

# **Environment Group**

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Your ref: Our ref: 2DWE/25/1

28 February 2003

Dear George

## **INFORMATION LETTER 4/2003**

## REQUIREMENTS TO MEET NEW LEAD STANDARD

1. The purpose of this letter is to provide further guidance to Scottish Water on the requirements to facilitate compliance with the new tighter standards for lead in drinking water.

#### **EC Directive Requirements**

- 2. The Council Directive 98/83/EC, which came into force on 25 December 1998, requires an interim standard for lead of 25  $\mu$ g/1 to be achieved by 25 December 2003, and a final standard of 10  $\mu$ g/1 to be achieved by 25 December 2013. A note associated with these standards indicates that they apply to a sample of water intended for human consumption obtained by an adequate sampling method and taken so as to be representative of a weekly average value ingested by consumers. The European Commission intends to provide guidelines on harmonised sampling and monitoring methods under the provisions of Article 7.4, which Member States will be required to follow.
- 3. The Directive's standards, including the lead standards, apply at the point within premises or establishment at which the water emerges from the taps that are normally used for human consumption (consumers' taps). In respect of domestic premises, Member States shall be deemed to have fulfilled their obligations where it can be established that non-compliance with the standards at these taps is due to the domestic distribution system or its maintenance. However, the Directive also requires Member States to ensure that appropriate measures are taken in respect of domestic premises to reduce or eliminate the risk of non-compliance with the standards after the water is supplied. i.e. Member States must take measures to reduce or eliminate the risk of non-compliance with the standards after the vater is supplied. i.e. Member States must take measures to reduce or eliminate the risk of non-compliance with the risk of non-compliance due to domestic distribution systems or their maintenance.
- 4. In respect of premises and establishments where water is supplied to the public, such as schools, hospitals and restaurants, Member States are required to ensure compliance at the





taps normally used for human consumption. New regulations on drinking water quality in public buildings are expected to be in place by the end of 2003. It is anticipated that the public building regulations will make the owner of the building responsible for securing any improvements necessary as a result of the condition of the internal plumbing or the supply pipe. The responsibility for monitoring and enforcement of the public building regulations is likely to lie with local authority environmental health officers.

### **Interpretation of EC Directive Requirements**

- 5. The Directive means that Scottish Water requires to have a strategy of action to meet the lead standards. The first phase of that strategy is to identify areas served by Scottish Water where there is a risk that water at consumers' taps will contain lead at a concentration in excess of  $25 \ \mu g/1$ . If the risk is such that there is a 95% probability that the non-compliance rate with the  $25 \ \mu g/1$  standard, in the supply zones served by a treatment works, is higher than 5% then action must be taken by Scottish Water.
- 6. In determining whether the risk is such that there is a 95% probability that the noncompliance rate with the 25  $\mu$ g/1 standard is higher than 5%, Scottish Water must randomly sample at least 59 properties or 60% of the properties in the zone(s) served, whichever is the lower number.
- 7. Where action is required and where practical, plumbosolvency treatment must be installed or existing plumbosolvency treatment optimised. Any plumbosolvency treatment must be maintained whilst there is a 95% probability that the non-compliance rate with the  $25 \mu g/1$  standard in the supply zone(s) served is higher than 5%, irrespective of whether Scottish Water has replaced all of its lead pipes in the supply zone(s) concerned. Any discontinuation of plumbosolvency treatment must be approved by Scottish Ministers.
- 8. Scottish Ministers consider that plumbosolvency treatment is practical for all supplies serving more than 400 properties and that is also practical for many supplies serving less than 400 properties. However, Scottish Ministers recognise that pumbosolvency treatment may not be practical for all supplies serving less than 400 properties. Any decision on whether plumbosolvency treatment is practical for supplies serving less than 400 properties or not, is a matter for Scottish Water. Where plumbosolvency treatment is not considered practical, Scottish Ministers must be informed and Scottish Water must still take action to reduce or eliminate the risk of non-compliance with the standards after the water is supplied.

#### **Communication Pipe Replacement**

- 9. Where action is required and where plumbosolvency treatment is not practical, Scottish Water must replace all lead communication pipes in the supply zones concerned. Water supply zones served by treatment works where plumbosolvency control is not practical must therefore be surveyed to determine the location of all lead communication pipes. All lead communication pipes in these zones must be replaced by 25 December 2003.
- 10. When lead communication pipes are replaced by Scottish Water, the owner and occupier (if different) of the premises concerned must be informed and advised to replace their own lead pipes both internal and external. Consumers should also be informed of any remedial action that they should take in the interim such as allowing the tap to run before using the water for human consumption.





- 11. If any customer replaces their internal lead plumbing and lead supply pipe then Scottish Water must replace the corresponding lead communication pipe, if they have not already done so, as soon as possible but within 6 months of receiving notification from the customer that they have replaced their lead pipes. In addition, all lead communication pipes encountered, as part of Scottish Water's mains rehabilitation work, should be replaced on an opportunistic basis.
- 12. Accurate records of all lead communication pipe replacements must be maintained together with a record of the material from which the corresponding supply pipe is made. The maintenance of accurate records will assist in the designation of "lead-free" zones. If Scottish Water can demonstrate that a treatment works is only supplying lead-free zones then there will be no requirement to continue plumbosolvency control.

#### **Lead Sample Failures**

- 13. Where routine sampling identifies a failure of the lead standard, Scottish Water will investigate the failure and replace any lead communication pipe. Scottish Water will also determine whether other properties in the area are likely to have lead communication pipes as a result of being of a similar age and construction. This information shall be recorded so that the necessary data is accumulated to allow Scottish Ministers to determine whether or not plumbosolvency control can be discontinued (see paragraph 7).
- 14. The owner and occupier (if different) of a property, from which a routine tap sample fails to meet the lead standard, must be informed of the failure and encouraged to replace any lead pipework, internal or external, in their ownership. Consumers must also be advised about measures that they can take in the interim, such as flushing.

## The Final Standard of 10 $\mu$ g / litre to be met by 2013

15. The second phase of the strategy is to identify areas served by Scottish Water where there is a risk that water at consumers' taps will contain lead at a concentration in excess of  $10 \,\mu g/1$ . This will require a further lead survey across Scotland at the end of 2004 to identify any water supplies where there is a 95% probability that the non-compliance rate with the  $10 \,\mu g/1$  standard is higher than 5%. The study will be carried out at the end of 2004 to allow the full effect of the measures taken to meet the interim  $25 \mu g / 1$  litre standard to be taken into account. Once the extent of the problem is known a methodology to achieve the  $10 \,\mu g/1$  standard will be developed.

#### Enquiries

- 16. Any enquiries abou this letter should be addressed to Colin McLaren (0131 244 0186)
- 17. Copies of this letter are being sent to Willie Rowbottom and Catherine Benton.
- 18. Please acknowledge receipt of this letter using the enclosed slip.

#### Yours sincerely

#### TIM HOOTON





Please complete the acknowledgement below and return it to:

Ewan Young The Scottish Executive Drinking Water Quality Unit 1-H Victoria Quay EDINBURGH EH6 6QQ

## I acknowledge receipt of Information Letter 4/2003: **REQUIREMENTS TO MEET NEW LEAD STANDARD**

Signed	
Name	
Position	
Authority	
Address	
Date	





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