup>
Pt-193m		3 10 <sup>12</sup>
Pt-195m		3 10 <sup>12</sup>
Pt-197		2 10 <sup>12</sup>
Pt-197m		2 10 <sup>12</sup>
Pt-199		2 10 <sup>12</sup>
Pt-200		2 10 <sup>12</sup>
Plutonium		
Pu-234		1 10 <sup>12</sup>
Pu-235		2 10 <sup>13</sup>
Pu-236		6 10 <sup>8</sup>
Pu-237		1 10 <sup>13</sup>
Pu-238		2 10 <sup>8</sup>
Pu-239		2 10 <sup>8</sup>
Pu-240		2 10 <sup>8</sup>
Pu-241		1 10 <sup>10</sup>

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**Status:** This is the original version (as it was originally made).

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Pu-242		$2 \times 10^8$
Pu-243		$2 \times 10^{12}$
Pu-244		$2 \times 10^8$
Pu-245		$2 \times 10^{12}$
Pu-246		$2 \times 10^{12}$
Polonium		
Po-203		$3 \times 10^{12}$
Po-205		$7 \times 10^{12}$
Po-206		$1 \times 10^{11}$
Po-207		$8 \times 10^{12}$
Po-208		$2 \times 10^9$
Po-209		$2 \times 10^9$
Po-210		$4 \times 10^9$
Potassium		
K-40		$2 \times 10^{12}$
K-42		$7 \times 10^{11}$
K-43		$2 \times 10^{12}$
K-44		$6 \times 10^{11}$
K-45		$9 \times 10^{11}$
Praseodymium		
Pr-136		$1 \times 10^{12}$
Pr-137		$2 \times 10^{12}$
Pr-138m		$2 \times 10^{12}$
Pr-139		$7 \times 10^{12}$
Pr-142		$1 \times 10^{12}$
Pr-142m		$2 \times 10^{15}$
Pr-143		$2 \times 10^{12}$
Pr-144		$2 \times 10^{12}$
Pr-145		$1 \times 10^{12}$

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Pr-147		1 10 <sup>12</sup>
Promethium		
Pm-141		1 10 <sup>12</sup>
Pm-143		9 10 <sup>11</sup>
Pm-144		2 10 <sup>11</sup>
Pm-145		3 10 <sup>12</sup>
Pm-146		2 10 <sup>11</sup>
Pm-147		4 10 <sup>12</sup>
Pm-148		1 10 <sup>12</sup>
Pm-148m		5 10 <sup>11</sup>
Pm-149		2 10 <sup>12</sup>
Pm-150		1 10 <sup>12</sup>
Pm-151		2 10 <sup>12</sup>
Protactinium		
Pa-227		3 10 <sup>11</sup>
Pa-228		3 10 <sup>11</sup>
Pa-230		3 10 <sup>10</sup>
Pa-231		2 10 <sup>8</sup>
Pa-232		2 10 <sup>12</sup>
Pa-233		2 10 <sup>12</sup>
Pa-234		5 10 <sup>11</sup>
Radium		
Ra-223		3 10 <sup>9</sup>
Ra-224		7 10 <sup>9</sup>
Ra-225		3 10 <sup>9</sup>
Ra-226		2 10 <sup>9</sup>
Ra-227		2 10 <sup>12</sup>
Ra-228		1 10 <sup>9</sup>
Rhenium		

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**Status:** This is the original version (as it was originally made).

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Re-177		2 10 <sup>12</sup>
Re-178		2 10 <sup>12</sup>
Re-181		3 10 <sup>12</sup>
Re-182	(long lived isotope)	2 10 <sup>12</sup>
Re-182	(short lived isotope)	4 10 <sup>12</sup>
Re-184		1 10 <sup>12</sup>
Re-184m		7 10 <sup>11</sup>
Re-186		2 10 <sup>12</sup>
Re-186m		1 10 <sup>12</sup>
Re-187		5 10 <sup>14</sup>
Re-188		1 10 <sup>12</sup>
Re-188m		3 10 <sup>12</sup>
Re-189		2 10 <sup>12</sup>
Rhodium		
Rh-99		4 10 <sup>12</sup>
Rh-99m		9 10 <sup>12</sup>
Rh-100		4 10 <sup>12</sup>
Rh-101		7 10 <sup>11</sup>
Rh-101m		2 10 <sup>13</sup>
Rh-102		1 10 <sup>11</sup>
Rh-102m		6 10 <sup>11</sup>
Rh-103m		3 10 <sup>15</sup>
Rh-105		2 10 <sup>12</sup>
Rh-106m		2 10 <sup>12</sup>
Rh-107		2 10 <sup>12</sup>
Rubidium		
Rb-79		1 10 <sup>12</sup>
Rb-81		2 10 <sup>12</sup>
Rb-81m		4 10 <sup>12</sup>

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Rb-82m		3 10 <sup>12</sup>
Rb-83		1 10 <sup>12</sup>
Rb-84		1 10 <sup>12</sup>
Rb-86		2 10 <sup>11</sup>
Rb-87		4 10 <sup>12</sup>
Rb-88		5 10 <sup>11</sup>
Rb-89		9 10 <sup>11</sup>
Ruthenium		
Ru-94		1 10 <sup>14</sup>
Ru-94	(tetroxide vapour)	1 10 <sup>14</sup>
Ru-97		3 10 <sup>13</sup>
Ru-97	(tetroxide vapour)	1 10 <sup>14</sup>
Ru-103		2 10 <sup>12</sup>
Ru-103	(tetroxide vapour)	1 10 <sup>13</sup>
Ru-105		2 10 <sup>12</sup>
Ru-105	(tetroxide vapour)	6 10 <sup>13</sup>
Ru-106		3 10 <sup>11</sup>
Ru-106	(tetroxide vapour)	8 10 <sup>11</sup>
Samarium		
Sm-141		1 10 <sup>12</sup>
Sm-141m		2 10 <sup>12</sup>
Sm-142		9 10 <sup>12</sup>
Sm-145		3 10 <sup>12</sup>
Sm-146		2 10 <sup>9</sup>
Sm-147		3 10 <sup>9</sup>
Sm-151		6 10 <sup>12</sup>
Sm-153		2 10 <sup>12</sup>
Sm-155		2 10 <sup>12</sup>
Sm-156		2 10 <sup>12</sup>

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**Status:** This is the original version (as it was originally made).

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Scandium		
Sc-43		2 10 <sup>12</sup>
Sc-44		2 10 <sup>12</sup>
Sc-44m		9 10 <sup>12</sup>
Sc-46		3 10 <sup>11</sup>
Sc-47		3 10 <sup>12</sup>
Sc-48		2 10 <sup>12</sup>
Sc-49		1 10 <sup>12</sup>
Selenium		
Se-70		2 10 <sup>12</sup>
Se-73		2 10 <sup>12</sup>
Se-73m		2 10 <sup>12</sup>
Se-75		2 10 <sup>11</sup>
Se-79		5 10 <sup>10</sup>
Se-81		2 10 <sup>12</sup>
Se-81m		4 10 <sup>12</sup>
Se-83		2 10 <sup>12</sup>
Silicon		
Si-31		2 10 <sup>12</sup>
Si-32		2 10 <sup>11</sup>
Silver		
Ag-102		1 10 <sup>12</sup>
Ag-103		2 10 <sup>12</sup>
Ag-104		3 10 <sup>12</sup>
Ag-104m		2 10 <sup>12</sup>
Ag-105		2 10 <sup>12</sup>
Ag-106		2 10 <sup>12</sup>
Ag-106m		2 10 <sup>12</sup>
Ag-108m		1 10 <sup>11</sup>

