

THE ICL INQUIRY

PROPOSED RECOMMENDATIONS

Submitted on behalf of

CALOR GAS LIMITED, a company
incorporated under the Companies Acts and
having its Registered Office at Athena
House, Athena Drive, Tachbrook Park,
Warwick CV34 6RL

Calor considers safety to be the paramount consideration in the operation of its business. As the leading supplier of LPG in Great Britain Calor has always fully supported and continues to be committed to the promotion of safety throughout the industry. Calor was a founder member and remains an active member of UKLPG and its predecessor organisations. Calor is also a member of a number of other industry bodies relevant to its business, full details of which are contained in Calor's response to the Inquiry's further questions document ("Questions Document").

Existing Regulatory Regime

The existing regulatory regime for the LPG industry is underpinned by the duties set out in the Health and Safety at Work etc Act 1974 (HSWA) supported by regulations and industry codes of practice. More detailed consideration of these is contained in Calor's response to the Questions Document, however the principal ones are:

The Health and Safety at Work etc Act 1974 (HSWA)

The Management of Health and Safety at Work Regulations 1999

Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR)

Gas Safety (Installation and Use) Regulations 1998 (GSIUR)

Pressure Systems Safety Regulations 2000 (PSSR)

Pressure Equipment Regulations 1999 (PER)

Provision and Use of Work Equipment Regulations 1998 (PUWER).

As a bulk LPG supplier Calor has responsibility for the equipment it owns, namely the pressure vessel, associated valves and tank fittings. For vapour off-take commercial customers such as ICL, ownership of and responsibility for service pipework, associated regulators and installation pipework lies with the customer.

As owner of the service pipework and installation pipework, there are significant duties placed upon the customer to ensure that they fulfil their roles and responsibilities under the current regulatory regime. This would include, inter alia, the requirement to ensure that: the pipework has been properly designed, specified and installed by a competent person(s) and is suitably protected against corrosion; there is an appropriate inspection and maintenance strategy; and, where the system is operating at above 0.5 barg, there is a written scheme of examination in place.

LPG suppliers have no statutory or regulatory authority to enter or inspect a customer's premises. They have no statutory or regulatory authority to inspect or compel work to be undertaken upon a customer's service pipework or installation pipework. In that respect they are no different to the suppliers of any other packaged chemical and fuel suppliers such as the suppliers of compressed gases, for example hydrogen or oxygen, or heating oil.

Calor's recommendations

The current system of regulation of the LPG industry through existing legislation and the various codes of practice has worked very well. The industry is, on the whole, operating safely, efficiently and effectively under this regime. This is confirmed by the statistics presented in Mr. Sylvester-Evans' Report dated 9 September 2008. Calor's installations commissioned post 1992 are most likely to have non-corroding polyethylene (PE) pipework as would any new Calor installation. Therefore, in Calor's opinion any proposed action recommended by the Inquiry needs to be proportional to the risk and not pose any unnecessary burden on any of the stakeholders involved.

Calor would however make the following proposed recommendations:

- 1 The extension of the Gas Safety (Installation and Use) Regulations 1998 to fully cover industrial sites (i.e. factories) in addition to existing domestic and commercial sites. This, amongst other requirements, would make it mandatory to use a suitably qualified LPG CORGI engineer to install service pipework.
- 2 Suitably qualified LPG CORGI engineers are required to hold various ACS (Nationally Accredited Certification Scheme) certificates of competence to carry out certain types of gas work. Calor recommends that the relevant ACS assessments for installing LPG underground pipework are reviewed to ensure they include awareness of the issues involved regarding buried metallic pipework.
- 3 The elevation and status of the current LPGA (UKLPG) Codes of Practice, which have been developed through consultation with the HSE in any event, to the status of Approved Codes of Practice fully approved and endorsed by the HSE.
- 4 Calor does not believe that there is a need to make wholesale changes to the regulations and codes of practice to improve the way in which the LPG industry currently operates in relation to small industrial sites and recommends that this is not done. If ICL had fulfilled its duties under the existing legislation which imposes clear duties on site operators, Calor believes that this tragedy could have been avoided. However, Calor has recommended improvements that could be made reasonably quickly; would be cost effective; and would be practicable. These are set out in this section and also in Calor's answers to the Questions Document. Calor also supports many of the recommendations made by Mr. Sylvester-Evans in his report of 9 September 2008, as outlined below.
- 5 It should be noted that Calor has been very proactive in taking steps to address issues arising from the ICL incident. It has not waited for the outcome of this Inquiry. Calor has already carried out its own research on underground metallic pipework and has developed a strategy and risk-based model for

prioritising the replacement of pipework. It has shared information gained from its research with the HSE and UKLPG and is currently waiting for the HSE to validate Calor's risk-based model. If the LPG industry is required to undertake this task for customer-owned pipework, Calor would recommend that funding from the UK Government is made available to help the industry to do so.

