

## ICL INQUIRY STATEMENT

THOMAS WATSON DUDGEON

1. I am presently employed as a delivery driver with Johnston Gas. This company used to be known as Johnston Oils but about December 2004 it was split into Johnston Oils and Johnston Gas but they are the same company.

### Start of Employment with Johnston Oils

2. At the beginning of February 2004 I was working with Shotts Motor Auctions as a delivery/pick-up driver. That job involved delivering and uplifting cars.
3. At that time I telephoned Johnston Oils to see if there were any vacancies for a delivery driver. I had 6 months previously submitted an application form to Johnston Oils but had not heard back from them. When I telephoned in February 2004 I spoke to the Transport Manager, Jim Anderson. He set up an interview and a week later I got the job as a gas delivery driver.

### Training

4. At the end of February 2004, while I was still employed at Shotts Motor Auctions, I attended a week's course at Ritchie's Training Centre near Bishopbriggs, which was paid for by Johnston Oils. This course involved passing an exam and on passing I received a certificate that permits me to carry gas, petrol and all dangerous packages other than radioactive substances and explosives. I have produced my ADR Certificate dated 2 April 2004 which is my Vocational Training Certificate for drivers of vehicles carrying dangerous goods [ICL/12823]. I was also at the time given a sheet telling me what

courses I had passed but I have no idea whether I still hold that document.

5. At that course I received training on LPG. Basically it involved being aware of the dangers of LPG, namely, that it is a low-lying gas because it is heavier than air. It showed that LPG can cause burns, that it is highly explosive and can give the symptoms of frostbite because it is delivered as a liquid. I remember watching a video where a storage plant of LPG, similar to Grangemouth, was on fire and the firemen being engulfed in flames. I was also shown photographs of LPG storage tanks in Mexico flying through the air after an explosion. This video and photographs were shown to demonstrate how flammable LPG is. Since I gave my original statement, my company have provided more training. I was given further health and safety training after Kenny Gardiner (the company's Health and Safety Officer) joined the company. Kenny is also my immediate Line Manager. Last April, I was given a general refresher course which was an internal course lasting about an hour.
6. On 14 or 16 April 2004 I started as a delivery driver for Johnston Oils.
7. It was a Thursday that I started. I was told that there were two jobs available, namely, delivering LPG or delivering kerosene, which is heating oil, diesel and petrol. I was taken to a place where you uplift the diesel from and I stood and watched our trainer driver, Andy Harkins, load a Johnston Oils lorry with a product, which I think might have been diesel.
8. Also that same day Andy took me out on deliveries of diesel and kerosene. One delivery was to a commercial property and others were to farms. He did not show me any deliveries to houses. I watched Andy filling up the diesel tanks there.

9. When I started at Johnston I got three days training on oil and then five days training on gas. There were two jobs going at the time. After doing the training I decided I wanted to do gas deliveries as it is a cleaner job than oil. After my training, I was not given any documentary evidence of the training as it was all done internally. Most of it comprised being taken out by another driver and being shown the ropes.
10. The gas training involved showing me the operation of the vehicle and familiarity with the different type of gas tanks, procedure to fill them, the use of personal protective equipment and safe levels to fill the tanks to.
11. The only gas I am aware that is supplied by the tankers is Propane. The ADR training covered the dangers of Propane its properties and what Health and Safety procedures should be adopted. That was reinforced by Johnston Oils during my training.
12. Whenever I have been working I have always drove the same vehicle an ERF Gas Tanker Registration number J2GAS.
13. I would fill the tank of the vehicle routinely either last thing at night or first thing in the morning.
14. I go to Grangemouth to fill the tank at premises Mag Gas, which has been taken over by BP. They fill it up for us. I would drive in, switch the engine off, open up the foot valve and isolate the vehicle, walk away and then they would fuel the vehicle up. It is still the case that I go to Grangemouth to fill up my tank with gas.
15. There is a weigh bridge you go in and that's how you calculate how much Propane they have supplied. I would then drive to a loading bay, carry out the isolation, put my safety equipment on and then go to the

waiting area til the tank was filled. I would then go back over the weigh bridge, get my ticket and calculate what was taken out. It is still the same process today.

