PASS

Problem Accepted - Solution Supplied

2020 WINNER

2020 PASS Award winner Scott Kitwood from Gippsland Water with the Environmental Lagoon Monitoring Attachment "ELMA"

W-I-O-A Australia EXCELLENCE IN OPERATIONS

An award providing opportunity for water industry operational staff to share their in the field innovations & fixes to problems so that others in the water industry can benefit.

AQUALIFT PROJECT DELIVERY

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Environmental Lagoon Monitoring Attachment "ELMA"

Scott Kitwood, Gippsland Water

THE PROBLEM

What was the problem that you experienced?

Gippsland Water's Wastewater Treatment group operates 8 lagoon treatment sites as well as 6 mechanical sites, 4 of which have lagoons as part of their treatment process. As well as collecting samples for external NATA accredited testing, we monitor pH and DO levels in each lagoon using portable lab bench top units.

There are various safety issues associated with collecting the samples and readings from lagoons including electric fences and risk of electric shock as well as falling over and/or damaging probe tips while trying to navigate over/under fences. Carrying all the equipment requires the use of both hands and/or multiple trips up and down slippery rock beaching. Different operators used different methods of collecting readings sometimes leading to inconsistent results. Some used a bucket to collect a grab sample to test and others just put the probes in the lagoon itself.

How did the problem impact you or your work situation?

To complete tests as safely as possible while having to carry 2 portables, notepad and bucket over/under electric fences, down wet & slippery rock beaching multiple trips were taken. This allowed a free hand to help traverse the fences and to be available to break fall, however this also meant increasing the time spent walking over slippery rocks.

pH and DO readings varied between the 2 methods of testing, in the bucket the pH was susceptible to temperature change during the warmer months and the DO readings were a little higher than if the probe was held in the lagoon.

When the probes were directly placed into the lagoon they had different issues depending on how the probe was used. As both probes are light, they would tend to float on the surface on most occasions and were not being submerged sufficiently unless you could somehow position the cord in the exact place to keep it down. To combat this, operators used the weighted end to sink the DO probe but this meant that sometimes it was sitting in the sludge at the bottom of the lagoon and giving very low readings.

How long had the problem been occurring?

The problem has been occurring for years and different operators would teach trainees or new employees their own method instead of using one method across the organisation.

Collecting samples previously.

THE SOLUTION

How did you come up with the solution?

When sitting at my son's swimming lesson, thought I could somehow use the pool noodle to make collecting the lagoon readings easier and more accurate, as well as removing the need to carry a sample bucket. A pool noodle is cheap, light weight, easily accessible and easy to clean which made them the perfect material. I kept two key design parameters in mind when considering ideas:

- Make it simple to use and maintain so that all operators will want to use it.
- Can I utilise something we already have/use.

I asked other operators for their thoughts and began by making the entire pole out of a pool noodle. Although it was light, cheap and easy to use & clean, it was too bendy and would still require 2 hands to carry probes and pole to the edge of the lagoon.

As everyone already used the paint roller poll for collecting samples and I also use it to clean the lagoon depth site boards, it seemed like a good option moving forward. As an added thought, I looked at the possibility of attaching the portable units to the pole so that you could carry everything in the one hand.

First design using all pool noodles.

Who helped work on the solution?

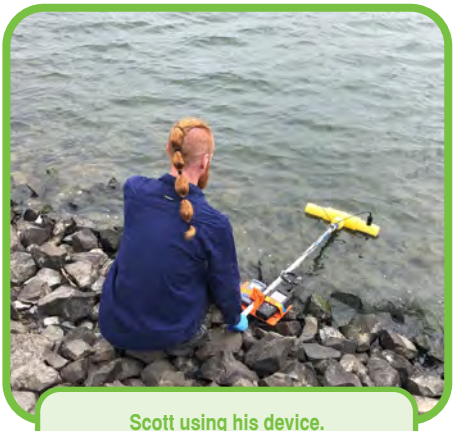
I approached my management team with my initial idea which was welcomed and I was encouraged to make it one of my development goals for the year.

Describe the solution.

The current version is a press fit pool noodle and paint roller which allows the probes to fit into the designated holes. It is designed to screw onto the end of the paint roller pole and supports the pole from the bottom so that when the probes are inserted they don't come into contact with the ground both in and out of the water. With the design being 100% press fit, it allows any section to be removed for cleaning or replacement and doesn't require any special tools or training. This design feature also allows the pole to be transported in the back of a ute without damaging the probe tips and allows the probes to be cleaned without having to hold them.

