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## The Question of Radon During House Transactions

Martyn Green, National Radiological Protection Board

The possibility of high radon levels in houses can be an issue during house sales. Information on this and other matters is obtained from the local authority by the buyer's representative using a standard set of questions normally called the CON 29 form (standard enquiries and optional enquiries of local authorities). This is the form used in England and Wales by solicitors, licensed conveyancers and others to make enquiries of local authorities during the house transaction process. A revised CON 29 form has been in use since 1 July 2002.

The radon question in the previous CON 29 form was drafted before the existence of maps showing radon Affected Areas, and asked whether the building was in an area where precautions against radon were required for new dwellings. This question was answered by reference to the published guidance on new buildings from the Building Research Establishment - the latest update was published in 1999.

The replacement question (number 3.13 in part I, standard enquiries)

recognises that most property transactions involve existing buildings and asks if the property is in a radon Affected Area. This enquiry should be answered by reference to the new Radon Atlas published by the National Radiological Protection Board\*.

The new question is:

### 3.13 Radon Gas Location of the property in a Radon Affected Area.

*Radon Affected Areas are parts of the country where 1% or more of properties are estimated to be at or above the radon Action Level of 200 becquerels per cubic metre of air.*

An appropriate answer to this 'question' would be of the form:

*The property is in an area in which between 1% and 3% of homes are above the radon 'Action Level'.*

If the reply is positive, the guidelines produced by the Local Government Association recommend standard wording to direct the enquirer to make further enquiries of the vendor.

\* See the front page of this newsletter for details of the Radon Atlas



# Radon in Commercial Premises: The High Peak Experience

Mike Towers and Ian Nicholls, High Peak Borough Council

## Getting Started

High Peak Borough Council's radon experience started close to home, when very high radon levels were identified at Buxton Town Hall in 1991. The Environmental Health Division were called on to assist with the process of remediation and management of the staff reaction to the radon risk.

This experience led us to consider radon exposure at work in the community. Banks, building societies, pubs and betting shops were encouraged to carry out radon testing as a 'health and safety at work' issue. These premises were chosen because they often have cellars and poorly ventilated workrooms. It was soon discovered that there were significant radon levels in ground floor rooms in many of the buildings in the Buxton and Hope Valley areas of the Borough.

As the issue of risk from radon in the workplace was developed in Local Authority Circulars in 1993, 1994 and 1996, the National Radiological Protection Board (NRPB) were compiling a database of radon hotspots across the country. Following the publication of the NRPB Memorandum "Potential for Exposure to Radon in Derbyshire Workplaces" in 1996, we decided to start a longer term programme of radon monitoring and remediation for all the commercial premises in the high risk zones identified.

## Getting the Message Across

### Our first steps in 1997 were:

- Developing a Radon Practice Note, establishing our procedures for dealing with radon at work during inspections of business premises.
- Compiling a database of commercial premises in the high risk areas. We found about 500 businesses operating in these areas.
- Sending the 'Radon at Work' leaflet issued by the Health and Safety Executive, and advice on testing to these businesses.
- Following up 6 months later with a more formal letter to those businesses which had not responded.

It became clear that there would have to be a systematic programme of inspection for all commercial premises to ensure testing and remediation took place. We decided to embark on a 5-year programme in which radon testing would be required for all premises in the high risk areas during routine health and safety inspections.

## Getting it Done

All targeted businesses were sent a strongly worded letter in 1999 advising them of our proposed action and strongly recommending that they initiate testing in advance of any visit, to avoid potential formal action. Further information on radon at work, and a list of radon contractors, was enclosed.

During routine inspections, where we found premises that had not carried out radon testing, and which had cellars or poorly ventilated workrooms, an Improvement Notice was served. The Notice required testing as the most appropriate way of demonstrating an adequate assessment of the risk presented by the levels of radon gas.

