

PIPELINES SAFETY REGULATIONS 1996 DUTY TO TEST EMERGENCY PLANS

Introduction

1 The Pipelines Safety Regulations 1996 (PSR) impose a duty on local authorities to prepare an emergency plan for major accident hazard pipelines in its area. There is currently no duty to test these emergency plans but such a duty is under consideration.

2 Whilst amending the regulations to create such a duty is relatively straightforward there are some significant difficulties associated with its implementation. The purpose of this paper is to identify the difficulties and initiate discussion on how they could/should be addressed.

3 Any changes to the regulations would be subject to full consultation and would have to be approved by the Health and Safety Commission before being submitted to the Minister for signature.

Emergency Plans - Existing Requirements

4 PSR imposes a duty on any local authority with a major accident hazard pipeline in its area to prepare "an adequate plan detailing how an emergency relating to a possible major accident in its area will be dealt with".

5 The regulations define local authority as:

- (a) in relation to England, a county council, a council having the functions of a county council, the London Fire and Civil Defence Authority, a metropolitan county fire and civil defence authority, or the Council for the Isles of Scilly;
- (b) in relation to Scotland, the council for a local government area; and
- (c) in relation to Wales, a county council or a county borough council;

6 The number of local authorities meeting these definitions are:

(a) [395] (b) [36] (c) [51] Total [482]

[Note: There are doubts over these figures which we are currently trying to verify. The total number may be as low as 150]

7 The regulations do not stipulate whether there should be one plan for each pipeline or one plan for each local authority so each local authority is free to make its own decision on this. A decision to prepare a plan for each pipeline would be complicated by having to decide what constituted a separate pipeline. For example would a pipeline with a branch be one or two pipelines? Does a change of operator along the length of a pipeline make it a separate pipeline?

Testing Emergency Plans

8 The duty to test emergency plans was deliberately left out of PSR when the regulations were being introduced. This was 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 the Advisory Committee on Dangerous Substances (ACDS) agreed with HSC's decision that PSR should be amended at a later date 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. This paper is the first step in the process to amend PSR to create the new duty.

Issues

9 There are two main issues to be dealt with in connection with a duty to test local authority emergency plans.

- (a) the number of tests to be carried out
- (b) how to carry out a test.

10 This paper deals only with the issues surrounding the question of how many tests should be carried out. The issues surrounding how to test a pipeline emergency plan will be dealt with separately.

The number of tests to be permitted/required

11 Pipelines can pass through many local authority areas and some areas can have many pipelines passing through them. If every local authority was under a duty to test its emergency plan for every pipeline passing through its area the total number of tests to be carried out would be very large. The tests would have to be repeated at intervals which would have to be stipulated by the regulations (emergency plans for fixed, COMAH, sites must be tested every 3 years). In line with other regulations the costs of carrying out the tests would have to be passed back to the pipeline operator.

12 The potentially large number of tests which would have to be carried out is a concern to local authorities because of limited resources. The ability to pass their costs to the operator is unlikely to change the resource position as only actual costs incurred by carrying out the test can be claimed from the operator; there can be no profit made from the tests. Local authorities with large numbers of pipelines would not welcome a duty to test their emergency plans in respect of every pipeline in their areas. Some local authorities have few pipelines crossing their area, many have only one. Clearly any local authority with no pipelines will not be affected by a duty to test.

13 Pipeline operators are also very concerned at the potentially large number of tests because they will have to bear the costs.

14 If the duty to test emergency plans is introduced, should it include a restriction on the number of tests which may be carried out? The HSE view is that ways of restricting the number of tests should be examined and if a way can be found which does not affect the ability of local authorities to be confident in the effectiveness of their plans then this should be pursued.

Possible restrictions

15 There are several ways that could be used to restrict the number of tests. The list below is unlikely to be exhaustive.

- (i) **reduce the frequency of tests** – Emergency plan tests are not one-off events, they have to be repeated to take account of changes within the local authority and emergency services, new technical knowledge and knowledge on responding to major accidents. The frequency at which pipeline emergency plans would be repeated will need to be incorporated in the regulations. Because emergency plans for COMAH sites are based on a 3-year cycle (ie they have to be tested every 3 years) that would be an obvious frequency to use for testing pipeline emergency plans. However, it does not have to be so and a lower frequency could be set for testing pipeline emergency plans. Setting a 5 or 10 year cycle would reduce the number of tests and ease the pressure on local authority resources and operators finances. Combined with a limitation on the number of tests any one local authority can conduct (see below) the number of tests may become more acceptable. However, it may be argued that a reduced frequency will reduce the confidence in the effectiveness of the plans.

(ii) restrict the number of tests per local authority - Many local authorities have several pipelines in their areas and these mostly fall into one of three categories:

- toxic gas
- flammable gas
- flammable liquid

The regulations could restrict local authorities to one test for each category of pipeline in its area in any one cycle. The maximum number of tests in any one local authority area would then be 3 no matter how many pipelines there were in the area. Discussions with two local authorities, one with many pipelines and the other with only one suggest that local authorities would be happy with such a restriction. Clearly local authorities whose areas did not include any pipelines in one of the categories would be permitted fewer tests eg a local authority with only flammable gas pipelines would only be able to do one test every cycle.

The regulations do not require local authorities to prepare a plan for each pipeline but only demand “an adequate plan detailing how an emergency relating to a possible major accident in its area will be dealt with”. This could be taken to mean that only one plan is required no matter how many pipelines there are in the local authority’s area; if so then only one test would be required each cycle which would reduce the total number further.

(iii) restrict the number of tests on any one pipeline – Long distance pipelines pass through many local authority areas and would attract one test in each area. It would be possible to limit the number of tests carried out along the length of the pipeline on the basis that adjacent areas could learn from the experiences of their neighbours tests. Indeed the existing regulations allow for a single plan to be prepared by 2 or more authorities together; co-operative testing would be an extension of this idea. However, this may not find favour with many local authorities because they vary significantly in the way they work, as do the emergency services. In addition there may be significant variations in the terrain and population densities between adjacent areas.

Costs

16 No attempt has been made to calculate the resulting costs of a duty to test pipeline emergency plans although it will need to be done if a formal consultative document is prepared. However, there are 482 local authorities who would be covered by a duty to test emergency plans. If we assume that the number of pipelines averages 2 per local authority then 964 tests would be required every cycle if there were no restrictions on the number of tests which were required/permitted. If the testing cycle were 3 years then 321 tests would be needed every year. Some previous work on this topic suggests that an average cost of £10,000 per test is realistic which would mean total costs in excess of £3,000,000 per year, all of which would be passed back to the industry.

[Note the figures used here for number of local authorities are those in paragraph 6 and may change when the figures are verified. If the true figure is 150 local authorities then the annual cost to operators would be around £1,000,000 but we also have higher figures for the cost of tests. The figure of £10,000 used above is for a table top test, for a full scale test it goes up to £25,000 and we have 1 industry figure (Transco) that suggests a full scale test could be £100,000. We thus have a range of costs to industry between £1,000,000 and £32,000,000 per year.]

Action

17 CAPEPLG member are invited to comment on the issues and ideas set out above at the next meeting on 3 September.