

Draft Text of Letter (not yet finally agreed) (to be sent by e-mail) to Chief Environmental Health Officers of all District/Borough Councils and unitary authorities in England.

9 January 2001

Dear

Radon and Uranium in Private Water Supplies

I am writing to you to draw your attention to the results of a study of private water supplies in West Devon that identified elevated levels of radon and uranium¹. The results for West Devon are unlikely to be unique and it is possible that private water supplies from local wells and boreholes (but not from surface waters) may contain elevated levels of these naturally occurring radioelements, particularly if your administrative area includes a radon-in-air Affected Area. A map prepared by the National Radiological Protection Board (NRPB) showing the radon-in-air Affected Areas may be viewed at <http://www.nrpb.org.uk/Radnmap2.htm>.

You will wish to be aware of this study, and the possible implications for water supplies in your area, in view of your duty under section 77 of the Water Industry Act 1991 to take all steps you consider appropriate for keeping yourselves informed about the wholesomeness of every private water supply to premises in your area.

The study in Devon was sponsored by DETR and undertaken in conjunction with West Devon Borough Council. The objective was to establish the behaviour of radon as water moves from boreholes and wells to the taps inside dwellings and other buildings. The research showed little loss of radon between source and tap and also that, contrary to previous studies, some radon remained in the water even after boiling. Of the water supplies tested, some 9% were found to have radon above the recently established NRPB advisory level of 1000 Becquerels /litre. Similarly, about 7% were found to have levels of uranium higher than the recently promulgated World Health Organisation provisional guideline of 2 micrograms/litre. In the study area, the high levels were noted at locations where the underlying geology would suggest that high radon-in air levels in dwellings might be expected. It is on the basis of this loose correlation and advice from the Committee on the Medical Aspects of Radiation in the Environment (COMARE) and the Department of Health (DH) that we are contacting local authorities more generally.

A press release is being issued today by West Devon Borough Council, and can be viewed at <http://www.westdevon.gov.uk>. West Devon are also placing on their site a note prepared by the NRPB on radon in water and a separate note prepared by DH dealing with uranium. The report of DETR's study in West Devon is being made available today, and can be seen at <http://www.environment.detr.gov.uk/radioactivity/research/complete/index.htm>

. DETR is also putting on the same web site a copy of a study on remediation measures to remove radon and uranium from private water supplies.

In view of their responsibilities for the regulation of private water supplies, we would expect local authorities to deal with local enquiries concerning water quality. Officials of DETR are, of course, happy to discuss matters further with local authority representatives. The following contact points may be helpful:

Information about the radon-in-water report	020 7944	6274 or 6273
Radon-in-air policy	" "	6265 or 6272
Press and media handling	" "	3041
Technical advice on private water supplies from The Drinking Water Inspectorate	" "	5976 or 5960
Water supply and regulation policy	" "	5381 or 5395

In addition, two telephone hotlines have been in existence for a number of years to provide expert advice to members of the public and local authority officers with questions about radon-in-air. Advice on health risks and how to obtain measurements of radon in air are provided by the National Radiological Protection Board, Freephone on 0800 614529. Advice about construction work to reduce radon-in-air levels can be obtained from the Building Research Establishment Radon Hotline on 0192 3664707.

Both sampling and analysis of radon and uranium in water supplies requires specialist expertise. Attached is a [list of laboratories](#) that we are aware of which may have the ability to carry out such analyses, and therefore may be of assistance to you or the owners of private water supplies in your area.

A hard copy of this letter will be sent to the Chief Executive of your Authority, but in the meantime I would be grateful if you would bring it to his or her attention.

Yours faithfully

Rodney Anderson

Head of Water Supply and Regulation Division

¹ Natural radioactivity in private water supplies in Devon; DETR/RAS/00.010

Some laboratories who may be able to provide assistance with radon and uranium sampling and analysis

Name	Fax	Telephone
J Toole, Harwell Scientifics Ltd, Harwell, Oxon	01235 434917	01235 436343
R.May, NNC (NIRAS, WQCL), Cheshire	01925 895551	01925 895669
H Mason, LGC, Middlesex	089 431050	02089 437506
D McReddie, Syntex, Cleveland	01642 522991	01642 522350
A Sanchez, ITE Merlewood, Cumbria	01539 534705	01539 532264
M Pick, BNFL Magnox, Berkeley, Gloucs	1453 812050	01453 812373
J Hunt, CEFAS, Lowestoft	1502 524546	01502 524447
D Assinder, Uni of Bangor	1248 716367	01248 382854
P Thompson/C Comley, AWE, Aldermaston, Berks	01189 825024	01189 824370 01189 825929
I Croudace, Uni of Southampton	02380 593052	02380 592780
D Talbot, BGS, Notts	01159 363549	01159 363508
B. Evans, Exeter Env., Consul., Services	01392 263914	01392 263914