THE HIGH COURT

1987 No. 7904P

BETWEEN

MICHAEL CONNOLLY

PLAINTIFF

AND

DUNDALK URBAN DISTRICT COUNCIL AND

MAHON & MCPHILLIPS (WATER TREATMENT) LIMITED

DEFENDANTS

Judgment delivered by O'Hanlon J., the 7th February 1990

The Plaintiff, Michael Connolly, is a married man, living in Dundalk, and now almost 50 years of age. He has five children whose ages range from 17 to 25, two of whom - a son aged 17 and a daughter aged 19 - are still living at home. He has worked in various kinds of labouring jobs, including a period of 16 years spent in England where he met his wife. Returning to Ireland he secured employment with the first-named Defendant, Dundalk Urban District Council as a general operative, and for 12 years or thereabouts up to the 8th January 1986, he was assistant caretaker in the Castletown Mount Waterworks.

These waterworks were erected by the second-named Defendants, Mahon & McPhillips (Water Treatment) Limited, pursuant to an agreement made by them with the UDC and dated the 7th May, 1968. Having completed the design and construction of the waterworks the contractors at a later stage agreed to service the installation by providing three service visits per

annum. This arrangement has continued ever since and their charges for their services have been agreed from time to time - the current charges being much more than the figures initially agreed in the year 1972.

The supply of water for the town of Dundalk has at all material times been provided from the Castletown Mount Waterworks, and the work carried out there has involved the addition of chlorine to the water for purification purposes. This has been achieved by the injection of a high concentration of chlorine gas into the water, and the mixture of chlorine and water is then carried into the general water system where it is diluted to a point where the purification process is maintained while providing a water supply which is fit for human consumption.

The waterworks is commonly manned by only two operatives the Caretaker or Superintendent, and his assistant - and at
times only one of these two persons would be required on the
premises. On the 8th January, 1986, the Plaintiff made his
way by motor-cycle to his place of work, which was closed up
prior to his arrival. He unlocked the door leading into the
waterworks and was proceeding along the ground floor of the
building towards the chlorine room which was located at the
far end of the building from his point of entry. Upon
opening an internal door leading from one part of the control
building to another, he was hit by a dense cloud of chlorine
gas, some of which he inhaled. He succeeded in getting back
to a telephone in a different part of the building;

telephoned his superior, Jim Clarke, to tell him what had happened, and then made his way out of the building.

When Mr Clarke arrived, he found the Plaintiff in a very distressed condition outside the building, and prevailed on him to go to hospital. He was found to have pain and difficulty with his breathing; his heart rate was up to 100, - 30 above normal; he had oedema of the eyes and mouth; the oxygen level in his blood was quite low. He was kept in hospital in Dundalk for two days during which he needed continuous oxygen. His blood pressure became very elevated; he was sweating profusely and suffered tremendous headaches for 48 hours.

He was then transferred to the Mater Hospital, Dublin, where his symptoms on admission involved coughing, with green infected sputum; very severe headaches; pain in chest; redness of eyes; elevated blood pressure and respiratory rate. He was very distressed, and was diagnosed as suffering from chlorine poison; infected bronchitis and deep lung injury. He was, however, found to be alert and conscious and able to give a rational account of the incident in which he had been involved.

He was kept in hospital for about three weeks, during which he was given oxygen through nasal tubes, and drugs for a condition of hypertension. Dr Brendan Keogh, who was the consultant supervising his treatment at the time, was puzzled by the abnormally high blood pressure and could not find the

cause for this condition. The Plaintiff gradually settled down and was described as "fairly well" on being discharged home. At that stage his X-Rays and blood pressure were normal.

Dr. Keogh saw him again in July of 1988 when he found the Plaintiff had recovered from the physical effects of the accident, but still required medication to control his blood pressure and was likely to need this for the rest of his life. He also found an extraordinary change in the Plaintiff's mental condition. He found it imposssible to communicate with him and had to obtain his history from his wife who accompanied him. He concluded that the Plaintiff had recovered physically but that his mental state appeared to have been grossly affected. At a later examination in April 1989, and again more recently, he found the Plaintiff unchanged in these respects.

