

**CONSULTATION ON THE AMENDMENT OF THE
WATER SUPPLY (WATER QUALITY)
REGULATIONS 2000 AND THE WATER SUPPLY (WATER
QUALITY) REGULATIONS 2001**

A Defra and WAG Consultation Paper

**Response from the Royal Society of Chemistry
27 March 2007**

Introduction

1. The Royal Society of Chemistry (RSC) welcomes the opportunity to comment on the Defra and WAG consultation on the amendment of the water supply (water quality) regulations 2000 and the water supply (water quality) regulations 2001.
2. The RSC is the largest organisation in Europe for advancing the chemical sciences. Supported by a network of 43,000 members worldwide and an internationally acclaimed publishing business, our activities span education and training, conferences and science policy, and the promotion of the chemical sciences to the public.
3. This document represents the views of the RSC. The RSC's Royal Charter obliges it to serve the public interest by acting in an independent advisory capacity, and the RSC is happy for this submission to be put into the public domain.
4. The evidence submitted arises from the expertise of the members of the Royal Society of Chemistry Water Science Forum.
5. The consultation paper sets out the Department for Environment, Food and Rural Affairs (Defra) and the Welsh Assembly Government (WAG) draft proposals for amending the 2000/1 Water Supply (Water Quality) Regulations and seeks views and comments from interested parties.
6. The Royal Society of Chemistry welcomes the opportunity to comment to on this joint consultation, even though it was not included on the list of invited consultees. We find this disappointing, given that more than 500 of our members are actively involved in the water industry.
7. For further information, please contact Dr Jeff Hardy, Environment, Sustainability and Energy Manager (Tel: 020 7440 3395, Email: hardyj@rsc.org)

The RSC Response

Consultation Point 1

Do you agree with the additions and amendments to the application provisions and definitions in the amended Regulations 1 and 2? Do you agree that notifications under the 2000/1 Regulations should be:

- (a) where relevant, to local authorities on both sides of the border between England and Wales, and
- (b) to the Health Protection Agency for notifications relating to England and to the National Public Health Service for Wales for notifications relating to Wales rather than other health bodies?

- We agree with the proposed additions and amendments to the application provisions and definitions in the amended Regulation 1, particularly in respect of consistency of interpretation with the Water Framework Directive.
- We have no views on the issue of notifications but agree that the approach being proposed is both pragmatic and sensible.

Consultation Point 2

Do you agree that the definition of wholesomeness in the amended Regulation 4 should be extended to include:

- (a) water supplied in bottles or containers by water undertakers or licensed water suppliers in place of a piped supply, and
- (b) that such supplies should be subject to similar monitoring requirements as water supplied by tanker in place of a piped supply as set out in the amended Regulation 6, and
- (c) that to achieve a broad equivalence with monitoring of tankers the unit for monitoring to be set out in guidance by DWI should be each uniquely identified batch of bottles?

- We agree that the definition of wholesomeness should be extended to include water supplied in bottles and containers whenever these are provided as an alternative to the piped supply.
- We also agree that such supplies should be subject to same monitoring requirements to water supplied by tanker in similar situations and endorse the proposal that the unit of monitoring should be each uniquely identified batch of bottles. However it needs to be recognised that in a major emergency such monitoring would increase the pressure on laboratories, possibly detracting staff from other more urgent and important work.

- In taking the concept of alternative supplies a stage further, should the definition of wholesomeness be extended to include the use of standpipes in severe drought situations?

Consultation Point 3

Do you agree that:

- (a) Regulation 8 should be amended to limit the use of supply points without prior authorisation by the Secretary of State or the National Assembly for Wales in certain circumstances, and
- (b) the addition to Regulation 3 is useful clarification regarding the future delineation of water supply zone boundaries in this context?

- We agree with the proposed amendment to Regulation 8 and the proposed addition to Regulation 3. Both proposals are highly relevant to meeting some of the water quality challenges that competition and, in particular, the use of common carriage are to bring. However clear guidance will be needed on the meaning of 'certain circumstances'.

