

Consultation on the UKTAG stakeholder review on environmental standards and conditions - Anglian Water response

We welcome the opportunity to comment on the UKTAG stakeholder review on environmental standards and conditions, our comments are as follows.

It would be useful to have in the document a reminder of how the different quality elements are combined to classify ecological status, chemical status and surface water status. Reading of the consultation document would be made easier if this reference was included either as a schematic or a decision tree. It would also be useful to have a schematic illustrating why some chemicals are Specific Pollutants and others Priority Substances.

General comments

This is a purely scientific based review and no consideration is given to the potential cost vs environmental benefit of any changes being considered. We believe a Regulatory Impact Assessment of any proposed changes should be undertaken before the proposals are implemented. This will indicate the potential implications of the proposals and therefore should be necessary. For example, source apportionment is not clear for all water bodies, and there is a need to tackle diffuse pollution. We have developed models at a catchment level which demonstrate that urban and agricultural diffuse pollution is a contributing factor to failures.

Control of chemicals is mentioned and it is not confirmed if there are plans to control any of the new Specific Pollutants at source and ban or control their use under REACH regulations. We would like this to be assessed by a Regulatory Impact Assessment if this were proposed.

For the Specific Pollutants that have been identified, we would like to see a comparison made with the lists from other Member States.

The move to setting standards for metals based on their bioavailability is welcomed, but we reserve judgement until the impact on waterbody compliance and hence discharge standards in our environmental permits can be seen.

In the substances that have been considered and discounted for inclusion, were the compounds metaldehyde and clopyralid considered? These substances are known to be abundant in the environment and can cause issues for sources of drinking water. We would like to see them included.

We note that a change to the phosphorous standard is delayed and due in Autumn. If this is delayed this would lead to uncertainty in our Business Planning process and could lead to abortive investment.

Chapter 1 – Introduction

For some standards where extra corroboration is required, we assume that action will not be taken until the relevant data is gathered. This would avoid driving tighter standards and consequent investment in solutions, where it may not be necessary.

There should be mention of Drinking Water Protected Areas and also clarification of the difference to derive the status classification between surface water and groundwater bodies.

Chapter 2 – Standards for Specific Pollutants

The new standards proposed for copper, zinc and iron are based upon the bioavailability of the metals, but it is unclear how these standards compare with existing standards when trying to make an assessment of impact upon waterbody compliance and subsequently our existing discharges to surface water. It is therefore difficult to assess the impact of the proposed change on our operations and discharges.

The changes to limits presented in a tabular format are useful. However, it would be good to be able to understand these changes at a River Basin District level to assess the impact of the changing standards.

Zinc, copper and iron are present in domestic wastewater which cannot be readily controlled. Tighter environmental standards may therefore result in limits on final effluent that cannot be achieved through source control, and may result in the need for the addition of tertiary treatment processes. Tighter limits could also result in little or no effective headroom for Trade Effluent discharges to be accepted at waste water treatment works.

For iron, reference is made to the difficulty in interpreting conventional laboratory data. A recent UKWIR report on iron (WW20) based on field data, identifies that iron speciation is of significance and concludes that total iron is not suitable for assessing ecological impact. This information should be used to inform the appropriate setting of the environmental standard for iron.

In addition, the requirement to remove phosphorus as part of the waste water treatment process to achieve Water Framework Directive targets is driving further use of iron (and aluminium) salts. To meet tighter environmental standards for iron, alternative non-chemical treatment solutions may have to be considered.

Triclosan has been included as part of the Chemical Investigations Programme (a collaborative UKWIR project) and therefore additional data is available which could

be used to support data from the 4 sites in Table 4: Specific Pollutants – Implications for England. This supports the statement in the review “... the data indicate that for triclosan widespread failure of a new standard is not anticipated.”

Anglian Water collects Glyphosate data for internal monitoring purposes for a number of sites across our region. Other water companies may have similar data available.

Chapter 3 – Groundwater

All groundwater bodies are classified as drinking water protected areas without due regard to the contrast in importance of different aquifers, for example some have many Public Water Supply abstractions whilst others are small with no abstractions. Each water body is given equal weighting when logically for example the large Cam and Ely Ouse Chalk covering large proportion of Norfolk should be given prominence over the Witham Upper Lias.

We support the proposed tightening of Nitrate thresholds for water dependent wetlands. This may improve the case for catchment management if wetlands are in the same waterbody / catchment as impacted sources.

We also support the proposed tightening of nitrate threshold levels for groundwaters used for human consumption, as this will help to address elevated nitrate levels at drinking water sources.

Feedback and potential changes to the Nitrate Regulations as a result of the recent Defra consultation should be taken into account to ensure objectives and aspirations are aligned.

With reference to monitoring groundwaters for human consumption, clarity is required regarding what would be considered an appropriately representative monitoring point, and the required density of monitoring points over a water body. Justification of the use of an average of all monitoring points across a water body is required. With large groundwater bodies it is common to have different groundwater conditions in different parts of the aquifer. Part of the groundwater body could be unconfined and suffer from elevated nitrate as a result of diffuse pollution whereas other parts could be confined and have reduced groundwater conditions and no nitrate problem. The question arises as to what is the average and appropriate.

With reference to plumes of pollution in a groundwater, plumes are normally associated with point source pollution whereas nitrate in some aquifers can be more related to diffuse sources. Also the density of monitoring boreholes required to be specific about plume dimensions needs to be considered.

Clarification is required with regard to the definition of groundwater bodies where there is a perched water table in a small superficial thin and laterally impersistent minor aquifer. For example, if a discharge is to a pocket of Glacial Sand and Gravel over Boulder Clay over the Chalk waterbody this would have a low significance.

Chapter 4 – Alien Species

We are in agreement to the approach to align the high impact species with the GB Non-Native Species Secretariat (GBNNS). However it is unclear why there are species listed which do not have a risk assessment from GBNNS (for example *Hemimysis anomala* which we have at several sites), we would like this to be clarified.

Chapter 5 – River Flows

More information is required in order to assess the impact or otherwise on Public Water Supply abstractions of adopting Mid and High flow standards. A few worked examples would be useful. The document suggests the changes are directed at new proposals and deterioration but does not explain what the implications are for existing abstractions.

Chapter 6 – Water Levels in Lakes

No comments on this section.

Chapter 7 – Intermittent Discharges

We are concerned about the implications that may arise as a result of the translation of the 99 percentile standards under the RE system to the WFD classes. When translating the old RE classes to the WFD classifications there is clearly an overlap (RE2 for example encompasses Good and Moderate under WFD). A stretch of river therefore that was only just meeting the RE2 ammonia standard could require improvement to meet Good status. We feel therefore that this could drive tighter Look Up Table limits on the final effluent discharges at some sites and/or more storage when a storm tank is proposed.

Chapter 8 – Standards for Acidification in Rivers

No comments on this section.