There was a large volume of evidence from psychiatrists, a psychologist, and the Plaintiff's wife, concerning his condition since the time of the accident, all of which bore out the finding of Dr. Keogh that the Plaintiff's mental state appeared to have been grossly affected by an accident which must, no doubt, have been very traumatic and terrifying, but which inflicted physical injuries of a comparatively minor character which should, in the ordinary course of events, have cleared up within a matter of weeks, leaving no permanent after-effects in their wake.

In many such cases it is necessary to view with considerable reserve, and to examine very closely, the claims put forward that permanent and deep-rooted psychiatric damage has emerged as a consequence of comparatively trivial physical injuries, but in the present case, having seen and heard the Plaintiff in a state of incoherence in the witness-box, which was clearly genuine in character, and having heard the evidence of psychiatrists and other expert witnesses called by the Defendants as well as by the Plaintiff, I can only come to the conclusion that the Plaintiff's personality and life-style have been permanently shattered by the events of the 8th January, 1986.

I am satisfied that for the past four years he has been profoundly depressed; that he has been aggressive and unpleasant to live with; that he has been, and will continue to be quite unfit to undertake any kind of gainful employment, even in a sheltered workshop; that he is unable to take part in or enjoy any of the forms of recreation which he was able to enjoy before the accident - going to football matches, socialising with his friends, reading and so forth; that he is condemned to a miserable, stagnant existence, where he mopes around the home, in a state of total dependence on his wife for all his needs. His marital relations, which she says were normal before the accident, have never been resumed since that date.

The description given by his wife and fellow-workers of his

personality prior to the accident was of an ordinary, pleasant, out-going individual, who got on well at his work and was a good family-man in his relations with his wife and family and in helping out around the home.

Dr. John Ryan, a consultant psychiatrist called on behalf of one of the Defendants, agreed with this over-all view of the Plaintiff's condition as given by other medical witnesses in the case, but suggested that treatment in an institution might be worth a trial, in an effort to break the Plaintiff's present state of dependence on his wife, and a change in the drug treatment which has not been varied for a long time past and which does not appear to have done much for the patient. These were, however, in the nature of speculative proposals put forward by him and it could not be suggested by him as a matter of probability or even as a strong possibility, that there was any hope of improvement for the future in store for the Plaintiff, and I think the probabilities are all the other way.

It is now necessary to consider the question of causation in respect of the accident in which the Plaintiff was involved and the question of liability in damages in the case of either or both Defendants.

When the Waterworks Superintendent, Jim Clarke, had done what he could for the Plaintiff, he entered the waterworks wearing a respirator and quickly discovered the cause of the escape of chlorine gas. The chlorine, mixed with water, was carried

from the chlorinator located in the Chlorine Room, through a pipeline constructed of rigid plastic and mounted horizontally to the wall of that part of the waterworks known as the Mahon Building about 6" above floor level. The injection point was located in the Mahon Building and consisted of a 4" diameter PVC upstand pipe cast in the floor and rising about 3" above floor level. A filtered water sump, through which the treated water flowed, was located under the floor at that point. The rigid plastic pipe carrying the treated water stopped short about three feet from the injection point, and where it terminated it was connected to a flexible, white plastic pipe, about 1" in diameter, which was bent through 90° into the injection point in the floor and continued vertically into the underground filtered water sump.

At some time prior to the entry of the Plaintiff into the waterworks the flexible plastic pipe had become disconnected from the rigid plastic pipe, so that the treated water poured out onto the floor of the Mahon Building at a rate of some gallons per minute. The chlorine gas quickly escaped from the liquid and set up poisonous fumes in the atmosphere.

