

Drinking Water Quality Regulator for Scotland

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## **Lead in Drinking Water - Property Issues - Home Report Consultation February 2014**

Numbered as per the Consultation Response Form.

### **Q 1 – Do You think the home report is meeting its original objectives?**

No

Whilst the Home Report will undoubtedly have improved information about property condition, my concern is that in its current form it is too restricted in its scope to the condition of the dwelling. There are two areas of concern which relate to the drinking water supply and both can have a serious impact on the health and wellbeing of householders. Firstly, the level of lead which is leached from lead supply pipes and storage tanks and secondly, the microbiological and chemical quality of water provided by Private Water Supply sources and the associated treatment, storage and pipework systems.

An essential aspect of any home must be that it has a means of receiving a wholesome drinking water supply. In most cases that is provided by connection to the Public Water supply but a significant number are subject to an arrangement for Private Water Supply (PWS). Where it is from a private supply, the source and system may be entirely in the ownership and unique to the property being sold or it may be shared with others with particular conditions applying. In either case, there can be onerous responsibilities and liabilities attached to the ownership of the dwelling. As dwellings fall into a range of structural condition requiring attention to reach an acceptable standard, so too are the associated private water supply systems and these issues are bypassed in the reports and questionnaires where they should be integral.

The DWQR has concerns that there is a lack of understanding around private supplies and their complexities. There are around 20,000 private water supplies in Scotland, supplying around 3% of the population. Many more people encounter private supplies when they stay in holiday accommodation, especially in the more remote parts of Scotland. The quality of private water supplies is variable. There are some very good ones that have adequate treatment and are well managed, but others undoubtedly present a risk to health due to the quality of the water and inadequate, or absent, treatment. There have been outbreaks of disease in Scotland that have been attributed to private water supplies. In 2012 15% of samples taken for Type A supplies (large PWS or supplies with a commercial entity) failed the standard for e.coli. Small Type B supplies (PWS serving less than 50 persons) are exempt from the directive, therefore a large number of these supplies never get sampled or risk assessed.

The owners and users of PWS are responsible for their drinking water supplies. Local authorities (LAs) are responsible for the enforcement of legislation relating to PWS, including risk assessment and sampling. Often people buying a property on a private water supply, have no real understanding of their responsibilities regarding the supply, any other management responsibilities on the supply and whether or not the supply is wholesome and safe to consume and use for domestic purposes. People buying a property with a PWS should not assume that this supply meets the necessary standards, they should seek assurance of this either from the contents of the home report or from samples they arrange themselves.

With regard to the lead concerns, DWQR is currently working with a range of stakeholders: Scottish Government Health; Scottish Government Housing; Scottish Government Water Industry Team; Health Protection Scotland, Local Authority Environmental Health, Scottish Water and Consumer Interest Organisations, to develop a strategy and co-ordinated range of actions to reduce exposure to lead.

Lead is toxic to humans and it accumulates within the body over a lifetime through exposure to lead sources in the environment. In assessing the tolerable daily intake of lead, the World Health Organisation has allocated 50% of lead exposure as arising from drinking water. The limit for lead in drinking water has progressively reduced over the past 30 years to the current level of 10 micrograms per litre. Over the same period however, concerns have developed within Scotland's health professional community that even the 10 standard may be too high and there is an increasing view that any level of lead within drinking water is unacceptable.

Control over the level of lead in drinking water supplies is a complex issue. The major source of failures of the standard is the leaching of lead from lead pipes and storage cisterns in the supply route to consumers. Whilst the point of compliance with Regulations is at the consumer's tap, for those on the public water supply, the supply route is formed of pipes in the ownership of both Scottish Water and property owners. Scottish Water has responsibility for communication pipes (the part of the connection within the street). Supply pipes and any pipes internal to the property are the responsibility of the property owner(s). Regulations set down the actions Scottish Water must take to minimise the level of lead in the supply but there is no requirement for property owners to remove lead plumbing unless there is a demonstrable failure of the water quality standard. For properties on a Private Supply, the ownership of the pipes should not be presumed to be any simpler.

Properties built before 1970 are most likely to have had their water supply delivered originally through lead pipes and over time, a proportion will have had those pipes replaced. WHO state that the principal remedy for reduction of lead in drinking water is removal of pipes and fittings, but this will take much time and money and it recognises that not all water will meet the guideline value immediately.

