



# AQUATRINE

## WINTER 2011 news

# Award winners!

**Congratulations to Team AQUATRINE who were announced winners of the national 2010 Utility Week Achievement Award for Supply Chain Excellence after smashing the SOGE (Sustainable Operations on the Government Estate) target for reducing water consumption over a decade ahead of schedule!**

**B**y demonstrating what can be achieved through teamwork, the partnership was officially recognised at the annual Utility Week Achievement Awards at Old Billingsgate in December. The judges praised the award entry for bringing together diverse partners and building strong relationships to deliver results through collaboration.

Team AQUATRINE beat off stiff competition from companies including Drax Power and Thames Water to receive the coveted award for exceeding the Government target to cut water consumption by 25 per cent by the year 2020 in 2009. By applying the latest techniques and technologies in leakage detection and repair across the Defence Estate, the team delivered savings equivalent to 10 Olympic-sized swimming pools every day.

Upon hearing the news, David Olney, Deputy Chief Executive of Defence Estates said: "Our success at the Utility Week awards



**Representatives from Defence Estates, C2C Services, Kelda Water Services and Veolia Water Nevis received the award from Master of Ceremonies Bobby Davro and Utility Week editor Janet Wood**

recognises the excellence of the working relationship between all AQUATRINE parties. "Defence Estates' priority is to support our Armed Forces and their families. The AQUATRINE partnership helps us to provide water services needed across the military estate, whilst helping to safeguard our environment and provide value for money.

"I commend all the AQUATRINE staff for their ongoing effort to ensure the continuing success of this project, and I am extremely proud that their efforts have been highlighted at these industry-leading awards."

The partnership's success was achieved whilst ensuring the minimum of disruption to site operations and security of water supply to defence customers.

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# Private to Public Sewer Transfer

**October 1, 2011 is an important date for householders and water and sewerage companies (WaSC's) alike. This is the date that many privately owned sewers and lateral drains will be transferred to sewerage companies.**

Up to 50 per cent of properties are connected to private sewers and nearly all properties are connected to privately owned lateral drains. A sewer usually carries water away from a number of properties; a lateral drain usually carries water away from just one property.

Some private sewers are used by more than one property, and if something goes wrong, it can be difficult for several property owners to either accept their shared responsibility; or work together to get it fixed.

The transfer of private sewers will relieve consumers of this burden and will allow water and sewerage companies to integrate private sewers and laterals into the public sewer system and help reduce the risk of flooding.

## What does this mean for MOD and the AQUATRINE Suppliers?

When the intention to transfer was first communicated by DEFRA (back in 2008), there was little mention of how MOD land would be treated. Currently MOD land has automatically been 'opted out' of the transfer. This means that if nothing is done, no laterals or sewers on MOD land will be handed over to the WaSC's, although DEFRA are considering reversing this to an automatic opt-in.

However, with the current opting process there is the option for MOD to notify the WaSC's that they wish to "opt in". These notifications must be received by the water and sewerage companies by April 1, 2011.

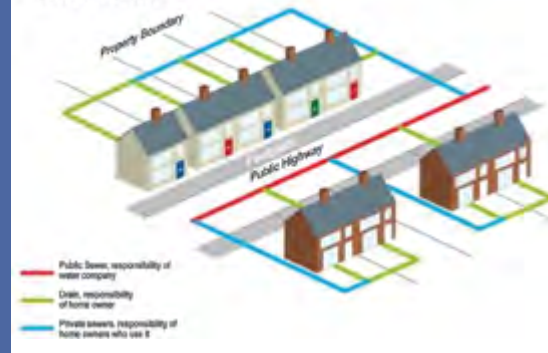
It is also clear that all the documentation produced has been written considering the impact on domestic customers, not MOD. To help clarify this situation, Kelda Water Services have been working with the PMO to understand the opportunities available to MOD to "opt in" specific MOD sites. KWS are currently looking at a wide range of sites, where they maintain the sewerage infrastructure, to understand and answer questions such as:

- What can be transferred?
- Is it in MOD's best interests to transfer these sites?
- How will the existing stakeholders (AQUATRINE, RPC, ALR, SETL etc) work with the statutory undertakers once the sites have been transferred?
- What will be the impact on the AQUATRINE Suppliers?
- How will the end users be affected?

