



guardians of drinking water quality

DRINKING WATER INSPECTORATE

Area 7E, 9 Millbank
c/o Nobel House
17 Smith Square
London SW1P 3JR

Direct Line: 030 0068 6413
Enquiries: 030 0068 6400

E-mail: milo.purcell@defra.gsi.gov.uk
DWI Website: <http://www.dwi.gov.uk>

Information Letter 01/2014

13 February 2014

To: Board Level and Day to Day Contacts in Water Service Companies and Water Companies in England and Wales

METALDEHYDE AND OTHER PESTICIDES

Dear Sir/Madam

1. Purpose

- 1.1 The purpose of this letter is to update companies on the outcome of the Inspectorate's assessment of companies' PR14 submissions for metaldehyde, and to set out our position regarding the appropriateness of current legal instruments for metaldehyde and other pesticides.

2. Background

- 2.1 There are currently 82 Undertakings in place covering 83 water treatment works that companies have identified as being at risk of supply water that is not wholesome due to the presence of metaldehyde. In all of these Undertakings, catchment management is the primary control measure that companies are applying to mitigate these risks.
- 2.2 The Inspectorate has received additional information with PR14 business plan submissions about company proposals for mitigating the risks to drinking water quality from pesticides including metaldehyde, over the AMP6 period. Some of the submissions covered metaldehyde alone, whilst others covered a number of additional pesticides. The proposals include a range of catchment actions, and in many cases, operational measures, to reduce the risk of non-compliance with the pesticide standard. A small number of proposals also included the investigation of treatment solutions with a view to installing new or enhanced treatment in AMP7.

- 2.3 On 11 October 2013 we held a joint UKWIR/DWI workshop for water companies and others that made available the outputs of the UKWIR project titled *Evidence Review of Catchment Management Strategies for Managing Metaldehyde*. The aims of the workshop were as follows:
- a. To review work completed to date and the outcomes achieved
 - b. To identify what has worked well, picking up on examples of good practice that have demonstrated success, or appear promising.
 - c. To reach a consensus view on what has been achieved to date and what more needs to be done
 - d. To discuss the next steps for AMP6 and beyond
 - e. To identify obstacles to achieving success and how to address these
 - f. To seek feedback on any existing or potential regulatory measures that would increase the likelihood of success.

Feedback from the workshop was positive, and we are grateful to everyone for their constructive engagement.

3. Actions to mitigate the risks associated with metaldehyde in drinking water

- 3.1 After reviewing progress to date with the Undertakings, the outputs of the workshop and companies' PR14 proposals, we have identified a number of actions that we consider contribute to current good practice for managing compliance with the standard for metaldehyde and other pesticides in drinking water. On that basis we consider that any proposal should be in the form of a package of work including the following, so far as is relevant to the specific raw water source, the nature of the catchment, the reason for the presence of metaldehyde, the treatment processes in place and the overall level of risk:
- a. **Operational Monitoring** – should complement regulatory raw water monitoring at the abstraction points, and extend upstream into catchments and sub-catchments and downstream through the different stages of water treatment to the final water point. Comprehensive sampling programmes are crucial to identifying the source and concentration of any compound, and to assess the success of remedial measures.
 - b. **Catchment Characterisation to assess the risk** – includes, for example: catchment modelling with analysis of soil type, land-use, product usage, cropping patterns, weather; remote sensing; product usage data gathering; analysis of weather patterns and relationship with metaldehyde or other pesticide risk; catchment walkovers; and identification of high-risk locations.

- c. **Engagement with stakeholders** - includes, for example: workshops and presentations for farmers and growers; inviting stakeholders to visit treatment works to raise awareness; leaflets and newsletters; working with rivers trusts and other NGOs; working with other regulators to promote best practice; forming links with Catchment Sensitive Farming and the Voluntary Initiative, with provision of advice where appropriate; involvement with the industry-led Metaldehyde Stewardship Group.
- d. **Payment for Ecosystem Services (PES)** - includes, for example: funding farmers to take arable land out of production; funding farmers the cost-differential for product substitution (either for whole catchments, sub-catchments or hotspot areas); construction of or purchase of assets, e.g. wash down facilities, bio beds, machinery; funding for machinery calibration; provision of specialised equipment for farmers and growers to borrow for use in a catchment area.
- e. **Operational Measures** – examples include: “smart” abstraction with use of surrogate indicators such as on-line turbidity, or in response to weather forecasts, rainfall events or other intelligence; optimisation of existing treatment processes within the normal operating envelope of the treatment works, e.g. GAC regeneration, use of PAC; use of alternative, lower-risk sources; development of new sources; blending with new or existing low risk supplies; and new treatment measures.
- f. **Research and Development** – examples of current research projects are those looking at water treatment options; on-site monitoring capability; best-practice for identification of risk hotspots; and actions to mitigate risk.
- g. **Regulatory Mechanisms** – liaison with the appropriate regulators responsible for taking action using environmental legislation or plant protection product legislation to introduce compulsory measures, including safeguard zone action plans¹, and, if necessary, water protection zones; restrictions on product use; product formulation and labelling and promotion of product substitution.

