

COMAH Competent Authority (CA) consultation on: Containment of bulk hazardous liquids at COMAH Establishments

Buncefield Board response

1. Introduction and overview

1. We welcome the consultation document and support its broad aims. We notice that in places it calls for compliance with the policy, and in other places for compliance with raised standards. Standards are often qualified as 'adequate', 'appropriate' 'sufficient' etc but are generally not specific - with notable exceptions. We wonder to what extent the specific recommendations can be insisted upon by law and whether you believe changes to existing legal provisions might be required? We also wonder how the regulator intends to identify the relevant standards in order that broadly similar risks may have more consistent control measures applied to them than is currently the case in the sector.
2. We welcome, also, the broad scope of the consultation document but believe there is a risk of a narrower than intended interpretation of its scope by industry. The recommendations in the Buncefield Standards Task Group (BSTG) final report, for example, apply only to storage of highly flammable liquids such as petrol. We anticipate the sector will continue to develop recommendations to meet the standards called for in the MIIB's 5th report¹ and we believe that a firm stance by the regulator towards broadening rather than reducing the scope will give appropriate encouragement to the sector. We return to this issue in some of the following paragraphs.
3. Our 5th report gives a clear indication of the measures and standards we expect to see at fuel storage sites, and we believe the process of implementing them is a matter of the regulator agreeing site-specific timed action plans with duty holders, (para 13) that has due regard to costs (para 14) and strategic fuel supply issues (para 24). Therefore we would prefer not to give an impression to operators that long time scales are generally acceptable – they may be in particular cases, but this should in our view be subject to the outcome of a review by the CA of site specific proposals made by an operator. As written in the consultation document, we believe the suggested implementation period of up to 20 years is likely to be open to criticism.
4. Our 5th report calls for a consistent methodology agreed with the CA to determine the level of integrity required at each site. All engineering and operations standards would then flow from this starting point. So far, the consistent methodology has not emerged from the work of the BSTG and we would hope the CA ensures that this outcome is achieved, perhaps by suitable amendment of Part 3 of the consultation document.

¹ 'Recommendations on the design and operation of fuel storage sites' Published March 2007. Paragraph 9 ('Scope of the recommendations') applies the recommendations to '...depots that store and transfer petroleum products on a large scale.'

5. We call specifically in our 5th report for independent automatic overfill protection systems for storage of petrol and other highly flammable liquids and we feel the draft policy at para 6 (Control Instrumentation) may be interpreted by the sector as discretionary. We also feel the suggestion for ATG systems to be automated to be a little unclear and vulnerable to a narrowing of its application by some operators. We would prefer all of this part to be subject to engineering in accordance with BSEN 61511, having first determined the appropriate integrity level we refer to in the preceding paragraph, with also a fixed point of independent automatic overfill protection for tanks containing petrol and similar liquids.
6. We have called for specific measures to prevent escalation of loss of primary containment, such as improved detection, and note that this is covered in section 7 of Part 3 of the consultation document (Bunding and fire controls). We assume the term 'fire prevention' in this part refers to 'fire protection' and is meant to include the need to contain fire water and other products of fire fighting.
7. For secondary and tertiary containment we broadly support the performance standards proposed and we hope they will be underpinned by guidance from the CA that will assist the CA in agreeing priorities with site operators for any upgrades required to meet them. Formal standards for the performance outcomes to be achieved will help the CA to insist upon improvements where there is a lack of progress. We also think it would be helpful to discourage the use of detailed risk assessments to defend the status quo by having some very clear performance standards in key areas of containment.
8. Recommendations for improved planning for firefighting are welcomed and align with our 6th report². We hope this will underpin our recommendations, particularly 23 – 26 which make specific recommendations for improved firefighting capability.
9. We welcome the reference to inter-site pipelines (para 3), but we believe more could be said in terms of performance standards. In a high integrity system the pipeline infrastructure should be engineered and operated so as to not infringe the safety integrity level of the depots and refineries that it joins together. We believe this was intended by the BSTG initial report of October 2006.
10. Finally we believe you might wish to say more about human reliability in paras 14 and 15 (Change Management, and Staffing). It would help to provide some definition of 'change management'. Our 5th report called for 'effectively managing changes that impact on people, processes and equipment'. You might find this a useful clarification.

2. Economic issues and the Regulatory Impact Assessment (RIA)

11. We appreciate it is difficult to fully quantify the costs and benefits of changes in containment policy on a national level because this would require a case by case analysis for each fuel storage site. Such analysis would be very costly and time consuming and we therefore accept that a general approach, presenting ranges for costs and benefits, is appropriate. Some of the large fixed cost or reliability assumptions are however open to challenge (see paragraphs below).