Having the floating attachment on the end of the paint roller pole allows it to be extended further into the lagoon (where length of probe cable permits) to get over a patch of algae or other plant matter.

Second design using the paint roller.



Scott using his device.

How has it helped you at work?

The solution has seen many benefits including the following:

- Increased safety when collecting readings. Less trips over wet, algae covered rocks reduces the possibility of falls.
- Readings are more consistent and more representative of the lagoon as a whole.
- Reduction in time spent out at lagoon sites. As the unit can be left fully set up while driving around multiple lagoon sites, it reduces the time operators spend away from mechanical plants and reduces the operator's daily physical load.

Suggest improvements, if time or financial limitations were not a factor.

I think there is plenty of room for improvement still. I would like to have it that the probes could be left in at all times and that the leads could be longer and run through the shaft of the pole.

Any other comments you would like to make?

This tool makes the wastewater operator/s life much easier. Reducing work time and improving on safety provides the operator with a better outlook and a better work/life balance. "ELMA" has an approximate cost of just under $10, is made from cheap, readily available materials and utilises existing equipment our operators already have on hand.

Relocating Septic Tank Pump Switches

Scott Adam & Ben Tickner, Veolia Water Services (ANZ)

THE PROBLEM

What was the problem that you experienced?

The sump pump failed in the septic tank which filled the tank, covering electrical switches with water and tripped the circuit breakers causing the high level switch not to operate.

How did the problem impact you or your work situation?

Potential for electrical shock or short circuit.

How long had the problem been occurring?

Hidden failure since installation in 2017.

Electrical switches inside the tank.

THE SOLUTION

How did you come up with the solution?

Plant operator identified the risk following the flooding event in the septic pit.

Who helped work on the solution?

Scott Adam - Supervisor and Ben Tickner – WTP Operator.

Describe the solution.

The risk was eliminated by relocating the electrical switches and sockets up and out of the tank environment.

How has it helped you at work?

Eliminated the risk of electrical hazard/risk through flooding of electrical equipment which could lead to a major safety incident.

Suggest improvements, if time or financial limitations were not a factor.

Nothing comes to mind.

Relocated Switches outside of the tank.

The Sustainable Approach for Recycled Water in the Regions of Queensland

Martin Coromandel, Urban Utilities

THE PROBLEM

What was the problem that you experienced?

The Rosewood STP effluent is used as recycled water and also discharges into the local creek. This creek is an ephemeral creek system with minimal flow. It was calculated that it would reach capacity in 2024 and an alternative solution was needed to remove the nutrients from the ephemeral creek and reuse the water for community benefits.

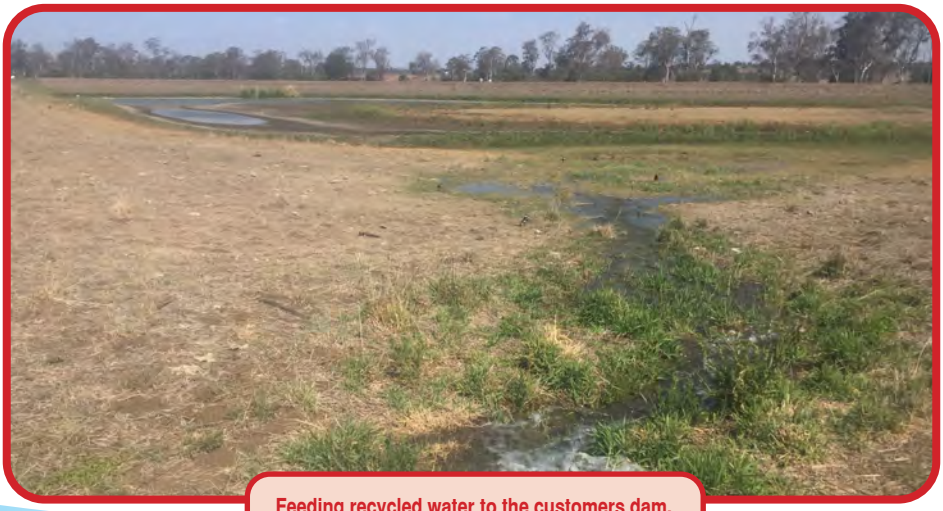
How did the problem impact you or your work situation?

