

6 October 2004

Mr Brian Labza
Public Health Group
DEPARTMENT OF HUMAN SERVICES
GPO Box 1670N
Melbourne Vic. 3001

Dear Brian

SAFE DRINKING WATER REGULATIONS 2004 - SUBMISSION

I refer to your Department's invitation to submit comments on the September 2004 Exposure Draft for Safe Drinking Water Regulations.

Overall, City West Water finds the thrust of the Draft to be quite clear and reasonable with respect to its presentation and requirements. However, we do have reservations on several technical issues which we believe should be examined in order to further improve the document and its associated regulatory process. These issues are as follows:

1. Regulation 1, sub-regulation (2)(a).
This refers to the Regulations setting out "*..... the further matters to be addressed*". The issue here is use of the word "*further*", which raises the question of "Further to what?" For example, is there another document that addresses other matters to be addressed in the risk management plans? If so, which document is this? Perhaps the word "*further*" is superfluous. Please clarify.
2. Regulation 5, sub-regulation (2)(a).
This refers to the number of sampling points not being "*..... greater than a number reasonably necessary to ensure that samples* are *..... representative of drinking water supplied*".
The issue here refers to use of the word "*greater*". How can the number of (potential) sampling sites be too great in terms of ensuring representativeness? Surely it is the converse situation (i.e. too few sample points) which would compromise representativeness. For example, a small number of sampling points within an isolated part of a sampling locality could hardly provide more representative data as compared with a large number of sampling points distributed widely throughout a sampling locality. Please clarify.
3. Regulation 11, sub-regulations (1) and (3).
By using the word "*must*", sub-regulation (1) clearly appears as a stand-alone mandatory requirement to adopt the sampling frequencies shown in the Table in Schedule 2. However, sub-regulation (3) suggests that sub-regulation (1) can be varied. Is this correct? To avoid potential confusion, it is suggested that sub-regulations (1) and (3) should cross-reference each other. In addition, are the sampling frequencies in the Table in Schedule 2 to be regarded as minimum frequencies?

4. Regulation 13, sub-regulation (8), 1st line.
It would seem that the word “be” is superfluous.
5. Schedule 2, Table, under the heading “*Microbiological organisms*”.
The quality standard implies an absolute absence of *Escherichia coli*, irrespective of concentration. Presumably this should be “per 100ml”? Please clarify.
6. Schedule 2, Table, under the heading “*Chlorine based chemicals*” and ensuing headings.
The quality standards do not refer to any chronological periods for compliance. Presumably these are meant to be “any 12 month period”, as for *Escherichia coli*? Please clarify.

The Table provides no guidance as to the minimum number of samples that are to be used in determining the statistical summaries (i.e. confidence limits, percentiles). This needs to be specified so that consistent reporting takes place. Please address.

7. Schedule 2, Table, under the heading “*Chlorine based chemicals*” and ensuing headings.
An elementary knowledge of statistical applications makes it clear that correct application and interpretation of the statistical summaries detailed in the Table assumes “normal” distributions of parameter populations. However, this significant issue is overlooked in the draft, with the result that many of the statistical summaries are likely to be inappropriate and largely irrelevant, due to grossly skewed and non-normal data sets. The Regulations therefore should allow for appropriate data analysis to be undertaken and for statistical transformations to be used (e.g. logarithmic transformations) in the interests of obtaining statistically valid performance measures.

I trust that these constructive comments will be of assistance in the finalisation of the Regulations.

Please do not hesitate to contact me on 9313 8388 to discuss or clarify any of the comments.

Yours Sincerely

Georges Ruta
Water Quality Scientist