Recommendations made by Mr R. Sylvester-Evans in his report of 9 September 2008

In respect of the recommendations made by Mr. Sylvester-Evans, Calor would comment, in corresponding order, as follows:-

- 1 Whilst attempts are made to reduce the number of "interfaces" between Calor and its customers, cognisance has to be taken of the requirement for technical support and competent advice to be available to all staff particularly those in customer facing and sales roles who are likely to have the primary interface with the customer. As a responsible supplier, Calor requires to ensure that it is fulfilling its duties and, on occasions, this will create the need for the involvement of staff with more specialist technical skills thus increasing the number of "interfaces" with the customer.

- 2 Calor is committed to providing clear and concise information to its customers. A copy of the pack provided to new bulk customers has been supplied with Calor's completed Questions Document. The ownership of service pipework and installation pipework, and responsibilities arising therefrom, are communicated by Calor to its customers within the terms and conditions of their supply contract (Commercial Gas Order - CGO), through the Information Pack provided to new customers, through technical publications, through Calor's website (*www.calor.co.uk*) and by separate additional information provided at other points for example when there is a change in the regulations or in support of an HSE initiative i.e. the issue of the HSE's '*Checking LPG pipework*' and the issue of a '*Gas Safety Information*' card to all its bulk customers.

- 3 Each party must however take responsibility for the duties incumbent upon them under the regulations. The LPG industry is not a regulator and has no regulatory function or powers.

UKLPG already has a comprehensive set of guidance and recommended practices for its members through its Codes of Practice which are reviewed and revised on an ongoing basis.

- 4 Calor would endorse recommendation 4 in its entirety.

- 5 Recommendation 5 is, in Calor's opinion, a restatement of requirements which are already embodied in the current regulatory framework, certainly for systems operated at above 0.5 barg in terms of the Pressure Systems Safety Regulations 2000. Whilst cathodic protection is, theoretically, possible Calor believes that it would not be suitable for the vast majority of existing small LPG installations. The installation of cathodic protection would require: excavation of the pipework in one or two places (depending on the length and diameter of the pipework); the installation of insulating fittings at each end of the pipe (to isolate the underground pipework and limit the section of pipe that is subject to cathodic protection); and tests to ensure the electrical continuity along the length of the pipe and the fitting of the sacrificial anode(s). This process is unlikely to be more cost effective or practicable than replacement of the underground pipework in its entirety by polyethylene (PE) pipework and furthermore creates a risk of damaging the pipework that it is intended to protect. In addition, cathodic protection systems require continuous monitoring to ensure effective protection of the pipework, whereas the replacement of metallic pipework with PE eliminates the risk of corrosion. Calor has already undertaken a survey of underground metallic pipework and has developed a strategy to prioritise and replace the pipework determined to be most at risk from corrosion using a risk-based model. Further details are contained in Calor's answers to the Questions Document.

- 6 There are a number of practical issues to take account of when considering such a "verification scheme". For example, Calor installations commissioned post 1992 are most likely to have non-corroding polyethylene (PE) pipework

as would any new Calor installations; so the “verification scheme” for these would be different to those with buried metallic pipework. Calor and other responsible suppliers of LPG already have well developed safety and certification systems in respect of bulk vessels and it is submitted that these are adequately protected by the current regime under the PSSR. A verification scheme for service pipework and installation pipework would require an accreditation body to be appointed to oversee such a scheme and accredit “competency”. Any such scheme would require having a lengthy transitional phase to allow the training and accreditation of engineers. It is respectfully recommended that a more appropriate step would be to extend the GSIUR to cover industrial premises.

7 Please refer to our comments on recommendation 6 of Mr. Sylvester-Evans’ Report above.

8 As previously stated, LPG suppliers have no statutory or regulatory rights to enter customers’ premises or inspect customers’ service pipework, installation pipework or installations. It is unlikely that the HSE have either the skills or the resources to undertake such compulsory inspections of all existing sites. Calor, through its subsidiary company CalorForce Limited, does provide a service whereby customers can contract with them to have their pipework inspected, upgraded or replaced as appropriate. As mentioned in paragraph 5 above, Calor currently has a pipework inspection strategy and risk-based replacement programme in place for underground metallic pipework. LPG suppliers could offer such services to their own customers; however, the current regulatory framework does not provide a mechanism whereby customers can be compelled to have such work undertaken.