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Ag-110m		3 10 <sup>10</sup>
Ag-111		2 10 <sup>12</sup>
Ag-112		7 10 <sup>11</sup>
Ag-115		9 10 <sup>11</sup>
Sodium		
Na-22		1 10 <sup>11</sup>
Na-24		2 10 <sup>12</sup>
Strontium		
Sr-80		1 10 <sup>14</sup>
Sr-81		9 10 <sup>11</sup>
Sr-82		2 10 <sup>12</sup>
Sr-83		3 10 <sup>12</sup>
Sr-85		1 10 <sup>12</sup>
Sr-85m		3 10 <sup>13</sup>
Sr-87m		7 10 <sup>12</sup>
Sr-89		1 10 <sup>12</sup>
Sr-90		8 10 <sup>10</sup>
Sr-91		2 10 <sup>12</sup>
Sr-92		2 10 <sup>12</sup>
Sulphur		
S-35	(inorganic)	1 10 <sup>12</sup>
S-35	(organic)	2 10 <sup>11</sup>
S-35	(carbon disulphide vapour)	2 10 <sup>13</sup>
S-35	(vapour)	2 10 <sup>14</sup>
S-35	(dioxide gas)	1 10 <sup>14</sup>
Tantalum		
Ta-172		2 10 <sup>12</sup>
Ta-173		2 10 <sup>12</sup>
Ta-174		2 10 <sup>12</sup>

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Ta-175		2 10 <sup>12</sup>
Ta-176		3 10 <sup>12</sup>
Ta-177		1 10 <sup>13</sup>
Ta-178	(long lived isotope)	3 10 <sup>12</sup>
Ta-179		6 10 <sup>12</sup>
Ta-180		9 10 <sup>11</sup>
Ta-180m		6 10 <sup>12</sup>
Ta-182		3 10 <sup>11</sup>
Ta-182m		2 10 <sup>12</sup>
Ta-183		2 10 <sup>12</sup>
Ta-184		2 10 <sup>12</sup>
Ta-185		1 10 <sup>12</sup>
Ta-186		9 10 <sup>11</sup>
Technetium		
Tc-93		5 10 <sup>13</sup>
Tc-93m		4 10 <sup>12</sup>
Tc-94		6 10 <sup>12</sup>
Tc-94m		1 10 <sup>12</sup>
Tc-95		4 10 <sup>13</sup>
Tc-95m		1 10 <sup>12</sup>
Tc-96		4 10 <sup>12</sup>
Tc-96m		2 10 <sup>13</sup>
Tc-97		9 10 <sup>12</sup>
Tc-97m		5 10 <sup>12</sup>
Tc-98		1 10 <sup>11</sup>
Tc-99		5 10 <sup>10</sup>
Tc-99m		1 10 <sup>13</sup>
Tc-101		2 10 <sup>12</sup>
Tc-104		6 10 <sup>11</sup>

Note: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Tellurium		
Te-116		6 10 <sup>12</sup>
Te-116	(vapour)	2 10 <sup>14</sup>
Te-121		4 10 <sup>12</sup>
Te-121	(vapour)	3 10 <sup>13</sup>
Te-121m		1 10 <sup>12</sup>
Te-121m	(vapour)	3 10 <sup>12</sup>
Te-123		6 10 <sup>12</sup>
Te-123	(vapour)	2 10 <sup>12</sup>
Te-123m		2 10 <sup>12</sup>
Te-123m	(vapour)	5 10 <sup>12</sup>
Te-125m		2 10 <sup>12</sup>
Te-125m	(vapour)	8 10 <sup>12</sup>
Te-127		2 10 <sup>12</sup>
Te-127	(vapour)	2 10 <sup>14</sup>
Te-127m		1 10 <sup>12</sup>
Te-127m	(vapour)	2 10 <sup>12</sup>
Te-129		2 10 <sup>12</sup>
Te-129	(vapour)	4 10 <sup>14</sup>
Te-129m		1 10 <sup>12</sup>
Te-129m	(vapour)	3 10 <sup>12</sup>
Te-131		1 10 <sup>12</sup>
Te-131	(vapour)	1 10 <sup>14</sup>
Te-131m		2 10 <sup>12</sup>
Te-131m	(vapour)	5 10 <sup>12</sup>
Te-132		3 10 <sup>12</sup>
Te-132	(vapour)	2 10 <sup>12</sup>
Te-133		1 10 <sup>12</sup>
Te-133	(vapour)	7 10 <sup>13</sup>

Note: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Te-133m		1 10 <sup>12</sup>
Te-133m	(vapour)	2 10 <sup>13</sup>
Te-134		3 10 <sup>12</sup>
Te-134	(vapour)	7 10 <sup>13</sup>
Terbium		
Tb-147		2 10 <sup>12</sup>
Tb-149		2 10 <sup>12</sup>
Tb-150		2 10 <sup>12</sup>
Tb-151		4 10 <sup>12</sup>
Tb-153		7 10 <sup>12</sup> ;
Tb-154		4 10 <sup>12</sup>
Tb-155		1 10 <sup>13</sup>
Tb-156		3 10 <sup>12</sup>
Tb-156m	(long lived isotope)	1 10 <sup>13</sup>
Tb-156m	(short lived isotope)	4 10 <sup>12</sup>
Tb-157		1 10 <sup>13</sup>
Tb-158		2 10 <sup>11</sup>
Tb-160		5 10 <sup>11</sup>
Tb-161		2 10 <sup>12</sup>
Thallium		
Tl-194		1 10 <sup>13</sup>
Tl-194m		2 10 <sup>12</sup>
Tl-195		4 10 <sup>12</sup>
Tl-197		5 10 <sup>12</sup>
Tl-198		7 10 <sup>12</sup>
Tl-198m		2 10 <sup>12</sup>
Tl-199		6 10 <sup>12</sup>
Tl-200		1 10 <sup>13</sup>
Tl-201		7 10 <sup>12</sup>

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Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Tl-202		7 10 <sup>12</sup>
Tl-204		2 10 <sup>12</sup>
Thorium		
Th-226		4 10 <sup>11</sup>
Th-227		2 10 <sup>9</sup>
Th-228		6 10 <sup>8</sup>
Th-229		1 10 <sup>8</sup>
Th-230		2 10 <sup>8</sup>
Th-231		2 10 <sup>12</sup>
Th-232		2 10 <sup>8</sup>
Th-234		3 10 <sup>12</sup>
Thulium		
Tm-162		2 10 <sup>12</sup>
Tm-166		3 10 <sup>12</sup>
Tm-167		4 10 <sup>12</sup>
Tm-170		2 10 <sup>12</sup>
Tm-171		1 10 <sup>13</sup>
Tm-172		2 10 <sup>12</sup>
Tm-173		2 10 <sup>12</sup>
Tm-175		2 10 <sup>12</sup>
Tin		
Sn-110		6 10 <sup>13</sup>
Sn-111		2 10 <sup>12</sup>
Sn-113		5 10 <sup>12</sup>
Sn-117m		3 10 <sup>12</sup>
Sn-119m		5 10 <sup>12</sup>
Sn-121		3 10 <sup>12</sup>
Sn-121m		4 10 <sup>12</sup>
Sn-123		2 10 <sup>12</sup>

Note: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

**Status:** This is the original version (as it was originally made).

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Sn-123m		2 10 <sup>12</sup>
Sn-125		1 10 <sup>12</sup>
Sn-126		5 10 <sup>11</sup>
Sn-127		2 10 <sup>12</sup>
Sn-128		2 10 <sup>12</sup>
Titanium		
Ti-44		2 10 <sup>11</sup>
Ti-45		2 10 <sup>12</sup>
Tungsten		
W-176		5 10 <sup>12</sup>
W-177		3 10 <sup>12</sup>
W-178		6 10 <sup>13</sup>
W-179		1 10 <sup>13</sup>
W-181		1 10 <sup>13</sup>
W-185		4 10 <sup>12</sup>
W-187		2 10 <sup>12</sup>
W-188		3 10 <sup>12</sup>
Uranium		
U-230		2 10 <sup>9</sup>
U-231		7 10 <sup>12</sup>
U-232		6 10 <sup>8</sup>
U-233		3 10 <sup>9</sup>
U-234		3 10 <sup>9</sup>
U-235		3 10 <sup>9</sup>
U-236		3 10 <sup>9</sup>
U-237		2 10 <sup>12</sup>
U-238		3 10 <sup>9</sup>
U-239		2 10 <sup>12</sup>
U-240		2 10 <sup>12</sup>

Note: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.



Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Vanadium		
V-47		1 10 <sup>12</sup>
V-48		1 10 <sup>12</sup>
V-49		2 10 <sup>14</sup>
Xenon		
Xe-120	(gas)	1 10 <sup>14</sup>
Xe-121	(gas)	3 10 <sup>13</sup>
Xe-122	(gas)	1 10 <sup>15</sup>
Xe-123	(gas)	9 10 <sup>13</sup>
Xe-125	(gas)	2 10 <sup>14</sup>
Xe-127	(gas)	2 10 <sup>14</sup>
Xe-129m	(gas)	2 10 <sup>15</sup>
Xe-131m	(gas)	4 10 <sup>15</sup>
Xe-133	(gas)	1 10 <sup>15</sup>
Xe-133m	(gas)	2 10 <sup>15</sup>
Xe-135	(gas)	2 10 <sup>14</sup>
Xe-135m	(gas)	1 10 <sup>14</sup>
Xe-138	(gas)	5 10 <sup>13</sup>
Ytterbium		
Yb-162		1 10 <sup>13</sup>
Yb-166		8 10 <sup>12</sup>
Yb-167		4 10 <sup>12</sup>
Yb-169		3 10 <sup>12</sup>
Yb-175		4 10 <sup>12</sup>
Yb-177		2 10 <sup>12</sup>
Yb-178		2 10 <sup>12</sup>
Yttrium		
Y-86		2 10 <sup>12</sup>
Y-86m		1 10 <sup>13</sup>

Note: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

*Status: This is the original version (as it was originally made).*

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Y-87		$2 \times 10^{13}$
Y-88		$2 \times 10^{11}$
Y-90		$2 \times 10^{12}$
Y-90m		$7 \times 10^{12}$
Y-91		$2 \times 10^{12}$
Y-91m		$2 \times 10^{13}$
Y-92		$6 \times 10^{11}$
Y-93		$8 \times 10^{11}$
Y-94		$6 \times 10^{11}$
Y-95		$6 \times 10^{11}$
Zinc		
Zn-62		$1 \times 10^{13}$
Zn-63		$1 \times 10^{12}$
Zn-65		$5 \times 10^{10}$
Zn-69		$2 \times 10^{12}$
Zn-69m		$2 \times 10^{13}$
Zn-71m		$2 \times 10^{12}$
Zn-72		$3 \times 10^{12}$
Zirconium		
Zr-86		$2 \times 10^{13}$
Zr-88		$1 \times 10^{12}$
Zr-89		$4 \times 10^{12}$
Zr-93		$8 \times 10^{11}$
Zr-95		$8 \times 10^{11}$
Zr-97		$2 \times 10^{12}$
Other radionuclides not listed above (see note)		$4 \times 10^7$

Note: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

## PART II

### Quantity ratios for more than one radionuclide

1. For the purpose of regulation 3(2), the quantity ratio for more than one radionuclide is the sum of the quotients of the quantity of a radionuclide present  $Q_p$  divided by the quantity of that radionuclide specified in the appropriate column of Part I of this Schedule  $Q_{lim}$ , namely—

$$\sum \frac{Q_p}{Q_{lim}}$$

2. In any case where the isotopic composition of a radioactive substance is not known or is only partially known, the quantity ratio for that substance shall be calculated by using the values specified in the appropriate column in Part 1 for 'other radionuclides not listed above' for any radionuclide that has not been identified or where the quantity of a radionuclide is uncertain, unless the employer can show that the use of some other value is appropriate in the circumstances of a particular case, when he may use that value.

### SCHEDULE 3

Regulation 3(1)

#### MASSES OF FISSILE MATERIAL

For the purpose of regulation 3(1), the specified mass of a fissile material shall be—

(a)	plutonium as Pu 239 or Pu 241 or as a mixture of plutonium isotopes containing Pu 239 or Pu 241—	150 grams;
(b)	uranium as U233—	150 grams;
(c)	uranium enriched in U 235 to more than 1% but not more than 5%—	500 grams;(r)
(d)	uranium enriched in U 235 to more than 5%—	250 grams.

*Status: This is the original version (as it was originally made).*

## SCHEDULE 4

Regulation 3(1) and (3)

**SPECIFIED QUANTITIES FOR THE TRANSPORT OF RADIONUCLIDES****PART I****Table of radionuclides**

<b>Radionuclide name, symbol</b>	<b>Radionuclide form</b>	<b>Quantity (Bq)</b>
<b>Actinium</b>		
Ac-225	(see note 1)	$6 \times 10^9$
Ac-227	(see note 1)	$9 \times 10^7$
Ac-228		$5 \times 10^{11}$
<b>Aluminium</b>		
Al-26		$1 \times 10^{11}$
<b>Americium</b>		
Am-241		$1 \times 10^9$
Am-242m	(see note 1)	$1 \times 10^9$
Am-243	(see note 1)	$1 \times 10^9$
<b>Antimony</b>		
Sb-122		$4 \times 10^{11}$
Sb-124		$6 \times 10^{11}$
Sb-125		$1 \times 10^{12}$
Sb-126		$4 \times 10^{11}$
<b>Argon</b>		
Ar-37		$4 \times 10^{13}$
Ar-39		$2 \times 10^{13}$
Ar-41		$3 \times 10^{11}$

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of  $UF_6$ ,  $UO_2F_2$  and  $UO_2(NO_3)_2$  in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of  $O_3$ ,  $UF_4$ ,  $UCl_4$  and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Arsenic		
As-72		3 10 <sup>11</sup>
As-73		4 10 <sup>13</sup>
As-74		9 10 <sup>11</sup>
As-76		3 10 <sup>11</sup>
As-77		7 10 <sup>11</sup>
Astatine		
At-211	(see note 1)	5 10 <sup>11</sup>
Barium		
Ba-131	(see note 1)	2 10 <sup>12</sup>
Ba-133		3 10 <sup>12</sup>
Ba-133m		6 10 <sup>11</sup>
Ba-140	(see note 1)	3 10 <sup>11</sup>
Berkelium		
Bk-247		8 10 <sup>8</sup>
Bk-249	(see note 1)	3 10 <sup>11</sup>
Beryllium		
Be-7		2 10 <sup>13</sup>
Be-10		6 10 <sup>11</sup>
Bismuth		
Bi-205		7 10 <sup>11</sup>
Bi-206		3 10 <sup>11</sup>
Bi-207		7 10 <sup>11</sup>
Bi-210		6 10 <sup>11</sup>
Bi-210m	(see note 1)	2 10 <sup>10</sup>

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF<sub>6</sub>, UO<sub>2</sub>F<sub>2</sub> and UO<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub> in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O<sub>3</sub>, UF<sub>4</sub>, UCl<sub>4</sub> and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

