

Safety Breaches Leads to Prosecution

Foreword; Following an Explosion on a Licensed Forecourt when contract works were taking place, investigations by the Petroleum Licensing Authority revealed serious shortcomings in safety. The following article has been produced that all in the Industry may learn.

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At about 0900 on 24 August 2009 there was an explosion on a petrol filling station in Milton Keynes; the joint investigation by the Petroleum Officer, Brian Baker, and the Environmental Health Officer, Kim Bennett, resulted in two prosecutions being brought.

The Licensees of the site, Murco Petroleum, had decided, following investigation, to reline one of the underground petrol tanks on site. They had engaged a contractor to isolate the tank at the manifold prior to cleaning, degassing and relining. They engaged 1st Advance Tanks Pipeworks Ltd (now in liquidation) (1st Advance) as the main contractor for the work. They in turn engaged Airblast (East Anglia) Ltd (Airblast) to shot blast the inner surface to prepare it to receive the new lining.

On 12 August 2009, the tank was isolated at the manifold, cleaned and degassed. A gas free certificate was issued to this effect by the employee of 1st Advance who had carried out the work. The certificate was only valid for eight hours, but no checks were carried out on the day to ensure that the tank was gas free.

There were issues with the sufficiency and

suitability of the risk assessment and method statement supplied by 1st Advance to Murco and to Brian Baker; there were several versions of the documents, none of which were deemed adequate for the task and which did not cover the shot blasting activity. Airblast did not supply any relevant documentation and the 1st Advance risk assessment did not cover the shot blasting activity on their behalf.

On 24 August 2009, Alan Greenstreet from 1st Advance came to the site, but did not have all the necessary equipment with him to carry out the work. He was not to have been the supervising operative on site, but assumed that role when the two operatives from Airblast also arrived on site. Mr Greenstreet did not take them through the induction required by the Method Statement, nor did he carry out any checks on their equipment to ensure that it was in good order and safe for use in a Zone 0 environment. No checks were made for petroleum vapour before the tank chamber lids were lifted and no safety equipment such as fire extinguishers was deployed.

A tanker delivery was expected that morning, and when it arrived, Mr Greenstreet backed it in, acting as a banks man, then he and the other operatives continued to work in and around the area, including entering the chamber over the tank. The fencing was not erected until about 0845 although work had already started, nor was any safety equipment in use, including appropriate Personal Protective Equipment. One of the operative's boots had a part of the metal toe cap showing and none were wearing the correct over-clothing.

Although a colleague of Mr Greenstreet was due on site with the fire extinguishers and venturi for

degassing the tank and to oversee operations, it was decided to begin the work. Although the three men said that they had smelled petrol vapour, they did not check for it, despite the fact that Mr Greenstreet had a VOC meter of his own; the meter had not been issued by 1st Advance and was overdue its calibration. The three decided to use the breathing apparatus supplied by Airblast to vent the tank, although it was not ATEX marked and was not adequate for the task.

The tank lid was opened and a ladder put into it to allow access. One of the Airblast operatives then put a broken halogen light – bought from a builders' merchant for £9.99 and modified with additional flex – into the tank and an explosion occurred. The operative suffered minor burns to his face and hands (he was able to return to work after 11 days), but no other injury resulted. There was minor damage to the glass doors of an adjoining business. The fire brigade attended, but soon declared the area safe.

The investigation by Mr Baker and Mrs Bennett revealed that the system of work on site was unsafe, that the risk assessment and method statement from 1st Advance were inadequate, those from Airblast non-existent, the equipment and clothing provided to the operatives were unsuitable and the management of health and safety on site and in the companies was inadequate. This was compounded by the poor checking of the subcontractor by 1st Advance to ensure that they were able to carry out the work in compliance with the Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR).

Improvement Notices were served under the Health and Safety at Work etc Act 1974 on 1st

Advance and Airblast requiring them to provide adequate generic risk assessments for the type of work which they were carrying out, and on Airblast to provide suitable equipment and training for their staff. 1st Advance complied with the Notice by providing the required documentation. Following the incident, Airblast immediately withdrew from petroleum related work, thereby complying with the notice by "any other means acceptable to the Environmental Health Officer".