The team wanted to help the community and identified the neighbouring farmer as a good future customer with over 70 ML of dam storage. The farmer was a Lucerne farmer and was suffering during the drought.

How long had the problem been occurring?

The operators sought quotes to the farmer as a new reuse customer by using existing infrastructure, but it was going to cost over $100,000.

The original system.



Feeding recycled water to the customers dam.

THE SOLUTION

How did you come up with the solution?

Operations identified that the recycled water system had the capability to bring on another customer and sought input by our other team members to find the best solution.

Who helped work on the solution?

It was a collaborative effort by our operations team, planning, recycled water team, process engineers and field services. An agreement was created to bring the new customer on board. The process engineers and engineers designed the system needed, and field services installed all the pipework.

Describe the solution.

We could utilise the existing pump and tap another line into the system to bring the other customer on board. We could run the pipework to our property boundary and the farmer could then tap into the line and direct the flow accordingly. Through this effort we have been able to do the job for $13,000.

How has it helped you at work?

We have managed to increase our recycled water use from 60% to 100% which was recorded in December 2019. We have reduced our TN discharged into the ephemeral creek by 2000 kg/year.

After the new pipework was installed.

Suggest improvements, if time or financial limitations were not a factor.

Understanding the effects ephemeral creeks, and how the nutrient levels can pose a risk on the receiving water way.

Any other comments you would like to make?

This effort was a collaborated effort by the Lockyer Valley Operators, and Leaders.

The Algal Broom

Brian Whinfield, Murray River Council

The Mathoura WTP provides potable water for a population of approximately 1000 people but sometimes more in the holiday periods. It has a designed maximum flow rate of 1.2 ML/d and as low as 150 kL in the winter. The WTP is run by myself for the majority of the time although others fill in for me from the on call roster on my off week.

THE PROBLEM

What was the problem that you experienced?

The clarifier for the Mathoura WTP was built in 1964. During the recent algae outbreak on the Murray River, I found that I was able to make good floc in the clarifier but the volume and type of algae would keep coming up and would block the tube settlers.

Floc build up in the clarifier.

How did the problem impact you or your work situation?

We had to clean the tube settlers daily instead of once or twice a month, as well as backwashing both filters to waste daily which is still ongoing.

How long had the problem been occurring?

Generally, over summer during red alert algae blooms, but the tube settlers also required cleaning under normal operating conditions.

THE SOLUTION

How did you come up with the solution?

I thought that by not draining the clarifier to clean it, I would not lose the sludge blanket, so I came up with my water broom to gently sweep the floc off the tube settlers.

Who helped work on the solution?

This solution was entirely my idea.

Describe the solution.

By making a long handle PVC pipe broom with water veins and jets, I could move the floc from the tube settlers and get it to settle while the plant was off.

How has it helped you at work?

It has saved time and water by not having to drain down the clarifier to clean the blocked up tube settlers.

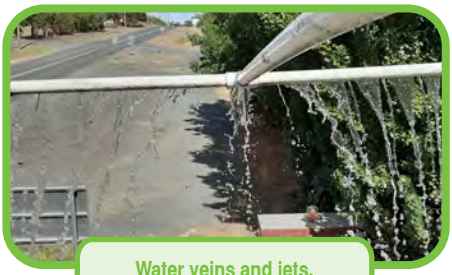
Suggest improvements, if time or financial limitations were not a factor.

A higher volume of water could be supplied to ensure even flow across the whole broom, and a radial bend at the top to stop the hose from kinking. Possibly make a new pipe broom up from aluminium.

Any other comments you would like to make?

I enjoy coming up with solutions for such issues, as well as the construction side of the project.

Algal Broom in action.



Water veins and jets.

Clarifier after using the Algal Broom.

Solar Installation at Bendigo WTP

Stephen Dickons & Andrew Naughton, Veolia Water Operations

THE PROBLEM

What was the problem that you experienced?

A Veolia business case demonstrated the benefits of incorporating a Solar Power System at the Bendigo Water Treatment Plant (WTP) to offset the electricity consumption at the Plant and therefore reducing the carbon footprint of the facility by displacing the use of fossil fuels.

How did the problem impact you or your work situation?

The Project aligns with industry energy reduction schemes through reducing Greenhouse gas emissions. The Plant and the Project are consistent with and complement the programs that have been implemented at the State, Regional and local government levels within Victoria.

How long had the problem been occurring?

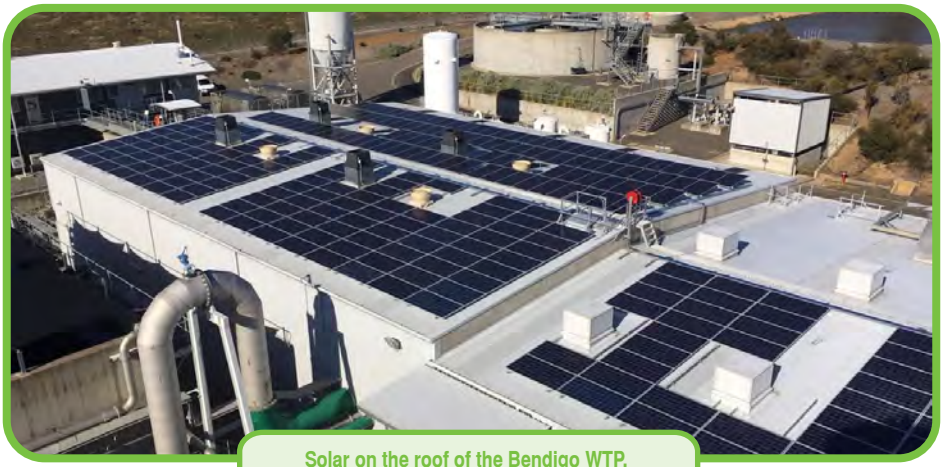
Since 2001.

THE SOLUTION

How did you come up with the solution?

To offset base load energy consumption at the facility a 100 kW roof mounted solar installation was sized and fitted to the main process buildings. The installation was designed using a local electrical solar distributor and managed internally.

https://www.youtube.com/watch?v=cYOCwZW35WQ



Solar on the roof of the Bendigo WTP.

Who helped work on the solution?

Andrew Naughton - WTP Operator and Stephen Dickons - Project Manager.

Describe the solution.

The Project involved the installation of a 100 kW solar power system on the roof of the Bendigo WTP filter building which would be completely installed and resourced internally by Veolia employees. The project is to provide an on-site source of power that will displace electricity that is currently purchased from a commercial power company (off the grid).

The water plant has an ongoing 24-hour per day 7 day a week requirement to operate, therefore the project will maximise the internal use of the solar power, during daylight hours.

The new solar system control panels.

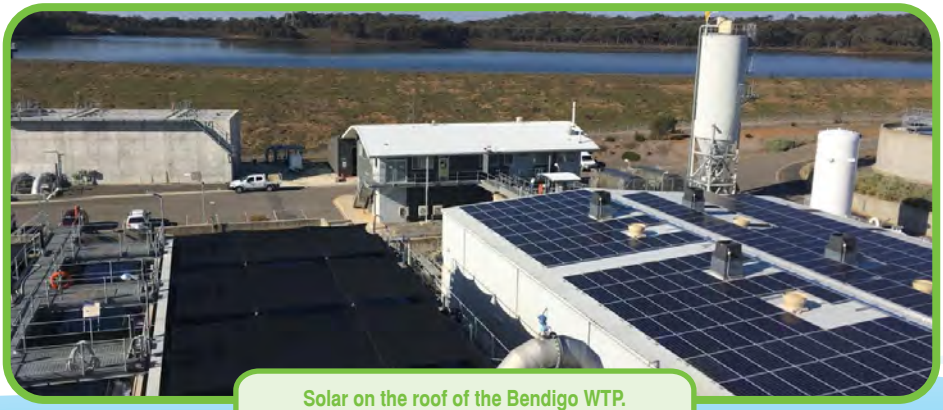
How has it helped you at work?

Andrew led a team of Veolia employees to install the 100 kW solar system to meet strict solar and electrical standards. The solar installation makes a positive contribution to the overall sustainability aspects of the Plant. The project is expected to reduce greenhouse gas emissions by approximately 180 tonnes of CO_2-e per year, or approximately 1,800 tonnes of CO_2-e over a 10-year period.

The expected annual electricity savings provided by the Project are estimated to pay for itself in 3 years.

Suggest improvements, if time or financial limitations were not a factor.

Consider the opportunity to install a land based solar system.



Solar on the roof of the Bendigo WTP.

Supplying Water to Customers When Cleaning Trunk Mains

Noel Richards, Veolia Water Services (ANZ)

THE PROBLEM

What was the problem that you experienced?

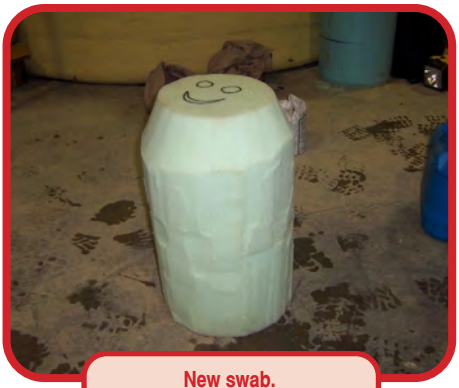
A contract requirement to disinfect, swab and air scour the Blackwood water reticulation network every 6 months, including swabbing the trunk main meant the entire network was isolated for 8 hours. Since 2005 the trunk main swabbing was carried out overnight (10pm to 5am) to reduce the impact of the water outage on customers. Undertaking the work at night has increased the potential safety risks to employees.

How did the problem impact you or your work situation?

Working overnight in public roads and in easements increases hazards associated with slips trips and falls, fatigue, visibility, and manual handling. There is also disturbance to residents due to the noise of the operation and barking dogs. The overnight works increased the loss of productivity due to staff stand down before and after night works.

How long had the problem been occurring?

Since 2005.



New swab.

Getting ready to launch the swab.

The swab after going through the main.

THE SOLUTION

How did you come up with the solution?

Rethinking was undertaken on how to supplement the water supply during the day to maintain water supply and allow the works to proceed.

Who helped work on the solution?

Noel Richards and the Ballarat WTP operators working for Veolia.

Potable water tanker.

Describe the solution.

In July 2019, a potable water tanker and booster pump was connected to the water network to temporarily supply the town with water while the trunk main was cleaned during the day.

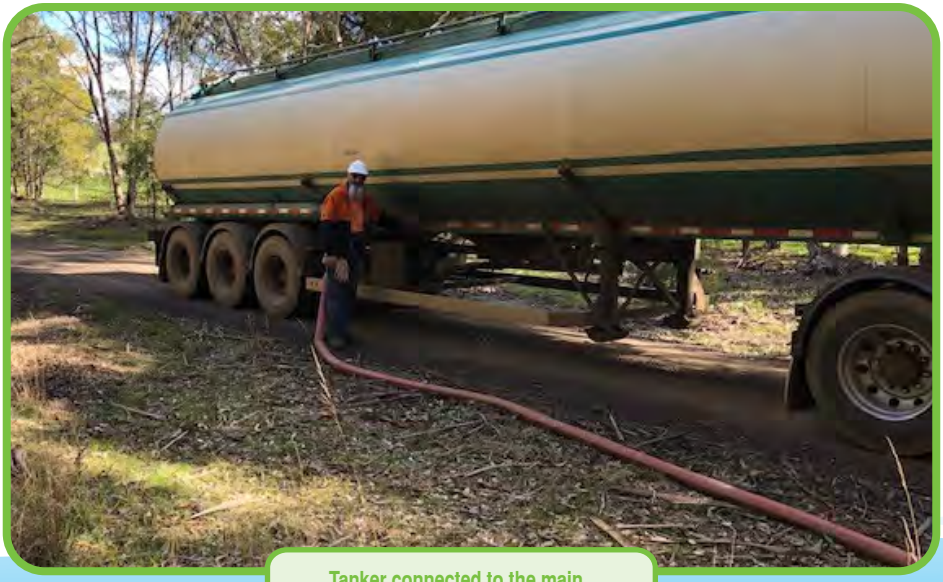
How has it helped you at work?

Customers were not shut off from drinking water during the entire operation. Customers were not disturbed at night due to noise of maintenance works. OHS Hazards associated with traffic, slips and falls fatigue, visibility, and manual handling were reduced. The town's water supply was maintained which eliminated the risk of having no water during a fire. Elimination of all night works was achieved.

No night time noise disturbances to customers, a much safer work operation as the town has very steep slopes and access to properties after dark was always of concern. No disturbance to dogs at night when entering properties to isolate stop taps.

Suggest improvements, if time or financial limitations were not a factor.

No obvious improvements on the solution can be identified.



Tanker connected to the main.

Wacol STP Inlet Bar Screens

Leah Jones & Wayne Allard, Urban Utilities

THE PROBLEM

What was the problem that you experienced?

Wacol STP inlet bar screens have very heavy lids that had to be lifted manually so the screens can be cleaned. Some operators found them too heavy to lift and did not want to do the job. I struggled with the weight and thought "something has to be done here". I then reported it as a safety hazard.

How did the problem impact you or your work situation?

I was frustrated because I wanted to clean the screens but there was always a risk of injury when lifting the lids due to how heavy they are. It was pretty much a two person lift and the operators were often on the plant on their own.

How long had the problem been occurring?

There had been an upgrade to the inlet in 2014 and the previous grating lids had been replaced with the current sealed lids due to an odour issue.

Old grating.

New lids after inlet upgrade.

THE SOLUTION

How did you come up with the solution?

I organised for external quotes for a couple of different solutions. One was for the winches and the other was to replace the lids with lighter split doors.

Who helped work on the solution?

The Manager, team leader and maintenance personnel all contributed towards the solution.

Describe the solution.

The solution was to redesign the workplace by using mechanical lifting equipment. A hand winch was installed onto the external wall with a clip on the cable that can be attached to the latch on the top of the lids.

How has it helped you at work?

This has made the job so much easier and eliminated all risk of injury. It has totally eliminated any manual handling risks associated with lifting the lids. It has been a real win for our team by solving an ongoing problem that had affected everyone in the team for a long time.

Suggest improvements, if time or financial limitations were not a factor.

An electric winch would be pretty awesome.

Any other comments you would like to make?

The solution was so simple and cost efficient. It was an easy fix for a very annoying problem that had been there for many years. Now everyone is happy to do the job. Everyone is a winner here. The screens can now be cleaned easily which helps the environment and operators do not have to risk getting hurt to do the job which provides a major OH&S benefit.

Winding the hand winch to raise the lid.

Chlorine Supply Manifold - High Pressure to Vacuum

Konrad Mueller & Aqua Operators, Veolia Water Operations

THE PROBLEM

What was the problem that you experienced?

The Chlorine System at Bendigo WTP consisted of 8 x 920kg chlorine drums parallel connected by way of a high pressure manifold, prior to reduction back to a low pressure system through a vacuum regulator. The high pressure manifold and associated flexible lines presented a potential risk for release to atmosphere.

How did the problem impact you or your work situation?

Chlorine gas is extremely toxic to the environment and operators. The high pressure chlorine system had the potential to expose operators or environment to chlorine gas in the event of a leak with many fittings, threads and valves under high pressure.

The high pressure lines also obstructed the operator when completing disconnections and reconnections of the chlorine drums which created another hazard as the flexible lines and pipework could easily be knocked.

How long had the problem been occurring?

Since 2001.

Previous set up with pigtails and pressure manifold.

New set up with vacuum regulator connected directly to chlorine drum.

THE SOLUTION

How did you come up with the solution?

A risk review process initiated some research by the operations team to identify the best low pressure system available to meet the needs of the facility.

Who helped work on the solution?

Konrad Mueller and Aqua Operations Team.

Describe the solution.

As part of a risk review process, the need to remove the hazard of a high pressure chlorine facility was identified. The solution was to convert to vacuum pressure drum mount regulators so that any chlorine from the regulator and downstream was under vacuum. If there was a leak, it would be minimal and easily contained with the use of auto shutoff actuators and an alarm system.

To maintain equal draw off between each chlorine drum, a chlorine sequencing system was designed by our supplier and built offsite. Veolia operators designed the onsite layout and completed all the onsite installation work including sequencing control panel, solenoid panel, electrical, plumbing, chlorine scales upgrade, leak detector and auto shutoff system upgrade and cable tray work.

How has it helped you at work?

The hazard risk from high pressure chlorine contained in a manifold has been removed from the site. The system is now much safer to work around and operators are more confident with handling the chlorine system. The risk of leaks to the environment has been reduced considerably and as Veolia Operators were able to design the layout of the system, we have ensured that the area was kept as clear of obstructions around the drum area when working on the chlorine system.

