

ICL INQUIRY STATEMENT

Maurice John Coville

Qualifications

1. I joined the Royal Air Force in September 1954 and trained as a propulsion fitter working in aircraft engineering throughout my career. I left the Air Force in March 1977.
2. In 1976 I obtained a certificate from Plymouth College of Further Education which was an industrial safety officer course intended to prepare you for a career once you left the Air Force. The course was on a number of subjects, primarily safety in relation to industry, industrial relations and legal issues.
3. Later, when employed by Calor Gas in Scotland I became an associate member of the Institution of Industrial Safety Officers on 1st October 1980. I had to sit exams in order to obtain my membership.
4. I later became a corporate member of the Institution of Occupational Safety and Health. That membership was based on the length of time served in the field of safety.

Work History

5. After leaving the Royal Air Force in March 1977 I was taken on by Calor Gas and took up my employment with them in March 1978. I worked with Calor for a period of 15 years until my retirement in November 1993.
6. I was employed by Calor Gas as Group Safety Inspector for Scotland.
7. I have provided details of my job description which was "To provide a comprehensive safety inspection and advisory service to company locations as directed by the Health and Safety Manager and to ensure compliance with legal requirements by implementation of company

safety policies. To make initial investigations of incidents at consumers' premises and company establishments. To maintain a liaison with local HSE Inspectors and the emergency services".

8. Calor Gas's business was, in the main, distribution of bulk and cylinder LPG (LPG being liquefied petroleum gas - describing both propane **and** butane which is sometimes not realised).
9. Bulk supplies were of propane whilst propane and butane were supplied in the cylinders.
10. When I joined the company I was trained in LPG. My initial induction training covered everything related to LPG, pertinent to my intended Post.
11. I both advised on installations and dealt with problems at installations. I would only be called in if there were problems being experienced by the customer or other Calor employees. With new installations, the problems arose mainly to do with the siting of the tank.
12. When I joined, in general terms, as far as I can recollect, pipework was put in by Calor technicians from the tank to a building or to the point of use but thereafter the pipework became the property of the consumer.
13. In the case of bulk installations, as far as I recall, Calor's ownership and responsibility stopped at the regulator on the vapour off take pipe leading from the tank to the ground.
14. As far as I can recollect the responsibility of Calor would end at the last regulator before it went into the ground whether that was the first and only regulator or what I described as a second stage regulator, ie even if there was only one regulator.

15. All pipework issues were dealt with by the technical side of Calor's business. My only knowledge of pipework was through Codes of Practice.
16. As far as I can recollect, I never had any occasion to inspect underground pipework.
17. I would consult codes of practice as general references but generally pipework issues would be referred to the technical section of Calor.
18. I know they used to use Denso tape for wrapping pipes. This was tape impregnated with something but I am not sure what. Its purpose was to protect the pipe from external corrosion and this continued until polyethylene pipework was introduced for underground pipework which was some time after I joined Calor.
19. Calor carried out regular inspections of their own bulk installations, by which I mean the tank and the part of the vapour off take pipe owned by Calor. If I went in to do an inspection on an installation, the condition of the visible above ground pipework would be looked at.
20. Bulk vessels had to undergo a visual inspection every 5 years. By this I mean the LPG tank.
21. Every 10 years there was an ultrasonic test to check for the thinning of the wall of the tank. This would be carried out on site by a fitter. At that time the inspections and any of the major work would be recorded. If at any other time there was a fault with the pipework which was noted by anybody on site from Calor it would be reported back. I am only referring to any pipework owned by Calor.
22. I was not involved in underground pipework at all nor in general the pipework inside the building. This was the responsibility of the users as far as I was aware.

23. Codes of Practice published by the LPG industry would be issued to all members of Calor staff to whom they were relevant.
24. The company also produced, for use by consumers, guidance which précised the guidance from the LPG ITA codes.
25. As far as I recollect these would be circulated at the time of a new installation being put in and also to existing customers. I think they included pipework issues. My successor in Calor, John Nichol, should have copies of all the relevant guidance produced by Calor.
26. I did not circulate LPG ITA codes to customers. I advised customers of their existence as necessary. Calor would advise customers of them as a matter of course.
27. Sometimes when carrying out inspections I would leave a copy of my inspection report along with a copy of our guidance for the consumer, even if someone was not available when I was on site.
28. I would also give presentations and make guidance available to those involved. I would give presentations to all kind of groups from the Women's Institute to customers of the company to business groups and local government bodies.
29. I never made enquiries of any customer regarding what they were doing with their underground pipework.

Involvement with Grovepark Mills

30. A personal log which I kept and consulted when spoken to by the police after the tragedy shows that I visited the premises of ICL Plastics on 3 occasions. I still have this log and I gave a copy to the Police.