Consultation Point 4

Do you agree that Regulation 15 should be strengthened so that water undertakers and combined licensees cannot supply water from a new source unless they have received a notice from the Secretary of State or the National Assembly for Wales and until 3 months after they have supplied a copy of the risk assessment to them under Regulation 28? This brings the situation for water undertakers into line with that of combined licensees pursuant to condition 13 (prohibition on introduction - combined licensees) of the Standard Conditions of Water Supply Licences.

- We endorse this proposal to strengthen Regulation 15 and to bring water undertakers in line with the requirements imposed on water supply licensees.

Consultation Point 5

Do you agree that the requirement for a raw water monitoring programme as proposed in Regulation 16A:

- (a) is protective of public health by ensuring that adequate information is available for risk assessment, water treatment design and operation, and

(b) will at the same time adequately implement the monitoring requirements of Articles 7 and 8 and Annex V of the Water Framework Directive for water bodies used for the abstraction of drinking water?

- We support the requirement for a raw water monitoring programme as proposed under Regulation 16A provided it meets fully the requirements of the Water Framework Directive. Clear guidance will be needed on the risk based approach to be adopted for the monitoring – will it rely on the risk of a substance being present in the raw water, the risk to public health associated that substance, if detected, or a combination of both? Clear guidance would also be needed on the trigger level that would result in the need to monitor for a given substance.
- Most water companies carry out some operational monitoring of raw water quality, in many cases using continuous monitoring for key parameters. We believe that there will be a need for clear guidance and a pragmatic approach to the use of continuous monitoring results under this proposal.
- However it needs to be recognised that few, if any of the water companies are routinely looking for all the parameters listed in Schedule 5 in their raw waters. Furthermore we are concerned that Schedule 5 does not give limits of detection or maximum acceptable concentrations. If these are to be the same as the Environmental Quality Standards required for priority substances in inland waters under the Water Framework Directive, then some parameters will have to be detected at significantly lower concentrations than required for drinking water. Clear guidance will be needed especially in terms of the performance requirements for analytical methods to be used in such monitoring, given that current methodologies may not be adequate. These points have not been covered in the consultation document but there is an urgent need for them to be addressed if such monitoring programmes are to be introduced in the near future, not least because there could be a significant cost implication in with developing new methods and/or instrumentation to meet these new demands.
- In a similar vein, three of the parameters listed in Schedule 5 (acrylamide, epichlorohydrin, and vinyl chloride) are controlled in drinking water by product specification rather than by analysis, which again raises questions on the availability of suitable analytical methods.

Consultation Point 6

Do you agree with the proposed Regulation 23 which will require water undertakers to place the details of authorisations, free of charge, on the homepages of their websites in place of publishing these details in advertisements in all the relevant newspapers? Can you suggest any alternative means of bringing authorisations to the attention of those who may be affected, excluding advertising in newspapers?

- We have no views on this matter, other than recognizing that some people do not have access to a computer.

Consultation Point 7

Do you agree new Regulation 26A as amended will provide an adequate level of ongoing public health protection when the water treatment and disinfection arrangements as derived from SWAD cease to apply in December 2007?

- Given that the Surface Water (Abstraction for Drinking Water) (Classification) Regulations have already been repealed, there is an urgent need provide an alternative. We therefore support this new requirement to broaden the concept of disinfection by including the need for preliminary treatment.

Consultation Point 8

Do you agree that the risk assessment required in Regulations 27 and 28 which currently address only *Cryptosporidium* should be widened in scope, in line with World Health Organisation Guidelines for Drinking-water Quality 2004, to cover all forms of risk to human health?

- The Royal Society of Chemistry endorses the use of risk based regulation and has promoted its use in other areas of chemical and product regulation.
- The regulations relating to *Cryptosporidium* have shown the benefits of using a risk based approach. We therefore agree with widening the scope of risk assessment to include other potential dangers to human health in relation to drinking water.

