Health and Safety
Executive

HSE

The History of PSR and Proposed Amendments

Jim Stancliffe

Gas & Pipelines Unit

Hazardous Installations Directorate

Summary

- Pipelines Safety Regulations 1996
- Amendment process
- Amendments history
- Current proposed amendments
- Progress

Pipeline Safety Regulations 1996

- Part 1 - General goal setting duties
- Part 2 – Provisions and notifications for Dangerous Fluids and MAHPs

and…

- Reg.13A (enacted 3 Nov 2003)

  Allows iron gas mains operators to prepare a programme to decommission 30yr/30m mains

Amendment Process

- Strategic background
- HSE internal consultation
- Fact finding and research – taking account of previous work
- Impact assessment
- Pre-Consultation Document engagement
- Consultation Document issued
- Amendments made

PSR Amendment History

- Feb 2001 – HSE Policy Unit recommends testing of MAHP emergency plans every 3 years
- Broader view taken by HSE and industry
- Work by UKOPA and HSE on emergency plan testing and impact of classifying gasoline as a dangerous fluid
- Draft Consultation Document prepared by HSE, but not issued
- March 2004 – UKOPA seeks confirmation on amendments
- July 2004 –PSR amendments withdrawn in expectation of European Pipeline Directive

Current Strategic Background

What's changed?

- Buncefield
- Government Energy Review
- Concern over continuity of supply
- No sign of the European Pipeline Directive yet

Proposed PSR Amendments

1. Add Gasoline to the definition of Dangerous Fluids in Schedule 2

2a. Require Local Authorities to test MAHP emergency plans every 3 years.

2b. Enable LAs to charge MAHP operators for emergency plan testing

3. Introduce a 3 year expiry date for MAHP notifications

And, depending on timescales –

4. Add CO2 to the definitions of Dangerous Fluids in Schedule 2

Gasoline as a Dangerous Fluid

- Extremely flammable
- Can spread as a liquid (drains, water courses, downhill)
- Can spread as a vapour cloud (heavier than air)
- Ignition occurs in vapour at ambient temperatures for vapour/air mixtures
- High pressure release from pipeline will aid dispersal

Gasoline Pipelines – key issues

- Single and multi-product pipelines already exist
- Risk based approach includes pipeline failure rates
- LUP and compensation
- Definition of gasoline (range of products and flash points)

Testing Emergency Plans

- PSR Reg.25 already requires LAs to have Emergency plans where MAHPs exist and to review them at least every 3 years

Propose -

a. Mandatory testing of MAHP emergency plans by LAs

b. LAs to charge operators for testing based on cost recovery

Testing Emergency Plans - Guidance

- Amended Regulations will be goal-setting
- Amendment will allow pipeline operators and LAs to establish best practice as their experience grows
- Contingency planning and liaison now significantly more advanced than in 2004 (e.g. CCA and LRFs) – but some LAs more so than others.

MAHP Notifications

- PSR Reg. 20 – Notification before Construction
- Currently no expiry date
- DTI/BERR pre-construction Pipeline Works Authorisation (PWA)
- PWA expires after 3 years
- Proposal to harmonise PSR and PWA to 3 year expiry

CO2 as a Dangerous Fluid

- Headaches and respiratory difficulties at low concentrations
- Loss of mobility and consciousness and death at high concentrations (Asphyxiant)
- Heavier than air
- No ignition source required

CO2 – key issues

- Driven by Carbon Capture & Storage
- Empirical data for -
  - large-scale (Lake Nyos 1986)
  - small scale industrial incidents
- Modelling loss of containment and risk incomplete
- Transport pressure for MAHP classification to be determined

Progress

- HSE internal consultation complete
- Impact assessment being prepared by HSE
- Consultation with UKOPA underway