4. New Legal Instruments

- 4.1 Following the guidance provided in our PR14 Information Letter 01-2013², and PR14 Guidance on Pesticide Parameters³, companies’ catchment-related programmes of work have been included as statutory obligations in the National Environment Programme for AMP6.
- 4.2 Additionally, in accordance with IL 01-2013, if there is an identified material risk to wholesomeness forecast to materialise before 31 March 2020, companies are expected to adopt a twin track approach that includes treatment or other operational control measures in addition to catchment management actions. Companies’ business plan proposals confirm that, in

¹ Safeguard zone action plans are voluntary measures, but can be classed as regulatory because they are identified under Article 7 of the Water Framework Directive

² Information Letter 01/2013 – The PR14 Period Review of Prices – Guidance on Drinking Water Quality Requirements

³ DWI PR14 Guidance – Pesticides including Metaldehyde, published February 2013

most instances, this is the case, however the operational measures are not fully developed.

- 4.3 The Inspectorate intends to consolidate the management of these improvement programmes for metaldehyde by bringing existing Undertakings up to date to reflect current good practice, and to make them consistent with any new improvement programmes identified through the PR14 process. This will necessitate revocation of existing Undertakings and the putting in place of new replacement Undertakings. Where necessary, these new Undertakings will address additional pesticide parameters.
- 4.4 We have also considered the uncertainties and timescales associated with delivery of catchment management solutions, together with the current and planned research and pilot studies. Therefore we intend to revise delivery dates to take account of these difficulties, while still maintaining a pace of delivery that takes account of the interests of consumers.
- 4.5 The new Undertakings must include a strategy for measuring the benefits of the programme(s) of work. In all cases, companies must, **by 31 March 2018**, have assessed the benefits achieved, or likely to be achieved, by their catchment actions and decided on any additional operational measures required, in particular, treatment, to adequately mitigate risks. The Undertakings will include appropriately timed reporting requirements and milestones to facilitate delivery of this requirement.
- 4.6 A definitive final report will be required by **31 March 2020**. If further new statutory programmes of work are required after this date, it will be assumed that catchment actions by themselves are inadequate to reduce the risk to drinking water quality compliance to an acceptable level, and that more robust operational measures are required.
- 4.7 Companies are requested to submit draft new/replacement Undertakings for metaldehyde and other pesticides to the Inspectorate by **31 March 2014**. Major water and sewerage companies, and water only companies, must liaise with inset appointees so that, where required, appropriate Undertakings are in place for inset areas. The Inspectorate will provide a template to assist with this process.

5. Water Resource Management

- 5.1 We would also like to take the opportunity to remind companies of our PR14 Guidance on Water Resource Planning issued in March 2013⁴, and the requirements of Regulation 15 covering new sources. Companies have a duty to ensure no deterioration in the quality of water supplied to consumers, and should not, therefore, introduce any new sources or bulk transfers that supply unwholesome water. This requirement also applies

⁴ DWI PR14 Guidance – Water Resource Planning, published March 2013

where areas supplied by existing bulk transfers are extended (which covers internal transfers and imports from another company).

- 5.2 If any replacement Undertaking includes additional water supply zones not covered by its equivalent existing Undertaking(s), companies must provide an explanation to the Inspectorate when the draft is submitted. The Inspectorate will not automatically accept the addition of new water supply zones to the annex of an Undertaking.

6. Enquiries

- 6.1 Copies of this letter are being sent to Pamela Taylor, Chief Executive, Water UK; Carol Skilling, Department for Environment, Food and Rural Affairs; Olwen Minney, Welsh Government; Susan Petch, Drinking Water Quality Regulator for Scotland; Margaret Herron, Drinking Water Inspectorate for Northern Ireland; Tony Smith and Chairs of the Regional Consumer Council for Water; Frances Pollitt, Public Health England; and Shifra Sheik, Defra (FSA).
- 6.2 Enquiries about this letter should be addressed to Jacqueline Atkinson (0300 068 6402), email jacqueline.atkinson@defra.gsi.gov.uk. This letter is being sent electronically to Board Level and Day-to-Day contacts, and to PR14 contacts. Please acknowledge receipt by e-mail to DWI.enquiries@defra.gsi.gov.uk. Hard copies are not being sent. This letter may be freely copied.

Yours sincerely



Milo Purcell
Deputy Chief Inspector (Regulatory Strategy)