



United Utilities with their Street works compliance team

Winner of the Street Works UK Team of the Year award 2017

Street Works UK is the UK industry association representing utilities solely on street works issues. Street Works UK represents some 56 utility companies and contractors engaged in the street works sector, and 18 specialist sub-contractors who provide equipment, materials and services supporting street works activities. Our members represent major contributors to economic growth and work to deliver gas, electricity, water and telecommunications to both individual consumers and UK plc. In order to continue this drive for further improvements within the industry – we have developed the Street Works UK Vision for Street Works, which revolves around seven main principles:

- Safety
- High Quality
- Minimise Disruption
- Keep the Public Fully Informed
- Sustainable Methods and Materials
- Avoid Damage to Underground Assets
- Innovation

This case study is an example of the street works sector delivering on these principles and turning the vision into reality.

Overview

Timeline of work

2013. Due to a commitment from senior leadership within United Utilities to improve Street Works compliance the resource was made available to put together a new team that would drive these improvements. This began with Mark Whittaker being appointed as Senior site auditor. From there three auditors were added to begin on site auditing activities (signing, lighting and guarding, backfill, reinstatement etc). At the same time a third party service provider were undertaking the same auditing activities, but additionally, were also retrieving core samples to carry out depth measurement and then pass the sample to their laboratory to determine air void content. Compliance was steadily improving and a correlation looked to be developing between numbers of audits completed against compliant sites visited.

2014. As part of the plan, and to get the most value from the works being undertaken, it was deemed necessary to build our own air void content testing capability. A space was secured, and building work was completed towards the end of 2014 while recruitment for a scientist was ongoing. At the same time, auditing continued, along with a team work approach to making improvements with our partners. Plenty of face time, site visits and advice from the team helped to move improvement along all year.



2015. Scientist appointed in January, with a UKAS visit in April being successful upon submission of action evidence. The laboratory was awarded UKAS testing status in July and tested its first 'live' sample the following month (as of end of September 2017, over 3500 samples have been processed). Due to capacity constraints, additional works were still being undertaken by the third party supplier. Compliance was still improving. The laboratory joined a proficiency testing scheme; a central lab distributes repeatable samples to participants, the sample is tested and results submitted. When results are published, it gives the laboratory the opportunity to understand how it performs against others conducting the same tests. They were able to see that we are in line with the other participants, giving added (independent) confidence in results on top of own quality checks. They were also asked by UKAS to consider setting up a UK based PT scheme, but this is something they did not wish to pursue at this time.

Having both site and now laboratory capacity within the same team has allowed 'narrow and deep' assessment of any issues that present themselves. Information from site condition is passed to the laboratory and then the laboratory has the time to properly assess the sample once it is dry, (which is a huge advantage). This has led to issues such as over-use of Enviroclean being identified (potentially compromising the integrity of the reinstatement) and the information being passed to the relevant partner and stand down/tool box talks taking place to educate the reinstatement teams involved. This is possible due to the huge amount of data gathered, ordered and reported for each audit carried out; it allows us to identify areas of improvement quickly and efficiently to turn around non-compliant practices in short time frames – sometimes on the same day.

2016. Work began to build their own electronic auditing system, as they were still reliant on third party systems. Work continued to improve processes along with arrival of purpose built coring vehicle to house hydraulic coring rig. They continued to work with partners to present audit results, and from that, work to improve performance. Having full control of all activities helped to drive improvements through, and gave flexibility to address new (or existing) compliance issues. A second successful UKAS visit along with the second successful PT participation, showed improvements made by the site and lab team were having a positive effect on the quality of the work being carried out.

2017. Site team numbers went from three to six, with an additional scientist added to the lab. As a result of this, third party audit, coring and air void content testing were turned off, at the same time as the in-house audit system went live. They are now fully able to cover current workload demands in house. A third successful UKAS visit gave just one action to complete (an extra temperature monitoring device for the laboratory) and was very complimentary about all aspects audited.

Utilising the capabilities of both the site and lab teams they have been able to undertake more detailed trials to better understand materials, construction methods and team behaviours. All this leads to a mind-set of improving what they currently do but also looking to the future with innovative ways of working (which we will be looking to share next year).



Having such a closely integrated team, working from a real commitment from the most senior management within the organisation that then works with Partners to drive improvements has meant that we have moved air void content compliance consistently in the right direction along with all the other areas being audited such as signing, lighting and guarding. The pro-active approach to improvement, with a real desire to help and educate Partners has also played a huge part in our achievements to date, and is a proper long term, sustainable solution to issues they face as a utility company operating in the modern world.

Over the last twelve months there have had numerous Utility companies and Highway Authorities who have visited their lab to see first-hand how we monitor, record, report and improve our street works performance. Feedback from all visitors has been very complimentary and the last feedback from the UKAS visit confirms just how well the team have performed this year “The construction laboratory is an outstanding example of one dedicated to seeking and implementing opportunities to improve at every stage of its work.”.