9 Calor has worked in conjunction with its fellow members of UKLPG and the HSE to produce and distribute to all its customers a booklet on commercial installations highlighting to customers their statutory duties. This was issued to all customers in conjunction with a letter, a copy of which is enclosed in the pack appended to Calor’s completed Questions Document, offering further advice, inspection and/or upgrading as required.

- 10 Calor has no comment to make in respect of this recommendation.
- 11 It is respectively submitted that the duties imposed upon LPG suppliers under the Health and Safety at Work etc Act 1974, the Management of the Health and Safety at Work Regulations 1999 and the Pressure Systems Safety Regulations 2000 already incorporate the requirement for these documents to be held and made available to customers on request.
- 12 Calor would support UKLPG in creating and agreeing a template for such a “safety dossier” with the HSE and would endorse this recommendation.
- 13 Calor would support UKLPG in creating and agreeing a template for such a “safety dossier” with the HSE and would endorse this recommendation.
- 14 There is already in existence a wealth of information available to users from UKLPG, the HSE and individual LPG suppliers. Calor produces a pack of information given to new customers and all customers are updated of key developments. A copy of this pack is included in Calor’s completed Questions Document. Calor will continue to work with other industry members and UKLPG to produce information from time to time as appropriate. Reference is also made to the leaflet produced in conjunction with the HSE and distributed by LPG suppliers to all their customers at the request of the HSE.
- 15 Calor has no specific comments in relation to this recommendation.
- 16 Calor already retains records of all reported gas emergencies and incidents. It discusses these findings at senior management meetings and disseminates information as appropriate. It also participates in the exchange of information through the forum of UKLPG. Co-operation and assistance is provided to the HSE when incidents are being investigated. Calor participates in best practice exchanges with UKLPG and in the issuing of safety alerts by UKLPG to its members and within Calor itself. Calor has expressed concern to the HSE and others that some LPG incidents are not reported to the LPG supplier. Calor typically becomes aware of such incidents through press coverage but does not receive notification from the HSE and/or the emergency services.

- 17 As mentioned above (Mr. Sylvester-Evans' recommendation 8), Calor has developed a pipework inspection strategy and a risk-based model for the assessment of pipework. Information in respect of Calor's research and risk-based model has been shared with both UKLPG and the HSE. The risk-based model prioritises the replacement of metallic pipework by considering the pipework material, pipe diameter, soil corrosivity, pipework operating pressure, soil permeability, proximity of the pipework to the building, the surface material and its effect on gas migration, the build up of LPG within a dwelling and the probability of ignition. Calor is awaiting the outcome of research being conducted by the HSE which will hopefully validate and confirm the acceptance of Calor's model for wider industry use. The HSE will also use a version of the model to identify high risk areas based on soil types. Calor, together with the other UKLPG suppliers, will provide the HSE with lists of commercial and industrial customers in these high risk areas so that the HSE can contact them and provide recommendations regarding pipework, as well as the inspection and maintenance regime in place at these premises.
- 18 Please refer to Calor's response on Mr. Sylvester-Evans' recommendation 17 above.
- 19 Calor would endorse the recommendation and would additionally recommend that LPG suppliers should be required to demonstrate competence to provide information on pipework installation and maintenance. Calor would also suggest that such a "registration scheme" should be drawn up by representatives of UKLPG and CORGI (or its successor body – run by Capita) and that the scheme should be operated by CORGI/Capita.
- 20 Calor does not believe that a verification scheme is the best approach for the reasons outlined above. Calor would respectfully recommend that these matters could adequately and appropriately be dealt with by the extension of the GSIUR to cover industrial sites which would ensure that only LPG qualified CORGI engineers would work on and connect to LPG systems and that it would be a criminal offence to do so without the appropriate qualifications. Calor believes that a verification scheme would be impractical because of the limited resource available in relation to competent engineers,

timescales involved, the competitive disadvantage against other fuels and that it would require a change in the law to ensure it is applied consistently.

- 21 Calor has no specific comments to make in respect of this recommendation; save to say that any target timescales should be realistic and practicable.