² 'Recommendations on the emergency preparedness for, response to and recovery from incidents'

12. As we have already indicated in responding to the HSE consultation document on land use planning and the Cabinet Office consultation document on societal risk, we believe that these consultations need to be taken together in developing policy.
13. A common issue – the risk to those off-site - is being addressed by all three. With separate policy consultations there is a danger that the majority of the costs of risk reduction could be imposed on either those off-site or the site operators and not apportioned fairly. There is also a possibility that risks would not be addressed appropriately, leading to unnecessary restrictions.
14. An improvement in containment measures on-site will reduce the level of risk faced by homeowners, businesses and others off-site. In turn this ought to reduce the restrictions in land use planning advice in order to achieve a desired level of risk reduction. In this scenario site operators would face the majority of the cost of risk reduction regardless of the behaviour of those off-site.
15. If the land use planning regime became more stringent then risks to those off-site would reduce and there could be a case for less restrictive containment measures. In this scenario the costs faced by those off-site – the opportunity cost of not developing land – would rise and more land would not be developed (though many of the containment policy improvements would no doubt be necessary anyway to control on-site risks to workers and to people affected by the undertakings to ALARP).
16. Because the total risk reduction benefit would be the sum of the risk reductions achieved through land use planning and societal risk restrictions and improved containment performance, the risk reduction benefits from all policy approaches should be integrated. In other words it seems to us to be likely that the best solution considers changes to the land use planning and societal risk regime in the light of improved safety integrity levels at high hazard sites.
17. Turning to the costs and benefits assumptions in the RIA, we are pleased to note that people advising us are in discussion with those advising on this consultation document and RIA to try to understand both the basis of the costs assumptions and the assumptions on which benefits are calculated. We welcome this, as we welcome the adoption of some ranges for costs and the use of a table to show the sensitivity of benefits to changes in the levels of risk.
18. As presently constructed there is reliance on assumptions that have a limited data range or none (e.g. a single cost of £500,000 for a tank upgrade) which could lead to unnecessary disputes about where the balance between costs and benefits lies. It is therefore important to try and get the agreement of industry, the regulator (and MIIB) on the assumptions used in the calculation of both costs and benefits.

3. Answers to the specific questions

Q1 Are the proposed policy measures appropriate for new installations?

19. We believe these measures should be implemented at new installations, and should be capable of being insisted upon by law. They should be underpinned by guidance and standards that can also be applied to existing installations that will be by far the most numerous high hazard sites.

Q2. Do you have any suggestions for alternative measures that will achieve an equivalent level of protection to people or the environment?

20. We have suggested in the preceding section a number of measures that we believe will strengthen the implementation of policy. Alternative measures will normally be allowable within a goal setting regime but the CA must make it clear where there is to be no discretion within a given timescale – such as in pipework penetration of bunds, and for independent automatic overfill protection of petrol tanks.

Q3. To what extent should existing establishments be upgraded to meet the proposed policy measures?

21. We believe this must be determined on a site specific basis with timed action plans. The presumption must be that sites will achieve the required standards needed to reach and maintain the safety integrity level. The CA should agree the priorities for action.

Q4. Do you agree with the costs and benefits of compliance with the policy on existing establishments, as described in the Regulatory Impact Assessment?

22. We believe the approach to generic cost benefit calculations is pragmatic and sensible. We also think the use of ranges for the costs assumptions, and the table to illustrate the sensitivity to change of the risk benefit calculations is the correct approach. However we would encourage discussion on the key cost assumptions, and the methodology for computing reductions in risk arising from improvements to integrity levels. As presented, some of the key assumptions are open to debate which, unless there is a measure of agreement on reasonableness, might undermine public confidence in the proposed approach.

Q5. Is the proposed implementation timetable achievable?

23. We believe the timetable is overly generous, and should not in any case be quantified in terms of numbers of years. We would prefer to see timescales that are contingent on plans agreed with the CA that have due regard to factors, such as levels of risk to be controlled, the gap between required standards and the status quo, costs, and strategic fuel supply issues.

Q6. What disproportionate effects will the policy have on small firms in the sector (defined by OECD as having fewer than 50 employees)?

24. This is a difficult question to answer. We are not sure how many small firms operate in the sector, and suspect they may be few in number. Smaller companies are at a greater corporate risk from a major accident at a storage site than a large oil company so it could be argued that 'disproportion' applies in reverse. We also note that relevant UK law does not relate compliance, or test reasonable practicability on the basis of a company's ability to pay. Nonetheless, the approach we suggest in answer to Q5 will allow the CA to optimise improvement programmes so as, for example, the work done on cheaper alternative remedies by richer companies and the trade associations can be shared throughout to the sector.