**Status:** This is the original version (as it was originally made).

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Bi-212	(see note 1)	6 10 <sup>11</sup>
Bromine		
Br-76		4 10 <sup>11</sup>
Br-77		3 10 <sup>12</sup>
Br-82		4 10 <sup>11</sup>
Cadmium		
Cd-109		2 10 <sup>12</sup>
Cd-113m		5 10 <sup>11</sup>
Cd-115	(see note 1)	4 10 <sup>11</sup>
Cd-115m		5 10 <sup>11</sup>
Caesium		
Cs-129		4 10 <sup>12</sup>
Cs-131		3 10 <sup>13</sup>
Cs-132		1 10 <sup>12</sup>
Cs-134		7 10 <sup>11</sup>
Cs-134m		6 10 <sup>11</sup>
Cs-135		1 10 <sup>12</sup>
Cs-136		5 10 <sup>11</sup>
Cs-137	(see note 1)	6 10 <sup>11</sup>
Calcium		
Ca-41		unlimited
Ca-45		1 10 <sup>12</sup>
Ca-47	(see note 1)	3 10 <sup>11</sup>
Californium		
Cf-248		6 10 <sup>9</sup>

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF<sub>6</sub>, UO<sub>2</sub>F<sub>2</sub> and UO<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub> in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O<sub>3</sub>, UF<sub>4</sub>, UCl<sub>4</sub> and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Cf-249		8 10 <sup>8</sup>
Cf-250		2 10 <sup>9</sup>
Cf-251		7 10 <sup>8</sup>
Cf-252		3 10 <sup>9</sup>
Cf-253	(see note 1)	4 10 <sup>10</sup>
Cf-254		1 10 <sup>9</sup>
Carbon		
C-11		6 10 <sup>11</sup>
C-14		3 10 <sup>12</sup>
Cerium		
Ce-139		2 10 <sup>12</sup>
Ce-141		6 10 <sup>11</sup>
Ce-143		6 10 <sup>11</sup>
Ce-144	(see note 1)	2 10 <sup>11</sup>
Chlorine		
Cl-36		6 10 <sup>11</sup>
Cl-38		2 10 <sup>11</sup>
Chromium		
Cr-51		3 10 <sup>13</sup>
Cobalt		
Co-55		5 10 <sup>11</sup>
Co-56		3 10 <sup>11</sup>
Co-57		1 10 <sup>13</sup>
Co-58		1 10 <sup>12</sup>
Co-58m		4 10 <sup>13</sup>

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF<sub>6</sub>, UO<sub>2</sub>F<sub>2</sub> and UO<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub> in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O<sub>3</sub>, UF<sub>4</sub>, UCl<sub>4</sub> and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

**Status:** This is the original version (as it was originally made).

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Co-60		4 10 <sup>11</sup>
Copper		
Cu-64		1 10 <sup>12</sup>
Cu-67		7 10 <sup>11</sup>
Curium		
Cm-240		2 10 <sup>10</sup>
Cm-241		1 10 <sup>12</sup>
Cm-242		1 10 <sup>10</sup>
Cm-243		1 10 <sup>9</sup>
Cm-244		2 10 <sup>9</sup>
Cm-245		9 10 <sup>8</sup>
Cm-246		9 10 <sup>8</sup>
Cm-247	(see note 1)	1 10 <sup>9</sup>
Cm-248		3 10 <sup>8</sup>
Dysprosium		
Dy-159		2 10 <sup>13</sup>
Dy-165		6 10 <sup>11</sup>
Dy-166	(see note 1)	3 10 <sup>11</sup>
Erbium		
Er-169		1 10 <sup>12</sup>
Er-171		5 10 <sup>11</sup>
Europium		
Eu-147		2 10 <sup>12</sup>
Eu-148		5 10 <sup>11</sup>
Eu-149		2 10 <sup>13</sup>

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF<sub>6</sub>, UO<sub>2</sub>F<sub>2</sub> and UO<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub> in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O<sub>3</sub>, UF<sub>4</sub>, UCl<sub>4</sub> and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.



Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Eu-150	(long lived isotope)	7 10 <sup>11</sup>
Eu-150	(short lived isotope)	7 10 <sup>11</sup>
Eu-152		1 10 <sup>12</sup>
Eu-152m		8 10 <sup>11</sup>
Eu-154		6 10 <sup>11</sup>
Eu-155		3 10 <sup>12</sup>
Eu-156		7 10 <sup>11</sup>
Fluorine		
F-18		6 10 <sup>11</sup>
Gadolinium		
Gd-146	(see note 1)	5 10 <sup>11</sup>
Gd-148		2 10 <sup>9</sup>
Gd-153		9 10 <sup>12</sup>
Gd-159		6 10 <sup>11</sup>
Gallium		
Ga-67		3 10 <sup>12</sup>
Ga-68		5 10 <sup>11</sup>
Ga-72		4 10 <sup>11</sup>
Germanium		
Ge-68	(see note 1)	5 10 <sup>11</sup>
Ge-71		4 10 <sup>13</sup>
Ge-77		3 10 <sup>11</sup>
Gold		
Au-193		2 10 <sup>12</sup>
Au-194		1 10 <sup>12</sup>

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF<sub>6</sub>, UO<sub>2</sub>F<sub>2</sub> and UO<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub> in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O<sub>3</sub>, UF<sub>4</sub>, UCl<sub>4</sub> and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

**Status:** This is the original version (as it was originally made).

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Au-195		6 10 <sup>12</sup>
Au-198		6 10 <sup>11</sup>
Au-199		6 10 <sup>11</sup>
Hafnium		
Hf-172	(see note 1)	6 10 <sup>11</sup>
Hf-175		3 10 <sup>12</sup>
Hf-181		5 10 <sup>11</sup>
Hf-182		unlimited
Holmium		
Ho-166		4 10 <sup>11</sup>
Ho-166m		5 10 <sup>11</sup>
Hydrogen		
H-3		4 10 <sup>13</sup>
Indium		
In-111		3 10 <sup>12</sup>
In-113m		2 10 <sup>12</sup>
In-114m	(see note 1)	5 10 <sup>11</sup>
In-115m		1 10 <sup>12</sup>
Iodine		
I-123		3 10 <sup>12</sup>
I-124		1 10 <sup>12</sup>
I-125		3 10 <sup>12</sup>
I-126		1 10 <sup>12</sup>
I-129		unlimited
I-131		7 10 <sup>11</sup>

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF<sub>6</sub>, UO<sub>2</sub>F<sub>2</sub> and UO<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub> in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O<sub>3</sub>, UF<sub>4</sub>, UCl<sub>4</sub> and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
I-132		4 10 <sup>11</sup>
I-133		6 10 <sup>11</sup>
I-134		3 10 <sup>11</sup>
I-135	(see note 1)	6 10 <sup>11</sup>
Iridium		
Ir-189	(see note 1)	1 10 <sup>13</sup>
Ir-190		7 10 <sup>11</sup>
Ir-192		6 10 <sup>11</sup>
Ir-194		3 10 <sup>11</sup>
Iron		
Fe-52	(see note 1)	3 10 <sup>11</sup>
Fe-55		4 10 <sup>13</sup>
Fe-59		9 10 <sup>11</sup>
Fe-60	(see note 1)	2 10 <sup>11</sup>
Krypton		
Kr-81		4 10 <sup>13</sup>
Kr-85		1 10 <sup>13</sup>
Kr-85m		3 10 <sup>12</sup>
Kr-87		2 10 <sup>11</sup>
Lanthanum		
La-137		6 10 <sup>12</sup>
La-140		4 10 <sup>11</sup>
Lead		
Pb-201		1 10 <sup>12</sup>
Pb-202		2 10 <sup>13</sup>

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF<sub>6</sub>, UO<sub>2</sub>F<sub>2</sub> and UO<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub> in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O<sub>3</sub>, UF<sub>4</sub>, UCl<sub>4</sub> and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

