



# **ADVICE TO LOCAL AUTHORITIES ON IMPLEMENTING A RADON MEASUREMENT PROGRAMME**

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## **1. Introduction**

The Environmental Protection Agency (EPA) is the national organisation with statutory responsibility to advise the public and Government on ionising radiation. Radon is by far the largest contributor to annual radiation dose to the public and it greatly exceeds doses from all other sources<sup>1</sup>. As such, reducing exposure to radon is a major priority for the EPA. Radon in homes can be a significant public health issue and therefore radon is also a concern to the Health Service Executive (HSE). As a landlord, each local authority has a duty of care to its tenants which includes minimising the risk from radon<sup>2</sup>.

During 2007, very high levels of radon were found in homes and businesses in north Cork. The discovery of these levels prompted Cork County Council (CCC) to assess the radon risk to its tenants and during 2008, CCC undertook radon measurements in the social housing stock in north Cork. CCC found that almost one-third of homes required remediation. Some houses had very high radon levels<sup>3</sup>. The relevant state agencies, EPA, CCC and the HSE collaborated in the radon programme in north Cork and this multi agency approach was key to effectively assessing, fixing and communicating the radon problem in the area. This document draws upon the experience gained in north Cork to provide guidance to local authorities on the parameters and general advice that are needed to roll out a successful radon measurement programme.

## **2. What is radon and why is it harmful?**

Radon is a radioactive gas formed in the ground by the radioactive decay of uranium which is present in varying quantities in all rocks and soils. Radon has no colour, taste or smell and can only be measured using radon detectors. Outdoors radon is

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<sup>1</sup> O'Connor et al, Radiation Doses Received by the Irish Population, (2014) [www.radon.ie](http://www.radon.ie)

<sup>2</sup> EPA (formerly RPII) legal advice on Radon in Local Authority Houses issued to all Local Authorities on 12<sup>th</sup> August 2008

<sup>3</sup> Report of the 2008 Irish National Radon Forum. [www.radon.ie](http://www.radon.ie).

not a problem but as it is a gas, it is drawn into buildings from the ground and can sometimes accumulate to unacceptably high concentrations.

Exposure to radon in homes is linked to approximately 300 lung cancer deaths each year in Ireland and it is the second most important cause of lung cancer after smoking<sup>4</sup>. It is in the same group of lung carcinogens as asbestos and tobacco smoke. In the air, radon decays quickly to produce radioactive particles that, when inhaled, are deposited in the airways and in the lung. This results in a radiation dose that can lead to lung cancer. There is no evidence linking radon exposure to other types of respiratory illnesses or other cancers.

### **3. Radon in Ireland**

The reference level for long term exposure to radon in homes is 200 Bq/m<sup>3</sup> measured in accordance with the EPAs Protocol for the Measurement of Radon in Homes and Workplaces<sup>5</sup>. The reference level is not a rigid boundary between safety and danger but a guideline as to when one should consider taking action to reduce the radon concentration. Living in radon concentrations above the reference level should be avoided.

Areas where 10% or more of homes are predicted to have radon concentrations above the reference level are called High Radon Areas. The EPAs searchable radon risk map is available on [www.radon.ie](http://www.radon.ie). While houses with high radon concentrations are more likely to be found in those areas, radon concentrations above the reference level can be found in houses in High Radon Areas. This means that the only way of confidently assessing the risk in homes is to measure radon in each home.

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<sup>4</sup> [www.radon.ie](http://www.radon.ie)

<sup>5</sup> [www.radon.ie](http://www.radon.ie)

For apartment blocks radon need only be measured in ground floor apartments. If a ground floor measurement is made there is no need to measure in apartments located on the upper floors<sup>6</sup>.

Indoor radon concentrations can vary considerably from day to day due to changes in weather conditions, ventilation rates, etc. and for this reason measurement should not be less than three months.

#### **4. Building Regulations - radon prevention in new homes**

The 1997 Building Regulations require that reasonable precautions be taken to avoid danger to health and safety caused by substances and contaminants in the ground. This includes danger from radon and specific guidance is given as to the precautions to be taken<sup>7</sup>. This guidance specifies that all homes, built since 1 July 1998, must be fitted with a standby radon sump. This standby sump can be activated at a later stage to reduce radon concentrations, if this is found to be necessary. For homes built in High Radon Areas the installation of a radon barrier as well as a standby sump is required. This guidance was strengthened in 2004 when the need to carry out a radon test once the building was occupied was emphasised. This test will confirm if radon concentrations are below 200 Bq/m<sup>3</sup> and whether or not the standby radon sump needs to be activated.

