



## NJUG CASE STUDY

### CASE STUDY 53: Incident and Injury Free (IIF) - Behavioural Safety Programme

#### *Winner of the 2010 NJUG Safety Award*

The National Joint Utilities Group (NJUG) is the UK industry association representing utilities on street works issues. The 39 companies<sup>1</sup> we represent work to deliver gas, electricity, water and telecommunications to both individual consumers and UK plc.

NJUG members need to continue to drive forward further improvements. We have therefore developed the NJUG Vision for World Class Street Works, which revolves around six main principles:

1. Safety is the number one priority
2. Utilities deliver consistent high quality
3. Utilities work together and in partnership with local authorities and contractors to minimise disruption
4. Utilities keep the public fully informed on all aspects of works
5. Utilities maximise use of sustainable methods and materials
6. Damage to underground assets is avoided

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

#### **Overview:**

In 2003 Laing O'Rourke realised that a culture change was needed if they were to achieve a step change in accident prevention, where there would be no tolerance of unsafe practices so that they didn't just prevent accidents and injuries, but removed the environment in which they occurred. The catalyst for this development was their appointment as Construction Managers of BAA's Terminal 5 at Heathrow. Using industry statistics – as a 'safe' company – given the size of the project they could 'expect' to suffer five fatalities during construction. This was completely unacceptable, and they agreed with their client BAA to lead safety into new levels that prospers to this day. This has now seen their utilities business accident free for the last eighteen months, since the start of 2009.

#### **Case Study:**

Laing O'Rourke reviewed their processes and concluded that they needed to move into a safety culture where people made safe working decisions because they were enabled to do so and understood the potential impact on themselves and everyone else. They adopted the Incident and Injury Free (IIF) behavioural safety programme as their initiative, and rolled out Phase1 commitment workshops across the business, including all supply chain partners and clients. IIF made them not only challenge complacency but also encouraged operatives to look out for each other and make sure 'everyone goes home safely every day'.

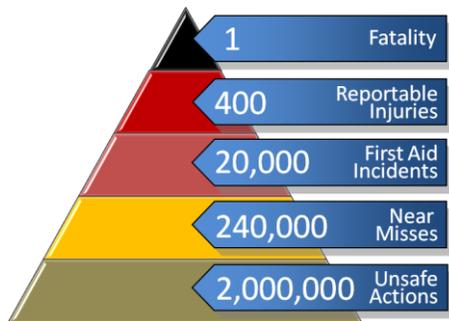
Phases 1&2 were based on an American model, with case studies designed to provoke a 'what if I had just . . .' analysis around severe burns and blindness caused by the 'it couldn't happen to me' culture. In

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<sup>1</sup> NJUG's current members are Energy Networks Association (representing electricity and gas), Water UK (representing all water and wastewater companies), National Grid, Openreach, and Virgin Media. Our associate members are Clancy Docwra, Skanska Utilities, Balfour Beatty, Morrison Utility Services, Morgan Est, Nacap, PJ Keary, First Intervention, Carillion, Enterprise, Laing O'Rourke, Amec, SQS and Fastflow Pipeline Services Ltd. Including members through trade associations, NJUG represents 39 utility companies, and 14 utility contractors.

Phase 3, the programme was customised and became Laing O'Rourke-specific. In 2004 Kieron Deeney died on a Laing O'Rourke site in Canary Wharf when he fell through an inadequately protected hole in an apparently safe-looking concrete floor. This tragedy led to enormous anguish in the company, who believed they were doing all they could to make workplaces as safe as possible. Kieron's widow Jenny agreed to lead the IIF Phase 3 presentations, explaining in a video presentation how his death had affected her and their family. This immediacy to the workforce provoked increased understanding.

Laing O'Rourke set targets for accident reduction and promoted reporting of near misses, using the Bird/Heinrich Accident Pyramid (below) to drive improvement. They knew that reducing the lower level incidents had a direct corresponding impact on the top level frequency.



#### The targets are

**0.1 AFR  
(Accident Frequency Rate) by 2011**

**0.1 DIFR  
(Disabling Injury Frequency Rate) by 2015**

**0.1 AAFR  
(All Accidents Frequency Rate) by 2020**

Having identified heightened risk from misuse of Drugs and Alcohol (D&A) at work, they began random testing for all employees, in addition to the 'With Cause' procedure for anyone involved in a utility strike or other incident. In utility companies, given the exposure to the public and the danger of works in the highways, all new starters are also tested at induction. All employees were also subject to a major awareness campaign. Since 2004 they have carried out 9,832 D&A tests with 88 failures – none for alcohol and 95% for cannabis to date.

They also introduced their lightweight steel street works barrier system, reducing SLG category 1 failures by 86% in six months. Site accidents involving the public reduced dramatically. The rigid barriers cannot be pushed over, removing the potential for accidents involving falls into exposed excavations.

The group Accident Frequency Rate (AFR) was planned to reduce following the launch of IIF3. In their European Hub, they reached the 2010 target eighteen months early. In the utilities division, they beat the already-ambitious target of 0.1 AFR by a similar margin.

They introduced another first for utilities - enhanced training for EVERY operative (not just Gangers) to avoid utility strikes. All are now trained to Code of Practice 2 – Excavation In The Vicinity Of Buried Services, now mandatory on all their contracts. Simultaneously, all Operatives are retested in the use of Cat and Genny services detection. This initiative has lowered their London utility strike rate to less than one in 600 excavations, or just 0.0016%.

IIF Phase 4 rolled out in November 2010 and is designed to take the message further. Jenny Deeney again fronts the campaign and makes personal visits to sites to lead training sessions. She uses striking statistics to make her point – for example, since 2002, 318 soldiers have died in Iraq and Afghanistan. In the same period, in the UK, 609 construction workers have died.

#### **The Benefits**

- Clients have seen a marked drop in accident rates, which has been of reputational value.
- The public see the utility not the contractor when they see an excavation – therefore a safe, tidy and well-barriered site is in effect, a positive advertisement for the utility client.
- The public are exposed to far less risk by establishing safe and tidy sites.
- An Ipsos MORI staff survey in 2010 reported that 86% of Laing O'Rourke employees believe the company is committed to safety – enhancing their reputation internally.

