

## STATEMENT OF CASE

by

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

in the inquiry under the Inquiries Act 2005 into the circumstances surrounding the explosion at Grovepark Mills, Glasgow on 11<sup>th</sup> April 2004 (“the ICL Inquiry”)

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### *The ICL Inquiry*

1. The present inquiry was announced by the Department of Work and Pensions and the Crown Office and Procurator Fiscal Service on 5<sup>th</sup> December 2007 and set up on 21<sup>st</sup> January 2008. The remit of the inquiry is:-
  1. To inquire into the circumstances leading up to the incident on 11 May 2004 at the premises occupied by the ICL group of companies, Grovepark Mills, Maryhill, Glasgow.
  2. To consider the safety and related issues arising from such an inquiry, including the regulation of the activities at Grovepark Mills.
  3. To make recommendations in the light of the lessons identified from the causation and circumstances leading up to the incident.
  4. To report as soon as practicable.
2. The Inquiry is to be held in two parts. The first will deal with the causes of the incident on 11<sup>th</sup> May 2004, and the circumstances leading up to it. The second will consider the extent to which lessons may be learned from the

circumstances and what recommendations can be made to avoid any repetition of the disaster.

*Calor*

3. Calor Gas Limited (“Calor”) is the leading supplier of liquefied petroleum gas (LPG) in Great Britain. It has been engaged in the supply of LPG for 73 years. It has extensive experience of the installation and maintenance of LPG systems.
4. Calor wishes the Inquiry to address the following issues, topics and circumstances. Calor’s position is that all arise from, or are relevant to, the Terms of Reference.
5. Calor supplied LPG to ICL Plastics Limited (“ICL”) at Grovepark Mills from 1969 to 1998. LPG was stored at Grovepark Mills in a tank installed by Calor in 1969. The tank (normally referred to in the industry as a pressure vessel) was installed to the safety standards then current within the industry. LPG was piped from the tank to the ICL factory by means of pipework installed by contractors employed by ICL, Messrs. Grebe and Plant. Calor was not involved in the installation of the pipework. Where Calor connected a tank to existing pipe-work it would have conducted a gas tightness test of that pipework. At the time LPG supply commenced to the ICL factory, the pipework did not go into an unventilated basement. Guidance as to the installation of LPG pipework was available to ICL inter alia from Calor at the time of ICL’s installation of the pipework. Reference is made to the Calor Gas (Distributing) Co. Ltd publication “Technical Information”, Edition 3, 1963 a copy of which is produced and its terms held to be incorporated herein *brevitatis causa*. Reference is also made to a report in relation to the Grovepark Mills explosion by Roderic Sylvester-Evans on Safety Management and Risk Assessment Issues dated 9<sup>th</sup> March 2007. Calor is unaware whether ICL installed the pipework in accordance with such guidance. It is not clear whether Calor or Messrs Grebe and Plant connected the pipework between the underground pipework and the tank. In the original contract, it implies that Calor were asked to do this. We can find no record of

who actually made this final connection. If Calor did connect to the underground pipework, it is likely that we were asked to connect to a pipe riser. If this were the case, the Calor fitter would have isolated the pipework at a suitable downstream position and carried out a gas tightness test on the entire pipework. If Messrs Grebe and Plant had carried out the installation, Calor would have expected them to do the same.

6. Calor retained ownership of the tank and pipework up to the first stage regulator for the purposes of inspection and maintenance, but not beyond. ICL installed the pipework and so assumed and retained responsibility for its inspection and maintenance. In about 1974 the pipework was completely buried as a result of raising the level of the yard. As a result of that process, the pipework was placed in contact with a concrete slab. That was likely to increase the risk of corrosion in the pipe-work. In about 1981 the lower level of the ground floor of the premises was levelled, enclosing the space into which the pipework ran, creating an unventilated basement. So far as Calor is aware, Calor was neither asked for, nor did it provide, advice or guidance as to the effect of such alterations on the pipework.
7. HSE inspected Grovepark Mills in 1988. On 8<sup>th</sup> September 1988, HSE wrote to ICL with twelve recommendations to bring the storage of LPG at Grovepark Mills within the standards current in 1988 and invited ICL to advise then as to the action they proposed to take. A copy of that letter is produced [PRODUCTION NUMBER 221 A3/A4]. Recommendation 11 proposed that part of the underground pipework carrying LPG vapour should be excavated in order to determine its condition, and that pressure testing of the pipework should be carried out.
8. On 4th January 1989 Mr Maurice Coville, then an employee of Calor, responded on behalf of ICL to some of the matters raised by HSE. A copy of Mr Coville's letter is produced [PRODUCTION NUMBER 221/A8]. Mr Coville's letter stated inter alia that "on behalf of ICL Technical Plastics Ltd...the attached sketch plan outlines suggested suitable remedial action, to

be taken by Calor Gas Limited, in order to meet the recommendations made at paragraphs 1, 2, 3 & 4 only of [HSE's letter of 8<sup>th</sup> September 1988].”

