

Training on site under the LTO concept

Don McLeod, Chief Executive of Matamata Piako District Council, discusses internal plant systems and training reviews under the concept of 'Licence to Operate'

Over the past 10 years we have invested heavily in upgrading and automating our water treatment plants to the degree that we now have plants that are capable of complying with the requirements of the Drinking Water Standards NZ (DWSNZ).

We also have a passionate and committed team who run our water treatment plants and yet despite this we have still had occasional incidents of non-compliance. This was unacceptable for us as an organisation and as a result we initiated a number of internal system and organisational risk reviews in early 2016.

One of the reviews covered site specific operator training and competency assessment. This identified a number of issues that potentially contributed to non-compliance events:

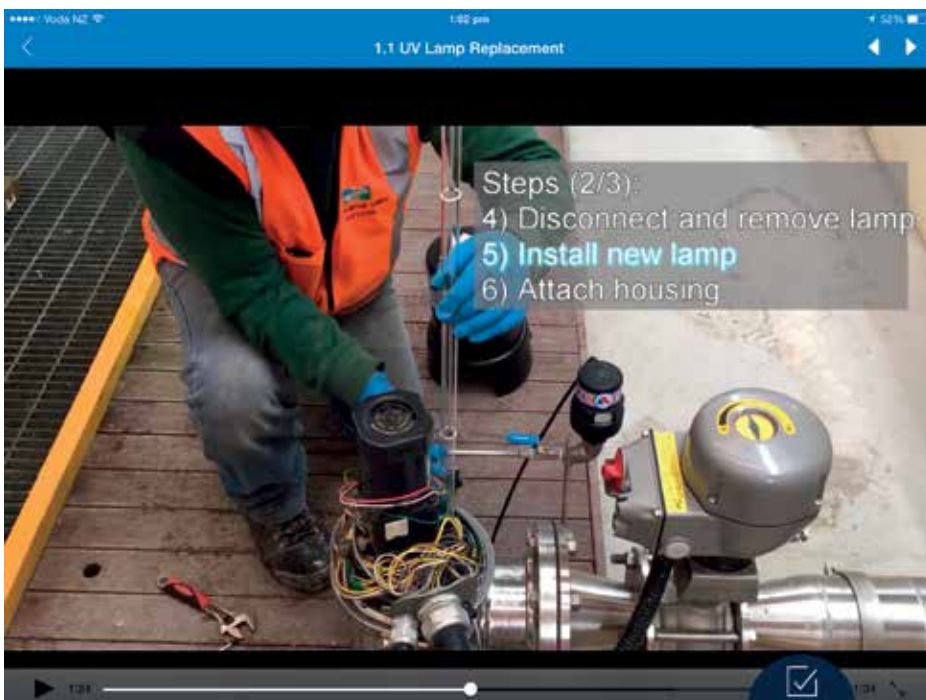
- Poor records of formal and informal operator training for specific plants;
- Incomplete, missing or out of date operating manuals;
- No clear plan to train and on-board new staff;
- No records of staff competency with respect to operating specific plants;
- Inconsistent practice between operators;
- Lack of skills resilience in the event of resignation or illness.

It was clear to us that we needed to create a new operator training and assessment process which would address these issues. We want to be able to demonstrate that our operators have the knowledge and skills required to operate and maintain our water treatment plants. We also knew from

experience that producing wordy operating and training manuals was not necessarily the most effective way to transfer knowledge to our operations teams.

A contract consultant, Shaun Hodson, introduced me to the concept of Licence to Operate (LTO). This was a scheme used in the UK that was based on providing site specific training and assessment for operations staff. This seemed to be exactly what we needed but we faced the challenge of making it relevant to this country and indeed of developing training material, assessment procedures and a modern delivery system.

Jason Colton and his team from H2Ope were engaged in July 2016 to scope out and develop an LTO scheme





for our Matamata WTP as a proof of concept. The needs and wants of both the operations and management teams were identified in a series of workshops facilitated by Jason and these were used to develop the LTO framework.

One of the key requirements was to develop a system that the operators had easy access to via smartphones, tablets and PCs and thus a web-based system was selected. The training material is largely video based with a focus on short clips of ‘how to do this task’ and ‘how to respond to this event’. Operations and plant controls (SCADA) are covered and where possible the operators themselves are the ones ‘starring’ in the videos.

The LTO scheme has four levels and a site specific health and safety prequalification course. The first LTO level qualifies a staff member to assist with plant operation under supervision. The second level qualifies a staff member to operate the plant for short periods without supervision (eg, callout cover).

The third level is a plant expert, someone who understands all operations and key maintenance activities and is able to optimise the process; finally the fourth level is someone who is qualified to assess the performance of others on the plant. To qualify for each level a staff member has to complete all the training material, pass some online tests and demonstrate competencies to an assessor.

My management team can track all the training metrics and as an organisation we now have a complete auditable training record for our operations staff and this will include a record of annual refresher training.

One of the key benefits I saw in this style of training is that it trains all our operators to the same level and supplants the old style of on-boarding new operators whereby they were buddied up with an old hand and “shown the ropes”.

In my opinion this style of training is no longer acceptable. I strongly believe that training is a skill and that our new system will both accelerate and normalise the on-boarding process for new staff. Furthermore I think it will make the process more enjoyable which can only be a good thing.

I have been particularly pleased with the way in which our operators have become invested with the scheme and with their enthusiasm in helping to develop the material. They were also heavily involved in testing the Matamata WTP proof of concept along with my management team.

The net result is that we have a state-of-the-art training and competency assessment system which the whole organisation has contributed to. We have since given h2Ope the green light to roll-out the system to all our larger water treatment plants and are now considering the same for our wastewater plants.

My management team are currently planning how the LTO scheme will be implemented across our operations teams.

This is a significant challenge for our organisation since we are making such fundamental changes to ingrained behaviours. In fact the challenge is greater still since we would like to share the system with adjoining councils. To that end we sought to involve our neighbours right from the

concept stage as ultimately we all have a lot to gain from cross boundary and cross team collaboration.

If these councils choose to follow our lead then we will all have a system that will better allow our teams to share services and therefore increase the resilience of all our organisations.

Finally, I believe that this has been an essential step for us as an organisation to be able to achieve the standard of service which we want to consistently provide for our communities. The events at Havelock North have given us a stark reminder of how very important that is. **WNZ**



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