

CIMAH to COMAH

Information to Demonstration

or

Irritation to Distraction

Experience

- *Involved with CIMAH report update in 1993/4 on ICI Castner Kellner site*
- *Provided services for original CIMAH companies transferring to COMAH (2000)*
- *Major involvement with 14 upper tier COMAH cases with Haztech Consultants Ltd (combination of CIMAH & non CIMAH sites)*
- *Provided COMAH training to a number of companies*

CIMAH recap

- *Seveso I directive Control of Industrial Major Accident Hazards 1999*



CIMAH Requirements

- *Site Safety Report*
- *Description of safety systems*
- *Emergency plan*
- *Covered mostly larger sites*
- *Emphasis on description*

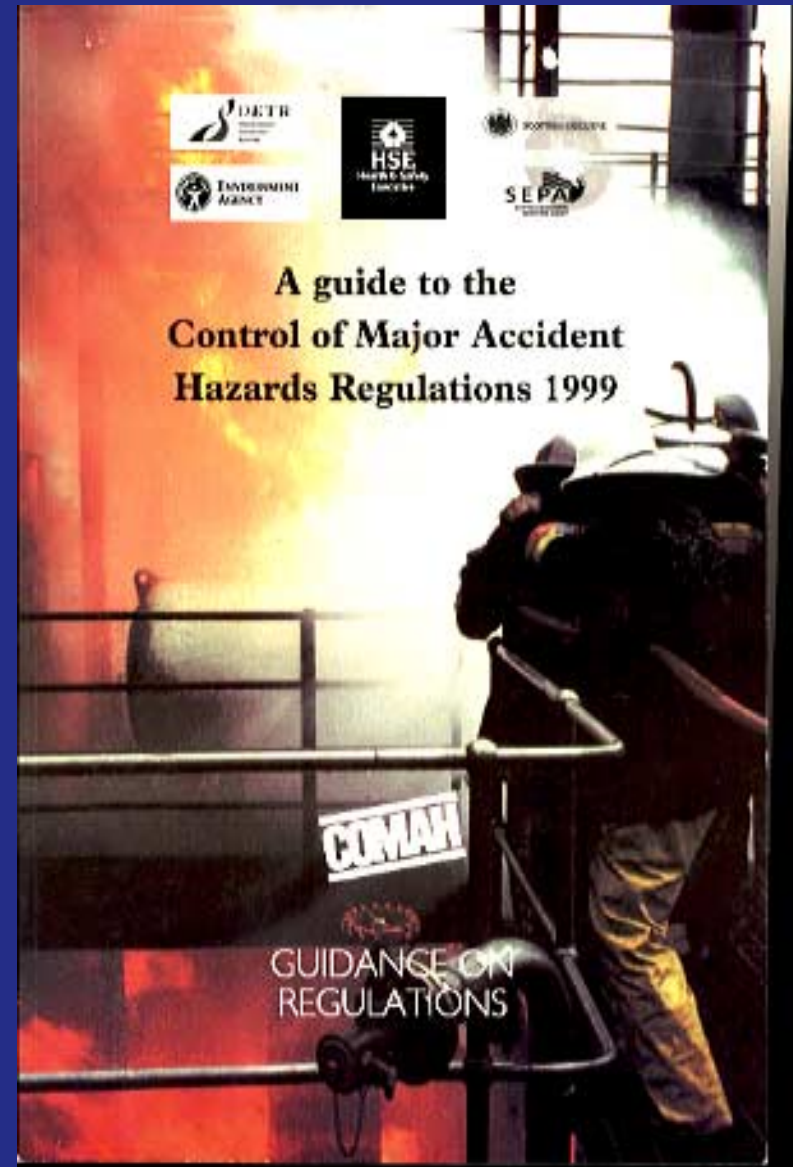


Main differences

- *Preparation of a Major Accident Prevention Policy (MAPPP)*
- *Domino events have to be taken into account*
- *Reports are accessible to the public*
- *More chemicals and sites need to be notified*
- *Demonstrations are required to show how systems function*
- *HSE & CA conduct formal assessments with the power to serve Prohibition / Improvement notices*
- *Industry pays for CA involvement*

COMAH

- *Two tiers*
- *Reduced inventories*
- *More smaller sites*
- *Emphasis very much on demonstration*
- *ALARP concept*
- *Extent & severity*
- *More prescriptive content*



Problems encountered



- *Amount of paper!*
- *Lack of guidance*
- *Evolution of guidance*
- *Level of detail required*
- *Proportionality*
- *No fixed end point*
- *Charging regime*
- *Improvement notices*

Example 1 – Jet A1 Tanks



CA response ...

