Fuel Theft Prevention from Oil Tanks

The theft of fuel from external storage tanks is an ongoing problem. Incidents of fuel theft increase correspondingly with rises in fuel prices. A tank full of fuel can represent an investment of several thousand pounds and suitable security measures should be put in place to safeguard the contents of the tank. This Risktopic deals with practical measures that can be taken to increase the security of externally sited, above ground fuel tanks.

**Introduction**

Thieves are relentless in the pursuit of what they want to steal and safety is rarely their top priority. Although the contents of fuel and oil storage tanks are likely to be flammable or combustible, thieves will not hesitate to use drills and blow torches to help them empty a tank of its contents. The fuel or oil could easily be set alight by sparks during a theft involving the use of drilling or blow torch equipment. One false move by the thief could not only result in the loss of the tank’s contents but could also result in a catastrophic fire loss to the tank and any adjacent buildings, plant or machinery. This in turn could cause an extended period of interruption to the business and project completion delays for construction sites.

**Tank Location**

The location of the storage tank should be planned, with security in mind, prior to installation. Consideration can also be given to relocating storage tanks if there has been a history of theft at the site. The following factors should be taken into account when deciding where to locate a fuel storage tank:

- Consider locating the tank within a secure outbuilding that can be locked at night, keeping the fuel tank out of sight.
- If it is not possible to site the tank within a building, locate the storage tank within a secure, perimeter fenced yard. ‘Closed’ fencing (such as timber panels), should not be used for perimeter fencing as this may allow thieves to operate unseen if they get behind the fencing. See Zurich’s Risktopic entitled A Guide to Security Fencing for more information.
• The storage tank should be located away from the actual perimeter fencing, ensuring that thieves cannot break into the tank by reaching through the fence.
• In addition to site perimeter fencing, consider the installation of security fencing around the tank storage area to form a secure storage compound. When designing the compound, care should be taken to ensure that the delivery tanker is able to access the tank for refilling.
• Locate the tank in an area which is well lit at night. Thieves do not like to be visible.
• Do not hide the tank away behind buildings as this will provide cover for thieves if they gain access to the site. Instead, locate tanks where they may be visible by neighbours (especially if your premises are overlooked by residential housing) and leave contact details with neighbours, encouraging them to report any suspicious activity.

Control/Filling Equipment

Oil and fuel storage tanks may be used for different reasons. Fuel tanks may have manual dispensing nozzles, while some tanks may have electric pump controls. Whichever type of equipment is fitted, suitable security arrangements should be put in place as follows:

• Manual fuel dispensing nozzles should be locked when not in use.
• Electric pump controls should be locked and isolated from the power supply when not in use.
• Consideration should be given to locating pump controls within secure buildings.
• All filling points and drain valves should be suitably locked. It is possible to source lockable caps that, when locked, spin freely to prevent them being broken by force.

If using padlocks to secure nozzles, ensure that close shackle padlocks are used as these make it more difficult for thieves to use bolt-cutters to remove the padlock.

Monitoring Equipment

In addition to physical locking devices, it is possible to install tank monitoring alarms that will sound an alarm if the contents of the tank reduce rapidly. This can help to identify leakage from storage tanks as well as thefts. Some monitors are available with GSM technology so the alarm can be raised via SMS text to a mobile phone, even when the premises are closed for business.

Electronic Security

For tanks that are stored inside buildings, consider extending any existing intruder alarm systems to provide coverage of the fuel storage area. Where tanks are located externally, within a perimeter fenced yard, it is possible to alarm the perimeter of the yard with infra-red beam technology. This will allow the alarm to be sounded before the thieves even reach the fuel tank.

CCTV systems act as a good deterrent against thieves. Consider providing security cameras to cover the fuel tank location. Cameras can be placed in clearly visible locations to act as a visual deterrent but should be well secured and out of reach to ensure they can’t be tampered with. Ideally CCTV images should be remotely monitored so that an early response can be provided to any suspicious activity but, where this is not possible, the images should at least be recorded to hard drive.
General Security Measures

As well as locking tanks and providing electronic and monitoring security, the following general precautions can be taken to make the theft of fuel difficult for thieves:

- Provide entrance controls to the site. Ensure that visitors sign in and out and, where possible, ensure that visitors are accompanied around the site.
- Periodically change access codes or keys, especially when staff leave the company through dismissal or redundancy.
- Thieves have been known to use their own tankers to extract fuel from tanks. Restrict vehicular access to approved suppliers only and make it difficult for vehicles to get close to fuel storage tanks out of business hours.
- Fuel delivery vehicles are often followed from supply depots, allowing thieves to identify storage tanks that have recently been filled. Make employees aware of the security risks relating to fuel/oil storage and encourage them to report any suspicious activity, especially while oil is being delivered.
- Schedule deliveries for times when the site is manned.
- Employ a security guarding firm to carry out nightly patrols of the site at different times and display signs to this effect.
- Carry out regular maintenance checks of fencing.

Summary

The theft of fuel and oil from external storage tanks has increased in recent years as a direct consequence of rising fuel prices. External storage tanks are often provided with very little security, making the theft of oil a low risk - high return proposition for thieves. This Risktopic has focused on various measures that can be taken to help prevent the theft of a valuable commodity. Zurich recommends that, a combination of these risk control measures are put in place to minimise the risk of theft – merely using locks to secure oil tanks is not considered to provide a good level of security as thieves can easily puncture tanks, causing not only a monetary loss from the theft of the oil or fuel but also potentially high costs for cleaning up any oil or fuel that has spilt from the tank onto the ground or run into local watercourses.
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CONTACT

Risk Engineering
Risk Support Services
126 Hagley Road
Edgbaston
Birmingham
B16 9PF

Phone +44 (0) 121 697 9131
www.zurich.com

For more information please visit:
www.zurich.com/riskengineering

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