#### **5. Developing a radon measurement programme**

The aim of the radon measurement programme is over time to measure all homes. An implementation team, within the local authority, should be set up with responsibility to roll out the radon measurement programme. The EPA can give

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<sup>6</sup> Radon originates from the ground so if ground floor apartments are measured and, if necessary, remediated this is sufficient to ensure that radon concentrations in higher floors are below the reference level. Please note this applies to apartment blocks only. For measurements in individual houses a bedroom and living room reading is always required irrespective of the floors they are located on.

<sup>7</sup> Technical Guidance Document C – site preparation and resistance to moisture. [www.radon.ie](http://www.radon.ie)

advice and support to this team. The local HSE environmental health and public health teams should be advised of the proposed radon measurement programme. This will enable them to consider and provide input on issues that may arise during the programme.

If high radon levels are found there is likely to be public or media interest in the radon programme. The implementation team should also notify the communications/media officer of the local authority of the proposed radon programme in advance.

The implementation team should monitor progress of the roll out of the programme so as to predict a date when the results would be available so that the results can be promptly interpreted and released.

The experience of other local authorities who have measured radon may be of benefit when setting up your radon measurement programme. Many local authorities have carried out surveys of radon in their social housing stock and in doing so have acquired considerable experience in measuring radon.

## **6. The radon measurements**

### Where to start?

Priority should be given to measuring in homes in High Radon Areas built before July 1998. At a later time, the programme should be widened so that all remaining homes including ground floor apartments are measured.

Consideration is sometimes given to carrying out initial screening radon measurements in a small percentage of the housing stock. In such cases a small number of homes in estates spread throughout the county may be chosen for

measurement. While such tests will yield information on the radon concentrations in those homes they will not be representative of the radon levels in that estate<sup>8</sup>. Therefore equal consideration should be given to targeting initial radon measurements in all homes in a number of estates. Each estate could then be measured comprehensively over time which will yield accurate information on the radon risk in each estate. In addition the placing and retrieving of the detectors may be more economical if all detectors are in the one estate.

#### Who can do the radon measurements?

It is strongly recommended that an EPA registered radon measurement service is used to carry out radon measurements. This register of measurement services is available on [www.radon.ie](http://www.radon.ie)

All measurements must be carried out in accordance with the EPAs Protocol for the Measurement of Radon in Homes and Workplaces and this should be specified in the Invitation to Tender documents. The contents of the radon report for each home, communication of results and the application of seasonal correction factors are all set out in this Protocol. It is the seasonally corrected average that is compared to the national reference level of 200 Bq/m<sup>3</sup>.

#### **7. The radon results and scheduling remediation works**

Once the results are available priorities should be set for remediation works. Prioritisation will depend on how the result compares to the 200 Bq/m<sup>3</sup> reference level<sup>9</sup>. For homes where the radon concentrations are:

- less than 200 Bq/m<sup>3</sup> no further action is needed

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<sup>8</sup> It is known that there can be considerable house to house variation in radon levels. Therefore no conclusion of the radon levels in a particular estate can be drawn from readings made in a small number of houses.

<sup>9</sup> The result that is compared to the reference level is the seasonally adjusted average of the bedroom and living room.

- between 200 Bq/m<sup>3</sup> and 800 Bq/m<sup>3</sup> remediation should be carried out as soon as practicable
- above 800 Bq/m<sup>3</sup> immediate remediation is recommended<sup>10</sup>.

## 8. Communicating the results

Proper communication with all parties is key to the successful delivery of the radon programme. In particular, consideration needs to be given to:

- communication of the radon results to each tenant who had their house measured<sup>11</sup>
- communicating information on the risks to health of those tenants found to have high radon concentration in their homes<sup>12</sup>
- linking the radon programme with other lung cancer prevention initiatives that may exist locally for example smoking cessation efforts<sup>13</sup>
- communication with local GP's to ensure they are aware of the radon programme and of the health risks of radon
- communicating with the elected members<sup>14</sup>. The elected members should be notified in advance of the plan to implement the radon measurement programme and when the results are available they should be informed of the results and of the proposed follow up actions
- dealing with media enquiries that may arise once the results are made public. To assist the media with their enquiries consideration could be given to drafting a press release or an information fact sheet that would give information on the programme and perhaps other radon statistics for

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<sup>10</sup> A radon measurement in a home above 800 Bq/m<sup>3</sup> can be described as very high.

