

# Drinking Water Regulatory Unit Newsletter

Volume 5, December 2005

The Drinking Water Regulatory Unit would like to wish you all a Merry Christmas, and a very successful New Year. We have enjoyed working with you throughout 2005, and look forward to on-going collaboration during 2006

## News from the Unit

The Unit and water businesses have been through a period of hectic activity in relation to the *Safe Drinking Water Act 2003* and the *Safe Drinking Water Regulations 2005*.

We have had several staff changes. Belinda Bush has left for overseas and domestic travel, and Kelly McCoy has moved onto a new position. Their contribution to the Unit and the water industry was much valued, and will be missed. MaryAnne Fox is currently undertaking the administrative duties for the Unit, and can be contacted on [maryanne.fox@dhs.vic.gov.au](mailto:maryanne.fox@dhs.vic.gov.au) or 9637 5221.

On 25 November 2005 Jennifer McDonald, Manager Food Safety and Water Regulation left the Department of Human Services to take up her new position heading up the Food and Healthy Living Branch in the Population Health Division of the Commonwealth Department of Health and Ageing. The Unit and water industry has benefited from her guidance and oversight of the establishment of the Drinking Water Regulatory Unit, and we wish her well in her new position.

The Public Health Group of DHS is currently undergoing a significant restructure. The Drinking Water Regulatory Unit will move from the current Food Safety and Water Regulation Unit into the new Environmental Health Branch. The new position of Assistant Director, Environmental Health has yet to be appointed. The major advantage of this move is that the Unit will be co-located both organisationally and physically with the Water Policy Unit, headed by John Siapantas and currently located in the old Environmental Health Unit. It is to this Unit that reports to the Department under Section 22 of the Act are made. There will be significant policy and operational advantages for all parties in having these two units more closely aligned within the Department.

A major milestone was the making of the Victorian *Safe Drinking Water Regulations 2005* on 19 July 2005 by the Governor-in-Council. They came into operation on the same day.

The Unit has also prepared and posted Guidance notes and application forms where required for a number of processes. These relate to regulated water, undertakings, the 2004/05 annual report, approved analysts, water sampling localities and water sampling points and exemptions. All documents are available on the website at [www.health.vic.gov.au/environment/water/drinking.htm](http://www.health.vic.gov.au/environment/water/drinking.htm).

Further guidance notes are currently being prepared in relation to reports to the Department under Sections 18 and 22 of the Act.

We also acknowledge the volume of work required by the water businesses to meet their legislative requirements in the last six months. Water suppliers and water storage managers were required to develop and commence implementation of their risk management plans by July 1, 2005, the 2004/05 annual report was due for submission by October 31, 2005 and the information underpinning the water sampling localities and water sampling points was due into the Unit by October 14, 2005.

In addition, businesses are reviewing supplies that may not comply with the Legislative standards or the supplies may not be intended for drinking. In consultation with the Unit, businesses are making decisions on these supplies such as improvements that will bring the water into compliance, applying for undertakings or contemplating the supply as a regulated water supply.

We would like to remind all water businesses that the collection of weekly water quality monitoring samples for *E. coli* and turbidity must continue over the Christmas/New Year period for you to remain compliant with regulations 11, 12 and 13.

Please continue to consult with your designated liaison officer if you require assistance with any of these, or other matters related to water quality and the legislation.

## **The Safe Drinking Water Regulations 2005**

The regulations, law as of July 19 2005, mandate requirements relating to water sampling localities and water sampling points, risk management plans, provisions relating to risk management plan audits, drinking water quality standards, sampling for drinking water, results of analysis, approval of water analysts, and additional details to be included in annual reports.

There will be a period of transition for water businesses and analytical laboratories to move from existing arrangements to those required under the new Regulations. A number of issues have arisen as a result of the Regulations commencing, and we will provide guidance as required. Some of these issues are covered briefly in this newsletter.

For more information about the Victorian Safe Drinking Water Regulations see the webpage [www.health.vic.gov.au/environment/water/d-wateract.htm](http://www.health.vic.gov.au/environment/water/d-wateract.htm). Hard copies can be purchased from Information Victoria [www.information.vic.gov.au/](http://www.information.vic.gov.au/).

