Confused about COMAH?

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Relevant Good Practice (RGP) Audits

In previous posts my colleagues and I have discussed; how to define a representative set of Major Accident Hazard scenarios for the purposes of a COMAH Safety Report submission, consequence modelling and frequency assessments (Consequence – Likelihood Ranking) in order to assess the risk associated with the representative scenarios, and how to be an intelligent customer when outsourcing consequence modelling. The next step of the COMAH process requires the operator to demonstrate that they are compliant with ‘Relevant Good Practice’ (RGP).

What is Relevant Good Practice?

The HSE defines good practice as “the generic term for those standards for controlling risk which have been judged and recognised by the HSE as satisfying the law when applied to a particular relevant case in an appropriate manner”. In other words, ‘good practice’ is the legal minimum standard that is to be reached for a particular application, and the RGP audits are conducted to highlight any gaps to this minimum requirement. Where gaps are identified these must be carefully justified or else a plan to ensure full compliance is achieved in an appropriate timescale must be put in place. Good practice is distinct from ‘best practice’ which describes a standard that exceeds the legal minimum.

There are many different sources of good practice including, but not limited to; HSE Guidance, HSE ACOPs, guidance from trade federations or professional institutions, and standards e.g. British Standards. However, where it is sometimes very clear what represents good practice for a system or piece of equipment it is often not so straightforward! For instance, BS EN 746-2 gives very prescriptive guidance on good practice for protective systems on fired equipment, whereas other items of equipment such as reactors, columns, or pumps don’t have clearly defined RGP.
Why do I need to review my RGP Audits?

It is important to recognise that what is considered to be good practice may change over time and the source material may be updated. It is for this reason that RGP audits are reviewed at the five-yearly COMAH review. Good practice may change for many reasons including, new learning from process safety incidents and increased knowledge about the hazards involved, technological innovation, reduction in the cost of controls, or because of changes in management practices. For instance, prior to the Buncefield incident in 2005 large explosions were not associated with overfill of storage tanks containing flammable liquids and the RGP for these tanks, HSG176, recommended the use of a high-level alarm in mitigating overfill. The Buncefield Report was published in the wake of the incident, this was much more prescriptive and recommended a high integrity overfill prevention system, providing, as a minimum, a level of SIL 1 as defined in BS EN 61511-1. The new version of HSG176 published in 2015 now refers to the Buncefield Report recommendations on level gauging and overfill protection for in-scope tanks.

The changes to RGP with time may not always be for the better! The HSE used to publish HSG30 which gave guidance on the storage of anhydrous ammonia, however, this was withdrawn and not replaced meaning that there is no longer a standard source of RGP for ammonia storage. Many copies of HSG30 still exist, so it is still used, but the guidance within is not updated and is out of date. Some use ANSI-CGA2.1-2014 in place of HSG30, but this is an American standard and therefore may not be seen as RGP outside of America. This leads us to the next point...

Is RGP always consistent globally?

The short answer is no! It is important to consider the location of your process and recognise that what is good practice in one country may be different in another. In France, for example, RGP from the regulator suggests that ethylene oxide storage tanks should be buried to avoid the occurrence of BLEVEs. However, in many other countries, including the UK, this is not the case! Investigating what RGP is applicable to the location of your process and getting buy-in from the relevant Competent Authority is best done early in the design stages of a project, where making any necessary significant alterations is cheaper.

There is no RGP for my equipment/process! What should I do?

As we have already discussed, it is sometimes the case that RGP for a piece of equipment or a process may not be clearly defined. At this point the onus falls on the operator to determine what other companies in their industry sector do and then justify to the Competent Authority why their own arrangement is suitable in comparison. If a particular material is being used in the process, guidance on RGP for handling this material may be sought from expert suppliers. In fact, certain suppliers may insist on auditing their customer’s facilities!

This is all well and good, but an operator may find themselves in a situation where they are producing a novel product meaning that there are no similar processes to draw a comparison with. This is another case where the operator will need to justify the choices of equipment and operating practices that they have made to the Competent Authority in their pre start-up COMAH Report, which will likely involve an element of negotiation. As with any negotiation, it is possible that compromises will have to be reached which may mean that design changes are required. Starting the discussion with your Competent Authority as early as possible is the best way to minimise the impact of any changes that may be required.
I’m Compliant with RGP, so What’s Next?

Compliance with RGP doesn’t necessarily mean that your residual risk is ALARP, however the plant operator has a legal duty to ensure that this is achieved. In the next in our series of blogs we examine ALARP Demonstration and discuss some of the common pitfalls during this process.

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For further information see our COMAH web pages