<sup>11</sup> Appendix 1 shows the letters sent by CCC to all the tenants who had measurements made. This includes those with radon levels below 200 Bq/m<sup>3</sup>, those between 200 Bq/m<sup>3</sup> and 800 Bq/m<sup>3</sup> and those above 800 Bq/m<sup>3</sup>.

<sup>12</sup> Appendix 2 shows the radon information sheet developed by EPA, HSE and CCC and sent to all tenants with high radon concentrations.

<sup>13</sup> Appendix 3 shows smoking cessation advice sent to tenants in north Cork with high radon levels.

<sup>14</sup> Appendix 4 shows the letter sent to each elected member in north Cork informing them of the results of the radon programme and that the results were being released.

the area. The EPA can assist in gathering this data. The information sheet should contain the programme results. For example, the number of homes measured, the number above the reference level and the number above 800 Bq/m<sup>3</sup>. The follow up actions and when will these actions be implemented should be set out. In addition it is likely that local print and/or radio journalists will seek to speak to a member of the implementation team and therefore spokespersons need to be identified and fully briefed.

- advice to those private householders in the locality who may be alarmed if high radon levels are found locally. This may include former tenants, who for example have purchased their houses. It may be necessary to make these householders aware of the results of the programme and to encourage them to measure radon in their homes. This could include public meetings which, for example, could be organised by the local authority and chaired by an elected member aimed at heightening awareness of radon among all householders in the locality. The EPA contribute to such meetings if requested to do so.

## **9. Radon remediation**

### How many houses may need remedial work

While all homes with radon concentrations above the reference level will need remedial work, the higher the radon concentration the sooner radon remediation should be carried out. As mentioned above, homes whose result is above 800 Bq/m<sup>3</sup> need to be prioritised for early remediation. To give an idea of how many homes in your county might need remediation, summary information on radon measurements in homes in each county is available [here](#). These figures as well as providing an indication of the likely number of homes requiring remediation also gives an idea of the magnitude of the radon problem in your county.



### What type of remedial work is needed?

A reduction in high radon concentrations can be achieved using relatively straightforward and inexpensive building methods. Work can be carried out without undue disruption to the house and should not require the house to be vacated or the tenants to be re-housed while the work is carried out. Radon remediation does not require complex building work and therefore the work is relatively inexpensive. A detailed description of the radon remediation techniques is covered elsewhere and outside the scope of this document<sup>15,16</sup>.

### Who can carry out radon remediation work?

It is strongly recommended that an EPA registered radon remediation service is used to carry out this work. This register of remediation services is available on [www.radon.ie](http://www.radon.ie)

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<sup>15</sup> Understanding Radon Remediation – a Householder Guide [www.radon.ie](http://www.radon.ie)

<sup>16</sup> Radon in Existing Buildings - Corrective Options [www.radon.ie](http://www.radon.ie)

## Appendix 1

Example of the letters written to tenants of Cork County Council who had radon measurements carried out. The letters cover those less than 200 Bq/m<sup>3</sup>, between 200 Bq/m<sup>3</sup> to 800 Bq/m<sup>3</sup> and those above 800 Bq/m<sup>3</sup>.

### LESS than 200 Bq/m<sup>3</sup>

Date

Re : RADON SURVEY – NORTH CORK.

A Chara,

As you know the Council placed radon detectors in your house earlier this year to check for radon. We did this following advice, from the Environmental Protection Agency (EPA) that North Cork was an area in which high radon levels are found.

Radon is measured in units called becquerels per cubic metre (Bq/m<sup>3</sup>), and radon levels in homes should be below 200 Bq/m<sup>3</sup>. This is called the reference level.

The result of the test carried out in your house, indicate a seasonally adjusted annual average radon concentration of XX Bq/m<sup>3</sup>.

Since this figure is below the reference level, no further action is necessary.

Please contact the EPA at 1800 300600 or at [www.radon.ie](http://www.radon.ie) should you have any further queries on radon gas.

Many thanks for your cooperation and assistance during the period of testing.