#### **Procedures for Filling an LPG Tank**

16. The procedure adopted to remove Propane Gas from the tanker to storage tank at premises is to earth the tank, reel out my hose (a white line as they call it) that's what I put the propane in with, screw the reel onto a valve on the tank, open the pressure valve on the tank. I do not recall calling it a white line as I just know it as the hose line. I also would not have called the valve on the tank the "pressure valve" as that is something different. I would normally call it the "filler valve".

17. The procedure that I was taught to fill a LPG tank was as follows: -

(1) Basically I was to look at the gauge, which sits on the top of a tank, which displays percentages from zero to ninety and this shows the level of LPG in the tank. I was shown Book of Photographs titled [ICL/ 13129-13160]. I only have a vague recollection of being shown the photographs. I recall that it was of the actual tank at Maryhill Factory. I remember it showed the filler valve and also the ulage guage which is a small guage that sits on top of the tank which tells you the percentage of gas in the tanks.

18. I observe that photograph [ICL/ 13137] is an LPG tank and as per the middle of this tank the gauge would be underneath its hood.

19. I am shown Photograph [ICL/ 13149], which shows the gauge at the far left of this photograph.

20. I am shown photograph [ICL/ 13150], which shows a close up view of the gauge. I observe that in this photograph this shows the level at about 68% or 69%. This shows that this tank is about 68% or 69% full. It is never filled to 100% because you have to allow space for the liquid inside the tank to expand to gas. You have to allow 20% space for the liquid to be converted to gas. I was trained that we should fill tanks to 80%. It is also related to the heat in the atmosphere. In the winter it could be filled to 85% because it is colder. However, I only ever fill tanks to 80%. Since giving my original statement, I do remember being shown this photograph but cannot remember whether the percentage figure shown on the level of the gauge stated 68% or 69%. However, the usual 20% space is there to allow for the gas to expand. When I had started my job, I would only fill a tank to 80% as I was very cautious as had just started the job. If we are filling high usage sites such as the caravan park then we usually fill the tank to 85%. The tanks are design/pressure tested to 87% but it is our company policy to only ever fill a tank to 85%.

21. If I attended and saw the gauge was at 68% or 69%, I would fill the tank to 80%. Since giving my original statement I do not know if I did say I would have filled the tank to 80% as I might have left it at 70% if the gauge was sitting at 69% etc. It was a half tonne tank which holds approximately 1,200 litres of gas. Therefore if a tank is already at 69% and you fill it up to 80% then you might only be supplying the tank with less than 100 litres. I might be wrong in saying that but I think that is roughly right. However, back at the time when I had just started my job I maybe did say that I would have filled it right up as I had only been a couple of weeks in the job. If, however, you are in a situation where you might be filling a tonne tank and the gauge is already at 69% then because the tank at full capacity will hold 1,850 litres, then you will be talking about adding in another 300 litres of gas to get it to 85%. That might be more worthwhile doing. You also get to know whether a

customer is a high user and you make a judgement as to whether it is necessary to fill a tank right up to 80% or 85%.

- (i) I always wear my personal safety equipment when doing deliveries.
- (ii) I would earth my lorry. This is done by pulling a wire from my lorry and attaching it to the customer's tank or a piece of metal. I believe this takes away any static electricity from my lorry when loading the LPG. I don't know why that is done.
- (iii) I would pull out the hose from my lorry, which delivers the LPG, and this has a T shaped gun at the end of it.

I am shown Photograph No [ICL/ 13149]. This shows a blue dust cap. I would remove that dust cap and tightly screw one end of the T shaped gun onto it.

- (iv) I would open the ulage valve, which is shown in the above-mentioned photograph, between the above-mentioned percentage gauge and the above-mentioned blue dust cap. It is nearest to the hinges in this photograph. I would open the ulage valve by unscrewing the ulage screw at the front of this valve, nearest the hinges. If, on doing so, there was LPG liquid or gas coming out, I would not fill the tank because the tank would be full. If the percentage gauge showed a reading under 80, then the percentage gauge would be faulty. This has never happened to me. You can use either a guage or the ulage valve to find out whether a tank is full. It is almost like a belt and braces approach. Since

providing my original statement I have had to deal with faulty gauges on occasion.

- (v) If there were no release of LPG from the ulage valve then I would pull up the valve release handle, which is in the above-mentioned photograph, immediately behind the blue dust cap.
- (vi) I would pull up the lever at the other side of the T shaped gun, which would allow the LPG to flow into the tank.
- (vii) I would look at the percentage gauge and the ulage valve and when I saw that the gauge reached 80% I would shut down the delivery because the tank was full. I would stop the delivery by pulling the handle down on the T shaped gun.
- (viii) I would close down the above-mentioned red handle and tighten the ulage screw. I would unscrew the gun and replace the blue dust cap. The red handle is really just an extra safety measure to close off the tank.
- (ix) I would reel in the hose back into my lorry. I would disconnect the earth wire. I would put the hood down on the tank.
- (x) I would issue a delivery ticket from my delivery meter, which is in my lorry. The delivery ticket shows how much LPG has been delivered to the customer. The delivery meter is similar to that in a

house electricity meter in that it has a series of plastic numbers on a round cog. Prior to making a delivery to a customer, I re-set the numbers to zero. After a delivery I run of a ticket, which is in 3 parts. The top 2 copies go to the customer and displays how much has been delivered. Ideally I would try to give the 2 copies to the customer and have him sign the tickets. However, if there is no customer about then I would attach the delivery ticket to the tank. The 3<sup>rd</sup> part, I deliver to the office of Johnston Oils.

22. If I were to over-fill the customer's tank, and for example the gauge crept up to 85%, then the LPG would, I think, pour out of the ulage valve. However I have never over-filled a tank or have seen this happen. If that did happen, then I would phone Johnston Oils to inform them. You would have to fill a tank more than 85% for a tank to become overfilled. You normally take over 87% but much depends on the weather as if it is a warmer temperature then a tank may be overfilled at a less percentage level. In winter you can usually get away with filling up to 85%. Since I provided my original statement I have now seen tanks overfilled. It actually happened two weeks ago. The gauge reading was wrong and it went to between 88% to 90% and the gas came out of the valve. It would not cause a hazard but I contacted my company and Johnston Oils sent out an Engineer to look at it.

#### **Other Parts of the Tank**

23. I was shown Photograph [ICL/ 13144]. I observed that this showed a valve with a yellow cover. As far as I am aware that if the pressure in the tank was too much then this would blow the yellow cap off and the LPG would be released. I have never seen that happen. I was shown Photograph [ICL/ 13152]. I observed that this showed a pressure

indicator but I have no knowledge of this. It is not part of my job. I would not deal with this or the lever beside it, which I believe would switch it on and off. I believe this pressure indicator is more to do with installation. Since my original statement I have still never seen a situation where the pressure in the tank has caused the yellow cap to be blown off.

24. I was shown photograph [ICL/ 13140]. I observed that this showed 2 gas cylinders attached to the end of the LPG tank. I do not remember seeing those 2 gas cylinders but my only concern had been filling the LPG tank.

**25. Date of Tragedy**

26. I remember that I made a delivery to ICL Plastics Limited the day before the tragedy. I remember that I delivered on a Monday in May 2004.

27. I was shown - Delivery Ticket [ICL/ 12589]

28. This showed that I delivered to ICL Plastics on 10 May 2004. At that time I had been delivering LPG or 3 or 4 weeks and this was only the second or third week that I had delivered on my own. At that time I would normally be making between 10 and 15 deliveries of LPG each day to customers' tanks. Since making the statement, I now often make deliveries between 15 to 20 each day but much depends on the area and how much you have to do.

29. I remember that I arrived that day between 8.00 and 9.00 am. It was my first delivery that day. I stopped at Taggarts Garage and asked a store man at the factory where the LPG tank was. He gave me directions and I drove up to the main gate. I didn't think I would be able to get the lorry under the arch so I didn't go into the yard with the

tanker. I put on my high Vis jacket and hardhat. As I was new, I was doing it all by the book.

