Q & As for radon – outcome of research project

Q1) Should local authorities consider monitoring for radon in air in properties with groundwater private water supplies (PWS) in moderate or high hazard areas?

A) Yes, they should consider this. It is likely to be cheaper and easier to measure than radon in water measurement. However, if the property already has mitigation in place to reduce levels of radon in air, then an air measurement may be of little value in determining radon in water and it could be wiser to go direct to a radon in water measurement.

Q2) Can a local authority charge the relevant person(s) for air testing?

A) Yes, the air testing serves as a lower cost surrogate for water testing. As part of the analytical fees in Schedule 5 of the PWS regulations up to £500 costs can be charged for audit monitoring and up to £500 for risk assessment including anything additional identified during a risk assessment, for example in a Reg 10 supply (no audit monitoring required).

Q3) If the air sample passes, is water testing required for radon?

A) The risk in this situation has been confirmed as low, and therefore no further monitoring is required.

Q4) If radon above 200Bq/m³ is detected should I test the water?

A) It is advisable to test the water. The radon may be coming from the ground but it may also be coming from the water supply.

Q5) Can the local authority charge for water testing?

A) Yes, as part of the analytical fees in Schedule 5 of the PWS regulations. Up to £500 costs can be charged for audit monitoring and up to £500 for risk assessment including anything additional identified during a risk assessment, for example in a Reg 10 supply (no audit monitoring required).

Q6) Our costs of analysis already exceed the £500 allowed for audit monitoring. Will this figure be increased in the revised regulations to accommodate this additional requirement?

A) We are seeking robust evidence as part of the consultation process on the revised regulations on the actual costs of analysis and how they compare to the maximum fees in Schedule 5. However the Private Supply regulations have now been in force for over 5 years, and local authority staff are reminded that they may exclude parameters from the audit monitoring suite if it considers that it’s unlikely to be present at concentrations which would pose a risk to health, based on historic monitoring and risk assessment. Additionally the frequency of check
monitoring can be reduced to not less than half if the previous two year’s results show that the results are constant and significantly below the standard.

Q7) How can a local authority gain accreditation for radon sampling?

A) Local Authorities have been informed that their sampling staff must be deemed competent to carry out sampling and transportation of samples through an accreditation system (IL 05/2013). The Inspectorate is working with the appointed accreditation service, UKAS, to develop a system for local authority staff. In the interim, local authorities should continue to follow best practice with regards to sampling and transportation with guidance and support from their local water companies. The Inspectorate will issue specific radon sampling guidance before the new Regulations come into force.

Q8) None of the laboratories near the local authority area are accredited for radon monitoring. How can we get the water tested?

A) Local authorities should always use laboratories accredited to carry out the analysis in question. However the Inspectorate is aware that only two laboratories (LGC and SWW) are currently accredited for radon analysis. In response to the implementation of the Euratom Directive, a number of other laboratories are working towards accreditation. Radon analysis of samples must be carried out within a specified time period after collection due to the short half-life of radon. Therefore in the interim local authorities should seek laboratories which carry out non-accredited radon analysis in preference to missing the timeframe for analysis by using more distant laboratories.

Q9) Where levels of radon above 1000Bq/l are detected, or the investigation into elevated radon in air results identifies the drinking water supply as the likely source, what remedial action is effective for radon?

A) The Manual for Treatment of Small supplies is available on the DWI website and contains guidance on remediation options for radon: