

# KWATYE (WATER) PRIZE NOMINATION - 2012

## **Project Brief**

Southern Water is one of three Tasmanian Water Corporations established in 2010 as a part of a recognised restructure. The business looks after the water and sewage infrastructure in Southern Tasmania.

Operators within the business are responsible for undertaking repair works on both water and sewer infrastructure it was during these operations that the business began to identify a public health risk to its customers in the form of contamination of water supply systems via cross contamination.

To eliminate the risk to the business Southern Water sourced training of its operators through WIOA based workshops in the awareness of risk to customers through work practices when undertaking repairs of water infrastructure. These sessions allowed the staff for which I am responsible for to provide feedback about our work practices and the requirement for equipment and a procedure to ensure that reticulation systems are disinfected adequately therefore ensuring a safe drinking supply for our customers.

This project is designed to gain knowledge on the disinfection practice of reticulation systems after maintenance, the equipment used and its cost and then development of a comprehensive working document (Code of Practice) for the Tasmania water corporations to utilise.

## **Project Description**

The *Disinfection of Reticulation Systems – Code of Practice* project has been identified as a need for the Tasmanian water corporations. Currently none of the water corporations in Tasmania disinfect water mains after a break and this seems to be the industry practice throughout the majority of Australia.

This project although directly based around the Tasmanian environment the emphasis will be around a document that can be utilised throughout Australia.

It is proposed that the *Disinfection of Reticulation Systems – Code of Practice* project is carried out in four stages.

The first stage is to research how other water corporations nationally and internationally (New Zealand & United States) deal with such issues. During this research phase I propose to utilise documentation from other Water Corporations to see what their processes are and how effectively they work within the field, the field investigations would mean appointments to speak about and see the processes in operation. It is important from the field based investigations to identify the following:

- Time

It is important to see how long it takes to undertake the task from the disinfection in the field through to the taking of samples and the turnaround for results. The process will no doubt increase the amount of time that resources require to complete their operations.

## KWATYE (WATER) PRIZE NOMINATION - 2012

The time for service to be restored may also impact on commitments made by the business in its customer charter and subsequent key performance indicators.

- Resources  
How many resources required undertaking the task? This can have a bearing on operations and therefore a financial impact on the business and the customer charter.
- Equipment  
Specialised equipment will be required for the task so it is important to see what equipment is required and how the businesses have incorporated them into a user friendly piece of plant. Operator feedback about how equipment is used and set up is extremely important when establishing a suitable set up for new plant.
- Cost  
It's important to speak to relevant parties to get an appreciation of the operational cost that such task has on the business. Not only from the resource hours but from the operation and maintenance of the equipment utilised for the undertaking of the task.
- Health, Safety & Environment  
Field based investigations will also allow for decisions to be made based on the health and well being of staff and customers as well as the necessary requirements to protect the environment.

Upon the compilation of notes from the field I would then undertake Stage 2 of the project which would be a risk assessment on our current work practices. The risk assessment would include the standard risk that our work practices create but also what impact do they currently have on the businesses reputation. This information will be used in the presentation of the final document to show why the process should be accepted by the corporation.

Upon looking at the risks the next step would be then the collation of a Code of Practice for the business which would be based on what is perceived as an industry standard. This document will take into consideration the needs of both Urban and Regional areas which would then enable it to be utilised not only within Tasmania but other areas of Australia.

Once this document has been drafted I would then seek feedback not only from the other Tasmanian corporations, water corporations within Australia and experts within the water industry.

When the document is well received by all parties I will then undertake a cost analysis of the project and its impact on the business as Stage 3 of the project.

At this stage of the project, costing would be undertaken on the following to see how its implementation would impact on the business:

- Resource hours / Costs
- Purchase of Equipment
- Maintenance of Equipment
- Chemical costs
- External costs

Once the document and costs analysis have been completed the document will be sent to the board to accept as a standard business process and therefore eliminate the risk that the business has with

## KWATYE (WATER) PRIZE NOMINATION - 2012

the possibility of threatening the health of its customers, this is the fourth and final stage of the project.

This stage would then see the completion of the project and it would be the final approval which would see my proposed project adopted Statewide with the potential to be accepted by other Water Corporations within Australia.