30. I looked at the LPG tank and I saw that it was between 40 and 45% full. I then, as per using the previously mentioned filling instructions, filled the tank to 80%. I am 100% that I filled it to 80% because at that time I was working by the book because after seeing those videos and photographs of LPG explosions during my training, there was no way I wasn't going to do everything 100% right. I then went to look for someone to give them the delivery ticket. I remember that in my police statement I said that I gave the ticket to someone and got a signature but now, on thinking about it, I just thought I had. I thought I had because I had been visiting numerous places and getting signatories from other commercial properties.

31. There was nothing unusual about that delivery. It was just another normal delivery. I did not notice any unusual smells or notice anything untoward.

32. I was shown - Delivery Ticket [ICL/ 12589]

33. At position no 821 this showed that prior to the delivery the counting number was reset to zero. At position number 822 this showed that 509 litres of LPG was delivered to ICL Plastics Limited. I have written that I was driving vehicle registration number J2 and that I was the driver. It is noted on the sheet that the special instruction was that this was a weekly delivery.

34. At a later time Health and Safety phoned me and said that the rolling number, for example, 821 and then 822 as shown on this delivery ticket, was out of sequence on another delivery ticket produced by me. The running sequence is used to show that each time I return the meter

to zero that the next number is in sequence and shows the amount delivered. This is done to show that I have not given away any LPG, free. If there were a jump in sequence, say from 824 to 826, then this would probably have been caused by a paper jam. The ticket is manually inserted into the machine and sometimes it sticks. When I turn the cog to try to get the paper in properly, this sometimes causes me to turn it further and it jumps a number.

### Vehicle Running Sheets

35. I was shown - BP Gas Uplift Ticket Number 19162 [ICL/ 12587]

36. This uplift ticket detailed that at 3.30 pm on 7 May 2004 I attended at BP, Grangemouth and obtained 5740 kgs of LPG. At that time, I signed this ticket. As stated earlier, this is converted into litres by multiplying the 5740 by 1965 (calculates to 11,279). I should have added that figure onto the Running Sheet for that day of 7 May 2004 [ICL/ 12586]. I should have added it to the running balance. However, I was maybe in a hurry that day and did not include it. The running sheet therefore shows a closing running balance for 7 May 2004 of 2098.

37. I was shown - Vehicle Running Sheet for 10 May 2004 [ICL/ 12588]

38. In that vehicle running sheet I had included the balance carried forward of 2,098 and I had added the 11,279 from the BP ticket number of 19162 to show a balance of 13,377. This vehicle running sheet shows that on 10 May 2004 ICL Plastics was my first customer and that I delivered 509 litres of LPG there. I note that at the end of that day my balance was 6541.

39. I was shown - Vehicle Running Sheet For 11 May 2004 [ICL/ 12599]

40. I note that the balance carried forward was not 6541 but 6417. This has been a mistake made by me. What I used to do is that I used to scribble the amount carried forward onto the back of a pad and then insert that number onto the new running sheet. I think I have either written the wrong number down on the back of a pad or have been unable to read my own writing.

41. When I delivered the Propane there was no lingering smell of gas when I left. I put in about 509 litres of Propane. If I had smelled gas I would have checked the tank with soapy water and all the connections having phoned in first. Any gas escaping would show up bubbles on the soapy water. I've never had to do that yet but am aware of the procedure through training. Since I provided my original statement, I now have had to carry out the same procedure with soapy water. If I ever smelled gas or found a leak through the test I would call Johnston Oils who would send an Engineer out to look at the tank.

42. I don't not know where the pipe work for the tank went. It is not something I would look at.

43. I don't remember seeing the two cylinders connected to the tank, that is not to say that they weren't there. I have seen cylinders beside tanks before now but I couldn't say if they were attached. If there were cylinders attached to the tank I don't have anything to do with them. My job is just to fill the tanks.

44. As far as I know the tank was working fine. I saw one person there I did not see anyone else. There was a car coming up next to it but that is all I seen. I don't do cylinder deliveries.

I confirm that the contents of this statement are true.

Witness signature \_\_\_\_\_

Date \_\_\_\_\_