



## DRINKING WATER INSPECTORATE

Area 7E, 9 Millbank  
c/o Nobel House  
17 Smith Square  
London SW1P 3JR

Enquiries: 0300 068 6400

E-mail: [claire.pollard@defra.gsi.gov.uk](mailto:claire.pollard@defra.gsi.gov.uk)

DWI Website: <http://www.dwi.gov.uk>

DWI Information Letter 06/2013

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To: Board Level and Day to Day Contacts of Water and Sewerage Companies and Environmental Health contacts of local authorities in England and Wales

### **NEW EUROPEAN REQUIREMENTS FOR MONITORING FOR RADIOACTIVITY IN DRINKING WATER SUPPLIES**

Dear Sir or Madam

#### **Purpose**

1. The purpose of this letter is to inform water companies and local authorities of a new European Directive on the requirements for monitoring of drinking water supplies for radioactive substances.

#### **Background**

2. The European Council has recently agreed a new Directive under the Euratom Treaty [Council Directive 2013/51/Euratom] laying down requirements for the protection of the health of the general public with regard to radioactive substances in water intended for human consumption. The Directive was published in the Official Journal on 7th November 2013 and member States will have two years from publication to implement its requirements.
3. The new Directive sets out parametric values, and frequencies and performance characteristics for analytical methods for monitoring radioactive substances in water intended for human consumption. This includes water as defined in the scope of the Drinking Water Directive 98/83/EC for drinking, cooking, food preparation or other domestic purposes supplied from a distribution network, tanker or in bottles or containers. It also includes all water used in any food production undertaking for the manufacture, processing, preservation or marketing of products or substances intended for human consumption.

4. The specific requirements of the Directive are summarised in the following paragraphs:

- A parametric value is introduced for radon of 100Bq/l. However, Member States may set a level higher than 100Bq/l but lower than 1000Bq/l which is judged inappropriate to be exceeded. Remedial action must however, be taken where radon concentrations exceed 1000Bq/l.
- The parametric values for tritium and Indicative Dose (ID) remain unchanged from the values set out in the Drinking Water Directive and national legislation i.e. 100 Bq/l and 0.1 mSv respectively.
- Screening for gross alpha activity and gross beta activity can continue for monitoring for ID. The recommended screening levels for gross alpha and beta remain as 0.1 Bq/l and 1.0 Bq/l and if either the gross alpha or gross beta activity exceeds these values, analysis for specific radionuclides shall be required. However, the new Directive does allow Member States to set alternative screening levels for gross alpha and gross beta where they can demonstrate that the alternative levels are in compliance with an ID of 0.1 mSv.
- Monitoring frequencies are set out in the new Directive for radon, tritium and ID; however, Member States are not required to monitor where it can be demonstrated that levels of the substances are well below the respective parametric values. Demonstration will be on basis of representative surveys, monitoring data and/or other reliable information.
- Representative surveys should determine the scale and nature of likely exposure to radon in water and should include an assessment of the geology and hydrology of the area, and radioactivity of rock or soil, as well as historical data.
- Where there is reason to believe that from findings of any representative surveys or from other reliable information sources that radon or other radioactive substances may be present at levels that could exceed the parametric values, monitoring must be carried out at the frequencies set down in the new Directive.

### **Way forward**

5. The Inspectorate is reviewing the details of the new Directive to assess the implications for water companies (public supplies) and local authorities (private supplies). As part of this review we have put in place a research project looking specifically at the position regarding radon in drinking water in England and Wales. Water companies and local authorities will be contacted and asked to provide any information they hold regarding the occurrence of radon in their area.

6. The outcome of this project and any other data gathering exercise that may be considered necessary, will inform whether any further surveys are required to demonstrate that a supply does not contain levels of radioactive substances at a concentration that could exceed the parametric values set out in the new Directive.
7. Further guidance on the implementation of the new Directive requirements will be provided in due course. In the interim, water companies and local authorities do not need to take any specific actions or measures in respect of the new requirements.
8. Local authorities should be aware that the new Directive on radioactivity in drinking water does not change the requirements of the buildings regulations for control of radon in air.

### **Enquiries**

9. Copies of this letter are being sent to Pamela Taylor, Chief Executive, Water UK; Carol Skilling, Department for Environment, Food and Rural Affairs; Olwen Minney, Welsh Government; Susan Petch, Drinking Water Quality Regulator for Scotland; Margaret Herron, Drinking Water Inspectorate for Northern Ireland; Tony Smith and Chairs of the Regional Consumer Council for Water; Frances Pollitt, Public Health England; and Shifra Sheik, Defra (FSA).
10. This letter is being sent electronically to Board Level and day to day contacts. Please acknowledge receipt by email to [dwi.enquiries@defra.gsi.gov.uk](mailto:dwi.enquiries@defra.gsi.gov.uk). Hard copies are not being sent but the letter may be freely copied.

Yours sincerely



Claire Pollard  
Deputy Chief Inspector