**Status:** This is the original version (as it was originally made).

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Pb-203		$3 \cdot 10^{12}$
Pb-205		unlimited
Pb-210	(see note 1)	$5 \cdot 10^{10}$
Pb-212	(see note 1)	$2 \cdot 10^{11}$
Lutetium		
Lu-172		$6 \cdot 10^{11}$
Lu-173		$8 \cdot 10^{12}$
Lu-174		$9 \cdot 10^{12}$
Lu-174m		$1 \cdot 10^{13}$
Lu-177		$7 \cdot 10^{11}$
Magnesium		
Mg-28	(see note 1)	$3 \cdot 10^{11}$
Manganese		
Mn-52		$3 \cdot 10^{11}$
Mn-53		unlimited
Mn-54		$1 \cdot 10^{12}$
Mn-56		$3 \cdot 10^{11}$
Mercury		
Hg-194	(see note 1)	$1 \cdot 10^{12}$
Hg-195m	(see note 1)	$7 \cdot 10^{11}$
Hg-197		$1 \cdot 10^{13}$
Hg-197m		$4 \cdot 10^{11}$
Hg-203		$1 \cdot 10^{12}$
Molybdenum		
Mo-93		$2 \cdot 10^{13}$

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF<sub>6</sub>, UO<sub>2</sub>F<sub>2</sub> and UO<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub> in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O<sub>3</sub>, UF<sub>4</sub>, UCl<sub>4</sub> and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Mo-99	(see note 1)	$6 \times 10^{11}$
Neodymium		
Nd-147		$6 \times 10^{11}$
Nd-149		$5 \times 10^{11}$
Neptunium		
Np-235		$4 \times 10^{13}$
Np-236	(long lived isotope)	$2 \times 10^{10}$
Np-236	(short lived isotope)	$2 \times 10^{12}$
Np-237		$2 \times 10^9$
Np-239		$4 \times 10^{11}$
Nickel		
Ni-59		unlimited
Ni-63		$3 \times 10^{13}$
Ni-65		$4 \times 10^{11}$
Niobium		
Nb-93m		$3 \times 10^{13}$
Nb-94		$7 \times 10^{11}$
Nb-95		$1 \times 10^{12}$
Nb-97		$6 \times 10^{11}$
Nitrogen		
N-13		$6 \times 10^{11}$
Osmium		
Os-185		$1 \times 10^{12}$
Os-191		$2 \times 10^{12}$
Os-191m		$3 \times 10^{13}$

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of  $UF_6$ ,  $UO_2F_2$  and  $UO_2(NO_3)_2$  in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of  $O_3$ ,  $UF_4$ ,  $UCl_4$  and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

**Status:** This is the original version (as it was originally made).

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Os-193		6 10 <sup>11</sup>
Os-194	(see note 1)	3 10 <sup>11</sup>
Palladium		
Pd-103	(see note 1)	4 10 <sup>13</sup>
Pd-107		unlimited
Pd-109		5 10 <sup>11</sup>
Phosphorus		
P-32		5 10 <sup>11</sup>
P-33		1 10 <sup>12</sup>
Platinum		
Pt-188	(see note 1)	8 10 <sup>11</sup>
Pt-191		3 10 <sup>12</sup>
Pt-193		4 10 <sup>13</sup>
Pt-193m		5 10 <sup>11</sup>
Pt-195m		5 10 <sup>11</sup>
Pt-197		6 10 <sup>11</sup>
Pt-197m		6 10 <sup>11</sup>
Plutonium		
Pu-236		3 10 <sup>9</sup>
Pu-237		2 10 <sup>13</sup>
Pu-238		1 10 <sup>9</sup>
Pu-239		1 10 <sup>9</sup>
Pu-240		1 10 <sup>9</sup>
Pu-241	(see note 1)	6 10 <sup>10</sup>
Pu-242		1 10 <sup>9</sup>

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF<sub>6</sub>, UO<sub>2</sub>F<sub>2</sub> and UO<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub> in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O<sub>3</sub>, UF<sub>4</sub>, UCl<sub>4</sub> and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Pu-244	(see note 1)	1 10 <sup>9</sup>
Polonium		
Po-210		2 10 <sup>10</sup>
Potassium		
K-40		9 10 <sup>11</sup>
K-42		2 10 <sup>11</sup>
K-43		6 10 <sup>11</sup>
Praseodymium		
Pr-142		4 10 <sup>11</sup>
Pr-143		6 10 <sup>11</sup>
Promethium		
Pm-143		3 10 <sup>12</sup>
Pm-144		7 10 <sup>11</sup>
Pm-145		1 10 <sup>13</sup>
Pm-147		2 10 <sup>12</sup>
Pm-148m	(see note 1)	7 10 <sup>11</sup>
Pm-149		6 10 <sup>11</sup>
Pm-151		6 10 <sup>11</sup>
Protactinium		
Pa-230	(see note 1)	7 10 <sup>10</sup>
Pa-231		4 10 <sup>8</sup>
Pa-233		7 10 <sup>11</sup>
Radium		
Ra-223	(see note 1)	7 10 <sup>9</sup>
Ra-224	(see note 1)	2 10 <sup>10</sup>

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF<sub>6</sub>, UO<sub>2</sub>F<sub>2</sub> and UO<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub> in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O<sub>3</sub>, UF<sub>4</sub>, UCl<sub>4</sub> and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

**Status:** This is the original version (as it was originally made).

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Ra-225	(see note 1)	4 10 <sup>9</sup>
Ra-226	(see note 1)	3 10 <sup>9</sup>
Ra-228	(see note 1)	2 10 <sup>10</sup>
Radon		
Rn-222	(see note 1)	4 10 <sup>9</sup>
Rhenium		
Re-184		1 10 <sup>12</sup>
Re-184m		1 10 <sup>12</sup>
Re-186		6 10 <sup>11</sup>
Re-187		unlimited
Re-188		4 10 <sup>11</sup>
Re-189	(see note 1)	6 10 <sup>11</sup>
Re-natural		unlimited
Rhodium		
Rh-99		2 10 <sup>12</sup>
Rh-101		3 10 <sup>12</sup>
Rh-102		5 10 <sup>11</sup>
Rh-102m		2 10 <sup>12</sup>
Rh-103m		4 10 <sup>13</sup>
Rh-105		8 10 <sup>11</sup>
Rubidium		
Rb-81		8 10 <sup>11</sup>
Rb-83	(see note 1)	2 10 <sup>12</sup>
Rb-84		1 10 <sup>12</sup>
Rb-86		5 10 <sup>11</sup>

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF<sub>6</sub>, UO<sub>2</sub>F<sub>2</sub> and UO<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub> in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O<sub>3</sub>, UF<sub>4</sub>, UCl<sub>4</sub> and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.



Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Rb-87		unlimited
Rb-natural		unlimited
Ruthenium		
Ru-97		5 10 <sup>12</sup>
Ru-103	(see note 1)	2 10 <sup>12</sup>
Ru-105		6 10 <sup>11</sup>
Ru-106	(see note 1)	2 10 <sup>11</sup>
Samarium		
Sm-145		1 10 <sup>13</sup>
Sm-147		unlimited
Sm-151		1 10 <sup>13</sup>
Sm-153		6 10 <sup>11</sup>
Scandium		
Sc-44		5 10 <sup>11</sup>
Sc-46		5 10 <sup>11</sup>
Sc-47		7 10 <sup>11</sup>
Sc-48		3 10 <sup>11</sup>
Selenium		
Se-75		3 10 <sup>12</sup>
Se-79		2 10 <sup>12</sup>
Silicon		
Si-31		6 10 <sup>11</sup>
Si-32		5 10 <sup>11</sup>
Silver		
Ag-105		2 10 <sup>12</sup>

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF<sub>6</sub>, UO<sub>2</sub>F<sub>2</sub> and UO<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub> in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O<sub>3</sub>, UF<sub>4</sub>, UCl<sub>4</sub> and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

**Status:** This is the original version (as it was originally made).

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Ag-108m	(see note 1)	7 10 <sup>11</sup>
Ag-110m	(see note 1)	4 10 <sup>11</sup>
Ag-111		6 10 <sup>11</sup>
Sodium		
Na-22		5 10 <sup>11</sup>
Na-24		2 10 <sup>11</sup>
Strontium		
Sr-82	(see note 1)	2 10 <sup>11</sup>
Sr-85		2 10 <sup>12</sup>
Sr-85m		5 10 <sup>12</sup>
Sr-87m		3 10 <sup>12</sup>
Sr-89		6 10 <sup>11</sup>
Sr-90	(see note 1)	3 10 <sup>11</sup>
Sr-91	(see note 1)	3 10 <sup>11</sup>
Sr-92	(see note 1)	3 10 <sup>11</sup>
Sulphur		
S-35		3 10 <sup>12</sup>
Tantalum		
Ta-178	(long lived isotope)	8 10 <sup>11</sup>
Ta-179		3 10 <sup>13</sup>
Ta-182		5 10 <sup>11</sup>
Technetium		
Tc-95m	(see note 1)	2 10 <sup>12</sup>
Tc-96		4 10 <sup>11</sup>
Tc-96m	(see note 1)	4 10 <sup>11</sup>

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF<sub>6</sub>, UO<sub>2</sub>F<sub>2</sub> and UO<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub> in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O<sub>3</sub>, UF<sub>4</sub>, UCl<sub>4</sub> and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Tc-97		unlimited
Tc-97m		1 10 <sup>12</sup>
Tc-98		7 10 <sup>11</sup>
Tc-99		9 10 <sup>11</sup>
Tc-99m		4 10 <sup>12</sup>
Tellurium		
Te-121		2 10 <sup>12</sup>
Te-121m		3 10 <sup>12</sup>
Te-123m		1 10 <sup>12</sup>
Te-125m		9 10 <sup>11</sup>
Te-127		7 10 <sup>11</sup>
Te-127m	(see note 1)	5 10 <sup>11</sup>
Te-129		6 10 <sup>11</sup>
Te-129m	(see note 1)	4 10 <sup>11</sup>
Te-131m	(see note 1)	5 10 <sup>11</sup>
Te-132	(see note 1)	4 10 <sup>11</sup>
Terbium		
Tb-157		4 10 <sup>13</sup>
Tb-158		1 10 <sup>12</sup>
Tb-160		6 10 <sup>11</sup>
Thallium		
Tl-200		9 10 <sup>11</sup>
Tl-201		4 10 <sup>12</sup>
Tl-202		2 10 <sup>12</sup>
Tl-204		7 10 <sup>11</sup>

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF<sub>6</sub>, UO<sub>2</sub>F<sub>2</sub> and UO<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub> in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O<sub>3</sub>, UF<sub>4</sub>, UCl<sub>4</sub> and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

**Status:** This is the original version (as it was originally made).

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
Thorium		
Th-227		5 10 <sup>9</sup>
Th-228	(see note 1)	1 10 <sup>9</sup>
Th-229		5 10 <sup>8</sup>
Th-230		1 10 <sup>9</sup>
Th-231		2 10 <sup>10</sup>
Th-232		unlimited
Th-234	(see note 1)	3 10 <sup>11</sup>
Th-natural		unlimited
Thulium		
Tm-167		8 10 <sup>11</sup>
Tm-170		6 10 <sup>11</sup>
Tm-171		4 10 <sup>13</sup>
Tin		
Sn-113	(see note 1)	2 10 <sup>12</sup>
Sn-117m		4 10 <sup>11</sup>
Sn-119m		3 10 <sup>13</sup>
Sn-121m	(see note 1)	9 10 <sup>11</sup>
Sn-123		6 10 <sup>11</sup>
Sn-125		4 10 <sup>11</sup>
Sn-126	(see note 1)	4 10 <sup>11</sup>
Titanium		
Ti-44	(see note 1)	4 10 <sup>11</sup>
Tungsten		
W-178	(see note 1)	5 10 <sup>12</sup>

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF<sub>6</sub>, UO<sub>2</sub>F<sub>2</sub> and UO<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub> in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O<sub>3</sub>, UF<sub>4</sub>, UCl<sub>4</sub> and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
W-181		3 10 <sup>13</sup>
W-185		8 10 <sup>11</sup>
W-187		6 10 <sup>11</sup>
W-188	(see note 1)	3 10 <sup>11</sup>
Uranium		
U-230	(fast lung absorption, see notes 1 and 2)	1 10 <sup>11</sup>
U-230	(medium lung absorption see notes 1 and 3)	4 10 <sup>9</sup>
U-230	(slow lung absorption, see notes 1 and 4)	3 10 <sup>9</sup>
U-232	(fast lung absorption, see note 2)	1 10 <sup>10</sup>
U-232	(medium lung absorption, see note 3)	7 10 <sup>9</sup>
U-232	(slow lung absorption, see note 4)	1 10 <sup>9</sup>
U-233	(fast lung absorption, see note 2)	9 10 <sup>10</sup>
U-233	(medium lung absorption, see note 3)	2 10 <sup>10</sup>
U-233	(slow lung absorption, see note 4)	6 10 <sup>9</sup>
U-234	(fast lung absorption, see note 2)	9 10 <sup>10</sup>
U-234		2 10 <sup>10</sup>
U-234	(medium lung absorption, see note 3)	6 10 <sup>9</sup>
U-235	(slow lung absorption, see note 4)	unlimited

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of UF<sub>6</sub>, UO<sub>2</sub>F<sub>2</sub> and UO<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub> in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of O<sub>3</sub>, UF<sub>4</sub>, UCl<sub>4</sub> and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

**Status:** This is the original version (as it was originally made).

Radionuclide name, symbol	Radionuclide form	Quantity (Bq)
U-236	(all lung absorption types, see notes 1, 2, 3 and 4)	unlimited
U-236	(fast lung absorption, see note 2)	$2 \cdot 10^{10}$
U-236	(medium lung absorption, see note 3)	$6 \cdot 10^9$
U-238	(slow lung absorption, see note 4)	unlimited
U-natural	(all lung absorption types, see notes 2, 3 and 4)	unlimited
U (enriched to 20% or less)		unlimited
U-depleted	(see note 5)	unlimited
<b>Vanadium</b>		
V-48		$4 \cdot 10^{11}$
V-49		$4 \cdot 10^{13}$
<b>Xenon</b>		
Xe-122	(see note 1)	$4 \cdot 10^{11}$
Xe-123		$7 \cdot 10^{11}$
Xe-127		$2 \cdot 10^{12}$
Xe-131m		$4 \cdot 10^{13}$
Xe-133		$1 \cdot 10^{13}$
Xe-135		$2 \cdot 10^{12}$
<b>Ytterbium</b>		
Yb-169		$1 \cdot 10^{12}$
Yb-175		$9 \cdot 10^{11}$
<b>Yttrium</b>		

Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.

Note 2: These values apply only to compounds of uranium that take the chemical form of  $UF_6$ ,  $UO_2F_2$  and  $UO_2(NO_3)_2$  in both normal and accident conditions of transport.

Note 3: These values apply only to compounds of uranium that take the chemical form of  $O_3$ ,  $UF_4$ ,  $UCl_4$  and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.

Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.

Note 5: These values apply to *unirradiated uranium* only.

Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.