31. According to the log, my first visit was on 19th December 1988. The reference for that visit was BR05969. It shows that this was a Bulk Report which meant that my report would have been completed on a form which had 4 copies.
32. The top copy would go to Head Office, Second copy – to Regional Office (latterly Grangemouth), Third copy – would go to customer (I think), Fourth copy – this would be for my own records.
33. A bulk report is a report containing all information regarding the tank, detail of testing and any other relevant information gleaned at the visit to the premises.
34. The second and third visits to the premises were on 4th January 1989 (reference number VR14172, VR meaning Visit Report) and on 7th December 1989 (reference number VR14305).
35. The visit reports were A4 blank sheets to record what I said, did etc.
36. I have no actual recollection of these visits.
37. I have been shown photographs of the installation and have virtually no recollection of this installation. From my logbook I can tell you the reference for that is BR05969.
38. I have been shown Letter of 4 January 1989 (at page A8 in HSE Report on Inspection File) **[ICL/11479]**
39. This is a letter on Calor PLC headed notepaper sent by me to the Health and Safety Executive Scotland West Area at St Vincent Street, Glasgow marked for the attention of Mr J K Ives, Principal Inspector of Factories. I knew John Ives through business. We had met in an office situation on various occasions and we would keep up to date in relation to LPG matters generally. I can't elaborate on this. We met maybe

once every few years and occasionally I would seek advice from him in relation to installations.

40. The letter was headed up BULK LPG STORAGE ICL TECHNICAL PLASTICS LTD, GROVEPARK MILLS, MARYHILL, GLASGOW
41. The letter referred to Letter dated 8th September 1988 at page A in HSE Report on Inspection File [ICL/11474-11475] (report in inspection file page A3 and A4). Sent by Mr Ives to ICL Technical Plastics Ltd (addressed in error to ICI Technical Plastics Ltd).
42. From my log which I have already referred to it appears that I must have been called into ICL premises on 19th December 1988 after the company received Mr Ives letter of 8th September. I imagine that the letter was received, Calor were called in and I was made privy to the contents of that letter.
43. I have read through the contents of the letter.
44. HSE were concerned regarding the bulk storage of LPG and the letter addressed various issues including the siting of the tank, the total inventory and size of tanks and the separation distances which applied. The issue of pipework was also addressed within the letter and I would refer to the entire letter for its terms.
45. The purpose of my letter dated 4th January 1989 [ICL/11479] was to suggest possible remedial action in order to meet the recommendations made by Mr Ives in his letter.
46. In paragraph 2 of my letter dated 4 January 1989 [ICL/11479] I have begun "On behalf of ICL Technical Plastics Ltd". I note that I have indeed written on behalf of ICL Technical Plastics but it was not really on behalf of them, not really like that. It is hard explain this and put it into words.

47. In effect, it was with their knowledge that I wrote as it saved me suggesting a proposal for remedial action to ICL, ICL going back to HSE (Mr Ives) with that proposal then coming back to me with the response of HSE. To avoid all this I wrote directly to HSE for their view on my proposals.
48. I was shown photographs [ICL/12426-12435 Photograph numbers 4, 5, 6, 7, 8, 9, 10] of the LPG tank which I have been told were taken in 1988. On being shown these I vaguely recollect the grid sitting in front of the tank. That was unusual.
49. I would have to say that, if this is a 2 tonne tank things are not the way they should be. It would be quite obvious why the Health and Safety Executive wanted something done about it.
50. The guidance in HS(G)34 Health and Safety Series Booklet [ICL/01278] sets out at page 7 table 2 location and spacing for vessels. This table deals with the siting of tanks in relation to boundary walls, distance from radiation walls, distances between vessels etc. The specified separation distances for different sizes of tanks which, when installing a tank, there should be adherence to.
51. On looking at the table, a tank of 2 tonnes would fall into the category of 1.1 to 4 tonne capacity. The table makes it clear that for above ground vessels the distance from a building, boundary, property line or fixed source of ignition should be 7.5 metres, the distances from a fire (I would prefer to use the word radiation) wall was 4 metres and the distance between vessels (if there was to be more than one of the same size) should be 1 metre.
52. Whatever the condition of the walls forming the corner into which the tank is situated there was certainly no compliance with the 7.5 metre or

4 metre distances to which I have referred and the 1 metre separation distance between vessels didn't apply.

53. If a radiation wall had no holes in it at all and was of a certain height it could be that the tank could be closer than the distance specified in the table. A radiation wall would reduce the radiation of heat. Even allowing for the fact that you can't see on photographs the precise condition of the radiation wall, it is clear that there are real problems with the siting of this tank.
54. There is also a lot of clutter around the tank which you can see in the photographs.
55. The recommendation from Mr Ives is that the overall inventory (quantity of gas stored in bulk on the premises) should not exceed 750 kilograms and that no individual tank for storing of LPG should have a capacity exceeding 250 kilograms. As far as I recall, Calor did not have 250 kilogram tanks and therefore could not supply them. It may have been that other companies produced them but we did not. The sizes which we supplied were 2 tonne, 1 tonne and a smaller vessel but not as small as 250 kilograms. With my letter of 4th January 1989 I supplied a Sketch plan (Report in inspection file pageA9) [ICL/11480]. This letter refers to ICL reducing the LPG quantities at their factory at the request of the HSE. At that time one of the facets of my job as Group Safety Inspector with Calor Gas, would have been to advise ICL on the set up of Storage and siting of the LPG tanks.
56. In my sketch plan I proposed to install a 1 tonne bulk vessel to replace the 2 tonne bulk vessel which was at that time in situ because HSE were looking for a reduction in capacity held on site and it was my understanding that this would comply with the necessary regulations in the broader circumstances.
57. Other proposals were