Suggest improvements, if time or financial limitations were not a factor.

None come to mind.

New chlorine drum selection solenoid panel.

Luggage Point Sewage Treatment Plant Polymer Batching

Robin Hansen & Gary Fenwick, Urban Utilities

THE PROBLEM

What was the problem that you experienced?

At Luggage Point STP we require a strong, stable pressure of potable water of 650 kPa with a minimum of 450 kPa for the three polymer batching systems. Unfortunately, due to unprecedented industrial growth in the area, potable water demand has skyrocketed, and we are often left with less than 450 kPa. This left us with polymer systems that did not function well. At one stage we were experiencing up to 4 blockages each day.

How did the problem impact you or your work situation?

Blockages are a real issue because each blockage incurred maintenance of costs up to $3000, not to mention the poly spills on the floor. Polymer is extremely slippery when mixed with water. You can only imagine how dangerous a work condition this created. It is like walking on ice.

The old system.

THE SOLUTION

How did you come up with the solution?

Robin Hansen, one the operation team at Luggage Point took real ownership of this area. During the troublesome months he was right on top of each spill and spent countless hours hosing and cleaning the areas. As it became more and more time consuming, Robin started dreaming up ways of mitigating the spill radius and floor slip hazard. He would spend time after hours drafting up plans for improvement. He went as far as visiting Clark Rubber and Bunnings on the weekend to see if they had the needed supplies for improvement.

The new flexible bund.

Who helped work on the solution?

Turns out all the parts were available, and Robin's plans were brilliant. In one afternoon, Robin and I were able to pick up all the supplies needed to build the solution.

Describe the solution.

The solution included a flexible containment around the unit and installation of a direct drainage line. He also installed a temporary bund to help manage floor cleaning and to prevent chemicals from entering the storm water drain on the roadway. Furthermore, Robin worked with a plumbing contractor to trial a high pressure cleaning system which has eliminated the need to engage maintenance for blockages. We no longer need to scoop out congealed polymer with our hands from the cone system.

How has it helped you at work?

Since installing the catchment system, the floor has never been safer. It is not slippery anymore...

Any other comments you would like to make?

We're really proud of all the great work Robin has done for the team. He showed real tenacity in facing this health and safety and operational problem. One other note of improvement, now that the polymer systems have less downtime, we can keep up with our solids management on the plant. This is a big win for the team because it has saved time, money and reduced a site risk.

The bund containing the spill.

The drain line from the bund.

Optimisation of RO System and Brine Lagoon Management

Rakesh Patel & Noel Richards, Veolia Water Services (ANZ)

THE PROBLEM

What was the problem that you experienced?

Reverse Osmosis (RO) efficiency was not meeting design specifications (50-60% rather than 80%), resulting in an increase in average daily flow into the brine lagoons from 3 to 6 kL/d. CIP cleaning events were not effective enough to improve RO performance and the antiscalant was inefficient.

How did the problem impact you or your work situation?

Inadequate evaporation from the brine lagoons resulted in reduced evaporation of RO brine waste, which resulted in significant waste disposal cost.

How long had the problem been occurring?

Five years.

The original brine evaporation lagoons.

THE SOLUTION

How did you come up with the solution?

The issue was workshopped with the operations team, reviewing process inputs and ways to maximise evaporation potential on the lagoon system.

Who helped work on the solution?

Rakesh Patel – Process Engineer & Noel Richards – Operations Supervisor.

Describe the solution.

Improve the efficiency of the RO system recovery.

Investigation conducted into potential solutions to improve RO recovery included oxidation with aeration, precipitation through increased pH and oxidation with potassium permanganate. We identified that it would only need to improve RO recovery from ~60% by 2% in order to break even on a new set of membranes each year (~$4K).

Maximise brine evaporation.

VSD's have been installed to run evaporation fans during the evenings at low speed to enhance evaporation. New radar level sensors installed on the brine lagoon to measure the effectiveness of evaporation.

Evaporation fans running 24 hours a day.

How has it helped you at work?

The RO membranes were replaced and recovery has increased from 60 to 70%. New antiscalant has been applied and is effective at maintaining RO recovery to an acceptable level. Significantly reduced brine disposal cost is expected over a 12-month period based on current operating conditions.