Some of the matters arising from the Regulations include:

### **Regulations 4 and 5 – Water sampling localities and water sampling points**

The Unit is currently assessing the information provided by water businesses in relation to proposed water sampling localities and water sampling points. Until water sampling localities and water sampling points are specified, water businesses should continue to use their current zones and sampling points for compliance monitoring purposes.

### **Regulation 6 – Risk management plan**

Water suppliers and water storage managers should ensure that their risk management plans comply with the requirements of regulation 6. If a business is experiencing any difficulties in meeting the requirements of regulation 6 they are encouraged to contact their liaison officer at Unit to discuss the issue.

### **Regulation 10 – Drinking water quality standards**

Water suppliers are reminded that regulation 10(b) establishes a generic obligation to ensure that drinking water that is supplied does not contain any toxin, pathogen, substance or chemical, whether alone or in combination with another toxin, pathogen, substance or chemical, in such amounts that may pose a risk to human health. How this is achieved is up to the discretion of each water supplier, and should be an outcome of the risk assessment process. It is expected that some form of monitoring program would be involved and that the drinking water complies with any health-related guideline value set out in the 2004 version of the Australian Drinking Water Guidelines.

### **Regulation 11– Sampling for drinking water**

The sampling and analysis programs established under regulations 11 and 12 are intended to form the basis of determining compliance with regulation 10 (a). Water suppliers must ensure that their sampling within each water-sampling locality is at least at the frequency set out in Schedule 2.

Water suppliers that presently sample drinking water at a greater frequency than that set out in Schedule 2 (most typically, more frequently than weekly for *Escherichia coli* in localities with populations over 5,000, based on the advice in Australian Drinking Water Guidelines) are encouraged to continue to do so. When the water sampling locality and water sampling points project nears completion, the Unit is intending that these sampling frequencies will be recorded as a variation under regulation 11 (3).

### **Regulation 12– Relevant Treatment Parameter**

Regulation 12 (3) establishes the concept of a relevant treatment parameter. For example, where drinking water has been disinfected or treated with ozone, the relevant treatment parameters are bromate and formaldehyde. This also means that in a water supply where ozone is not used to disinfect or treat the water, samples do not need to be collected and analysed for bromate and formaldehyde at the frequency detailed in Schedule 2 of the regulations. Despite this, the water in that locality must still comply with the water quality standards for bromate and

formaldehyde, but the frequency of sampling used to verify is an outcome of the risk assessment for the water supply.

### **Regulation 13 – Results of analysis**

As a transitional arrangement, water suppliers should continue with the current arrangements for delivering the monthly water quality data reports to the Unit. The Department is currently developing a new database to store the monthly water quality data reports. As part of this process reporting formats will be reviewed. Industry will be invited to provide input at this time.

Regulation 13 (2) requires that if the drinking water supplied by a water supplier exceeds one of the water quality standards, that the water supplier detail the exceedence in their monthly report. Until the revised reporting format is finalised, it will be acceptable for a water supplier to provide a written summary of the breach in the email that accompanies each monthly report.

### **Guidance around Sections 18 & 22 of the Safe Drinking Water Act 2003**

It has come to the attention of the Unit that ongoing confusion exists in relation to the reporting requirements under Sections 18 and 22 of the *Safe Drinking Water Act 2003*.

Section 22 requires water businesses to report known or suspected contamination and Section 18 requires notification when water that is non-compliant with the standards has been supplied to customers. The Unit is currently preparing a guidance note that will provide additional detail and clarification on the reporting requirements under these sections of the Act. The finalised guidance note will be placed on the website when it is completed.

### **Testing associated with the use of Chlorine Dioxide or Ozone**

Questions have been raised in relation to the 'relevant treatment parameters' where ozone is used as a pre-treatment in a water treatment process or where chlorine dioxide is the chlorine-based chemical used in the water treatment process. A letter has been circulated to all water businesses. In summary, the following is applicable in these circumstances.