The legislation used included s.3(1) and s.3(2) MHSWR 1992/99 for employers and the self-employed, and s.4(2) HASWA 1974 for persons in control of premises (notably breweries and multi-occupied workplaces). We found that the vast majority of businesses had carried out testing following receipt of the written information, and that those finding radon levels above 400 Bq m<sup>-3</sup> had taken steps to remediate. A further significant number agreed to test at the time of the routine inspection.

To date, 18 Improvement Notices have been served for radon testing, and 17 out of 18 have resulted in satisfactory compliance. One Notice went to appeal and was lost on the grounds that the premises were not deemed to be poorly ventilated, but the tribunal took no issue with the use of health and safety legislation to require radon testing as part of the risk assessment process.

So far, 273 businesses in the target areas have been tested for radon, and all those with elevated levels have carried out remediation without the need for further enforcement action. Once the problem had been identified and understood by the proprietors, no further formal prompting was required for remedial action to be taken.

We intend to continue with our programme of requiring businesses in high risk areas to test for radon and to remediate if necessary. We believe that radon in the workplace is a very significant health and safety issue. Anything we can do that will raise the profile of radon and result in a reduction in exposure must be of benefit to the health of employed persons in the High Peak Borough Council area.

# Developments in the Availability and Use of Radon Data

Daryl Dixon, National Radiological Protection Board

Information about the likelihood of radon problems occurring in different areas of the country is required by a variety of people and organisations:

- On-line commercial data suppliers who produce environmental hazard reports for the public or professional groups
- Professionals such as surveyors and solicitors who produce environmental hazard reports on specific properties for clients, during conveyancing for example
- Land charge officers of local councils who deal with the standard questions (CON 29 in England and Wales) that are submitted to councils during the conveyancing process
- Property management companies and others that require hazard reports on their properties
- Building control officers and consultants responsible for the planning and inspection of new buildings

There is an important distinction between the two main uses of radon data, which require reference to different sources of information:

- Present or future occupiers of *existing buildings* need to know whether or not the property is in a radon Affected Area. This is defined by the National Radiological Protection Board (NRPB) as an area where more than 1% of properties are estimated to be above the radon Action Level. If a building is in such an area, a radon measurement in the building will establish whether radon remedial measures are required. NRPB atlases define radon Affected Areas\*.
- Developers of *new buildings* need to know whether the Building Regulations require radon preventive measures to be incorporated during construction in that particular area. The requirements, and the areas where they apply, are

laid down in Building Research Establishment reports\*\*.

Traditionally the information about potential radon problems has been provided in the form of paper maps. These are still very useful, particularly where large poster maps of particular areas (such as council districts) provide a quick and easy way of identifying whether a home is likely to have a radon problem.

More recently commercial data suppliers have provided services electronically, based on the postcode of a property. NRPB has also provided radon Affected Area data in electronic form to companies and councils.

As more councils adopt computerised Geographical Information Systems (GISs) to store information about their district, there will be an increasing demand for the provision of radon potential data in GIS-compatible format.

National initiatives such as the development of the National Land Information Service and the House Sellers Pack will also increase the demand for electronic versions of the radon information. NRPB is in discussion with other interested parties on how this can best be taken forward. Research is also being carried out by NRPB and the British Geological Survey on how to map radon variations as accurately as possible, taking into account differences in radon potential both between and within geological units.

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\* Radon atlas of England and Wales, NRPB-W26; Radon in dwellings in Northern Ireland: Atlas and 1999 review, NRPB-R308; Radon Affected Areas: Scotland: Documents of the NRPB, Volume 4, number 3. Available from the NRPB information office, Tel: 01235 822742, Fax: 01235 822746, email: [information@nrpb.org](mailto:information@nrpb.org), [www.nrpb.org](http://www.nrpb.org).

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\*\* Radon: Guidance on protective measures for new dwellings (England and Wales, BR211, £26; Northern Ireland, BR413, £24; Scotland, BR 376, £24). Available from BRE Bookshop, Tel. 01923 664262, [www.brebookshop.com](http://www.brebookshop.com).

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