Is mise, le meas,

**LETTER GREATER THAN 200 Bq/m<sup>3</sup> AND LESS THAN 800 Bq/m<sup>3</sup>**

Date

**RE: RADON SURVEY.**

A Chara,

As you know the Council placed radon detectors in your house earlier this year to check for radon gas. We did this following advice, from the Environmental Protection Agency (EPA) that North Cork was an area in which high radon levels are found..

Radon is measured in units called becquerels per cubic metre (Bq/m<sup>3</sup>), and radon levels in homes should be below 200 Bq/m<sup>3</sup>. This is called the reference level.

The result of the test carried out in your house indicates a seasonally adjusted annual average radon concentration of XXX Bq/m<sup>3</sup>.

Since this figure is above the reference level, on the advice of the EPA and in order to permanently reduce the level of radon occurring in your house the Council proposes to carry out the following work:-

A cavity (about the size of a bucket) will be constructed in the ground underneath the floor slab of your house to which a pipe and an extractor fan will be connected. This is called a radon sump and the operation of the fan will stop radon getting into your house and will draw out the gas at eaves level. This is the best and most effective method of permanently stopping the high radon levels occurring. All the work will be carried out externally and our aim is to complete the work within 1 day.

There are a number of homes in this area which require these works be carried out and the Council is obliged to seek Tenders from specialist contractors in that regard. You will be contacted again to let you know in advance the exact date of commencement of the proposed works, but you will appreciate, this may take a few weeks to organize.

Please contact [*Name and contact details of Council official dealing with the remediation of the houses*] should you have any query in relation to these works.

Attached, please find a Radon Advice Fact Sheet, which I trust will clarify any issues arising. The note includes a diagram of a typical radon sump and will give you an idea of what the completed work will look like.

Many thanks for your cooperation and assistance to date.

Is mise, le meas,

**GREATER THAN 800 Bq/m<sup>3</sup>**

Date

**Re : RADON SURVEY.**

A Chara,

As you know the Council placed radon detectors in your house earlier this year to check for radon gas. We did this following advice, from the Environmental Protection Agency (EPA) that North Cork was an area in which high radon levels are found.

Radon is measured in units called becquerels per cubic metre (Bq/m<sup>3</sup>), and radon levels in homes should be below **200 Bq/m<sup>3</sup>**. This is called the reference level.

The result of the test carried out in your house indicates a seasonally adjusted annual average radon concentration of XXXX Bq/m<sup>3</sup>.

Since this figure is above the reference level, on the advice of the EPA and in order to permanently reduce the level of Radon occurring in your house the Council proposes to carry out the following work, as soon as is practical :-

A cavity (about the size of a bucket) will be constructed in the ground underneath the floor slab of your house to which a pipe and an extractor fan will be connected. This is called a radon sump and the operation of the fan will stop radon getting into your house and will draw out the gas at eaves level.

This is the best and most effective method of permanently stopping the high radon levels occurring. All the work will be carried out externally and our aim is to complete the work within 1 day.

The Council is in the process of engaging a specialist contractor to carry out this work. You will be contacted again shortly to let you know in advance the exact date of commencement of the proposed works.

Please contact *[Name and contact details of Council official dealing with the remediation of the houses]* should you have any query in relation to these works.

Attached, please find a Radon Advice Fact Sheet, which I trust will clarify any issues arising. The note includes a diagram of a typical radon sump and will give you an idea of what the completed work will look like.

Many thanks for your cooperation and assistance to date.

Is mise, le meas,

## Appendix 2

**Radon fact sheet produced by CCC, the EPA and HSE and sent to all tenants of CCC found to have high radon levels in their homes.**

### Facts and Information on Radon Gas

Radon is a radioactive gas which originates from the decay of uranium which is present in all rocks and soils. It has no colour, taste or smell and can only be measured using special equipment. Outdoors, radon is quickly diluted to harmless concentrations, but when it enters an enclosed space, such as a house or other building, it can sometimes accumulate to unacceptably high concentrations.

Long-term exposure to high levels of radon increases the risk of developing lung cancer. There is no other known health effect associated with radon exposure. The size of the risk depends not only on the amount of radon present and the length of exposure but also on one's smoking habits. Radon is a particular hazard for people who smoke.

Risk in the home can normally be reduced by increased ventilation. However when very high radon levels are present, other remediation methods will need to be applied.

