

1986 No. 10

ATOMIC ENERGY AND RADIOACTIVE SUBSTANCES

The Radioactive Substances (Gaseous Tritium Light Devices) Exemption Order (Northern Ireland) 1986

Made 16th January 1986

Coming into operation 1st April 1986

The Department of the Environment in exercise of the powers conferred by sections 2(6) and (7), 6(5), 7(4) and 21 of the Radioactive Substances Act 1960(a) and now vested in it(b) and of every other power enabling it in that behalf, hereby makes the following Order:—

Citation and commencement

1. This Order may be cited as the Radioactive Substances (Gaseous Tritium Light Devices) Exemption Order (Northern Ireland) 1986 and shall come into operation on 1st April 1986.

Interpretation

2.—(1) 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;

“Class A article” means a relevant article (as hereafter defined) the activity in which does not exceed 20 gigabecquerels;

“Class B article” means a relevant article fulfilling the following conditions namely;

(a) that the number of gigabecquerels of activity in each sealed container in the article is not more than 80; and

(b) that the number of terabecquerels of activity in the article as a whole does not exceed 1;

“Class C article” means a relevant article which is installed, or awaiting installation, in (i) a vessel or aircraft; or (ii) a vehicle or equipment used or intended for use by the armed forces of the Crown;

“the Department” means the Department of the Environment;

“district council” means a district council within the meaning of the Local Government Act (Northern Ireland) 1972(c);

“month” means a period of 28 consecutive days;

“relevant article” means an illuminant, instrument, sign or indicator which—

(i) incorporates tritium gas in one or more robust sealed containers so constructed as to withstand normal use without breaking; and

(ii) is radioactive material solely because it contains that gas;

(a) 1960 c. 34

(b) S.R. & O. (N.I.) 1964 No. 205; S.R. & O. (N.I.) 1965 No. 13; S.R. & O. (N.I.) 1972 No. 111; S.R. & O. (N.I.) 1973 No. 504

(c) 1972 c. 9 (N.I.)

“waste source” means any radioactive waste which immediately before it became waste was a Class A, B or C article or radioactive material forming part of such an article.

(2) The Interpretation Act (Northern Ireland) 1954(a) shall apply to this Order as it applies to a Measure of the Northern Ireland Assembly.

Exemption from registration under Section 1 of the Act

3. Subject to the conditions set out in Article 4, all persons are exempted from registration under section 1 of the Act in respect of the keeping and use of Class A, B or C articles on any premises other than premises used for or in connection with—

- (a) the manufacture of any such articles; or
- (b) the storage for sale or hire of any such article, the activity in which exceeds 20 gigabecquerels.

Conditions attaching to exemption under Article 3

4. The conditions mentioned in Article 3 are that—

- (a) the activity in the form of tritium oxide and other water soluble compounds of tritium in any sealed container in any article on the premises does not exceed 2% of the total activity in that container or, in the case of any such container containing not more than 5 gigabecquerels of activity in total, does not exceed 100 megabecquerels;
- (b) the aggregate number of terabecquerels of activity in all the Class A articles on the premises at any one time does not exceed 5;
- (c) the aggregate number of terabecquerels of activity in all the Class B articles on the premises at any time (other than articles installed in or on railway vehicles) does not exceed 30;
- (d) any Class B article on the premises (and not installed in or on a railway vehicle) is securely affixed or attached to the premises or, if it is stored on the premises, is not stored there for more than one month.
- (e) where at any time railway vehicles are on the premises, the aggregate number of terabecquerels of activity in all the Class A and B articles installed in or on the vehicles that are on the premises at any one time, other than activity in material which falls to be ignored by virtue of section 19(2)(a) of the Act (which deals with radioactive material kept or used on vehicles in the course of a journey), does not exceed 30;
- (f) any Class B article installed in or on a railway vehicle that is on the premises is securely attached to the vehicle;
- (g) no individual Class C article awaiting installation is stored on the premises for more than one month;
- (h) where 2 or more articles which are Class B or C articles are to be stored on the premises for more than 48 hours while awaiting installation, the local fire brigade are informed by telephone forthwith and the information confirmed in writing as soon as possible.
- (i) all Class A, B and C articles stored on the premises are kept in packages each marked with, or having attached to them a label or notice bearing, in characters of adequate size, distinctly and legibly printed, the word “radioactive” and the basic ionising symbol recommended for use by British Standard 3510:1968;
- (j) where reasonably practicable, all Class B articles and Class C articles on the premises are marked with, or have attached or affixed to them a label bearing in characters of adequate size and distinctly and legibly printed—

- (i) the word "radioactive";
- (ii) the basic ionising symbol mentioned in paragraph (i);
- (iii) a statement of the number of gigabecquerels of activity in the article at the date of receipt on the premises; and
- (iv) a statement of the manner in which the article can be disposed of as waste, without specific authorisation, by virtue of Article 5;
- (k) if, as a result of damage, tritium gas is released from any article on the premises it is dispersed as quickly as possible by ventilation;
- (l) a record is kept at the premises, and retained there for inspection by any person authorised by the Department in that behalf, showing—
 - (i) the date of receipt of each Class B article received on the premises, the manufacturer's type number and the number of gigabecquerels of activity in the article at the date of receipt, and
 - (ii) the date on which any Class B article is removed from the premises for exchange or disposal other than as waste, the address of the premises to which it was removed and the name of the occupier of those premises; and
- (m) all reasonably practicable steps are taken to prevent any Class A, B or C article on the premises being damaged, lost or stolen, and that whenever there are reasonable grounds for believing or suspecting that such an article has been lost or stolen—
 - (i) all reasonably practicable steps are taken to recover it forthwith; and
 - (ii) if the article contains more than 20 gigabecquerels of activity, a member of the Royal Ulster Constabulary is notified forthwith of the loss and the activity of the article and the Department is advised of the occurrence in writing as soon as practicable.

