



The Root Cause of the BP Leak

Trevor Kletz / July 2010

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There has been much discussion of the immediate technical causes of the 2010 BP oil leaks, but the underlying or root cause was a change in the culture of the company as a whole, particularly in the US. Back in the 1960s and 1970s, BP had a good safety record and safety culture. Why has it changed ?

Every manager in the chemical and oil industries (and no doubt many others) knows that many operators, maintenance workers, foremen and shift managers, that is many of the non-professional staff, will start taking short cuts or stop following instructions if they can get away with it. Their attitude is a macho one, that their job is to make product, not fill in forms such as permits-to-work. Professional staff, at all levels, should check details frequently or the procedures will corrode faster than the steelwork and soon vanish without trace. It is not enough for the professional staff to take a helicopter view.

On many, perhaps most, offshore rigs and platforms, the senior person in charge is usually someone who has risen from the ranks and would have been a foreman or shift manager if he had stayed onshore.

While professional staff visit from time to time there is no day-to-day checking. When there is a problem, the attitude of the senior person on the rig or platform is often a macho one: "Forget (or a shorter word) the rules. Let's get stuck in and finish the job."

Over recent years, BP and other large oil companies have concentrated their efforts on acquiring oilfields and getting the oil out. They have sold all or most of their refineries and chemical plants and consider any that are left as equipment of minor importance. Most of their profits come from crude oil and from equipment that is managed in a macho way. The whole culture of the company becomes macho, from the bottom up rather than the top down.

I am not suggesting that the BP directors agreed that the company should change its attitude to safety or turn a blind eye to changes that had happened. Changes occurred gradually and no one realised that they were happening. Since the explosion at Flixborough, UK in 1974 most companies have realised that before any changes are made to plants, processes or organisations, the possible consequences

should be considered. However, gradual changes may not be recognised.

If a frog is put in hot water it jumps out. If it is put in cold water which is then gradually heated, it stays there until it dies. A similar phenomenon occurred in BP. Minor changes were made and in time became custom and practice. For a long time nothing happened, and then major incidents occurred. Once something becomes custom and practice, it is hard to change it. People are not putty in the hands of professional staff. They are more like rubber. Custom and practice restrain and push back.

The phenomenon I have described was also a root cause of the 2005 explosion on BP's Texas City plant - the macho culture spread to the whole company, not just the offshore parts. A similar phenomenon occurred in Buncefield, UK which resulted in the 2005 explosion there.

It is easy to point the finger at the management and assume that a culture of cutting corners started at the top, and was motivated by money. It's worth remembering that the same culture can also originate at the bottom, driven by the desire to get the job done. The task of management is to know this and make sure it is done properly.

The distinguished archaeologist, Lawrence Stager, in an interview in *Biblical Archaeology Review*, July/August 2010, shows that the culture and actions of societies are often those of the people at the bottom of the ladder rather than those at the top. He writes: "What I detect is that tribalism is never excluded or extinguished by state formation in the Ancient Near East. Even after kingship is established, these bonds of kinship, clans, lineages, tribes persist. They don't always make it into the court literature because that's not what they are writing about. They're interested in the kings and the courts, but

the persistent tribalism is there never the less. ... The people of the land decide who the next king is going to be."

Later, Stager says that though tribalism is strong in villages it also occurs in cities, today in Iraq and Afghanistan. If Tony Hayward is forced to resign it will be due to the actions of today's tribes.

Trevor Kletz : After graduating in chemistry at Liverpool University in 1944, Trevor Kletz joined Imperial Chemical Industries (ICI) and spent eight years in research, sixteen in production management and the last fourteen as safety adviser to the Petrochemicals Division. In 1978 he was appointed an Industrial Professor at Loughborough University. On retiring from ICI in 1982 he joined the University full-time; in 1986 he became a Visiting Fellow and is now a Visiting Professor at Loughborough and has been one at Texas A&M University. He was appointed an OBE in 1997.

He is Fellow of the Royal Academy of Engineering, the Institution of Chemical Engineers, the Royal Society of Chemistry and American Institute of Chemical Engineers. He is also an Honorary Fellow of the Institute of Occupational Safety and Health and the Safety and Reliability Society.

He has written eleven books, over a hundred reviewed papers and over three hundred short articles on loss prevention and process safety.

