

UKOPA Comments on the Consultation Document for the Amendments to the Pipeline Safety Regulations 1996

The following comments are submitted by UKOPA on the proposed amendments to the Pipeline Safety Regulations 1996

UKOPA an independent organisation which provides a formal, recognised forum for pipeline operators to discuss, establish and present a consistent view on strategic issues of mutual interest relating to the safe operation and maintenance of pipelines.

The following companies are currently members of UKOPA and these comments on the consultation document represent their views:

- Shell
- National Grid
- SABIC
- BP
- Esso
- Greystar
- BG
- E.ON
- BPA
- The Oil and Pipelines Agency
- Total
- Northern Gas Networks
- Wales and the West Utilities
- Scotia Gas Networks
- INEOS
- BGE(UK)

Part 1: Classification of gasoline as a dangerous fluid

Question 1 – Do you agree that gasoline should be classified as a dangerous fluid in PSR

Yes, with the following qualification, UKOPA believe that ideally the decision should be deferred until the consultation distances have been defined as the impact of this change cannot be properly assessed until these distances are known. As a minimum UKOPA would want to be consulted on the proposed consultation distances for these pipelines when these distances are known. It should also be noted that UKOPA believe that the impact assessment currently only takes limited account of the cost impact to pipeline operators as a result of the consequential effect of Land Use Planning controls.

Question 2 – Views on definition suitability.

Gasoline: "Any petroleum derivative, other than liquefied petroleum gas, with a flashpoint between –51 °C to -40 °C and which is intended for use as a fuel in motor vehicles".

If the HSE aims are to cover Gasoline only, then this definition is sufficient. Other definitions are hazard based and not material based, which may widen the pipelines captured by this change. For example there is an aircraft fuel (Avgas) that has a similar flash point and can be transported by pipeline but not intended for use in a motor vehicle.

UKOPA would also note that there need to be clarity over the definition of Gasoline. We have commented before that in general Gasoline that is transported via pipelines lacks final performance enhancing additives and any ethanol blends for bio fuels. We would recommend that the regulations are clear that such fuels are covered by the definition of gasoline and prevent a debate as to "if they are not suitable for use in motor vehicles then they are not intended for use in motor vehicles". As we have noted previous it is better to base the definition on physical properties but we note that this can be difficult when limiting the regulation to gasoline.

Question 3 – Are you aware of any pipelines conveying gasoline that is not intended for use as a motor fuel. If so, please provide further details.

No, based on the comment for question 2.

General Comments on Part 1 and Associated Impact Assessment

The Consultation Document states in Para 21 that HSE set the CD (Consultation Distances) for pipelines. The Impact Assessment uses a CD of 80m, however, Para 22 of the CD states that the methodology is under review. It is difficult to provide full comments and feedback on both the CD and Impact Assessment without knowing the final (agreed) methodology for calculating CD's for Gasoline pipelines and what the CD will be?

Referring to the Impact Assessment, we would make the following observations:-

- The definition of Gasoline in the box "What Policy options have been considered?" is different to that on page 11 of the CD, we assume that the definition in the CD is the final agreed version.
- The impact assessment concluded that the costs of implementation in the order of £2 million whereas the savings are in the order of £8 million saving. This marginal benefit must be read noting the following cost considerations:-

- The impact assessment shows the cost for Land use Planning is only £91k, whereas previous Regulatory Impact assessments developed in the 1990's concluded that the implementation costs were in the order of £102 million over 40 years with the main difference being the cost of Land Use Planning compensation paid for by the pipeline Owners / Operators. Gasoline Pipeline Operators undertook their own assessments and came to the same conclusion.
 - Para 58 says that there will be no pipelines built in 40 years; I expect many diversions which are effectively new pipelines. The cost impact of these needs to be taken into account.
 - There are a number of specific areas where we would challenge the costs that have been assumed, e.g. Paras 63 and 76.
- As noted above the option 3 Impact Assessment has not included any costs relating to land use planning incurred by the pipeline owner/operator as these are not considered as a cost to society – but any cost to the operator will eventually be a cost to society in say fuel price. Referring to the Impact Assessment, these costs could result from at least 3 impacts:
 - Para 88 – the assessment has considered the particular case of Gasoline pipelines. These have never attracted LUP controls and are routed through urban developed areas – thus the risk of compensation is much higher than a pipeline built in full view of these regulations.
 - Para 91 – diverting the pipeline may save compensation costs but there will be significant costs in terms of construction and loss of operation.
 - Para 93 – changing to thick wall pipe may save compensation costs but again there will be significant costs in terms of construction and loss of operation.

In summary UKOPA believe that the Land use Planning Costs to the operator should be fully inclusive of compensation or mitigation costs and envisage they would be well in excess of £2.1 million per annum.