<b>Radionuclide name, symbol</b>	<b>Radionuclide form</b>	<b>Quantity (Bq)</b>
Y-87	(see note 1)	1 10 <sup>12</sup>
Y-88		4 10 <sup>11</sup>
Y-90		3 10 <sup>11</sup>
Y-91		6 10 <sup>11</sup>
Y-91m		2 10 <sup>12</sup>
Y-92		2 10 <sup>11</sup>
Y-93		3 10 <sup>11</sup>
<b>Zinc</b>		
Zn-65		2 10 <sup>12</sup>
Zn-69		6 10 <sup>11</sup>
Zn-69m	(see note 1)	6 10 <sup>11</sup>
<b>Zirconium</b>		
Zr-88		3 10 <sup>12</sup>
Zr-93		unlimited
Zr-95	(see note 1)	8 10 <sup>11</sup>
Zr-97	(see note 1)	4 10 <sup>11</sup>
Other radionuclides not listed above where only beta or gamma emitting nuclides are known to be present	(see note 6)	2 10 <sup>10</sup>
Other radionuclides not listed above where alpha emitting nuclides are known to be present or no relevant data are available	(see note 6)	9 10 <sup>7</sup>
Note 1: Values include contributions from daughter nuclides with half-lives less than 10 days.		
Note 2: These values apply only to compounds of uranium that take the chemical form of UF <sub>6</sub> , UO <sub>2</sub> F <sub>2</sub> and UO <sub>2</sub> (NO <sub>3</sub> ) <sub>2</sub> in both normal and accident conditions of transport.		
Note 3: These values apply only to compounds of uranium that take the chemical form of O <sub>3</sub> , UF <sub>4</sub> , UCl <sub>4</sub> and hexavalent compounds other than those specified in Note 2 above in both normal and accident conditions of transport.		
Note 4: These values apply to all compounds of uranium other than those specified in Notes 2 and 3 above.		
Note 5: These values apply to <i>unirradiated uranium</i> only.		
Note 6: In the case of radionuclides not specified elsewhere in this Part, the quantity specified in this entry is to be used unless the Executive has approved some other quantity for that radionuclide.		

## PART II

### Quantity ratios for more than one radionuclide

1. For the purpose of regulation 3(3), the quantity ratio for more than one radionuclide is the sum of the quotients of the quantity of a radionuclide present  $Q_p$  divided by the quantity of that radionuclide specified in the appropriate column of Part I of this Schedule  $Q_{lim}$ , namely—

$$\sum \frac{Q_p}{Q_{lim}}$$

2. In any case where the isotopic composition of a radioactive substance is not known or is only partially known, the quantity ratio for that substance shall be calculated by using the values specified in the appropriate column in Part I for “other radionuclides not listed above” for any radionuclide that has not been identified or where the quantity of a radionuclide is uncertain, unless the employer can show that the use of some other value is appropriate in the circumstances of a particular case, when he may use that value.

## SCHEDULE 5

Regulation 6(4)

### PARTICULARS TO BE INCLUDED IN AN ASSESSMENT REPORT

The following particulars are required to be included in an assessment report under regulation 6(4)—

- (a) the name and address of the operator or carrier;
- (b) the postal address of the premises where the radioactive substance will be processed, manufactured, used or stored, or where the facilities for processing, manufacture, use or storage exist or, in the case of transport, the postal address of the transport undertaking;
- (c) the date on which it is anticipated that the work with ionising radiation will commence or, if it has already commenced, a statement to that effect;
- (d) a general description of the premises or place including the geographical location, meteorological, geological, hydrographic conditions and, where material, the history of the premises, except that in the case of transport a general description shall be given of either—
  - (i) the starting and end points of the journey and transshipment points, or
  - (ii) the criteria to be used for route selection;
- (e) in the case of an assessment by an operator, a description of any radioactive substance on the premises which is likely to exceed any quantity or mass specified in Schedule 2 or Schedule 3, as the case may be, which description shall where practicable include details of the radionuclides present and their likely maximum quantities;
- (f) in the case of an assessment by a carrier, a description of any radioactive substance which is likely to exceed any quantity or mass specified in Schedule 4 or Schedule 3, as the case may be, which description shall where practicable include details of the radionuclides present and their likely maximum quantities;
- (g) except in the case of an assessment relating to transport, a plan of the premises in question and a map of the environs to a scale large enough to enable the premises and any features which could affect the general risk in an emergency to be identified;
- (h) a diagram and description of any single plant or enclosed system containing more than the quantity or mass of any radioactive substance specified in Schedule 2 or Schedule 3, as the case may be, or, in the case of the transport of more than the quantity or mass of



any radioactive substance specified in Schedule 4 or Schedule 3, as the case may be, the nature of the containment for the radioactive substance, the type of vehicle and the means of securing the load within or on the vehicle;

- (i) those factors which could precipitate a major release of any radioactive substance and the measures to be taken to prevent or control such release and information showing the maximum quantity of radioactive substance which, in the event of a major failure of containment, would be released to the atmosphere including, in respect of premises, the identification of plant and other activities anywhere on the premises which could precipitate such release;
- (j) those factors which could precipitate a smaller but continuing release of any radioactive substance and the measures to be taken to prevent or control such releases to atmosphere;
- (k) those factors which could give rise to an incident involving the initiation of an unintended self-sustaining nuclear chain reaction or the loss of control of an intended self-sustaining nuclear chain reaction and, in either case, the measures to be taken to prevent or control any such incident;
- (l) information concerning the management systems and staffing arrangements by which the radioactive substance is controlled and by which the procedures are controlled;
- (m) except in the case of an assessment relating to transport, information about the size and distribution of the population in the vicinity of premises to which the report relates;
- (n) an assessment of the area which is likely to be affected by the dispersal of any radioactive substance as a result of any radiation emergency and the period of time over which such dispersal is likely to take place;
- (o) an assessment of the likely exposures to ionising radiation of any person or class of persons as a result of any radiation emergency; and
- (p) an assessment of the necessity for an emergency plan to be prepared by the operator or carrier.

## SCHEDULE 6

Regulation 6(5)

### **FURTHER PARTICULARS THAT THE EXECUTIVE MAY REQUIRE**

A further assessment and report may be required under regulation 6(5) in respect of the following matters—

- (a) the analysis carried out to establish the likely consequences of any hazard, including the likely doses of ionising radiation to which members of the public might be exposed, and the probability of the occurrence of such hazard;
- (b) the number of persons whose health or safety might be affected by the hazard;
- (c) the management systems and staffing arrangements by which any hazard is to be or is controlled;
- (d) the safety systems, procedures and monitoring systems by which any hazard is to be or is controlled;
- (e) the qualifications, experience and training of staff concerned;
- (f) the design, construction, operation or maintenance of any equipment (including the incorporation of adequate safety or reliability features of such equipment) which is used for the purposes of intervention or which is used to control any hazard;
- (g) the design and operating documentation;

- (h) the design and operation of containment and pressure systems;
- (i) the protection of persons from the effects of loss of containment; and
- (j) the procedures for the reporting of and learning from radiation emergencies.

SCHEDULE 7

Regulations 7(2), 8(2) and 9(2)

**INFORMATION TO BE INCLUDED IN EMERGENCY PLANS**

**PART I**

**Information to be included in an operator's emergency plan**

The information referred to in regulation 7(2) is as follows—

- (a) the names or positions of persons authorised to set emergency procedures in motion and the person in charge of and co-ordinating the on-site mitigatory action;
- (b) the name or position of the person with responsibility for liaison with the local authority responsible for preparing the off-site emergency plan;
- (c) for reasonably foreseeable conditions or events which could be significant in bringing about a radiation emergency, a description of the action which should be taken to control the conditions or events and to limit their consequences, including a description of the safety equipment and the resources available;
- (d) the arrangements for limiting the risks to persons on the premises including how warnings are to be given and the actions persons are expected to take on receipt of a warning;
- (e) the arrangements for providing early warning of the incident to the local authority responsible for setting the off-site emergency plan in motion, the type of information which should be contained in an initial warning and the arrangements for the provision of more detailed information as it becomes available;
- (f) the arrangements for providing assistance with off-site mitigatory action; and
- (g) the arrangements for emergency exposures including the dose levels which have been determined as appropriate for the purposes of putting into effect the emergency plan.