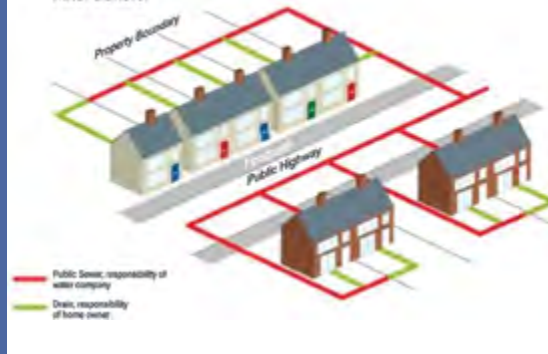
It is their intention to report back to the PMO with the findings of their initial investigations by mid February. This will provide an understanding on the suitability of certain types of sites which can be considered to be "opted in." This will also provide enough time to opt in or out suitable sites to the WaSC's before the deadline in April.

The diagrams below illustrate the changes in responsibilities for domestic customers, following the transfer on October 1, 2011

Before transfer



After transfer



## Wrap up your pipes this winter

**With an unprecedented cold weather snap hitting many parts of the British Isles in recent weeks, AQUATRINE partners are encouraging customers to take steps to ensure that water pipes don't freeze.**

Winter check list:

- Lag pipes by wrapping foam or a similar material around them to insulate them, particularly where they are exposed in roof spaces or next to outside walls
- Check for visible signs of damage to pipework – get any problems attended to
- A towel wrapped round external pipework can help
- Locate the water stop-cock and make sure family members know where it is too
- If a property is going to be empty for a while, turn off the water and drain down the system so that, if there should be a

problem whilst the building is vacant, any possible flooding can be prevented. Make sure you know where the stop-cock is and how to turn the water off

- Frozen pipes? Try turning the cold water tap nearest to the internal stop-cock on, so that it is in a "slow flow" position. (The internal stop-cock is usually located under the kitchen sink.) Use a hair-dryer at its lowest setting and gently move the appliance so the heat flows around the internal stop tap area. It will also help if you occasionally turn the internal stop-cock on and off fully, to clear any blockages.



Remember – pipes should be thawed slowly and carefully. Make sure that both the stop-cock and cold water tap are turned off when this exercise is finished, and be sure to unplug and remove the hairdryer.

# Water Management on HMNB Clyde

HMNB Clyde is one of the Ministry of Defence's (MOD) most important sites as it is home to the UK's strategic nuclear deterrent and the headquarters of the Royal Navy in Scotland. It has a population of several thousand service, civilian and civil service staff and numerous industrial operations on site. The site requires the highest level of security, which poses significant challenges to companies carrying out work on the site.

Veolia Water Nevis (VWN) delivers water and wastewater services to the MOD in Scotland. One of the aims of the contract is to deliver reductions in leakage, helping the MOD meet sustainability targets.

As the largest MOD base in Scotland, reducing leakage at HMNB Clyde is at the heart of Veolia Water Nevis' leakage strategy, which includes:

- Investment in metering equipment and telemetry
- Development and implementation of a Scotland wide annual leakage strategy
- Capital investment in reservoir alarms, ball valves and network rationalisation.

The initial step for VWN was to increase the visibility of the water networks within the base. This involved installing new water meters at strategic locations in the network. Data loggers were then installed with SMS telemetry to transfer live data back to VWN's head office in Dunfermline. With this information a number of activities could then be carried out:

- Areas of high leakage were identified for dispatching find and fix gangs
- Trends in consumption were monitored and responded to
- Individual high consumption buildings were identified and their impact on the sites overall water balance can be quantified
- Water supplied into the site was monitored to ensure continuity of supply.

With the newly available data, a more strategic view could be taken on leakage reduction and certain areas of the network were identified as having high night lines (unidentified night use, some of which is leakage). This formed part of VWN's Scotland wide leakage strategy which targets sites based on cost of water lost, operational impact of leakage and expected costs of finding leaks. Various techniques, both traditional and modern are used to locate the leaks in the network including, step testing, noise logging, and ground microphones.