Evaporation fans are running 24 hours without any noise issue to neighbouring properties and there has been an observed increase in evaporation in existing lagoons.

Installed a new radar level monitoring device and lagoon levels are being recorded on SCADA.

Suggest improvements, if time or financial limitations were not a factor.

The covered lagoons have very limited access for maintenance purposes. If the lagoons were able to be redesigned for access to maintain weeds and debris on the lagoon surface, this would significantly improve the evaporation potential on the brine lagoon.

Radar level monitoring in lagoon.

Self Tapping Tool Kit

Jason Schornig, Albury City Council

THE PROBLEM

What was the problem that you experienced?

Our water department, consisting of over 15 plumbers had access to only one water main hot tapping tool, which apart from being a logistical nightmare was just not working.

How did the problem impact you or your work situation?

A lot of downtime was experienced from the fact that one crew would be using it and another crew would need to wait until they had finished and then have to go and retrieve the tool.

How long had the problem been occurring?

Many years. I had previously requested another hot tapping tool but was rejected due to costs.

The home made tapping kit.

THE SOLUTION

How did you come up with the solution?

By looking at the design that we had with our commercially purchased kit and started designing a new one, starting by drawing ideas and researching ways to do it.

Who helped work on the solution?

I involved an apprentice to help me put this together. The idea was to have him make something, get him to think about designing and manufacturing a tool and to show that it can be done.

Describe the solution.

The solution was to design and build a self-tapping water main tool for our constructions crew to minimise the downtime caused by sharing one tool between two crews.

How has it helped you at work?

There is no more downtime as both crews now possess a self-tapping tool and efficiency has improved.

Suggest improvements, if time or financial limitations were not a factor.

Like everything it could use improvement. This tool was made from all brass, all thread, and brass fittings, so it is slightly heavy, but not as heavy as our commercially purchased kit though. The gasket designs work but it could be a bit better with smoothness of the stem coming up and down. It is a little bit tight due to it needing to be water tight to stop water coming out the top of the tool.

Any other comments you would like to make?

Not only did I enjoy making this and involving an apprentice, but also it is much appreciated among the crew because everyone was so fed up with only having one kit to share between so many people. There was definitely a job satisfaction after getting this to work. Also, I believe the best thing about this tool is that it cost approximately $60 compared to over $4000 for our commercially purchased tapping kit.

PASS Award Objectives

- To create an opportunity which encourages water industry operational staff to share their in-the-field innovations and/or fixes to problems so that others in the water industry can benefit.
- To provide an application process which is easy to complete and utilises a standard template. This will give all water industry operational staff the same opportunity for presenting their innovation.
- To provide the opportunity for operational staff to receive recognition for their innovation and efforts.
- To encourage operational staff to become aware of and involved with the Water Industry Operators Association of Australia (WIOA).

To allow WIOA to share the good ideas and innovations with other members through the Operator magazine and/or other publications.

The Process

The PASS application template and more details on the Award can be found on the WIOA web site or from the WIOA office.

Judging

All PASS applications received in the 12 month period ending 1st March annually, will be assessed by an independent panel on a number of criteria, including:

- Commonality of the problem
- Benefit to OH&S, water quality, and/or the environment
- Financial and sustainability benefits
- Application to other industries
- Uniqueness, adaptability and simplicity

Reward

The person who submits the PASS application deemed best in that particular year will be announced the winner of the PASS Award. Aqualift Project Delivery Pty Ltd, as the PASS Award sponsor, will provide sponsorship of $2,500 for the winner to join the WIOA team on their annual operational tour of New Zealand including attendance at the New Zealand WIOG operations conference.

Previous Winners

2019	Toby Spark - **Gippsland Water**
2018	Michael Cartmer, Quinton Caird, Martin Zardins, Stephen Casey & Michael Dixon - **Power & Water**
2017	Marcus Boyd - **Toowoomba Regional Council**
2016	Daren Lord - **TasWater**
2015	Frank Rinaldo - **North East Water**
2014	Lester Little - **TasWater**
2013	Terry Randall & Danny Roberts - **Port Macquarie Hastings Council**
2012	Mark Walker - **Gippsland Water**
2011	Wayne Shaw - **Gippsland Water**

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