Water disinfected or treated with ozone includes:

- where ozone is used as a pre-treatment in a water treatment process that produces drinking water, or
- where ozone is used as a treatment on backwash water in a water treatment process that produces drinking water and that backwash water returns to the head of works and is treated again, or
- where final disinfection of drinking water is carried out using ozone, regardless of any previous process applied to the water.

Samples of drinking water from water sampling localities that receive water that is treated or disinfected in this manner must be analysed for bromate and formaldehyde, as required by regulation 12.

The Department has determined that "chlorine based chemicals" does not include chlorine dioxide where chlorine dioxide is used as the sole disinfectant without a separate pre or post-treatment step involving chlorine. Testing for chloroacetic acid, dichloroacetic acid, trichloroacetic acid and trihalomethanes is not required in these circumstances.

Levels of chlorine dioxide and chlorite in drinking water in these localities must remain below the health-related guideline value set out in the 2004 Australian Drinking Water Guidelines (that is, below 1 mg/L for chlorine dioxide and below 0.3 mg/L for chlorite). At this time no health-related guideline value has been set for chlorate. Samples of drinking water from such water sampling localities should be analysed for chlorite, chlorate and chlorine dioxide at a frequency determined by your risk management process.

Where localities receive drinking water that has been disinfected with chlorine dioxide and also with a separate chlorine-based step, then the samples are expected to be analysed for chloroacetic acid, dichloroacetic acid, trichloroacetic acid and trihalomethanes as well as chlorite and chlorate.

### **Approved Analysts**

On 25 November 2005, certificates of approval were mailed to successful water analysts, pursuant to regulation 14. A list of the approved analysts is available on the Department's website. Copies of the associated guidance note and the application form for analysts wishing to apply for approval are also on

the website. Applications from analysts will be accepted at any time and processed by the Unit as they are received.

It is expected that water suppliers will be submitting their compliance samples to laboratories that have approved analysts relevant to the analyses that are being requested, as is required under regulation 12 of the Safe Drinking Water Regulations.

Water suppliers that require further information on the approved analyst process are encouraged to contact their relevant liaison officer.

Laboratories requiring further information should contact David Sheehan on 03 9637 4647.

### **DHS/NATA Memorandum of Understanding**

Prior to July 2004, the Department and NATA had entered into a Memorandum of Understanding (NATA sub-class 8.99.03 DHS (Victoria) sub-class) that accredited laboratories for a class of biological testing. There was no chemical equivalent. Laboratories accredited for this class of test were able to test potable water within Victoria under the previous regulations.

The MOU is currently inactive, and the accreditation was rendered inoperative when the *Safe Drinking Water Act* 2003 came into place on 1 July 2004. At this time the Unit has not made any policy decisions around its reinstatement in some form, and will monitor the systems of approved analyst and future specification of methodologies prior to considering this issue further.

Maintenance of existing contractual arrangements would be a sound quality control measure in the absence of any new regulations or updated advice that define specific methodologies.

### **New laboratory standards**

On 1 July 2005 NATA commenced assessments of laboratories against the draft ISO/IEC 17025: 2005 General requirements for the competence of testing and calibration laboratories (a revision of AS ISO/IEC 17025-1999). Some of the new and amended management requirements for laboratories include:

- "Top management shall communicate to the organisation the importance of meeting customer requirements as well as statutory and regulatory requirements."
- "Top management shall ensure that the integrity of the management system is maintained when changes to the management system are planned and implemented."
- "The laboratory shall be willing to cooperate with customers or their representatives in clarifying the customer's request and in monitoring the laboratory's performance in relation to the work performed, provided that the laboratory ensures confidentiality to other customers."
- The laboratory shall seek feedback, both positive and negative, from its customers. The feedback shall be used and analysed to improve the management system, testing and calibration activities and customer service.

Laboratories are expected to implement the changes outlined in ISO/IEC 17025: 2005 prior to their next assessment, that is, all facilities accredited to this standard within 2 years.