Mr. Clarke cut off the flow of treated water onto the floor of the building by pushing the flexible pipe over the rigid pipe. Later the same morning, Raymond McKenna, an Executive Engineer with the UDC, went back in with Jim Clarke and saw the two pipes pushed together in the manner described by Mr. Clarke, and also noted the presence of a loose metal clip, known as a Jubilee clip, on the white plastic pipe. Peter

Lamb, then Assistant Overseer with the UDC, also came that morning and saw the pipes joined in the manner described by Mr McKenna, and the loose Jubilee clip, but his recollection was that the clip was on the rigid pipe, about 12" back from the joint. He made the joint more secure by fixing on a black adaptor and sealing it with Wavin cement that afternoon. The pipe in that condition was photographed the same day, and the photograph put in evidence. It appears that some more work was done even later in the day by UDC staff who wrapped denzel tape round the joint as a temporary measure until a permanent repair could be effected.

The failure of the joint in the piping was clearly the primary cause of the accident in which the Plaintiff was involved, and there was a large volume of expert engineering evidence as to the probable cause for the pipes becoming disconnected in the manner already described. There was also a good deal of controversy as to the manner in which the joint was secured prior to the accident. Mr. Clarke and some other witnesses suggested that the denzel tape was already wrapped around the joint prior to the accident, but I did not find their evidence reliable in this respect and I concluded that the first time it had been used to secure the joint was during the afternoon following the accident. It was common case that it was unsuitable and ineffective if used for this purpose, save as a temporary, stop-gap measure.

Mr. Butler, a fitter employed by the second-named Defendants,

who had many years experience in carrying out maintenance work on the Dundalk Waterworks, gave evidence of service visits in the months of August, 1985, (lasting from the 26th to the 30th of the month), and again from the 9th to the 13th December, 1985, only a few weeks before the occurrence of the accident.

He said that in August 1985, the rigid piping was joined to the flexible pipe by means of a spigot which went into a 1½ " reducer, cemented in with solder, and the entire was held together by a Jubilee clip. He produced in Court an assembly which he said was typical of what was there at the time. He said that he saw the joint again in the course of his December visit, while working on a wash-pump nearby, and its condition was unchanged. He considered that the pipework in the waterworks was outside the scope of the service agreement with Mahon & McPhillips, and that he was only concerned with the mechanical plant.

It was put to him that the Jubilee Clip would not go over the joint and he appeared to agree that this was so if it were pushed over the rigid pipe.

Mr. McKenna said he did not think the Jubilee clip he saw on the pipe on the day of the accident was appropriate for securing the joint - it should be a cemented joint.

Joseph O'Neill, a consulting engineer called on behalf of the Plaintiff, said the joint should be a screw connection with a threaded joint or gasket for anything other than water. A

joint of the kind shown in the photogrpah was not acceptable, with one pipe tapering into another. It was likely to come off under pressure. He said that plastic would crease and crack due to the force used in pushing it in. He would expect the rigid piping to be continued to the end of its run, with a joint fitted, if necessary, to get it into the sump.

It appeared to me that the expert evidence on both sides confirmed that the type of joint seen in the photograph taken on the day of the accident was quite unsuitable for its purpose and was likely to fail at some stage, and the failure of the joint, which should have been foreseeable to the Plaintiff's employers, was the primary cause of the accident in which he was involved.

Accordingly, I conclude that the first-named Defendants, Dundalk Urban District Council, failed in the duty they owed to the Plaintiff to take all reasonable steps to ensure that his place of employment was safe and free from danger of a type which should have been foreseen by them.

The expert evidence adduced in the case also conveyed to me that while alarm systems and ventilation systems were not part and parcel of the conventional installation where chlorine gas was used for water treatment, at the time when the second-named Defendants designed and constructed the Dundalk Waterworks in the late 1960s, these additional protective features have become commonplace since that time and have now been widely used for many years prior to the

year 1986 when the Plaintiff met with his accident.