1. The installation of a vehicular barrier shown on the plan which I suggested may be of a steel "motorway" type or strategically placed concrete bollards. This would reduce the likelihood of any contact with the tank in the event of a forklift or other vehicle being used in the yard. It was a kind of crash barrier.
2. I have marked the radiation wall suggesting that the existing height of the wall was 1.8 metres to 2.6 metres. This can be shown in the Colour Photographs as already referred to. It appears that the existing wall height must have been 1.8 stepping up to 2.6 metres although I can't be certain about that now.
3. I have also noted that no building, combustible materials, non flame proof electrics, or car parking should be within the line to be painted around the tank 3 metres from the vessel. My plan shows that that line should be "suitably extended to beyond the ventilated gate-wall".
58. I have marked that this area should be clearly defined, for example by floor painted lines.
59. I am not clear exactly what I meant by extending to beyond the ventilated gate wall. I have been asked if I perhaps meant that this was a nominal 3 metre gap if the property wall was continued outwith the gate wall, should that land be under the control of the user. It may be that that was my intention - equally it may not. It is simply too long ago to recall this.
4. On the gate wall I have marked that the wall should be suitably vented at floor level, this being done by the staggered removal of some bricks along the full length of the gate wall.
60. My proposals would not meet absolutely the requirements of HS(G)34 but I was trying to reach a compromise on vessel size. [ICL/01272-01312] If ICL Technical Plastics had owned the land to the west of the

gate wall the requirements of HS(G)34 would have been met. As far as I can recollect at the time I wrote the letter ICL Technical Plastics were intending to acquire that piece of land and subsequently did so..

61. To that end I have suggested on behalf of ICL Technical Plastics that my sketch plan outlines suitable remedial action to be taken by my company in order to meet the recommendations made at paragraphs 1, 2, 3 and 4 only of the letter dated 8th September.
62. I have gone on to say "With regard to paragraph 11 of your letter, 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".
63. I have been asked how this would actually meet the requirements of paragraph 11 of Mr Ives' letter which states:-
64. "11 – Part of the underground pipework carrying LPG vapour into the building should be excavated. The state of the pipework and any corrosion protective coating should be examined by a competent person and any recommendations made as a result of this inspection should be carried out. A pressure test of the pipework should also be carried out".
65. I should say in explanation that the Technical Department in Calor would have been consulted by me in relation to the requirements of Para 11. I would have spoken to the Regional Technical Manager regarding that because it involved pipework. I would not have made the suggestion regarding paragraph 11 off my own bat.
66. The vapour off take pipe is the whole length of the pipework from the tank to the appliance or equipment using it.

67. The riser pipe is the visible part of the vapour off take pipe from the tank to ground level, ie the part above ground.
68. The whole suggestion about paragraph 11 would have come from the technical department at Calor.
69. I was shown Letter of 23rd January 1989 (Report on Inspection file page A13) [ICL/11484]
70. This is a letter from John Ives to me and it refers to my letter of 4th January containing proposals in response to that of Mr Ives dated 8th September.
71. The letter discusses the plan with which I have provided Mr Ives and makes it clear that my proposal is only acceptable provided the occupier of Grovepark Mills could somehow gain control of extra land outside his premises so that he had full control of all land within 3 metres of the proposed tank in order to meet the separation distance of 3 metres for a proposed tank. Mr Ives makes it clear that if that cannot be achieved then the proposals outlined by me were not acceptable and they would return to the requirements of his letter of 8th September.
72. Mr Ives advised that he was copying the letter also to Mr Stott of ICL Technical Plastics Ltd.
73. I do not remember specifically what went on after I received that letter but I must have had some discussion with the company. I have no recollection at all of Mr Stott.
74. It appears that, given that I have logged this I went back to the premises on 7th December 1989, therefore I believe I must have gone to the premises and thereafter drew up

80. I accept that I must have visited him with the plan but, as I have already emphasised, I can remember nothing of this.
81. I do not appear to have had any further involvement with the premises.
82. Subject to the proposals recommended by me in my letter of 4th January 1989 to HSE being acceptable and carried out, I do not think I would have given any further advice or had any further involvement in the issue of the underground pipework. Once I had complied with what I had to do that would be it as far as my involvement was concerned.
83. I confirm that the contents of this statement are true.

Witness signature _____

Date _____