

# Government of Alberta ■



## DRINKING WATER SAFETY PLANS

## PROACTIVE RISK MANAGEMENT FOR WATER SUPPLY SYSTEMS

### ***What is a Drinking Water Safety Plan?***

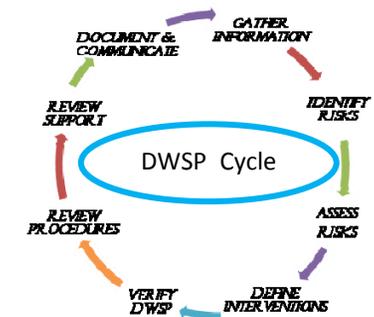
A Drinking Water Safety Plan (DWSP) represents a system-wide approach to ensuring that the quality of water delivered to consumers is of good and consistent quality. To do this it is necessary to consider the source of the water, how it is treated, and the storage and distribution of the treated water. A DWSP is based on a comprehensive assessment of risk factors that could adversely affect the quality of the water delivered to consumers, and sets out how risk factors are to be monitored and managed.

### ***Why do we need Drinking Water Safety Plans?***

Traditionally, the regulatory approach to maintaining the quality and safety of drinking water has largely been a prescriptive one, based on the ability of any given supply to meet standards (usually in the form of Maximum Acceptable Concentrations or MACs) set for a number of different chemical and biological parameters. In Canada this legislation is the Guidelines for Canadian Drinking Water Quality (GCDWQ). DWSPs provide a proactive

method of dealing with risk which better protects Public Health.

### ***The DWSP Cycle***



### ***How do I put a DWSP together?***

The compilation of an effective Drinking Water Safety Plan is dependent on four principal processes:

- Collecting and collating the best information that you can about your water supply system.
- Analysing and understanding the risks that are present and that in certain circumstances will threaten the safety of your customers.
- Assessing correctly what you need to do in order to reduce these risks to an acceptable level.
- Determining how you will obtain the necessary resources to do this, how you will prioritise and audit

the tasks that you have identified, and how you will deliver the actions within the required timescale.

There are three other important considerations:

- A DWSP cannot work in isolation so you must communicate and discuss your findings with the main stakeholders and other relevant parties.
- For the DWSP to work the actions that you have identified as necessary to mitigate the risks must be implemented.
- Finally, the DWSP is a 'living document' and should not just sit on the shelf as if to say 'job done', it should be reviewed regularly and updated when necessary.

### ***How is Alberta Environment and Water going to help me do this?***

Alberta Environment and Water has developed a template for recording Drinking Water Safety Plans together with guidance notes to help you complete them.

The template has been developed in Excel, which is commonly available to operators, and has been designed in a straightforward step-wise manner with guidance on the completion of each sheet.

It includes four main risk tables covering each main element of water supply which are pre-populated with commonly found 'generic' risks and these are carefully assessed before considering what action is required to deal with significant risks.

Following completion of the risk tables, key risks are identified and the interventions required to bring them into control.

Advice will be available from members of the AEW drinking water team, including Drinking Water Operations Specialists.

### ***What do I do with my DWSP?***

As previously stated a DWSP is a live document.

In order for it to be effective it must be implemented and the interventions followed through. It will need to be updated as you go along.

If you use it to full effect, it will help you manage and track the risks within your water supply system.

### ***Where do I get more information?***

Alberta Environment and Water has set up a web-page [www.environment.alberta.ca/apps/regulation/dwsp/dwsp.aspx](http://www.environment.alberta.ca/apps/regulation/dwsp/dwsp.aspx) which contains all the necessary documentation including guidance. It also contains web links to other sources of useful information about DWSPs. There is also an email address ([aenv.dwsp@gov.ab.ca](mailto:aenv.dwsp@gov.ab.ca)) where you can send any additional questions.