Part 2: Classification of Carbon Dioxide as a dangerous fluid

1. Do you agree with HSE that adopting a precautionary approach and including carbon dioxide as a dangerous fluid in PSR?

UKOPA accept a precautionary approach to the classification of carbon dioxide as a dangerous fluid on the basis that the hazards and risks of dense phase carbon dioxide pipelines are not yet fully understood. Further work however needs to be carried out in order to define a carbon dioxide pipeline, as we believe that the inclusion of gaseous phase CO₂ as a dangerous fluid at all pressures is not appropriate and not justified.

As with gasoline one of the key impacts of defining pipelines containing carbon dioxide as a MAHPs is the consequential effect of the land use planning controls and the associated land use planning distances. UKOPA consider that transportation of gaseous phase CO₂ represents a low risk application of known technology (i.e. pipelines) to transport a fluid which has properties, behaviour and a level of harm which are generally well understood and where failure would lead to serious but localised effects. UKOPA strongly believes that these issues need to be taken into account when defining the consultation distance for CO₂ pipelines.

2. Should further defining parameters be introduced for example pressure thresholds, pipe diameter or length when including CO₂ within PSR?

Yes - evidence from studies carried out so far indicate that risks from releases of gaseous CO₂ are low, so we believe there should be lower pressure threshold as exists for other MAHPs within PSR. The current proposal should include a lower pressure threshold below which PSR would not apply. UKOPA have concerns about systems such as gathering systems and fire-fighting facilities where we would look for a pressure to be defined that would exclude these systems and also exclude any ancillary equipment supporting the transport of carbon dioxide that might contain carbon dioxide at low pressure. The risk from these systems would be very low and should not be therefore classed as part of a major accident hazard pipeline. It should also be noted that any equipment containing gaseous carbon dioxide above 2 bar (and 250 bar litres) would be within the scope of the Pressure Systems Safety Regulations (PSSR). The controls under PSSR should ensure that the pressurised gas is safely contained. The key criteria should be at what pressures should land use planning controls apply to keep the general public away from the hazard in the unlikely event that a pipeline fails. UKOPA do not believe that this question has been adequately addressed.

3. Are you aware of other UK industries that currently transport CO₂ using a pipeline?

Yes - Other industries where CO₂ is transported at low pressure include processes where CO₂ is produced as an involuntary by-product such as ammonia production, fermentation processes such as bio-ethanol production and CO₂ bottling plants. These are industries where CO₂ at low pressure has been transported safely by pipeline for many years and should be excluded from PSR.

In addition as currently defined the amendment would include any pipelines that have been purged to air, as air contains small but measurable levels of carbon dioxide.

Part 3: Regulation 21: Notification before construction

1. Do you agree with the introduction of a 3 year expiry date on notifications to construct a pipeline?

No - UKOPA have no objection to the inclusion of an expiry date, but would like to see alignment with the timescales for consents associated with the Town and Country Planning Act and the Public Gas Transporter Pipe-Line Works (Environmental Impact assessment) Regulations 1999. These documents refer to a 5 year period.

Part 4: Regulation 23: Notification in other cases

1. Do you agree with proposed changes to regulation 23?

Currently Schedule 1, 3 exempts a pipeline contained within the premises occupied by a single undertaking. If a change of ownership takes place and the exemptions under Schedule 1 no longer apply then this cross site pipework would currently fall completely under PSR. If this pipework contains a dangerous fluid, then it becomes a major accident hazard pipeline. Our understanding is that the proposed amendment has been included to clarify this issue. However we believe that there are some unintended consequential impacts if the pipeline in question is a major accident hazard pipeline. Where this is the case the local authority will need to produce an emergency plan for a pipeline that essentially may only be crossing the boundary of two adjoining installations, and the pipeline operator will be required to generate an MAPD for what may only be a short length of pipe. We believe therefore that cross boundary pipelines of this type need further consideration and should we believe by excluded from the additional duties resulting from them being major accident hazard pipelines.

Part 5: Proposed new regulation 29: Implementing emergency plans

1. Do you agree with the introduction of new regulation 29?

Yes, but with the following qualifications:

Regulation 29 directs the local authority to put plans into effect without delay. There is no indication of how they would make the decision to mobilise and we do not believe they would have the knowledge and training specifically related to pipeline operations to do this alone. There is the potential for the local authority to mobilise for incidents, such as low pressure gas incidents unnecessarily. They

should only mobilise when requested to do so by the primary responder. UKOPA propose the following amendment to regulation 29:

29. A local authority which has prepared an emergency plan pursuant to regulation 27 shall take reasonable steps to put it into effect without delay when –
- (a) The pipeline operator has confirmed that a major accident has occurred,
 - or
 - (b) an event occurs which the pipeline operator has confirmed could reasonably be expected to lead to a major accident.