It transpired that the operative who had put the lamp into the tank had previously been told by a colleague of Mr Greenstreet that it was not suitable for use on a petrol filling station, but he did not make any checks to ensure that such equipment was not in use. Consideration was originally given to taking six prosecution cases, although the case against Murco Petroleum was quickly dropped as they were able to demonstrate that they had systems in place for managing contractors and had taken immediate steps to improve upon them and to ensure that all their contractors and subcontractors were adequately trained and had the correct documentation and systems in place.

The two Airblast operatives were not prosecuted, not even the one who put the lamp into the tank. HSE guidance on the prosecution of individuals states that they should not be prosecuted where it can be shown that their employer is greatly at fault. It was also acknowledged that the more culpable of the two had suffered some personal injury. 1st Advance were served with two summonses – one under Health and Safety at Work etc Act 1974 Section 2 and 3 for failing to ensure that their employees and those not employed by them but who might be affected by

their operations were safe, andone under the management of Health and Safety at Work Regulations 1999 Regulation 5 for management failures. However, the company went into liquidation before the case was heard in court and the summonses were withdrawn.

Airblast were served with two summonses in the same terms as 1st Advance, and pleaded guilty at the earliest possible opportunity - this means that any fine which might be imposed is automatically reduced by one third. The Regulation 5 offence was subsumed into the Section 2 and 3 offence on the understanding that all the matters which contributed to the offence were taken into consideration. These included:

- Failure to provide a suitable and sufficient risk assessment and method statement for the shot blasting operation on a petrol filling station
- Failure to provide adequate information and training to their employees
- Failure to provide intrinsically safe equipment
- Failure to make provision to deal with emergencies e.g. by having a man down procedure
- Failure to provide safety equipment e.g. a calibrated VOC meter, fire extinguishers etc

The company had decided immediately after the incident to withdraw from any work on petrol stations as they did not have the correct, intrinsically safe equipment nor the expertise to continue in this work and did not carry out enough of the work to justify the expense of providing ATEX marked equipment. This was taken onto consideration at sentencing as was their full cooperation with the investigation throughout.

Alan Greenstreet was prosecuted under Health and Safety at Work etc. Act 1974 Section 7, to which charge he pleaded guilty, choosing to represent himself. This section of the Act places duties and responsibilities on the individualemployee to look after his own health and safety and that of others, and to follow the reasonable instructions of his employer. The HSE guidance on this point was taken into consideration, but it was agreed that he had committed acts of omission and commission that were over and above the failings of his employer. In particular:

- He had not followed the requirements of the method statement provided by 1st Advance, although it was acknowledged that this was inadequate in many areas
- He did not wear the PPE provided
- He allowed unsafe equipment to be used
- He did not ensure that safety equipment was in place e.g. fire extinguishers etc.
- He continued working in the area of the tanks despite having all three operatives complaining of the presence of petroleum vapour that "made their eyes water"
- He entered the tank top and allowed others to do so during the tanker delivery

The case was heard at Milton Keynes Magistrates' Court on 2 May 2012. After hearing a summary of

the evidence from Barry Berlin of St Philip's Chambers on behalf of Milton Keynes Council, and mitigation from Mr Whipps, solicitor for Airblast and Mr Greenstreet representing himself, the magistrates decided that the matter should be referred to the crown court at Aylesbury for sentencing. The magistrates felt that their sentencing powers were inadequate for a case where the potential for harm to the persons working on the site and to the public, including the adjacent housing, public house and car showroom was very high.

The case was heard in the crown court on 13 July 2012. His Honour Judge Sheridan complimented Mrs Bennett and Mr Baker on the thorough investigation and the excellent bundle provided to him. He acknowledged the full cooperation of Airblast throughout, acknowledged that they had withdrawn from work on petrol stations, that they were a good company who had an exemplaryrecord in over 20 years of trading, and that they were not motivated by greed. However, there had been a catastrophic failure to operate appropriately and he wanted to send out a clear deterrent message when sentencing; he did not want to put the Company out of business. He imposed a fine of £38,000 (including the reduction) and awarded costs of £25,136.30.

The Judge accepted that Mr Greenstreet had not had adequate training from his employer, but that he had been at fault. He was fined £2500 and awarded costs of £2500. He apologised that he could not award the full costs to Milton Keynes Council, but precedent forbade it. It is the duty of all companies employing contractors to ensure that the contractors they engage have the correct expertise and knowledge, equipment, risk assessments and method statements, together with adequately trained personnel to undertake work. This is particularly important when working on a petrol filling station.

Further advice on this matter can be found at: http://www.hse.gov.uk/pubns/books/hsg159.htm.

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