

# *Environmental* **Radon** Newsletter

SUMMER 1998

ISSUE 15

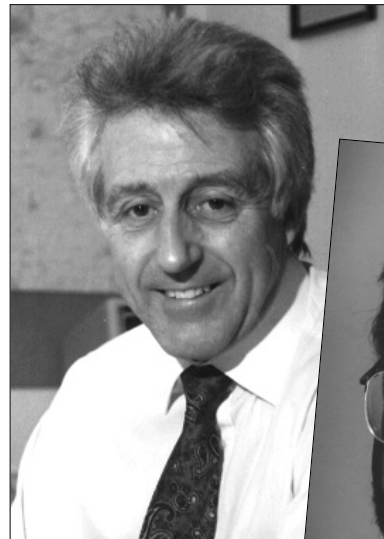
## Radon Steering Group - Northamptonshire and Elsewhere

Paul Smith, *Kettering District Council*

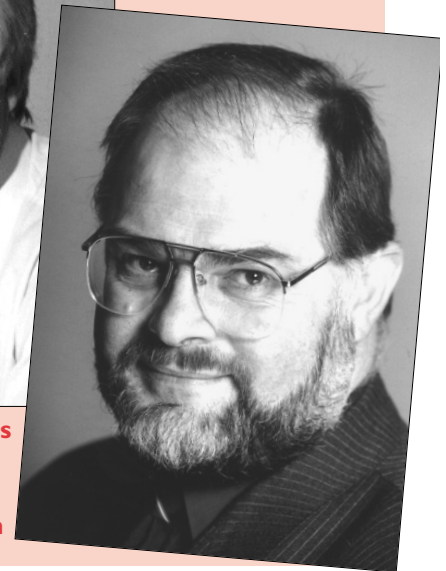
**A**t its meeting in November, 1997, the Steering Group wished farewell to Maurice Jones who has retired as Borough Environmental Health Officer at Wellingborough. Maurice has chaired the Group and been its mainstay since its creation in 1989. Over that time it has grown from a small group of people seeking to analyse the problem facing Northamptonshire and to raise awareness within the county to a much larger group with representatives from ten counties and six other bodies. Among the Group's achievements over the years has been the development of detailed maps of radon potential based on geology and radon measurements, a project funded by the Councils and carried out by the University of Leicester.

The benefits of councils and others working together as a group within Northamptonshire was seen in the declaration of the county as an Affected Area in 1992, following a major campaign by the district councils to persuade householders to take advantage of the free tests for radon which the Department of the Environment was funding at that time. But the level of the Northamptonshire problem was also evident to the Government when it re-introduced free tests in 1997, and Northamptonshire received the lion's share of those test invitations.

The Chairmanship of the Group has now passed to me (Paul Smith, Head of Environmental Services at Kettering Borough Council). I intend to continue to raise public awareness because of the danger to health



Maurice Jones



Paul Smith

from ignoring radon elevated levels. The Group will also maintain the pressure on the Government to address radon as a health risk by amendments to the housing fitness standard or through encouragement of remedial works by small grants which would not be linked to means tests.

Radon levels in the workplace have been and will continue to be an issue within the county and it has been helpful to have representation from the Health and Safety Executive on the Group. Employers are encouraged to have tests, and the levels of encouragement increase if the advice is not taken up! Most of Northamptonshire's councils will arrange tests for employers as small businesses often do not have the knowledge or resources to act alone.

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# How to Map Radon

Jon Miles, *National Radiological Protection Board*

**N**RPB has the results of more than 350,000 measurements of radon levels in houses in the UK, mostly funded by government. These results have been used to map the probability of houses having radon problems. To provide a robust picture of the pattern of variation of radon potential based on measurements in local houses, NRPB has designated radon Affected Areas on the basis of house radon data grouped by 5 km grid squares (see Environmental Radon Newsletter 8).

Many people would like to have more detailed maps than this, and in some areas there are now enough results to map at a higher resolution. NRPB and the British Geological Survey (BGS) have been awarded contracts by the Department of the Environment, Transport and the Regions to map radon potential in more detail in parts of England where this is possible.

