



**Drinking Water Quality
Regulator for Scotland**
PO Box 23598
EDINBURGH
EH6 6WW

Mr George Ponton
Quality Regulation Manager (Drinking Water)
Scottish Water
Castle House
6 Castle Drive
Carnegie Campus
Dunfermline
KY11 8GG

Tel: 0131 244 0184
Fax: 0131 244 0259
Email: Regulator @dwqr.org.uk

Our Ref: 2DWE/25/3
Your Ref:

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Dear George

INFORMATION LETTER 5/2005

REQUIREMENTS FOR MONITORING RADIOACTIVITY IN WATER SUPPLIES

Purpose

1. To clarify the requirements for compliance monitoring of radioactivity under the Water Supply (Water Quality) (Scotland) Regulations 2001 (the Regulations) and to outline how Scottish Water (SW) may seek to reduce the requirement to monitor their supplies.

Background

2. The Regulations require SW to monitor their supplies for both total indicative dose and tritium. In practice, routine monitoring for radioactivity is at present only carried out for surface waters in the environment, the results of which are reported by SEPA in its annual report (Radioactivity in Food and the Environment). To demonstrate to the European Commission that monitoring drinking water for tritium or total indicative dose is not required, SW need to satisfy the Commission that, on the basis of monitoring carried out, the levels of tritium and total indicative dose are less than one tenth of the parametric value. SEPA's monitoring programme is not sufficient to allow SW to do this. It is therefore proposed that SW start to monitor ex-works for total indicative dose and tritium. Monitoring is to be carried out at the audit frequency specified in Table 3 of Schedule 3 of the Regulations, although SW may choose to monitor in supply zones at the audit frequency in Table 2 of Schedule 3. Total indicative dose is determined through screening for gross alpha and gross beta.
3. The only exemption to this requirement is if SW has received a notice under regulation 6(7) from the DWQR indicating that tritium and/or total indicative dose need not be monitored. To date no such notices have been issued.
4. The EC have not clarified the monitoring required for radioactivity and some UK water utilities have interpreted this as a sign not to conduct compliance monitoring for

tritium and/or total indicative dose (in practice gross alpha and gross beta). This is not the case and SW should follow the Regulations.

The Way Forward

5. The DWQR accepts that, in good faith, SW may have been relying on the environmental monitoring for radioactivity rather than carrying out compliance monitoring. In light of these considerations and the fact that this is a new requirement the DWQR will not consider any sampling shortfalls for radioactivity during the 2005 calendar year.
6. From 1 January 2006 onwards SW must conduct compliance monitoring for radioactivity until they have received a regulation 6(7) notice from the DWQR which SW will need to apply for.

Applications for notices under regulation 6(7)

7. Applications for notices under regulation 6(7) valid from 1 January 2006 must be submitted to the DWQR. Applications must include the name of the treatment works for which the notice is requested, a summary of the likely presence of natural or artificial sources of radioactivity within the catchment, results of all radioactivity monitoring for gross alpha, gross beta and tritium conducted at the works or supply point, together with results of and further radiological investigations conducted in response to values in excess of the specifications.
8. The DWQR will assess any applications made and for those where there is sufficient evidence that the levels are well below the specification, will issue notices for tritium and/or total indicative does as the case may be.
9. In future, in order to simplify the sampling frequency assessment, the DWQR only proposes to issues notices under 6(7) that start on 1 January of a particular year. Therefore, should SW request a notice valid from 1 January of any future year, the application should be made by 30 November of the year prior to which the notice takes effect.

Operational monitoring

10. If SW receives a notice under Regulation 6(7) allowing it not to monitor for radioactivity, it is strongly advised to establish an operational monitoring programme. Should a sample taken under the operational monitoring programme fail to meet the specification, SW must investigate and notify the DWQR of the outcome of the investigation, in accordance with regulation 18.

Enquiries

11. Any general enquiries on this letter and applications for notices should be addressed to Philip Anderson (0131 244 0188).

12. This letter is being sent electronically to the SW regulation mailbox. Please acknowledge receipt by email to regulator@dwqr.org.uk. Hard copies are not being sent. This letter may be freely copied.

Yours sincerely

A handwritten signature in black ink, appearing to read "P. Anderson". The signature is written in a cursive style with a large initial "P" and a distinct "A".

Philip Anderson
For and on behalf of DWQR