

1962 No. 2711

## ATOMIC ENERGY AND RADIOACTIVE SUBSTANCES

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

Made . . . . . 12th December 1962

Laid before Parliament 17th December 1962

Coming into Operation 1st December 1963

The Minister of Housing and Local Government, in exercise of his powers under sections 2 (6) and (7), 6 (5) and 7 (4) of the Radioactive Substances Act 1960(a) and of all other powers enabling him in that behalf, hereby orders as follows:—

*Citation and commencement*

1. This order may be cited as the Radioactive Substances (Prepared Uranium and Thorium Compounds) Exemption Order 1962, and shall come into operation on 1st 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 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 Act 1936(a) or a sanitary authority within the meaning of the Public Health (London) Act 1936(b) 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 of this order, 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 of this order and paragraphs (1) and (6) 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 1889(c) applies to the interpretation of this order as it applies to the interpretation of an Act of Parliament.

#### *Exemption from registration under section 1 of the Act*

3. Any person who, on any 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 of this order and to the conditions specified in Article 6.

#### *Descriptions of radioactive material to which exemption relates*

4. The last preceding Article applies to radioactive material falling within any of the following descriptions, that is to say,—

- (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;

(a) 26 Geo. 5 & 1 Edw. 8. c. 49.

(b) 26 Geo. 5 & 1 Edw. 8. c. 50.

(c) 52 & 53 Vict. c. 63.

- (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—
- (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) of this order ; or
- (ii) by the use of such a compound or compounds for that purpose.

#### *Limitations of exemption*

5. The limitations to which Article 3 of this order 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 the last preceding Article for one or both of the following purposes only, that is to say,—
- (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 the last preceding Article for the purpose mentioned in sub-paragraph (i) of the preceding paragraph and for no other purpose.

#### *Conditions of exemption*

6. The conditions to which Article 3 of this order refers are—

- (a) that the weight of all the uranium and thorium contained in all the compounds and substances falling within Article 4 of this order 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, that is to say,—

- (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 the preceding sub-paragraph 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 the preceding sub-paragraph 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) of this Article or, if it is liquid waste, to the conditions specified in paragraph (3).

(2) The additional conditions subject to which solid waste falling within the preceding paragraph 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, that is to say,—

(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) of this paragraph, 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) of this Article 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) of this Article 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) (ii) of this Article, solid radioactive waste falling within paragraph (1) of this Article 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) of this Article 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.

Given under the official seal of the Minister of Housing and Local Government on 12th December 1962.

(L.S.)

*Keith Joseph,*  
Minister of Housing and Local Government.

### EXPLANATORY NOTE

*(This Note is not part of the Order, but is intended to indicate its general purport.)*

This Order exempts persons conditionally from registration under section 1 of the Radioactive Substances Act 1960 in respect of the keeping and use, for specified purposes and in amounts appropriate to laboratory work, of "radioactive material" within the meaning of section 18 (1) of that Act consisting of compounds of prepared thorium (defined in the Order) and of prepared uranium (defined in the Order) and certain other substances containing, made from or arising from a specified use of such compounds.

It also excludes (in some cases conditionally) from sections 6 (1) and (3) and 7 (1) of that Act (which prohibit the disposal and accumulation of radioactive waste without authorisation) certain descriptions of "radioactive waste" within the meaning of section 18 (4) of that Act arising directly or indirectly from the keeping or use of compounds or substances exempted by the Order.