

10 May 2011



**Scottish  
Water**

Always serving Scotland

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Dear Matthew,

**Forehill Water Supply Zone Pesticide Exceedances  
Section 76E(4)(b) of the Water (Scotland) Act 1980.**

Further to your response to my letter of 9<sup>th</sup> February, please find enclosed the undertaking regarding the failures of the pesticide standards in the Forehill water supply zone.

Please note that as requested we have committed to planning and designing works for the installation of a traditional pesticide removal stage, currently anticipated to be a fixed bed Granular Activated Carbon (GAC) adsorber, although the undertaking acknowledges that this may change following the completion and outcomes of investigation and scoping work.

I would like to draw your attention to the fact that while we can plan and design for late changes to the scope, to accommodate treatment for pesticides such as Metaldehyde, these changes are likely to have an impact on the delivery timescale of the final solution.

If you have any questions regarding the undertaking please do not hesitate to contact Peter Brown, Water Quality Regulation Manager at 0141 355 5661.

Yours sincerely,

A handwritten signature in blue ink that reads "G. Aitkenhead".

Geoff Aitkenhead  
Asset Management Director

**SCOTTISH WATER  
UNDERTAKING IN TERMS OF SECTION 76E(4)(b) OF  
THE WATER (SCOTLAND) ACT 1980, AS AMENDED.**

THIS UNDERTAKING is given by Scottish Water, established by section 20(1) of the Water Industry (Scotland) Act 2002, and having its Head Office at Castle House, 6 Castle Drive, Dunfermline, KY11 8GG.

Whereas:-

- (a) section 6 of the Water (Scotland) Act 1980 ("the 1980 Act") confers duties on Scottish Water to, inter alia, provide a supply of wholesome water to every part of its limits of supply where a supply of water is required for domestic purposes and can be provided at reasonable cost;
- (b) section 8 of the 1980 Act requires Scottish Water to supply a wholesome supply of water sufficient for the domestic purposes of all owners and occupiers of premises within its limits of supply entitled to a supply for those purposes;
- (c) regulation 4 of the Water Supply (Water Quality) (Scotland) Regulations 2001, ("the 2001 Regulations"), inter alia, prescribes requirements which require to be met in order that water supplied by Scottish Water in pursuance of its duties under the 1980 Act shall be regarded as wholesome for the purposes of Part VIA of that Act;
- (d) regulation 4(2)(c) of the 2001 Regulations prescribes that the maximum permissible value within consumers' taps for the individual pesticides Chlortoluron, Isoproturon, 2,4-D, Linuron, MCPA, MCPP, Metazachlor and Metaldehyde, is 0.1ug/l (item 20 in Part I of Table B in schedule 1 to the 2001 Regulations);
- (e) regulation 4(2)(c) of the 2001 Regulations prescribes that the maximum permissible value within consumers' taps for total pesticides is 0.5 µg/l (item 21 in Part I of Table B in schedule 1 to the 2001 Regulations);
- (f) the Drinking Water Regulator for Scotland has advised Scottish Ministers that he believes that Scottish Water may be at risk of failing to comply with the requirements of regulation 4(1) of the 2001 Regulations and Part VIA of the 1980 Act in respect of the water it supplies from Forehill Water Treatment Works in so far as those requirements concern the individual pesticides: Chlortoluron, Isoproturon, 2,4-D, Linuron, MCPA, MCPP, Metazachlor and Metaldehyde, and total pesticide parameters; and
- (g) Scottish Water desires to give an undertaking to the Scottish Ministers in terms of Section 76E(4)(b) of the 1980 Act, to take all such steps as it appears to the Scottish Ministers to be appropriate for the time being for Scottish Water to take for the purpose of securing or facilitating compliance with its duties under sections 6(1) and(2) and 8 of the 1980 Act, and of regulation 4(1) of the 2001 Regulations, as regards the individual pesticide and total pesticide parameters specified in paragraphs (d) and (e) above, respectively.



NOW THEREFORE, SCOTTISH WATER HEREBY UNDERTAKES as follows

1. Subject to the following provisions of this undertaking, Scottish Water shall carry out, or secure the carrying out of, the steps referred to in paragraph 4 of the schedule annexed and signed as relative hereto.
  - a. Scottish Water undertakes to secure that the steps referred to in the said paragraph 4 of the said schedule are complete on or before dates set by DWQR
2. If, in relation to Water Treatment Works specified in paragraph 1 of the said Schedule, Scottish Water considers that it is able to demonstrate compliance with the requirements of regulation 4(1) of the 2001 Regulations in so far as that applies to the individual pesticide and total pesticide parameters, it shall notify the Scottish Ministers in writing; and, if satisfied that Scottish Water is in a position to comply with its obligations under the 2001 Regulations and 1980 Act in so far as the individual pesticide and total pesticide parameters applies, and is likely to be in a position to continue to so comply, the Scottish Ministers shall treat this undertaking as ceasing to apply insofar as the Water Treatment Works is concerned, and shall notify Scottish Water accordingly.