In discussion with stakeholders, one acknowledged mechanism to moving toward that goal is in highlighting the issue and addressing the replacement at the time a property is sold. There is therefore an opportunity in the revision of the Home Report to stimulate the replacement of lead pipes and storage tanks and remove this from the health issues facing those living in Scotland.

**Q 18 – Does the single survey element of the home report provide an appropriate and useful level of information?**

No

The Single Survey element of the Home Report is intended to highlight the condition of various elements relating to the structure of the property and its services.

The drinking water supply to a property has a direct bearing on the health of householders and the Survey could be better structured to highlight the issues and responsibilities associated with that. Water supply should be treated as a separate service, as with Gas, Electricity and Drainage, with the view to establishing whether the property is connected to the public water mains or is subject to an arrangement from a private water supply.

Since private water supplies can impose particular responsibilities on the owner of a dwelling, the condition of the source, treatment and pipework systems and their overall ability to provide a wholesome supply should be addressed. Local Authorities are responsible for sampling private water supplies and records of sampling should be obtained from them for inclusion in the Report in similar fashion to the Energy report.

The condition of the water supply pipe into a property is also important as it has a direct bearing on the exposure of the occupants to the level of lead in their supply. Lead is toxic and it accumulates within the body over a lifetime through exposure to lead sources in the environment. In assessing the tolerable daily intake of lead, the World Health Organisation has allocated 50% of lead exposure as arising from drinking water and advocates the removal of lead from the supply route as the principal remedy. This issue needs to be highlighted to prospective buyers and therefore the pipe material from the connection point to the water main (private supply or public mains), into the property, to the kitchen tap, needs to be established and recorded.

Clearly a visual check cannot be made on all of these elements and unless there is confidence over the material of the supply pipe NOT being lead in all sections along its length, a water sample, analysed for lead, may be the only way for purchasers to obtain surety over any potential lead issue. A record of sampling could be included in the Report in similar fashion to the Energy report.

Under an amended heading of "Plumbing and Bathroom fittings", the survey should identify whether there is any lead pipework carrying the supply to bathrooms etc. and whether there are any lead or lead-lined storage tanks within the building.

The Sectional diagram should identify the water supply pipe entering the house and also indicate there is a boundary of responsibility for this between the property owner and Scottish Water (in the case of a public supply) by positioning and labelling the boundary stopcock.

In terms of the Category of repairs required to address issues noted in relation to a Private Water Supply, these are likely to fall across the range of urgency. Where lead water pipes or storage tanks form part of the drinking water supply route to the kitchen tap, the appropriate urgency to drive replacement would be a Category 3.

**Q 22 – Is the information provided in the property questionnaire appropriate and useful?**

No

The questionnaire does not adequately address factors which relate to the drinking water supply. There are important issues to be highlighted to prospective buyers regarding lead in drinking water and the ownership and maintenance of private water supplies. Both can have a serious impact on the health and wellbeing of householders.

In section 10a of the questionnaire you ask whether the property is connected to the mains supply or on a private water supply, however, you do not ask for any further information on the private supply. In section 10b the questionnaire asks a number of questions regarding a private septic tank. To provide better information there has to be a similar section relating to private water supplies. The questionnaire needs to ask what type of supply it is (i.e. spring/borehole), the responsibilities of the owner of the property, if the supply has treatment, maintenance records, when it was last sampled and the results of these samples.

With regards to sections 11 a and b of the questionnaire it should be noted that owners can have shared ownership and responsibility for shared water supply pipes and this should be explicitly mentioned. This is common in properties served by a public supply but it is also a likely scenario with a private water supply, where these often have complex ownership and management responsibilities. New owners of properties are often completely unaware of what is expected of them when they buy a property on a private water supply.

There should be a specific question relating to whether replacement of lead water supply pipes has taken place and whether this has been fully achieved from the boundary stopcock, through garden or driveways, through the external walls and up to the cold water tap in the kitchen. Or if there has been partial elements only renewed.

If there is a PWS, section 11 d and e should ask about relevant persons on the supply, the location of the supply, what access rights are associated with the supply and who has responsibility for what on the supply.

Section 11 e may also be relevant if the property is not served by a PWS, but may contain someone else's PWS. If this is the case, the questionnaire should ask if someone has access rights to their PWS on the property.

Section 14. within the Guarantees part (a), it should be reworded to include "maintenance agreements" and a specific line to - "Private Water Supplies e.g. boreholes, pumps or treatment equipment"