Due to the nuclear safety implications on the base, a high level of approval is required before any excavations can take place. This initially led to a delay in repairs being carried out and unnecessary water wastage. VWN recognised the importance of working closely with key stakeholders on site to manage the progress of any work through the base's approvals meetings. By working more closely with the base, VWN has reduced the time and cost of repairing leaks.

In addition to leakage work, VWN is undertaking a capital investment programme to improve the asset condition of the MOD's water and wastewater assets. These projects have also contributed to better network operability and increased operational data, which also reduces leakage.

The installation of reservoir level monitoring with an alarm capability has provided greater confidence in water



HMNB Clyde

supplies. The system alerts the MOD to any significant decreases in the site's drinking water and fire fighting water reserves such as those caused by a burst main. VWN will then respond to any alarms and resolve the problem before there is any operational impact.

VWN is also directly reducing water losses by investing in new control valves which reduce unnecessary overflows, and by removing sections of network that no longer serve a purpose.

So far these measures have reduced the leakage rate on site by a massive 40 per cent.

## Kelda Water Services re-tenders for service partners

Thanks to a radical and comprehensive re-tender process, Kelda Water Services (KWS) is achieving greater cost certainty and excellent customer care in operational and maintenance activities.

The launch of KWS at the end of 2009 provided a great opportunity to initiate a re-tendering process for the whole of the south-west England and Wales region.

Following detailed consultation, 65 companies were invited to bid for operations and maintenance work, nine of which ultimately won contracts.

The previous partnership with South West Water ended in August 2010 when the new, streamlined operational supply chain for Ministry of Defence (MOD) sites commenced.

"The detailed process has resulted in a far more manageable list of Partners with longer term commitment to shared strategic goals, and enhanced customer care," says Procurement Manager Peter Raczynski who is leading the project. "Our continuing vision is for a deeper, improved relationship and greater input into decision-making with the MOD."



KWS and some of their new O&M Partners

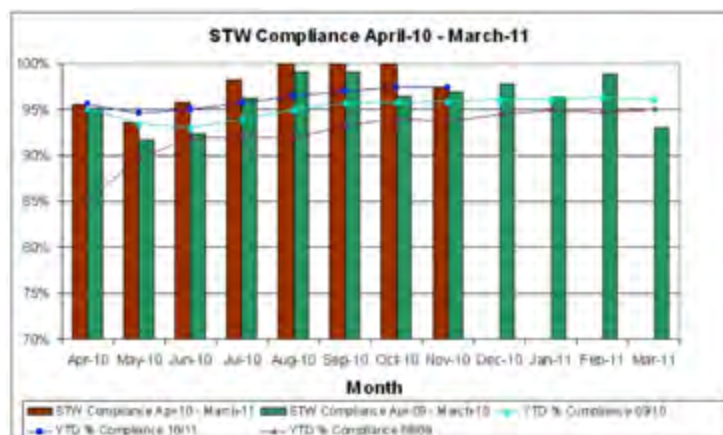
# C2C hits 100 per cent sewage treatment works compliance

C2C's sewage treatment works compliance level has been steadily improving month on month, culminating in 100 per cent compliance achieved from August to October last year and the annual average compliance as at December 2010 being 97.56 per cent. C2C has achieved this through effective maintenance and targeted asset investment to improve performance.

The sewage treatment works consent levels are set by the Environment Agency. This has been a superb effort by the C2C team. C2C's Field Technicians and Operators take samples at each works visit, the results are trended by the Asset Performance technicians based in Birmingham, the team then responds to rising trends by investigating the root cause of failure, from this they learn what good performing assets can and should achieve.

This compliance figure is calculated based on the number of failed determinants as a proportion of the total number of determinants sampled, for sites with a numeric consent. This calculation is based on laboratory sample failure rates only.

Poor performing sewage works can have a significant impact on the environment that they discharge to, so C2C strive to improve their sewage works performance year on year through a real operational



STW (Sewage Treatment Works) compliance levels showing performance over 3 years

focus to achieve the optimal frequency of planned maintenance activities. This operational emphasis has been complimented by investment expenditure. Major refurbishment works have been completed at DISC Chicksands and RAF Henlow since 'Go-Live' and there have been multiple smaller scale investments at many other C2C sites.