9. The express purpose of Mr Coville's letter of 4<sup>th</sup> January 1989 was to respond to HSE's letter regarding the LPG tank i.e. that part of the LPG installation for which Calor were responsible. Neither HSE, nor ICL, were entitled to rely on Mr Coville's letter for any purpose going beyond the parameters set out in Mr Coville's letter. Calor bore no responsibility for the inspection or maintenance of the pipework. Mr Coville's letter did not constitute an assumption of the burden of providing advice to HSE or ICL as to the correct steps to be taken by those parties as to that part of the installation for which Calor was not responsible.
  
10. In relation to Recommendation 11, Mr Coville also proposed that “the condition of the attendant vapour off take pipe would be ascertained, during vessel-exchange, by examination of the ‘riser pipe’ at the vessel, and by a pressure test on the pipeline.” That method of ascertaining the condition of the pipework was in accordance with best practice current at that time in the LPG industry. Reference is made to the LPG Industry Technical Association Code of Practice No 1, Part 3, first issued in 1986, and re-printed in October 1988. HSE responded by letter dated 23<sup>rd</sup> January 1989. They took no issue with Mr Coville's proposal in relation to Recommendation 11.
  
11. In 1990 Calor wrote to all its commercial customers, including ICL, advising them of their responsibilities regarding the inspection and maintenance of pipework which they owned. It made clear those responsibilities were set out in the Pressure Systems and Transportable Gas Regulations 1989 (now replaced by the Pressure Systems Safety Regulations 2000 SI 2000 No. 128). They included the initiation of a scheme of inspection and examination of underground pipework. The pipework was installed by ICL's contractors. Alterations to the premises, which affected the pipework were made by ICL. So far as it is aware, Calor was not asked to provide any advice or technical assistance at the time of the installation of the pipework or the alterations to the premises. So far as it is aware, ICL did not do so. Only ICL were aware of

the risks arising from their location, and the aggressiveness of their environment. Only ICL were in a position to assess the appropriate frequency for such inspection and examination in accordance with the requirements of section 6 of the Code of Practice No 1, Part 3.

12. In about June 1991, Calor replaced its LPG tank with two smaller tanks in a new location in accordance with their proposals accepted by HSE. At that point a gas tightness test of the pipework was carried out. This was in accordance with accepted practice in the LPG industry at the time. The pipework was sound at that time.

~~13.~~ In 1998 ICL decided to change their LPG supplier. The business relationship between ICL and Calor was terminated. J Gas took over the supply of LPG to Grovepark Mills. They replaced Calor's LPG tanks with their own 2,000 litre tank, first in March of that year and again in November when they exchanged their original replacement tank. They connected their tank to the existing underground pipework supplying the factory on both occasions. Given the terms of the Code of Practice No 1, part 3, it is believed that J Gas would have carried out gas tightness tests at that time.

14. On 11<sup>th</sup> May 2004 Grovepark Mills was demolished by a large explosion. Nine ICL employees were killed. Thirty three people were injured. An investigation by HSE concluded that the explosion was caused by a leak of LPG. It was found that the LPG pipework installed by Messrs Grebe and Plant on behalf of ICL in 1969 was badly corroded. It was concluded that the pipework was inadequately protected against corrosion. Corrosion in the pipework was exacerbated by the material used by ICL's contractors to bury the pipe in 1974, and by the placing of a concrete slab on an elbow in the pipe just as it entered the building. Gas leaked from two points in the pipework and entered the basement at Grovepark Mills. LPG collected undetected in the unventilated basement and ignited thus causing the explosion. In 2007, ICL pled guilty to charges brought against them under the Health and Safety at Work Act 1974.

*Lessons and recommendations*

15. As market leader in LPG supply in Great Britain, Calor has extensive experience and expertise in the installation and maintenance of LPG delivery systems. As market leader in Great Britain, it plays a leading role in the development of good practice in relation to the installation and maintenance of such systems. As such, Calor has a significant interest in the future requirements of the industry. Calor is willing to provide material assistance to the Inquiry in relation to the safety and related issues arising from such an inquiry, including the regulation of the activities at Grovepark Mills and similar establishments, both in relation to the past and the future.
16. Calor would expect the inquiry to establish whether or not there was a unique combination of factors that caused the explosion and, if so, whether lessons can be learned and applied to any similar installations of that period.
17. Calor will in due course wish to submit more substantive information and suggestions to help in formulating lessons to be learned from the ICL disaster for the purposes of part 2 of the Inquiry. Without further information as to the issues to be dealt with by the Inquiry, or the recommendations to be sought by other parties in Part 2 of the Inquiry, Calor is unable at this stage to provide detailed suggestions. It accordingly wishes to reserve the right to make further such suggestions. Provisionally it suggests that the following considerations may be relevant to the Inquiry's deliberations:-
  18. Whether further research ought to be undertaken: (a) to establish the number of installations potentially at risk (if any); and (b) to investigate practicable methods to check the condition of underground pipework.
  19. What, if any further, or different requirements, of the LPG industry is necessary, desirable and practicable.
  20. Issues of further or different regulation may involve consideration whether Gas Safety (Installation and Use) Regulations 1998 should be extended to

industrial premises and whether Codes of Practice for LPG pipe-work should be given ACOP status under the 1974 Act.

21. Whether a risk based replacement strategy for existing metallic pipework should be developed together with HSE and whether assistance in the funding thereof should be provided by government.