

To: Members of ACDS
Members of MHSC

FURTHER AMENDMENTS TO THE PIPELINES SAFETY REGULATIONS

The attached paper is to update members on the current position with amendments to the Pipelines Safety Regulations. It requires no formal action and is being circulated for comment as the next meeting is still some time away.

If you have any comments on the paper would you please let me have them by Friday 18 July 2003.

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ADVISORY COMMITTEE ON DANGEROUS SUBSTANCES

FURTHER AMENDMENTS TO THE PIPELINES SAFETY REGULATIONS 1996 - UPDATE

A Paper by Peter Sargent

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Cleared by Colin Potter on 20 June 2003

Issue

1. Proposals to amend the Pipelines Safety Regulations 1996.

Timing

2. Routine

Recommendation

3. Members are asked to note the proposals and agree the way forward.

Background

4. The Pipelines Safety Regulations 1996 (PSR) came into force on the 18th March 1996. They impose some general duties on all pipeline operators and additional duties on operators of Major Accident Hazard Pipelines (MAHPs), which are those pipelines carrying prescribed dangerous fluids.
5. ACDS has previously agreed to the Pipelines Safety Regulations being amended to:
 - (i) require local authority emergency plans to be tested
 - (ii) include gasoline as a dangerous fluid
 - (iii) clarify who is the duty holder in respect of duties imposed on operators and
 - (iv) require cooperation between designers, constructors and operators of pipelines.

These issues have been well documented and reported to ACDS previously but are summarised below.

(i) Testing of emergency plans

6. The additional duties include the preparation, by the local authority, of an emergency plan to deal with the consequences of a major accident to the pipeline but do not include a duty to test the emergency plan. This duty was deliberately not included at the time because the Control of Major Accident Hazard Regulations 1999 (COMAH) were under development and it was felt that PSR should be consistent with them. At its meeting on 16 June 1996 ACDS agreed with HSC's decision that PSR should be amended later to include both a duty to test emergency plans and a provision for local authorities to charge operators for the costs incurred in testing the plan. It is proposed to amend PSR to create the new duty and to produce supporting guidance.
7. Pipelines can pass through many local authority areas and operators are concerned that if every local authority tests its emergency plans for every pipeline passing through its area once every three years the total charges passed back to the operator could be excessive. We propose to examine ways of keeping the number of tests proportionate to the risks.

(ii) Gasoline pipelines

8. Gasoline is not a prescribed dangerous fluid for PSR purposes and therefore PSR's additional duties do not apply to gasoline pipelines. Although expected to be included in PSR until a late stage of development it was decided not to include it as research had indicated that the risks associated with gasoline pipelines were borderline. Later work confirmed this but indicated that gasoline should be designated a dangerous fluid because of the potentially very serious consequences of a failure. The ACDS accepted this at their meeting on 22/02/2001. We proposed to amend schedule 2 of PSR to introduce an additional dangerous fluid, "flammable liquids" (defined by reference to flashpoint).
9. HSE is required to give advice to LAs on any planning applications for developments close to MAHPs and it will be necessary for HSE to set consultation distances (CD's) for all gasoline pipelines when gasoline becomes a dangerous fluid. This gives us a difficulty as there are currently no models available in HSE for determining consultation distances for pipelines carrying non-flashing liquids such as gasoline, except where the terrain is flat and without features such as watercourses. It is not certain that a suitable model could be developed even if sufficient resources were available but at present we do not have any resources available. Further, in order to take account of all topographic details HSE would need to maintain a GIS database with all relevant information included and kept up to date. This would introduce significant ongoing cost.
10. We therefore have to make a choice. Do we wait until resources are available to develop a model before making gasoline a dangerous fluid or do we use the flat-ground model and accept that topography cannot be taken into account?
11. Although topography does not affect the frequency or probability of pipeline failure it can have a significant effect on the consequences of a gasoline pipeline failure, indeed it was the potentially serious consequences of a gasoline pipeline failure that led to the HSC decision to make gasoline a dangerous fluid. It could, therefore, be argued that if we cannot take account of topography when determining CDs, the decision to include gasoline may be undermined. However, over much of the length of a MAHP the difference in the CDs generated by the simplified model and a fully-featured one will be small.
12. No model can be fully accurate, including those currently in use for other dangerous fluids, and the flat-ground model will take most factors into account. However, topographical features as slopes and watercourses will not be taken into account and the CDs resulting from the simplified assumptions of the flat-ground model will in some places be conservative. However, the flat-ground model will give protection to the people who might be most affected by developments near to gasoline pipelines and will also give the pipelines some protection from people, which is important as many incidents to buried pipelines arise from damage caused by mechanical diggers. Accordingly we believe it is fit for purpose and propose to use this model.

(iii) Operator

13. The definition of operator in regulation 2(1) has given rise to a number of difficulties and these have been documented previously. For instance the owner of the pipeline may control what fluids

are conveyed but may not be controlling the flow day to day (eg. opening and closing valves may be done by a third party on behalf of the owner); which of them is the operator for the purpose of the regulations? The ACDS at their meeting on 12 June 1996 accepted that the definition of operator needs refining. It is proposed to clarify the responsibilities by amendments to PSR regulation 2.

(iv) Information and Co-operation

14. Operators have a duty to ensure that pipelines are designed, constructed and installed so as to be safely operated. There are no explicit duties placed on designers and constructors, which sometimes makes it difficult for operators to fulfil their duties to ensure the pipeline can be operated safely. It is proposed to introduce a duty for designers, constructors and installers to co-operate with operators and supply them relevant information.

European Dimension

15. The European Commission has indicated its intention to produce a Pipelines Directive and this is expected to be published next year. The proposed changes to PSR will be in line with what the Directive is expected to require.

Current position

16. Although ACDS and the HSC have already agreed to these actions, pressure of other work has prevented any progress, however, work has now begun. A draft Consultation Document (CD) will be prepared and submitted as soon as possible.

Consultation

17. The draft CD will be submitted to the Working Group on Pipelines (WGP) and the MHSC as well as the ACDS and finally the HSC before it is published.

Costs and Benefits

18. A regulatory impact assessment will be prepared and included in the CD.

Action

19. Members are asked to note the above and approve the proposed way forward.

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