## Risky business

Turning on a tap is something which we all take for granted but getting clean water to that tap is sometimes more complicated than you might imagine.

Drinking water originates either from underground sources, or from rivers, lakes and reservoirs. This "raw water" has to be treated to remove any naturally occurring chemicals or micro organisms which may be present.

Kelda Water Services (KWS) has to make sure that the water supplied to MOD sites is fit for humans to drink. In order to ensure this is achieved, recent changes incorporated in the Private Water Supply Regulations 2009 have emphasised a new obligation to assess and manage the perceived risks to each water supply source. KWS has now completed risk assessments of all supplies where water is taken from the environment. Using our in-house expertise KWS has made numerous recommendations to reduce any observed risks, such as the presence of sheep or cattle (which heightens the risk of cryptosporidium entering the raw water).

A significant investment will therefore be made to implement the recommendations



Okehampton UV treatment



Castlemartin chlorine dosing

from the risk assessments so we can rest assured that the water flowing from our taps is wholesome for some time to come.

## New C2C appointment

In December 2010, Martin Herbert joined C2C as the Commercial Manager for Coast to Coast Water. Martin joins C2C with several years' experience as a Quantity Surveyor in the construction industry, including other PFI projects for the MOD.



## STOP PRESS!

Following our recent success at the Utility Week awards, Team AQUATRINE has also submitted an entry to the Water Industry Achievement Awards for Partnership Initiative of the Year. The shortlist will be announced at the end of January, and winners will be announced in March. We'll keep you posted on the outcome in the next issue of AQUATRINE News.

# C2C maintain water supply through the coldest December since records began

**C2C Services abstract and treat water from the River Swale in Yorkshire in order to supply 20,000 residents at Catterick Garrison with their water supply.**

December 2010 saw temperatures in the area drop to a record -18°C, which presented a number of operational issues for C2C. The key challenge was to maintain water supplies to the whole of Catterick Garrison as the inlet to the River Swale began freezing, and a significant increase in leakage was observed across the Garrison. The worst case scenario was at the front of everyone's mind as the news filtered through about the recent water crisis in Northern Ireland which left 40,000 homes without supply.

C2C field technicians, operators and managers worked around the clock for three weeks to manage the impact of the freezing temperatures. They implemented contingency plans to ensure that all leaks were quickly identified and the water treatment process remained operational during this period. Their efforts were rewarded with a successful outcome, with no loss of supply during this extremely challenging period.



Inlet from River Swale



Frozen tanker pipe



Water pipes frozen solid



Thawing water pump on tanker

## Engagement provides benefits

**The delivery of a first class customer service is paramount to Kelda Water Services (KWS).**

In line with their business strategy, KWS has entered into partnership with customer management company IMONIC and is currently undertaking a Customer Engagement Project.

This is an initiative where members of the KWS management community meet and engage with identified individuals across the estate to discuss specific issues, joint plans and potential opportunities for closer working arrangements. The target audience is within Defence Estates, various MOD departments and other MOD supplier organisations.

The aim is to help KWS improve their ability to understand and respond to customer needs and preferences. In turn, they hope to drive opportunity, improve service delivery and working relationships by acting upon the customer knowledge captured throughout the process.



VC10s

## VC10's get clean bill of health

**Every VC10 which leaves the airfield at St Athan after refurbishment now has a clean bill of water health, thanks to a scheme set up by Kelda Water Services (KWS).**

The program of refurbishing and converting VC10s has been in place for years, but the final stage in each conversion was always a niggling problem. Before taking off, each aircraft has to have its internal water supply checked and approved. Lengthy procurement routes made the job of ordering up, paying for and interpreting the results a costly headache for staff at St Athan.