Two ways of doing this are covered by these contracts: grouping data by 1 km grid squares, or grouping by geological unit on 1:50,000 scale geological maps. Both methods have their advantages and disadvantages. The 1 km mapping method has the

advantage that it needs no prior assumptions about radon potential, and once the method is developed it can be applied anywhere at little cost. However, it makes no use of prior knowledge of geology, which is known to affect radon levels. The most logical way of grouping data is by geological unit, as radon potential clearly differs between geological units. BGS will apply this method. However, this method has its drawbacks as well: most 1:50,000 scale geological maps have not been converted to computerised form, an essential first step for grouping large numbers of measurements by geology. Also, in southwest England it has been found that radon potential can be linked to faults that cross several geological units, rather than remaining relatively constant within a unit.

For these reasons, the research by NRPB on 1 km grid square mapping will be applied to southwest England, and the work on linking radon to geology by BGS will include digitising 11 of their 1:50,000 geological survey sheets (BGS has an on-going programme to digitise all available UK geological maps at this scale). The contracts are due to be completed at the end of March 1999.

## Radon Steering Group - Northamptonshire and Elsewhere

*(continued from page 1)*

Northamptonshire has come a long way under Maurice Jones' leadership from the position in 1988 when Kettering and Wellingborough took part in the national radon survey organised by the Chartered Institute of Environmental Health. At that time there was no suggestion that there was any local problem - how little did

we know! When the scale of elevated radon levels became apparent there were those who wished to hush matters up fearing a blight would fall on homes in the area, but the actions of Maurice and his colleagues in Northamptonshire ensured that this risk to public health was made known, properly assessed and action taken.

# Of Radon Bondage

Chris Scivyer, *Building Research Establishment Ltd*

**P**eople buying houses are now routinely being advised to find out whether the house they are buying is at risk from radon. The concern is whether the purchaser might be buying a house that will either cost money to put right or could prove unsaleable in the future. So, what can the purchaser do about it?

Firstly, the purchaser could consult their local Environmental Health Officer or NRPB. NRPB have prepared maps indicating likely risk levels across the country. These maps can prove very helpful in assessing risk at the time of purchase, however, they will not give the actual radon level within a specific property. The only way to find this out is to have the property tested. In the areas of the country most at risk from radon many homes have already been tested, and so the owners can be approached for details of results. The owner is legally obliged to provide this information if the purchaser asks for it. If it is then found that the house has been tested and has a radon problem, the purchaser can either try negotiating a reduction in the selling price to cover the cost of likely remedial works, or ask for works to be carried out prior to sale.

Unfortunately, in many cases houses will not have been tested, and so results are not available. It is possible to test prior to purchase, but testing takes time and so often proves impractical. But what is the alternative? The purchaser could consider arranging a Radon Bond. This is an agreement between the buyer and seller to put to one side a small proportion of the sale price, to cover the cost of any radon remedial measures that might prove necessary after the house has been sold.

The Radon Bond will probably need to be drawn up with the assistance of a solicitor. However, to be successful the Radon Bond has to be equitable to both purchaser and seller and should therefore consider the following points:

- the risk of the house having a problem, based upon NRPB risk maps. (1%, 1-3%, 3-10% etc.)
- the extent of works that might be needed to resolve any radon problem. This should be based upon the construction and scale of the property, together with likely radon risk for the location of the property.

■ Family to pay £1,000 bond before move

## Cash ultimatum for radon family

**A COUPLE** have been told they must put up a £1,000 bond against radon being discovered in the house they are selling.

Malcolm and Gillian Boyd of Humber Gardens, Wellingborough, were shocked when they received a letter from their buyer's solicitor asking for the bond.

They were due to exchange contracts in a fortnight and planned to move into another house in Whitley Bay, Tyne and Wear, with their daughters Jennifer, six, and Eleanor, four, in the New Year.

The couple were told unless the £1,000 bond was lodged with a third party their buyer would pull out of the sale.

(For lower risk areas it is likely that simpler and therefore cheaper solutions will be applicable.)

- the radon level should be measured before and after remedial work. The most reliable method is to measure over a three month period.
- the Radon Bond should have a time limit. (Testing of the house, carrying out remedial works and retesting is likely to take 9-12 months to complete).