### **Water quality monitoring samples and results**

All water suppliers are required to have water samples collected and analysed to verify compliance with the water quality standards detailed in Schedule 2 of the regulations. The results water businesses receive from consultant laboratories, and subsequently submit to the Unit, should accurately reflect the quality of the water being supplied at the time the sample was collected.

Many factors contribute to the accuracy of the result, including the method of sample collection, the delivery of samples in a timely manner, laboratory technique, QA and QC processes, methodology and related factors such as limit of detection and measurement uncertainty. Meeting the standards defined in the Legislation is dependant on these, and other factors.

An agreed and clearly defined communication strategy should underpin the contractual relationship between a laboratory and a water business. Both parties should be clear about the reporting requirements, from sample collection to confirmed results delivery, particularly when a process does not proceed in the usual or agreed manner. Strategies should be in place to ensure timely notification of

when samples are not received, when they exceed time limits or when non-compliant results or unusual results are detected.

The Unit is committed to supporting capacity and knowledge in the water and laboratory sector to resolve issues that impact on legislative obligations. The most recent seminar organised by the Unit covered the topic of measurement uncertainty. Other issues, related to sampling and analytical methods will be dealt with in the coming year.

### **Methodologies & Water Sampling Officers**

During the past year the Unit has given consideration to the release of a discussion paper that would establish the need, and support for, the possible creation of future regulations that deal with the specification of analytical methods and an approval system for sample collection officers.

These discussions will be undertaken after the core requirements of the regulations have been established. Once the required guidance notes and systems have been established for the Regulations, the unit will commence the discussions with stakeholders that are an obligatory requirement when preparing new legislation.

### **Seminar Program**

We have had two very successful seminars during 2005. It is pleasing to note the continued high numbers of attendees at these events, particularly when we know that many people travel considerable distances to attend. We trust this means that you value the content of the seminars, and the networking opportunities that they provide.

We have been fortunate to have access to excellent speakers, prepared to contribute to the knowledge and capacity of the water business. The issues we have covered include:

- The use of NATA approved signatory status to support our analyst approval processes
- The development of the 2004 Australian Drinking Water Guidelines
- Research and development at the CRC for Water Quality and Treatment
- Measurement uncertainty and its estimation

The presentations from each of our seminars are on the website at [www.health.vic.gov.au/environment/water/d-seminars.htm](http://www.health.vic.gov.au/environment/water/d-seminars.htm)

If you did not fill out the evaluation form, but would like to suggest topics for the 2006 seminar program, please e-mail Julie Hoy, [julie.hoy@dhs.vic.gov.au](mailto:julie.hoy@dhs.vic.gov.au).

## Contacting the Drinking Water Regulatory Unit

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Queries relating to your Business, the Unit or the Regulations	Contact your liaison officer: David Sheehan Julie Hoy Brian Labza Janine Ryan Vanora Mulvenna	9637 4647 9637 4090 9637 4088 9637 4720 9637 4619	<a href="mailto:david.sheehan@dhs.vic.gov.au">david.sheehan@dhs.vic.gov.au</a> <a href="mailto:julie.hoy@dhs.vic.gov.au">julie.hoy@dhs.vic.gov.au</a> <a href="mailto:brian.labza@dhs.vic.gov.au">brian.labza@dhs.vic.gov.au</a> <a href="mailto:janine.ryan@dhs.vic.gov.au">janine.ryan@dhs.vic.gov.au</a> <a href="mailto:vanora.mulvenna@dhs.vic.gov.au">vanora.mulvenna@dhs.vic.gov.au</a>
Incident Reports (Section 22) <b>During business hours</b>	John Siapantas	9637 4221 <i>If there is no response use out-of-hours details</i>	<a href="mailto:john.siapantas@dhs.vic.gov.au">john.siapantas@dhs.vic.gov.au</a>
Incident Reports (Section 22) <b>Out of business hours</b>	DHS Emergency Pager	<b>1300 790 733</b> <i>Please inform the operators that you have an incident with your drinking water, wastewater or related to drinking water and you will be connected to an officer with appropriate experience to assist.</i>	

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