2. Do you agree with the proposed changes to align regulation 26 with the new regulation 29?

No - UKOPA supports in principal that when a MAHP incident occurs that the Local Authority plan should be implemented, but one of the consequences of this proposed change is that Regulation 26 (2) now requires the local authority and emergency services to be notified 'immediately' that a major accident occurs. The pipeline operator would not be in a position to 'immediately' notify any parties until a diagnostic period had passed. This period enables the pipeline operator to establish some basic facts and assess the scale and implications of a potential incident. UKOPA have raised this issue with the HSE in the past.

Additionally in some circumstances if a MAHP accident occurs in a remote area there may not be a need for the local authority to implement their emergency plan as there may be no impact on the surrounding population or infrastructure.

We suggest that Regulation 26 (2) should be amended as follows:

26 (2) The emergency procedures shall include provision for the local authority and the emergency services to be notified immediately that a major accident requiring the implementation of the local authority emergency plan has been confirmed by the pipeline operator.

Part 6: Other changes to Regulations and L82 guidance

Regulation 2: Definition of Operator

UKOPA do not agree with the working of bullet c) and this needs redrafting. As currently worded bullet c) would mean that if an asset were sold or transferred then the responsibility for the pipeline would remain with the original owner / operator until the pipeline is put back into service. This also conflicts with the direction of bullet a). If there is a doubt as to who is the operator for an out of service pipeline it should revert to the Owner by default. This would link to

regulations such as the CDM regulations where the Client has a duty to appoint a competent Planning Supervisor – thus under PSR the Owner would have a duty to ensure that a Competent Operator is appointed).

Regulation 3 (3): Meaning of 'pipeline'

UKOPA would want to be consulted on the new definition of the term 'pipeline' before it is included in the proposed amendments.

Regulation 14 Iron Pipelines

It is UKOPA's view that the proposed changes to regulation 14 (10) significantly extend the scope for bringing a prosecution and that this goes beyond an improvement in clarity to the wording in the original.

The current wording states: -

"where the proceedings arise from an event involving a failure of a pipe, the operator did not know and could not reasonably be expected to have known that there was a risk to safety concerning the pipe, which required immediate attention."

The proposed wording states: -

"where the proceedings arise from an event involving a failure of a pipe, the operator did not know and could not reasonably be expected to have known that the condition of the pipe was such as to require immediate attention"

As a result of the proposed changes we believe that there may be occasions where the gas transporter could inadvertently be in breach of the regulations when dealing with a gas escape (under certain circumstances) or at a later date having effected a permanent repair.

In the case of any escape on a main, a risk assessment will be undertaken and work is prioritised on this basis. This is a particularly important process when workload volumes are exceptionally high and the need to prioritise work based on risk is necessary to ensure all PREs are visited, assessed and secured accordingly. It is not current practice or practical for the gas transporter to confirm whether a leaking pipe forms a part of a currently approved programme at the time of the initial callout.

If the Transporter -

- has attended a gas escape on a pipe that we subsequently became aware was part of the approved programme;
- has undertaken a risk assessment as required in our procedures
- and based on this risk assessment, the pipe repair was deferred in order to work on one that presented a higher level of risk
- and the pipe subsequently failed before its replacement under the programme,

then we believe that the proposed wording leaves network operators in a position where they could be seen to be in breach of the regulations.

It has not been made clear during the consultation why it has been deemed necessary to make this change and UKOPA believe that the original should be retained as there is a clear understanding of the current legislation within the industry.

Part 7 : Amendments to the Health and Safety (Fees) Regulations

UKOPA are against the proposed charging regime as we believe that it adversely affects the relationship between the operator and the regulator. We believe the current arrangements work well and have facilitated the regulator and industry working together to improve the safety of the industry. Introducing a charging regime would we believe damage this relationship and it may discourage pipeline operators proactively consulting with the HSE on safety issues.

If a charging regime is to be introduced then it should be ensured that all costs are transparent and justifiable. To support this UKOPA believe that a guidance document should be produced to clarify the activities that are rechargeable and the charging arrangements. UKOPA would want to be consulted on these arrangements. The guidance document should also require the HSE to provide a justification for the numbers of inspectors who attend when a number of HSE staff are involved in a particular intervention.

General Comment

The cost estimates applied in the formulation of the document do not reflect market rates. For example the production of an MAHP plan would cost more than £12,000 and in the case of the carbon capture work it would be significantly more as the policy and procedures will also have to be developed to support this work, industry are currently investing £7.7m in this area.