Exclusion of waste sources from section 6(1) of the Act

5.—(1) Subject to the conditions set out in paragraph (2), radioactive waste consisting of waste sources is hereby excluded from the provisions of section 6(1) of the Act (authorisation required to dispose of radioactive waste).

(2) The conditions mentioned in paragraph (1) are that—

- (a) any waste source containing not more than 20 gigabecquerels of activity is disposed of—
 - (i) by removal as refuse by a district council or its contractors; or
 - (ii) by deposit at, or removal for deposit at, a site used principally for the deposit of substantial quantities of household, industrial or commercial waste in respect of which a disposal licence is in force under Part II of the Pollution Control and Local Government (Northern Ireland) Order 1978(a); or
 - (iii) by dispatch to, or removal by, a person authorised under section 6(3) of the Act to dispose of such radioactive waste or by a manufacturer of relevant articles;
- (b) where any such source is disposed of by the means specified in sub-paragraph (a)(i) or (ii)—
 - (i) it is dispersed before removal from the premises in refuse which is not radioactive waste; and
 - (ii) not more than 1 such source is disposed of in any 0.1 cubic metre of non-radioactive waste;
- (c) where any such source is disposed of by deposit at such a site as is mentioned in sub-paragraph (a)(ii), it is not deposited in any part of that site used for the deposit of radioactive waste only;

- (d) where a waste source contains more than 20 gigabecquerels of activity it is disposed of only by the means specified in sub-paragraph (a)(iii);
- (e) records are kept at the premises, and retained there for inspection by any person authorised by the Department in that behalf, showing:—
 - (i) the nature of any relevant waste disposed of on or from the premises and the number of gigabecquerels of activity contained in it at the time of disposal; and
 - (ii) the means and date of disposal.

Exclusion of certain waste sources from section 6(3) of the Act

6.—(1) Radioactive waste consisting of waste sources, none of which contains more than 20 gigabecquerels of activity, received for disposal by a district council or its contractor, is hereby excluded from the provisions of section 6(3) of the Act (authorisation required for the disposal of waste by persons receiving it for disposal) without condition.

(2) Radioactive waste in the form of such waste sources as are mentioned in paragraph (1) above received by any person other than a district council or its contractor for disposal by deposit at such a site as is mentioned in Article 5(2)(a)(ii) is hereby excluded from the provisions of section 6(3) of the Act subject to the following conditions, namely:—

- (a) that the waste is deposited at such a site; and
- (b) that it is not deposited at any part of the site used only for the deposit of radioactive waste.

Exclusion of radioactive waste from section 7(1) of the Act

7.—(1) Radioactive waste to which this paragraph applies is hereby excluded from the provisions of section 7(1) of the Act (accumulation of radioactive waste), subject to the conditions specified in paragraph (3).

- (2) Paragraph (1) applies to waste sources, other than waste sources which
 - (a) are received by a person for disposal by him; or
 - (b) are the waste of an undertaking which produces radioactive articles which contain tritium in a gaseous form.
- (3) The conditions mentioned in paragraph (1) are—
 - (a) that no waste to which that paragraph applies is retained on the premises for more than 12 weeks;
 - (b) that the waste is accumulated with a view to subsequent disposal by a means specified in Article 5(2)(a); and
 - (c) that no material forming part of a waste source is removed from that source prior to disposal.

Sealed with the Official Seal of the Department of the Environment on 16th January 1986.

(L.S.)

J. M. Beckett

Under Secretary

EXPLANATORY NOTE

(This note is not part of the Order.)

This Order is concerned with exemptions and exclusions under the Radioactive Substances Act 1960 in respect of articles containing tritium gas.

Article 3 provides a general exemption from registration under section 1 of the Act in respect of the keeping and use on certain premises of instruments, illuminants and similar devices containing tritium gas in robust sealed containers. The exemption is subject to the conditions set out in Article 4.

Articles 5 to 7 exclude radioactive waste arising from the keeping or use of such radioactive instruments etc. from the provisions of sections 6(1), 6(3) and 7(1) of the 1960 Act (which require a person to secure authorisation before accumulating or disposing of such waste). Conditions are applied in most instances.

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). Approximate equivalents in curies to values specified in the Order are given below:—

100 megabecquerels	= 0.0027 curies
5 gigabecquerels	= 0.135 curies
20 gigabecquerels	= 0.54 curies
80 gigabecquerels	= 2.16 curies
1 terabecquerels	= 27 curies
5 terabecquerels	= 135 curies
30 terabecquerels	= 810 curies

Copies of the British Standard referred to in Article 4(i) may be obtained from any of the sales outlets operated by the British Standards Institution, or by post from the British Standards Institution at Linford Wood, Milton Keynes, MK14 6LE (Telephone Number Milton Keynes [STD 0908] 320066).