## 2001 No. 4005

## The Radioactive Substances (Clocks and Watches) (England and Wales) Regulations 2001

## Amendment of the Radioactive Substances Act 1993

**2.**—(1) Section 15 (further exemptions from sections 13 and 14) of the Radioactive Substances Act 1993(1) shall be amended as follows.

(2) In subsection (1), after "clocks or watches" (where those words first occur) insert "on or from any premises in the circumstances described in subsection (1A)".

(3) After subsection (1) insert-

- "(1A) The circumstances referred to in subsection (1) are that-
  - (a) no radionuclide other than tritium, promethium 147 or radium 226 is present in any clock or watch on the premises (whether or not any radioactive waste arises from it),
  - (b) no such clock or watch contains more than one of those radionuclides, and
  - (c) either subsection (1B) or subsection (1C) is satisfied.

(1B) This subsection is satisfied if the total quantity of tritium divided by  $10^9$ , plus the total quantity of promethium 147 divided by  $10^7$ , plus the total quantity of radium 226 divided by  $10^4$ , in all such clocks and watches does not exceed 1 (quantity in each case being measured in becquerels).

(1C) This subsection is satisfied if—

- (a) all such clocks and watches fall within a description specified in the first column of the Table below;
- (b) radioactive waste arises from no more than five of them; and
- (c) none of them gives rise to a quantity of radioactive waste exceeding the figure in the third column of the Table corresponding to the relevant radionuclide listed in the second column.

Description of clock or watch	Radionuclide	Relevant quantity (in becquerels)
(i) Clocks or watches having their dials	Tritium	9.3 x 10 <sup>8</sup>
marked at the time of manufacture with "T	Promethium 147	$1.9 \ge 10^7$
25" (Tritium), "Pm 0.5" (Promethium	Radium 226	$5.6 \ge 10^4$

## Table

Description of clock or watch	Radionuclide	<i>Relevant quantity (in becquerels)</i>
147) or "Ra 1.5" (Radium 226)		
(ii) Clocks bearing radioluminescent	Tritium	$3.7 \times 10^8$
deposits and not falling within	Promethium 147	$7.4 \ge 10^6$
category (i)	Radium 226	$7.4 \times 10^3$
(iii) Watches bearing radioluminescent	Tritium	$2.8 \ge 10^8$
deposits and not falling within category (i)	Promethium 147	5.5 x 10 <sup>6</sup>
	Radium 226	$5.6 \times 10^3$
<ul> <li>(iv) Watches containing small sealed glass tubes internally coated with a phosphor and filled with tritium gas</li> </ul>	Tritium	7.4 x 10 <sup>9</sup> "