Consultation Point 9

Do you agree that together, the proposed amendments to Regulations 27 and 28, and the new Regulations 16A and 26A are sufficiently robust to enable the revocation of the existing Regulations 26 to 29, which contain existing requirements as to treatment and the provisions for risk assessment, taking action and forensic monitoring for *Cryptosporidium* at those treatment works judged by the water undertaker or combined licensee to be "at significant risk"? Do you agree that this does not represent a reduction in the level of public health protection already afforded against *Cryptosporidium*? Do you agree that it will encourage innovation by the water industry, and in particular, will facilitate the use of inactivation, as well as removal technologies?

- The existing regulations relating to *Cryptosporidium* have served their purpose, not least in providing a lot of useful data and in making the industry optimize and improve the efficacy of its water treatment processes. A review is overdue, especially on the need for ongoing forensic monitoring and the need for absolute physical removal rather than inactivation.
- We agree that the above proposals are sufficiently robust to enable revocation of the existing Regulations, though we would hope that DWI will encourage those companies that are currently carrying out regulatory monitoring to continue this on an operational basis. The combination of raw and treated water sampling would provide vital information in the event of an outbreak of cryptosporidiosis in the community.
- We agree that revocation of the existing Regulations also may encourage further innovation in treatment technologies, especially in terms of inactivation techniques.

Consultation Point 10

Do you agree that Regulation 31 should include the power for the Secretary of State and National Assembly for Wales, under certain circumstances, to require the person making an application for the approval of a substance or product to pay a charge? The charge would reflect the administrative expenses incurred by the Secretary of State in connection with obtaining independent expert advice on public health implications of the application.

- We have no views on this matter, although it seems a pragmatic way forward.

Consultation Point 11

Do you agree with the revision of the sanctions in Regulation 33 so they no longer bear on the specific tasks relating to the carrying out of *Cryptosporidium* monitoring and treatment but are directed to the more general public health protection requirements of adequately treating and disinfecting water before it is supplied and complying with statutory enforcement notices in relation to a failure of treatment in relation to any danger to human health?

- We have no views on this matter, although the risk of criminal liability would certainly help to focus minds.

Consultation point 12

Do you agree that Regulation 35 should be amended so that water undertakers are no longer required to maintain a record available for inspection by the public at all reasonable hours and free of charge at their offices, if this requirement was replaced by one of providing information on request within seven days and free of charge? Do you consider that it would be better to rely exclusively on the Environmental Information Regulations 2004?

- We have no views on this matter, although the lack of public interest in such a record has long been acknowledged.

Consultation Point 13

Currently the reports produced by water companies under Regulation 36 largely duplicate the annual reports of independently checked test results provided to local authorities by the Drinking Water Inspectorate. Do you agree that Regulation 36 should therefore be revoked with the result that water undertakers will no longer be required to produce an annual drinking water quality report for local authorities?

- We have no views on this matter. However results presented in the annual report by the Chief Inspector of Drinking Water are regionally based and are therefore difficult, if not impossible, to relate to individual local authorities areas where more than one water company involved. Therefore if Regulation 36 is revoked and this source of information on drinking water quality lost, then the water companies and DWI will need to make the general public more aware of where they can obtain equivalent information.

Consultation Point 14

Do you agree that the National requirement in Schedule 1 Table B Part II for prescribed values for the hydrogen ion parameter are no longer necessary and the indicator parameter status and specification provide sufficient safeguards and control for this parameter? Do you agree with the changes to pH values? Do you agree that the taste and odour standard should be the same as that in the Drinking Water Directive? Do you agree that *Clostridium perfringens* (including spores) should be added to the monitoring provisions in Schedule 3, Tables 2 and 3?

- We agree that the National standard for hydrogen ion is no longer necessary and that the indicator parameter status and specification are adequate for this parameter. Revocation of the National standard will not only simplify reporting, it will also make the flagging of abnormal results easier.
- We agree that standards for taste and odour should be the same as that in the Directive Water Directive. The appropriateness of the method of analysis used for the current National numerical standard for taste and odour has long been questionable in terms of consumer perceptions. However DWI will need to give clear and concise guidance on the interpretation of 'acceptable to consumers and no abnormal change' if the wording is brought into line with that of the Directive Water Directive.
- We agree with the proposed monitoring changes for *Clostridium perfringens* as these will remove any element of doubt.