**PART II**

**Information to be included in a carrier's emergency plan**

The information referred to in regulation 8(2) is as follows—

- (a) the names or positions of persons authorised to set emergency procedures in motion and the person in charge of and co-ordinating the mitigatory action;
- (b) for reasonably foreseeable conditions or events which could be significant in bringing about a radiation emergency, a description of the action which should be taken to control the conditions or events and to limit their consequences, including a description of the safety equipment and the resources available;
- (c) the arrangements for providing early warning of the incident, the type of information which should be contained in an initial warning and the arrangements for the provision of more detailed information as it becomes available; and

- (d) the arrangements for emergency exposures including the dose levels which have been determined as appropriate for the purposes of putting into effect the emergency plan.

## **PART III**

### **Information to be included in an off-site emergency plan**

The information referred to in regulation 9(2) is as follows—

- (a) the names or positions of persons authorised to set emergency procedures in motion and of persons authorised to take charge of and co-ordinate the off-site mitigatory action;
- (b) the arrangements for receiving early warning of incidents, and alert and call-out procedures;
- (c) the arrangements for co-ordinating resources necessary to implement the off-site emergency plan;
- (d) the arrangements for providing assistance with on-site mitigatory action;
- (e) the arrangements for off-site mitigatory action;
- (f) the arrangements for providing the public with specific information relating to the emergency and the behaviour which it should adopt; and
- (g) the arrangements for emergency exposures including the dose levels which have been determined as appropriate for the purposes of putting into effect the emergency plan.

## **SCHEDULE 8**

Regulations 7(4) and (5), 8(5) and (6) and  
9(10) and (11)

## **PRINCIPLES AND PURPOSES OF INTERVENTION**

### **PART I**

#### **Principles to which emergency plans shall have regard**

An emergency plan drawn up pursuant to regulation 7, 8 or 9 respectively shall, in so far as it applies to any radiation emergency, be drawn up having regard to the following principles—

- (a) the intervention shall be undertaken only if the reduction in the detriment due to the radiation resulting from the radiation emergency is sufficient to justify the harm and costs, including the social costs, of the intervention; and
- (b) the form, scale and duration of the intervention shall be carried out in such a way as to ensure that exposures to radiation are kept as low as is reasonably practicable so that the benefit of the reduction in health detriment less the detriment associated with the intervention will be maximised.

### **PART II**

#### **Purposes of intervention**

The purposes of intervention referred to in regulations 7(5), 8(6) and regulation 9(11) are—

- (a) reducing or stopping at source direct radiation and the emission of radionuclides;

*Status: This is the original version (as it was originally made).*

- (b) reducing the transfer of radioactive substances to individuals from the environment; and
- (c) reducing the exposure and organising the treatment of persons who have been subject to exposure to radiation.

SCHEDULE 9

Regulation 16(1)

**PRIOR INFORMATION TO BE SUPPLIED AND MADE PUBLICLY AVAILABLE**

1. Basic facts about radioactivity and its effects on persons and on the environment.
2. The various types of radiation emergency covered and their consequences for the general public and the environment.
3. Emergency measures envisaged to alert, protect and assist the general public in the event of a radiation emergency.
4. Appropriate information on action to be taken by the general public in the event of a radiation emergency.
5. The authority or authorities responsible for implementing the emergency measures and action referred to in paragraphs 3 and 4 above.

SCHEDULE 10

Regulation 17(4)

**INFORMATION TO BE SUPPLIED IN THE EVENT OF A RADIATION EMERGENCY**

1. Information on the type of emergency which has occurred, and, where possible, its characteristics, for example, its origin, extent and probable development.
2. Advice on health protection measures, which, depending on the type of emergency, might include—
  - (a) any restrictions on the consumption of certain foodstuffs and water supply likely to be contaminated;
  - (b) any basic rules on hygiene and decontamination;
  - (c) any recommendation to stay indoors;
  - (d) the distribution and use of protective substances;
  - (e) any evacuation arrangements;
  - (f) special warnings for certain population groups.
3. Any announcements recommending co-operation with instructions or requests by the competent authorities.
4. Where an occurrence which is likely to give rise to a release of radioactivity or ionising radiation has happened but no release has yet taken place, the information and advice should include the following—
  - (a) an invitation to tune in to radio or television;
  - (b) preparatory advice to establishments with particular collective responsibilities; and
  - (c) recommendations to occupational groups particularly affected.

5. If time permits, information setting out the basic facts about radioactivity and its effects on persons and on the environment.

## SCHEDULE 11

Regulation 21

### AMENDMENT OF REGULATIONS

#### *The Fire Certificates (Special Premises) Regulations 1976*

1. Paragraph 14 of Schedule 1 to the Fire Certificates (Special Premises) Regulations 1976(1) shall be deleted and the following substituted—

“14. Premises to which the Radiation (Emergency Preparedness and Public Information) Regulations 2001 apply by virtue of regulation 3 of those Regulations.”.

#### *The Ionising Radiations Regulations 1999*

2. The 1999 Regulations shall be amended in accordance with paragraphs 3 to 9.
3. In regulation 21(3)(i), the word “to” shall be inserted before “maintain”.
4. In regulation 35(1), after the words “these Regulations” there shall be inserted the words “or of the Radiation (Emergency Preparedness and Public Information) Regulations 2001.”.
5. After regulation 35, there shall be inserted the following regulation—

#### “Enforcement

**35A.** Insofar as any provision of regulation 21 is made under section 2(2) of the European Communities Act 1972, sections—

- (a) 16 to 21 (approval of codes of practice and enforcement);
- (b) 23 (provisions supplementary to sections 21 and 22) and 24 (appeal against improvement or prohibition notice), so far as they relate to an improvement notice;
- (c) 26 (power to indemnify inspectors); and
- (d) 33 to 42 (provisions as to offences),

of the Health and Safety at Work etc. Act 1974 shall apply to that provision as if that provision had been made under section 15 of that Act.”

6. Paragraph (7) of regulation 36 shall be deleted and the following substituted—

“(7) Where a contravention of these Regulations by any person is due to the act or default of some other person, that other person shall be guilty of the offence which would, but for any defence under this regulation available to the first-mentioned person, be constituted by the act or default.”.

7. In paragraph 6 of Schedule 4, after “trainee” there shall be inserted the words “referred to in paragraphs 1 or 3”.

8. In paragraph 19 of Schedule 4, in place of “pursuant to regulation 11(2)” there shall be substituted “in accordance with regulation 11(1)”.

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(1) [S.I.1995/3163](#).

**Status:** This is the original version (as it was originally made).

**9.** In column 1 of Schedule 8, under the entry for Ruthenium, in place of “Ru-160+”, there shall be substituted “Ru-106+”.

*The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995*

**10.** In Schedule 7 of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995(2)—

- (a) “The Ionising Radiations Regulations 1985” shall be deleted and “The Ionising Radiations Regulations 1999” substituted; and
- (b) after the final entry there shall be added: “The Radiation (Emergency Preparedness and Public Information) Regulations 2001.”.

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(2) [S.I.1985/1333](#), revoked (subject to a saving) by regulation 41 of the Ionising Radiations Regulations 1999.