SIGNED on behalf of Scottish Water by Geoff Aitkenhead, Asset Management Director

Signature           *G. Aitkenhead*          

Date           10 MAY 2011

**SCOTTISH WATER**  
**UNDERTAKING IN TERMS OF SECTION 76E(4)(b) OF**  
**THE WATER (SCOTLAND) ACT 1980, AS AMENDED**  
**Schedule of Information**

**Supply Zone Details**

1. The undertaking is given in respect of Forehill Water Treatment Works which supplies Forehill zone which has a population of 29,168. The works is located at Longside Road, Blackhills, Peterhead.

**Nature of Contravention**

2. The water supply [from this water treatment works] is at risk of failing to meet the prescribed level as regards to the individual pesticides Chlortoluron, Isoproturon, 2,4-D, Linuron, MCPA, MCPP, Metazachlor and Metaldehyde, (item 20 in Part I of Table B in schedule 1 to the 2001 Regulations) of 0.1µg/l.
3. The water supply [from this water treatment works] is at risk of failing to meet the prescribed level as regards to the total pesticides (item 21 in Part I of Table B in schedule 1 to the 2001 Regulations) of 0.5 µg/l.

**Steps to be taken**

4.
  - a) Develop and implement an enhanced monitoring strategy for pesticides to supplement current regulatory raw and treated water monitoring for the duration of the Undertaking;
  - b) Have formalised procedures for advising Health Authorities and Local Authority Environmental Health of PCV exceedences through DWQR Event Reporting and any additional discussion via local liaison with all relevant stakeholders. Continue to respond and escalate as described in the Scottish Waterborne Hazard Plan
  - c) Actively support the Voluntary Initiative to influence pesticide usage in the Ugie catchment and promote sustainable land management in the River Ugie catchment.
  - d) Assess and report on the success of sustainable land management to reduce the risk from pesticides in the Forehill supply. This report is to be completed not more than 12 months from the commencement of the Undertaking;
  - e) Continue to monitor and support industry investigations into the effectiveness, feasibility and cost of sustainable treatment options for Metaldehyde, due to the fact that Metaldehyde's relatively simple structure means that the normal treatment of adsorption onto activated carbon is not effective;
  - f) Complete planning and design works for the installation of an appropriate pesticide removal process, currently anticipated to be a fixed bed Granular Activated Carbon (GAC) adsorber, although this may change following completion of investigation and scoping work;



g) Complete installation and commissioning of fixed bed Granular Activated Carbon (GAC) adsorber (s) or equivalent pesticide treatment stage at Forehill WTW (dependant upon the success of step c & e).

#### Completion Dates

5. The steps identified in paragraph 4 above shall be completed on or before:
  - a) Currently in place
  - b) Currently in place
  - c) 31<sup>st</sup> Dec 2011
  - d) 31<sup>st</sup> Jan 2012
  - e) 31<sup>st</sup> March 2012
  - f) 31<sup>st</sup> March 2012, for fixed bed GAC. May be later dependant on the outcomes of c), d) & e)
  - g) 31<sup>st</sup> March 2014, for fixed bed GAC. May be later dependant on the outcomes of c), d) & e)

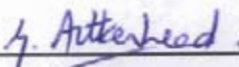
#### Water Quality Monitoring and Management Programme

6. Sampling and analysis of the River Ugie and Forehill WTW Final Waters varies according to the time of year and specific pesticide. The sampling programme will be communicated and agreed with the Drinking Water Quality Regulator for the following year by the 31<sup>st</sup> October annually.
7. All pesticide events are reported to the Aberdeenshire Council and NHS Grampian Health Protection Team, in accordance with agreed event reporting processes.

#### Progress Updates

8. Scottish Water will provide six monthly updates of progress to the DWQR, with the first to be provided by 30th June 2011. Such reports will include:
  - pesticide data for raw and final waters and consumer tap samples;
  - progress with sustainable land management measures and an evaluation of effectiveness;
  - progress to select, design and, if necessary, install treatment solutions;
  - potential threats to compliance, both current and in the future;
  - any other information that Scottish Water considers relevant.

SIGNED on Behalf of Scottish Water by Geoff Aitkenhead, Asset Management Director

  
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Geoff Aitkenhead, Asset Management Director  
Date: 10 MAY 2011