



In Case of Fire

Risk prevention should be a priority after the Shanghai blaze. How can another disaster be avoided?

By Bruno Lhopiteau

THE 15 NOVEMBER BLAZE IN Shanghai put risk prevention in the spotlight. Unlike mining accidents and other industrial mishaps, this was a tragedy that everyone could relate to; a fire that killed 58 middle-class denizens in a downtown residential building.

China's businesses are now more and more aware of risk. They are ready to learn from past mistakes; but even so, there is still some way to go.

Pointing Fingers

What causes an accident in China?

The blame for 15 November has fallen on unlicensed welders, poor supervision, and cascading subcontracting. But these are the rule rather than the exception in China construction projects. International certification agencies report that 40 per cent of inspected buildings are found to be non-compliant with fire safety regulations. In most cases the fire-fighting system is not functioning at all due to design, installation or maintenance problems. Alarm systems have not been switched on, in order to avoid disturbance by spurious alarms; the water lacks pressure, thanks to disconnected pipes; and there's no power, because no one ever checked. Knowing that regulations exist even though they are seldom enforced, in the week following the fire Shanghai officials announced a crack-down on the "chaos and lack of order found in the city's construction market."

But interestingly, discussions on fire safety almost invariably focus on the fire-

fighting system and the so-called 'new' 2009 fire law. True prevention, as in eliminating the causes of fire, is usually overlooked.

More often than not, it is wrong to assume that these technical issues are easily dealt with by the people in charge.

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The Chinese reality happens to be quite different. It is very difficult, for example, to make certain that systems have been checked in accordance with official guidelines.

Add to this a preference for fixing problems as they occur, shooting for the quick-fix rather than eliminating the root causes. Although the common sense concept of prevention may be understood in theory, it is almost never implemented in practice.

Too Little, Too Late

The same pattern of mitigation rather than prevention, the same disconnection between management and the technical reality, is observed in the way companies deal with other technical risks. Unfortunately, managers often experience a major accident before they come to realise that there is a problem with the routine technical work they used to take for granted.

One of my clients, a major MNC, was faced with a totally disorganised factory under the leadership of a senior production manager who relied on 'good' technicians. Unfortunately the only 'good' people he found all left within a few months. The production lines were experiencing abnormally fast aging, leading to increasing losses, which seemed totally out of control. Work procedures existed on paper, but the shop-floor was a mess. They flew in the experts to lecture locals on their shortcomings, with predictably disappointing results. They hired headhunters to recruit more 'good' people. This company talked to us for years, unable to decide what to do.

They carried on like this until one of their workers was killed in an accident. With no safety guideline in place, he had attempted to repair a machine with the power on and suffered a fatal electric shock. After years of procrastination, this sad event was a wake-up call.

Western companies often make this mistake, thinking that the technical

aspects of running a business are the same everywhere. They assume technical management skills are readily available, and try to apply Western solutions to typically Chinese situations. As in the example above, this leads to recurring problems, frequently blamed on individual people. The quick turnover of both expatriate and local managers, and stock-listed MNCs' focus on the short-term, do not help.

A Learning Curve

Some key risk management principles are now sinking in. For example, it is increasingly known that the use of mandatory and independent third-parties to audit a system is more reliable than on-the-spot checks. In November Shanghai's mayor Han Zheng even noted that, "Many construction sites knew in advance when inspections were due to take place".

There is also a better understanding of the merits of your own compliance team, whose integrity is worth more than a few packs of cigarettes.

The financial crisis helped to change perspectives, encouraging an increasing emphasis on long-term risk. This was especially the case for the biggest investors who have some history in China and a more in-depth understanding of local needs.

The increasing complexity of the technologies is a further key factor adding pressure here. This has helped some companies to see that an unlimited supply of manpower and equipment is no longer the answer: skills, methodology and technological know-how have become critical. This trend has clearly gained strength in light of the recent disasters.

The Great Unknowns

There are a number of other useful points whose importance has yet to be fully appreciated.

Firstly, it is the owners who carry the risk. This is true regardless of who actually does

the work – whether it is verifications by the Fire Bureau or maintenance by Facility Management service providers. The owner must take action accordingly. As far as fire safety is concerned, this is exactly what the 2009 law says. Outsourcing technical services does not help; in the immature Chinese market, only cost is outsourced, not risk.

It is also vital to find a way to make sure that critical inspections – for instance, inspections of the fire safety system – have actually been carried out. This is possible. Most paper records are filled in on the understanding that the individual knew it was working; relatively simple methods

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can be used to back up check their claims. Some of our customers have bar-coded their assets and equipped their supervisors with mobile devices, making it mandatory to scan the tags in order to confirm that inspections have been completed. This ensures that technicians have at least been to the specific inspection points.

As the Shanghai disaster illustrated, tabs should also be kept on subcontractors. The strict control of multi-layer subcontracting is not yet common, but highly recommended.

IT systems can be added as a structuring tool to support methodologies and best practices, allowing companies to become

less dependent on 'good' people in a market where a skills shortage and high turnover rate are common problems. This is very different from the West, where IT is used to increase efficiency – and eventually to reduce headcount. Training is forgotten after a while or deemed 'not applicable to real life' and handbooks often end up on the shelf, while experience has shown that IT systems serving the same purpose are very well accepted.

It is critical to be involved in these issues as early as possible, to be on point right from the construction stage. This will insure that there is a chance to compensate for some of the local engineering companies' weaknesses, which could lead to an unpleasant situation where "the baby was born with a lot of defects," as the representative of a major retailer recently put it. Issues relating to design, the choice of material, installation, subcontracting and as-built documentation can all heavily impact operations.

Moving On

The realisation that risk prevention relies on the daily work of technical people is the key to successful risk prevention. As those technicians are Chinese, western solutions tend not to work and a localised approach must be adopted, with key components as described here. This is essentially what the 2009 fire law is also saying. As seen in the aftermath of the Shanghai blaze, increased media coverage and growing public awareness will help the authorities to better enforce existing regulations. **SBR**

About the author: *Bruno Lhopiteau has been working with technical risk prevention in China for over 12 years. He is the General Manager of Siveco China, the country's largest maintenance consultancy.*