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# ATOMIC ENERGY AND RADIOACTIVE SUBSTANCES

# The Radioactive Substances (Prepared Uranium and Thorium Compounds) Exemption Order (Northern Ireland), 1962

ORDER, DATED 21ST DECEMBER, 1962, MADE BY THE MINISTRY OF HEALTH AND LOCAL GOVERNMENT UNDER SECTIONS 2(6) AND (7), 6(5) AND 7(4) OF THE RADIOACTIVE SUBSTANCES ACT, 1960.

The Ministry of Health and Local Government, in exercise of the powers conferred on it by Sections 2(6) and (7), 6(5) and 7(4) of the Radioactive. Substances Act, 1960(a), 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 (Prepared Uranium and Thorium Compounds) Exemption Order (Northern Ireland), 1962, and shall come into operation on the 1st day of December, 1963.

#### Interpretation

2.—(1) In this Order—

"the Act" means the Radioactive Substances Act, 1960;

- "decay products" means, in relation to any radionuclide, the radionuclides succeeding it in the radioactive series in which it and they occur;
- "prepared thorium" means a mixture of thorium prepared by a chemical process or processes the effect or one of the effects of which was the production of thorium separated from all or most of each of the decay products of thorium (other than isotopes of thorium), and decay products of thorium, being a mixture in which—
  - (a) the number of microcuries of thorium giving rise to the emission of alpha particles does not exceed 1.7 per gramme of thorium; and
  - (b) the number of microcuries of any of the decay products of thorium 232 does not exceed the number of microcuries of thorium 232 and the number of microcuries of any of the decay products of thorium 230 does not exceed the number of microcuries of thorium 230; and
  - (c) the decay products of isotopes of thorium consist of the remainder (if any) of the decay products present with those isotopes at the time the thorium was prepared and the decay products formed since that time through radioactive decay occurring in the mixture;
- "prepared uranium" means a mixture of uranium prepared by a chemical process or processes the effect or one of the effects of which was the production of uranium separated from all or most of each of the decay products (other than uranium 234) of uranium, and decay products of uranium, being a mixture in which—
  - (a) the uranium comprises the isotopes 238, 235 and 234 and contains by weight not more than 0.72 per cent. of the isotope 235; and
  - (b) the number of microcuries of any of the decay products of uranium 238 does not exceed the number of microcuries of

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uranium 238, and the number of microcuries of any of the decay products of uranium 235 does not exceed the number of microcuries of uranium 235; and

- (c) the decay products (other than uranium 234) of isotopes of uranium consist of the remainder (if any) of the decay products present with those isotopes at the time the uranium was prepared and the decay products formed since that time through radioactive decay occurring in the mixture;
- "refuse disposal authority" means a local authority within the meaning of the Public Health Acts (Northern Ireland), 1878 to 1962, acting in pursuance of statutory powers or duties relating to the removal and disposal of refuse;
- "the Schedule 3 elements" means the elements specified in column 1 of Schedule 3 to the Act;
- "weight" means weight ascertained by weighing or, where it is not reasonably practicable to ascertain weight by weighing, weight as calculated by any generally accepted method;

and any reference to an exempted compound or substance is a reference to a compound or substance falling within Article 4, being a compound or substance so kept or used as to be within the exemption from registration granted by Article 3.

(2) For the purposes of paragraph (a) of Article 6 and paragraphs (2) and (3) of Article 7, all premises in the same occupation and lying within the same curtilage shall together be treated as the premises in respect of which the conditions in those paragraphs apply.

(3) The Interpretation Act (Northern Ireland), 1954(a), applies to the interpretation of this Order as it applies to the interpretation of an Act of the Parliament of Northern Ireland.

# Exemption from registration under Section 1 of the Act

3. Any person who, on the premises which are used for the purposes of any undertaking carried on by him, keeps or uses or causes or permits to be kept or used any radioactive material to which this Article applies is hereby granted exemption from registration under Section 1 of the Act (which provides for the registration of persons who keep or use radioactive material) in respect of those premises and the keeping and use thereon of that radioactive material, subject to the limitations specified in Article 5 and to the conditions specified in Article 6.

### Descriptions of radioactive material to which exemption relates

4. Article 3 applies to radioactive material falling within any of the following descriptions,—

- (a) a solid or liquid chemical compound of prepared uranium being a compound which is radioactive material solely because of the presence of one or more of the Schedule 3 elements in the prepared uranium;
- (b) a solid or liquid chemical compound of prepared thorium being a compound which is radioactive material solely because of the presence of one or more of the Schedule 3 elements in the prepared thorium;
- (c) a substance which is radioactive material solely because it contains a compound or compounds falling within either of the preceding paragraphs or because it has been produced directly or indirectly—

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- (i) from such a compound or compounds (otherwise than by a process of isotopic separation) for use for the purpose mentioned in Article 5(a)(i); or
  - (ii) by the use of such a compound or compounds for that purpose.