#### How are we exposed to radon?

- Indoor radon levels are affected by the radium and uranium levels in soil, the porosity of the soil, the composition and condition of the foundation materials, and the ventilation rate of the room.
- Where high indoor radon levels are present, the ground under the house is normally the primary source
- As radon is a gas it can easily seep into buildings
- Small cracks in the floors or foundation of homes or in gaps around pipes or cables may allow high levels of radon inside the home.
- The rate that radon enters a building depends on properties unique to that building. Therefore it is not possible to confidently estimate your radon risk based on a neighbour's reading. Individual measurements are needed.
- Minor amounts of radon can be found in drinking water mainly from ground water supplies. This has no detectable effects if ingested.

The general population is continually exposed to background levels of naturally occurring radiation. Other countries too have radon problems. Cornwall, in England has high radon levels that increase the background exposure by a factor of 2-3. Despite this, lung cancer rates are lower in Cornwall than the rest of the UK because

the population in the area smoke less. The differences in smoking rates dwarf any radon effect at a population level.

### **At what level of radon in a house, should action be considered?**

The reference level for long-term exposure to radon in a house in Ireland, above which the need for remedial action should be considered, is 200 Bq/m<sup>3</sup>. Measurement is made using 2 radon detectors each placed in a bedroom and living room for at least 3 months. The average of the two rooms is seasonally corrected to take account of the months of the year that the measurement was made, and it is the seasonally corrected average that is compared to the reference level.

The reference level is not a rigid boundary between safety and danger, but rather a guideline as to when one should consider taking action to reduce the radon concentration.

### **How likely is radon to cause cancer?**

People exposed to high levels of radon have an increased incidence of lung cancer. The level of risk depends on how high a radon level a person is exposed to, and for how long and whether or not a person smokes. Based upon current knowledge, it is estimated that in Ireland, for the population as a whole, a **lifetime exposure** to radon in the home at the reference level of 200 Bq/m<sup>3</sup> carries a risk of about 1 in 50 (2%) of contracting fatal lung cancer. **The risk is much lower for non-smokers, and far greater than this average value for smokers.**

**It is worth illustrating how much higher the risk is for smokers.** For example if a person lived until aged 75 years in a radon concentration of 400 Bq/m<sup>3</sup>, if they are a non smoker their risk is less than 0.7% (1 in approximately 150) of developing lung cancer. If they smoke, their risk is nearly 16% (1 in 6) almost 25 times higher.

- Non Smoker, little radon exposure - LEAST RISK
- Non Smoker, some radon exposure - SOME RISK
- Smoker, little radon exposure - INCREASED RISK
- Smoker with radon exposure - GREATEST RISK

Radon is only a risk factor for lung damage due to its direct local effect on the lung. Cigarettes also have direct effects on the lung. There is no way of telling whether radon or smoking is linked with an individual lung cancer case.

**Reducing the radon concentration and quitting smoking will immediately reduce the risk of lung cancer.**

### **How can radon affect my general health?**

Radon is not irritating to the lungs in the conventional sense. Radon does not cause or increase the risk of asthma. Radon is not associated with other common respiratory disorders.

**How will the radon levels in my house be reduced?**

**Further exposure to high levels of radon will be eliminated by remediating your home.** Opening your downstairs windows will help dilute the radon levels present in your house and having regard to your comfort and security, this could be done as an immediate step. However this is not a permanent solution.

To permanently reduce the radon levels in your house Cork County Council will carry out the works as indicated in the attached covering letter addressed to you with this Information Note.

**How can I reduce the risk to my health?**

The risk from radon is hugely increased by smoking. **Quitting smoking reduces lung cancer risk from radon** more that does reduction of radon exposure itself. Current smokers can very significantly lower the risk of lung cancer by stopping smoking now.

**Is there a medical test to show whether I've been exposed to radon?**

Radon in human tissues is not detectable by routine medical testing. There is no local or systemic screening test that has been shown to be helpful in preventing harm from radon. Similarly there is no test that can detect if harm has been done. Technologies such as CT screening also involve radiation exposure and are not indicated in this situation.

**Is there any danger from growing fruit and vegetables in areas affected by radon?**

No. Radon is not found in fruit or vegetables.