Jet A1 Aviation fuel storage tanks

Inspection of the hazard and risk section for Jet A1 installation states that areas are kept clear of absorbent material yet the key risk control measures section states that spill kits are available. This appears to be contradictory.

Is it not obvious that spill kits are stored in a box and not left lying round in the bund?

Example 2

- *Chlorine storage & process plant (existing)*
~250 tonnes in storage / process

CA feedback asked why total containment of all Cl₂ process plant & equipment had not been considered for ALARP

The resultant building would have been big enough to house 8 Jumbo jets and the scrubber the size of a Saturn V rocket – which was clear from the site plan provided. Site was also fully compliant with HSG28.

Guidance example

- *Extent & Severity for identified MAHs*
 - *Industry interpretation very different from HSE*
 - *Public domain & risk perception*
 - *Led to many reports being rejected*
 - *Definitive guidance produced March 2002*
- *Estimation of casualties*
 - *Toxicity data only available via HSE*
 - *Not published until May 2002*
 - *Along with method for casualty estimation*
- *Inevitably led to recycle of reports*

ALARP principle

- *Major bone of contention*
- *Originally could be any of the following:*
 - *Equity based (Defined maximum level of risk)*
 - *Utility Based (CBA)*
 - *Technology Based (relevant best practice adopted)*
- *Later...*
- *Based on quantification of risk (TOR / R2P2)*
- *Guidance changed after submission of first reports*
 - *Technical measures*
 - *What else can be done*

ALARP

Mr Fidell expressed concern that compliance with the LPG industry's codes of practice which had been developed in conjunction with HSE, was not being accepted by inspectors as demonstration that risks were as low as reasonably practicable (ALARP). His concern was shared by Mr McPherson and Mr Musgrave.

It was suggested that in practice, few sites do comply fully the relevant codes of practice and moreover, it was for the inspector to judge whether compliance provided adequate demonstration or whether account also needed to be taken of changes/developments in technical standards.

In this respect however, Mr Fidell pointed out that the codes of practice were subject to review and updating every two years, and it was therefore reasonable to seek agreement that compliance would be accepted as "demonstration of ALARP".

HSE COMAH charging Review Group Sept 2001

Cost

- *Financial costs underestimated by a significant amount: original estimate £80 – £120k*
- *Typical cost more like £250k – £500k for small to medium size site*
- *Plus ongoing inspection costs*
- *Excessive burden on smaller companies e.g. fine chemical sector*



Hidden costs

- *Loss of production / reduction in available safety resource*
- *Use of safety budget deferred other items for SR writing*
- *Loss of jobs (closure of marginal plants)*
- *Loss of goodwill between industry / CA*



Benchmarking

- *Benchmarking => ALARP demonstration*
- *Compare UK implementation with other EU countries e.g. Ireland, France, Italy*
- *Reports much smaller, lower level of detail & less rigorous enforcement*
- *Analogous to Fireworks industry where almost all production now in China*
- *Bad feeling from enforcement by Improvement Notice system*
- *Should we also benchmark CA performance?*

Learning points

- *Regulatory Impact Assessment*
- *Accurate costs essential*
- *Benchmarking with EU*
- *Guidance*
- *Workload*
- *Stress!*



In Summary

- *Financial cost to British industry*
- *Guidance / timing*
- *Negative effect of prescriptive enforcement*
- *Deterioration in relationship with CA*
- *Value of COMAH (lives saved)?*
 - *Comparison with other industries*



The friendly HSE inspector may get a cooler reception post-COMAH!