#### Limitations of exemption

5. The limitations to which Article 3 refers are—

- (a) that the exemption is granted in respect of the keeping and use of a compound falling within paragraph (a) or paragraph (b) of Article 4 for one or both of the following purposes only,—
  - (i) demonstrating, or testing, measuring or otherwise investigating (otherwise than by a process of isotopic separation) the characteristics of, any compound or substance falling within that Article or some other material which is not radioactive material; or
  - (ii) sale; and
- (b) that the exemption is granted in respect of the keeping and use of a substance falling within paragraph (c) of Article 4 for the purpose mentioned in sub-paragraph (i) of paragraph (a) and for no other purpose.

## Conditions of exemption

6. The conditions to which Article 3 refers are—

- (a) that the weight of all the uranium and thorium contained in all the compounds and substances falling within Article 4 present on the premises at any one time does not, in the aggregate, exceed two kilogrammes; and
  - (b) that, if the compound or substance is kept for sale, it is kept in the immediate container in which it was supplied.

### Exclusion of radioactive waste from Sections 6 and 7 of the Act

- 7.—(1) Radioactive waste falling within any of the following descriptions,—
  - (a) waste, which if it were not waste, would be a solid exempted compound or substance;
  - (b) a solid substance, or an article, which is radioactive waste solely because it has been contaminated in the course of the keeping or use of an exempted compound or substance, or by contact with or proximity to other waste falling within sub-paragraph (a) or this sub-paragraph;
  - (c) waste which, if it were not waste, would be a liquid exempted compound or substance;
  - (d) a liquid substance which is radioactive waste solely because it has been contaminated in the course of the keeping or use of an exempted compound or substance, or by contact with or proximity to other waste falling within sub-paragraph (c) or this sub-paragraph,

is hereby excluded from the provisions of Section 6(1) of the Act (which relates to the disposal of radioactive waste), subject to the condition that the weight of all the uranium and thorium contained in all the waste falling within this paragraph disposed of in any one day on or from the premises does not, in the aggregate, exceed one hundred grammes, and subject also, if it is solid waste, to the conditions specified in paragraph (2) or, if it is liquid waste, to the conditions specified in paragraph (3).

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(2) The additional conditions subject to which solid waste falling within paragraph (1) is excluded by that paragraph from the provisions of Section 6(1) are—

- (a) that the waste is disposed of by one of the following means,---
  - (i) causing or permitting its removal as refuse by a refuse disposal authority or their contractors;
  - (ii) depositing it, or causing or permitting its removal (by persons other than a refuse disposal authority or their contractors) for deposit, at, on or in a tip, dump or pit used solely for the deposit of substantial quantities of refuse most of which is not radioactive waste; and
- (b) that, where it is disposed of by deposit at, on or in a place referred to in sub-paragraph (a)(ii), the waste is not deposited in a part of that place which is a part used solely for the deposit of radioactive waste.

(3) The additional conditions subject to which liquid radioactive waste falling within paragraph (1) is excluded by that paragraph from the provisions of Section 6(1) are—

- (a) that the waste is not disposed of on the premises; and
- (b) that it is disposed of from the premises by the means or by one of the means used for the disposal, from the premises, of liquid waste which is not radioactive waste.

(4) Where it is waste which has been received as refuse by a refuse disposal authority or their contractors, solid radioactive waste falling within paragraph (1) is hereby excluded from the provisions of Section 6(3) of the Act absolutely.

(5) Where it is waste which has been received (by persons other than a refuse disposal authority or their contractors) for disposal by deposit at, on or in a place referred to in paragraph (2)(a)(i), solid radioactive waste falling within paragraph (1) is hereby excluded from the provisions of Section 6(3) of the Act, subject to the conditions that—

- (a) it is disposed of by deposit at, on or in such a place; and
- (b) it is not deposited in a part of any such place which is a part used solely for the deposit of radioactive waste.

(6) Radioactive waste which, if it were not waste, would be an exempted substance in the form of a gas or vapour is hereby excluded from the provisions of Section 6(1) of the Act, subject to the conditions that—

(a) it is disposed of by allowing it to escape into the atmosphere; and

(b) the weight of all the uranium and thorium contained in all the waste falling within this paragraph disposed of in any one day on or from the premises does not, in the aggregate, exceed one gramme.

(7) Radioactive waste falling within paragraph (1) or paragraph (6) is hereby excluded from the provisions of Section 7(1) of the Act (which relates to the accumulation of radioactive waste) subject to the condition that it is disposed of as soon as practicable.

Sealed with the Official Seal of the Ministry of Health and Local Government this 21st day of December, nineteen hundred and sixty-two.

### Wm. J. Morgan,

Minister of Health and Local Government.

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(L.S.)