Now the site can simply make one phone call for water sampling, often with just one day's notice, thanks to KWS staff. The samplers who attend have security clearance for their routine work – ensuring the wholesomeness of water supplies which fall within the AQUATRINE scope. Samples are analysed by the nationally-accredited Severn Trent Laboratories. Any failures are notified within industry-beating and commercially available turn-around times, allowing VC10s to be operationally available in a shorter time period. And, instead of each sample going through a lengthy order and payment process, a yearly invoice from KWS is paid over the phone by St Athan.

Using the flexibility and expertise of the AQUATRINE supply chain, there's one less thing to worry about at St Athan.

For further details call Dr Lewis McCaffrey on 0114 201 3289.

# Interview with... Bill Yardley

As Head of Operations South, Bill Yardley holds overall responsibility to the Deputy Chief Executive for the delivery and performance management elements of the AQUATRINE programme. As such Bill jointly chairs the AQUATRINE Supplier Association and the three governance boards for each of the packages and regularly discusses the management and delivery of the contract with Nigel Chew, his team in Sutton Coldfield and with senior executives from each of the utility companies.



Bill Yardley

- What does a typical day entail for you?**  
In terms of my everyday business, AQUATRINE is only one element of my wider responsibilities for estate management delivery. In the current change environment more and more of my time is being taken up with Strategic Defence and Security Review and contract renegotiation work. This leads to a very busy calendar and my spending a significant part of my day away from the office attending meetings. Therefore I rely heavily on Nigel Chew and my Board colleagues to keep the business running on a day to day basis.
- What do you see as being the biggest challenges to team AQUATRINE over the next 12 months?**  
The next 12 months are going to be challenging for all staff connected with Public service delivery. The Strategic Defence and Security Review and the transformation from Defence Estates and other MOD infrastructure organisations to a single Defence Infrastructure Organisation will also have a significant impact. The major challenge will be keeping staff motivated and the recent utility Industry award is helpful in this regard. In terms of AQUATRINE itself, we are in the process of implementing changes to the Partnering Management Organisation which will improve the way we manage the contract and provide increased support to customers at site level. Additionally we are in the early stages of discussions with our three partners on the repositioning of each of the contracts to meet our future needs.
- How did you feel when you heard that the AQUATRINE Supplier Association had won the Utilities Industry Achievement Award for Supply Chain Excellence?**  
Absolutely delighted. I was honoured to be at the Award ceremony when the announcement was made and my initial reaction was surprise. This was not that I doubted that the nomination was worthy but through knowing that the competition was particularly fierce. When competing for such a high profile national award against submissions such as those from the Olympics you know you are up against it so to receive the award was an immense achievement.
- What does the recent Utility Industry Achievement award mean to you and team AQUATRINE?**  
This award is extremely important. It provides national recognition from the wider utility industry that the MOD and our partners are capable of meeting all the criteria set for Supply Chain Excellence and can compete on a level playing field. For the staff involved and the suppliers, it is recognition that all their hard work is not wasted.
- Are there any changes you would like to see implemented over the coming year?**  
In answer to the last question I have already set out the challenges over the next 12 months. These are significant but looking further ahead there will still be ongoing pressure to continue to improve the way we do business.
- What benefits do you think the AQUATRINE Supplier Association brings?**  
Major benefits; working collaboratively with all three suppliers fully engaged has led to major benefits to all parties. These include increased awareness and achievement in the Health and Safety area, a coherence and consistency to all aspects of the business, a business plan setting out areas where we strive to mutually improve our performance and a common approach to communications, which includes the provision of these newsletters. Once again the National Utility Industry award is formal recognition of the benefits of the Supplier Association.
- What are your expectations of AQUATRINE over the next 12 months?**  
My expectations from AQUATRINE are the same as those for the rest of the business I manage. I expect them to continue to provide the level of service they have always delivered and to continue to look for ways of improving the service and reducing costs. In addition, over the next 12 months we will be engaged in the change agenda I mentioned in answer to an earlier question.
- Do you have any other comments that you'd like to share?**  
Yes, over the last few years since becoming involved with AQUATRINE I have been very impressed by the professionalism, attitude and approach of all concerned. Working individually with the suppliers and at Supplier Association level we have achieved a great deal since the original contracts were let. Clearly we must face up to the challenges of change and continue to improve but I am confident that we have the people and mechanisms in place to continue to succeed.