

STATUTORY INSTRUMENTS

1986 No. 1002

ATOMIC ENERGY AND RADIOACTIVE SUBSTANCES

**The Radioactive Substances (Substances of Low Activity)
Exemption Order 1986**

<i>Made - - - - -</i>	<i>12th June 1986</i>
<i>Laid before Parliament</i>	<i>23rd June 1986</i>
<i>Coming into Operation</i>	<i>14th July 1986</i>

The Secretary of State, in exercise of powers conferred by sections 2(6), 6(5), 7(4) and 20(a) of the Radioactive Substances Act 1960(a) and of all other powers enabling him in that behalf, hereby makes the following order:—

Citation, commencement, application and interpretation

1. —(1) This order may be cited as the Radioactive Substances (Substances of Low Activity) Exemption Order 1986 and shall come into operation on 14th July 1986.

(2) This order applies to England, Wales and Scotland.

(3) In this order—

“the Act” means the Radioactive Substances Act 1960;

“activity”, expressed in becquerels, means the number of spontaneous nuclear transformations occurring in a period of one second in a radioactive substance;

“closed source” means an object free from patent defect which is radioactive material solely because it consists of one or more radionuclides firmly incorporated on or in, or sealed within, solid inert non-radioactive material so as to prevent in normal use the dispersion of any radioactive material;

“decay products” means, in relation to any radionuclide, the radionuclides succeeding it in the radioactive series in which it and they occur; and

“half life” means the time taken for the activity of a radionuclide to lose half its value by decay.

(4) In determining the activity of any solid radioactive material or waste for the purposes of article 2 or 3(a) of this order there shall be disregarded the activity of any element specified in column 1 of Schedule 1 to this order

(a) 1960 c. 34. The relevant powers are vested in the Secretary of State in relation to England and Wales by S.I. 1970/1681.

to the extent that the activity of any such element does not exceed the activity per gram mentioned opposite thereto in column 2 of that Schedule.

Exemption from registration under section 1 of the Act

2. All persons are exempted from registration under section 1 of the Act in respect of the keeping and use on any premises of solid radioactive material, other than a closed source, which is substantially insoluble in water, the activity of which does not exceed 0.4 becquerels per gram of mass.

Exclusion of radioactive waste from section 6 of the Act

3. Radioactive waste of the following descriptions is excluded from the provisions of section 6(1) and (3) of the Act (authorisation required to dispose of radioactive waste), namely—

- (a) a solid, other than a closed source, which is substantially insoluble in water, the activity of which, when it becomes waste, does not exceed 0.4 becquerels per gram of mass;
- (b) an organic liquid which is radioactive solely because of the presence of carbon 14, or tritium (or both), the activity of which, when it becomes waste, does not exceed 0.4 becquerels per millilitre; or
- (c) a gas containing one or more radionuclides none of which, nor the decay products of which, has a half life greater than 100 seconds.

Revocation

4. The orders mentioned in Schedule 2 to this order are hereby revoked.

SCHEDULE 1

Article 1(4)

SPECIFIED ELEMENTS

Column 1 (Element)	Column 2 (Becquerels per gram)
Actinium	0.37
Lead	0.74
Polonium	0.37
Protoactinium	0.37
Radium	0.37
Thorium	2.59
Uranium	11.10

SCHEDULE 2

Article 4

REVOCATIONS

Orders revoked	References
1. The Radioactive Substances (Civil Defence) Exemption Order 1962.	S.I. 1962/2641.
2. The Radioactive Substances (Civil Defence) Exemption (Scotland) Order 1962.	S.I. 1962/2767 (S.127).
3. The Radioactive Substances (Thorium-X) Exemption Order 1963.	S.I. 1963/1834.
4. The Radioactive Substances (Attachment to Lightning Conductors) Exemption Order 1963.	S.I. 1963/1835.
5. The Radioactive Substances (Thorium-X) Exemption (Scotland) Order 1963.	S.I. 1963/1880 (S.97).
6. The Radioactive Substances (Attachments to Lightning Conductors) Exemption (Scotland) Order 1963.	S.I. 1963/1881 (S.98).
7. The Radioactive Substances (Tokens for Vending Machines) Exemption Order 1968.	S.I. 1968/935.
8. The Radioactive Substances (Vouchers for Encashment Machines) Exemption Order 1968.	S.I. 1968/936.
9. The Radioactive Substances (Vouchers for Encashment Machines) Exemption (Scotland) Order 1968.	S.I. 1968/953 (S.99).
10. The Radioactive Substances (Tokens for Vending Machines) Exemption (Scotland) Order 1968.	S.I. 1968/954 (S.100).
11. The Radioactive Substances (Thorium-X) Exemption (Scotland) (Amendment) Order 1974.	S.I. 1974/488 (S.36).
12. The Radioactive Substances (Thorium-X) Exemption (Amendment) Order 1974.	S.I. 1974/500.

4th June 1986.

Nicholas Ridley,
Secretary of State for the Environment.

9th June 1986.

Nicholas Edwards,
Secretary of State for Wales.

12th June 1986.

Malcolm Rifkind,
Secretary of State for Scotland.

EXPLANATORY NOTE

(This note is not part of the order.)

This order, which extends to England, Wales and Scotland, is concerned with exemptions and exclusions under the Radioactive Substances Act 1960 in respect of certain substances of low radioactivity.

Article 2 exempts persons unconditionally from registration under section 1 of the Act in respect of the keeping and use on any premises of such substances.

Article 3 excludes from section 6(1) and (3) of the Act (control on the disposal of radioactive waste) the disposal of—

- (a) solid waste, other than closed sources, in which the activity does not exceed 0.4 becquerels per gram;
- (b) organic liquid waste whose only radioactive content is carbon 14 or tritium, or both, in which the activity does not exceed 0.4 becquerels per millilitre; and
- (c) gases with a half life not exceeding 100 seconds.

This order revokes the orders mentioned in Schedule 2.

Measurements of radioactivity which formerly were specified in curies are now specified in becquerels, following the adoption of the International System of Units (SI Units). 0.37 becquerels are approximately equivalent to 10^{-5} micro curies.