For an average sized three bedroom house or bungalow, the cost of even the most severe radon remedial measures is unlikely to exceed £1000. Therefore to be fair to both purchaser and seller, the Radon Bond needs to be valued somewhere between £500 and £1000.

It is important to remember that few houses will actually have a radon problem. Nevertheless purchasers and financial institutions need reassuring that the house they are buying is going to be a worthwhile investment. A Radon Bond can give that reassurance.

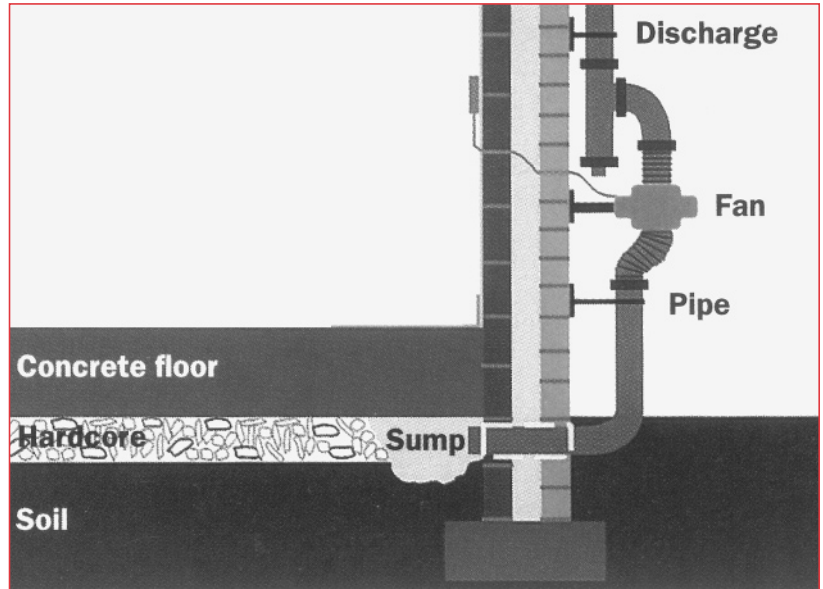
# More Remediators, More Remedies

Daryl Dixon, *National Radiological Protection Board*

Over recent years the radon programme has been very successful in finding houses with high radon levels. All householders with results above the Action Level are then provided with advice and literature about radon reduction methods, but the uptake of remedial measures has been lower than we would wish. The potential health benefits of the programme are therefore not being fully delivered.

There are various reasons for the low remediation rate, one of which is undoubtedly the cost of the work. Surveys of householders show that a further obstacle is that they find it difficult to find contractors to provide the service. It is clearly important for the widest possible choice of contractors to be available so that competitive estimates can be obtained. Although appreciable numbers of builders have received training in radon remedial work from various sources in the last few years, relatively few of them currently advertise their radon services.

The problem is particularly acute in parts of the country where radon has not been regarded as a significant hazard in the past. After new radon-prone areas were identified in 1996, householders in these areas were offered free radon measurements by the Department of the Environment, Transport and the Regions. Significant numbers of high radon houses have now been identified in these areas, so it is important that householders outside the original



## Small radon sump

radon Affected Areas can find suitable remediators.

One possible solution to this problem might be for NRPB to send out a list of trained contractors along with the advice on reducing radon levels. Alternatively, local government officers could maintain lists of contractors capable of carrying out work in their areas (as some do already). The Radon Council maintains a list of its members who offer such services, and this might provide the basis for approved lists. However, many of those who have been trained in remediation techniques are not on the Radon Council list at present.

As with any new initiative, there will undoubtedly be some procedural issues to resolve, but if remedial activity is to be increased some measures of this type seem necessary.

This newsletter is prepared for the Chartered Institute of Environmental Health by the National Radiological Protection Board. It is published quarterly as an insert in Environmental Health and distributed by the Royal Environmental Health Institute for Scotland. Any suggestions for topics for

future issues should be sent to Jon Miles at NRPB (see address on page 2). The views expressed in the contributions here are not necessarily those of the Chartered Institute of Environmental Health, the Royal Environmental Health Institute for Scotland or the National Radiological Protection Board.