**Further information is available during office hours Monday to Friday**

For information and advice on the radon remediation solutions and the scheduling of radon remediation work in your house, area or estate contact:

**Cork County Council;**



*[Name and contact details of Council officials dealing with the remediation of the houses]*

For general information on radon and its hazards contact:



**Environmental Protection Agency.** Tel: 1800300 600 or website [www.radon.ie](http://www.radon.ie)

For information on public health risks contact  
**Dept of Public Health, HSE South (Cork & Kerry) Tel: 021 4927601**



For **Smoking Cessation Advice** see additional enclosed leaflets and information sheet.

**July 2008**



## Appendix 3

### Smoking cessation advice offered to tenants with high radon level



#### Smoking Cessation Service – HSE-South (Cork & Kerry)

While many smokers will manage to stop smoking through their own efforts, more may need some support and encouragement to give up.

The smoking cessation service of the HSE, offers 1-1 telephone support to clients referred or self-referred to the service. Smoking Cessation Officers contact clients on a regular basis, offering support in the process of quitting.

A second strand of Service is the *Stop Smoking Group*, which provides support for those wanting to quit smoking but who feel they may need some extra help.

These groups run on a regular basis as part of the HSE, South Smoking Cessation Service, accessed, free of charge, by any member of the public wanting support to quit. While the ultimate goal of the course is to eventually be smoke free, the emphasis throughout is on the process of quitting, and moving from one stage to the next: from thinking about it, to making and action plan and hopefully to eventually becoming a non smoker.

The course consists of six one-hourly session run over six weeks. The course outline is as follows:

<b>Week 1</b>	Thinking about stopping (Carbon monoxide breath testing; and why I smoke)
<b>Week 2</b>	Planning to stop (different quitting methods and coping strategies)
<b>Week 3</b>	Stopping (Irish Cancer Society video, health aspects of quitting)
<b>Week 4</b>	Coping with withdrawal (weight gain, cravings, withdrawal symptoms)
<b>Week 5</b>	Benefits of stopping (relaxation techniques, passive smoking)
<b>Week 6</b>	Staying stopped (potential risky situations and coping as a non-smoker)

Smoking Cessation Officers are located in every Local Health Office (numbers below)

<b>Cork City</b>	<b>021 4921641</b>
<b>North Cork</b>	<b>022 30233</b>
<b>West Cork</b>	<b>028 40418</b>
<b>Kerry</b>	<b>066 7195617</b>

## Appendix 4

### Letter sent to each elected member in north Cork advising them of the results of the radon project and the follow up actions

To : The Cathaoirleach, Each Member of the Northern Committee, and Oireachtas Members, Cork East & Cork North West.

Date.

Re: **RADON GAS.**

Following on the national survey carried out by the Environmental Protection Agency (EPA) in 2007 which indicated that areas of North Cork maybe at risk of high levels of Radon Gas occurring, the Council decided to test all its rented housing stock to check such levels.

Almost half of the test results have now been received and have been analysed with the help of the EPA and the Health Service Executive (HSE).

The safe level of radon gas in any enclosed area is as determined by the RPII to be 200 becquerels per cubic metre. (Bq/m<sup>3</sup>).

XXX of the Council houses tested show seasonally adjusted radon levels less than 200 Bq/m<sup>3</sup>. The Council has today written to each of these households advising them of the results and confirming that no further action is necessary.

XX of the houses tested show seasonally adjusted radon levels at between 200 and 800 Bq/m<sup>3</sup>. The Council has today written to these households advising them of the results and confirming that the Council will undertake remediation works to each dwelling to be carried out by specialist contractors as soon as possible.

Tenders will be invited shortly from such contractors to allow this work commence.

XX of the houses tested show seasonally adjusted radon levels in excess of 800 Bq/m<sup>3</sup>.

The Council has today written to each of these households confirming that remediation works will be carried out as soon as is practical.

These works, on the advice of the EPA, are the best and most effective method to permanently reduce the levels of radon gas occurring in the house and will include the construction of a sump (about the size of a bucket) underneath the floor slab of

the house which will be connected to an external pipe and fan which will vent the gas to the open air as eaves level.

I enclose copies of the four letter types issued, a facts sheet and leaflets distributed to all of the households where seasonally adjusted radon levels in excess of 200 Bq/m<sup>3</sup> were detected.

Finally our testing programme is continuing to include all rented stock and the results will be delivered to each of the tested households as they are received.

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