Mr. McKenna, the UDC Executive Engineeer, said that he discussed these safety features with the second-named Defendants prior to the month of August, 1985, but was assured by the said Defendants' representative that if the operatives in the Waterworks were doing their job properly there was not much need for a detector. However, when the regular servicing of the waterworks took place in August, 1985, the second-named Defendants' service engineer, Jim Butler, commented as follows in his service report: "Some thought should be given toward the provision of the following items, purely from a safety point of view, particularly where chlorine and fluorine is concerned:

(1) Extractor fan and fume detector in chlorine drum store and chlorinator room...."

This suggestion was followed up quite promptly by the Urban District Council. Mr. McKenna attended a course on safety in chlorination of water treatment plants on the 24th October, 1985, and an exhibition of safety devices in Dublin in November, 1985. As a result he concluded that the Dundalk system did not meet the required standards, and decided that an alarm and extractor fans should be installed in the chlorination room, the fans to be activated automatically every 15 minutes. He wrote to the second-named Defendants for a quotation for the proposed changes in the installation on the 5th November; a quotation came through on the 19th November, and an order for the work was placed on the 6th

December, 1985. Unfortunately, but not surprisingly, the work had not yet been put in hand when the accident happened, but was carried out shortly after the Plaintiff sustained his injuries.

Once again, while the first-named Defendants were obviously activated at all times with the desire to keep their waterworks up to the best standards of safety as well as efficiency, I am forced to conclude that they must be held liable in law in respect of the accident on this ground also, namely, for their failure to acquaint themselves in time with the development of safety procedures which had come to be regarded as standard for some significant time prior to the accident, and to give effect to them in the Plaintiff's place of employment.

The Urban District Council have fought the case on a number of different grounds, one being their claim that the responsibility for any failure of the pipework in the system, or any failure to implement in time safety measures which should have been incorporated in the waterworks, should be laid at the door of Mahon and McPhillips, who were the acknowledged experts in the field, and who were responsible for the original design and construction of the waterworks and later for all aspects of service and maintenance of the system.

It is well-established, however, that an employer owes a duty to his employee to provide a safe place of work, and cannot escape liability for breach of such duty by employing an independent contractor - no matter how expert - to perform the duty for him. Goddard L.J. said in Paine -v- Colne

Valley Electricity Co., (1938) 4 AER 803/807; "This is a duty which cannot be avoided by delegation. It is no answer to say 'We employed competent contractors to provide a safe place or plant'". See also Charlesworth on Negligence, 4th edn. par 845: "The employer is liable if the failure to exercise reasonable care and skill is that of an independent contractor, and is only excused from liability if the danger is due to a latent defect not discoverable by reasonable care and skill on the part of anyone."

I must next consider whether a claim in negligence has also been made out against the second-named Defendants. If the joint in the piping was effected in the manner described by the said Defendants' service engineer in the month of August 1985 and again in the month of December 1985, then - while not, perhaps, ideal - it should have been safe and secure and it is difficult to understand how the two pipes became disconnected on the 8th January, 1986, unless interfered with in some way in the intervening period by some of the waterworks or other UDC staff.

However, no reason has been suggested why the waterworks staff should have had anything to do with this particular joint at any time. Secondly, I find it difficult to accept that Mahon and McPhillips service engineer would have taken mental note of the construction and condition of the joint in

question in August and again in December 1985 when not involved in any work on the pipeline in question and expressly disclaiming any responsibility for it as part of the service contract. In this situation I am driven to the conclusion that Mr. Butler is mistaken in his recollection of the nature and condition of the joint when he was on the waterworks premises in 1985. I believe that in all probability the joint was inadequate for a considerable time prior to the accident and that this inadequacy should have been noted and acted upon when the periodical servicing of the installation was taking place. I consider that the second-named Defendants' obligations under the service contract did extend to service and maintenance of the pipeline and injection point through which the potentially dangerous current of water treated with chlorine was introduced into the water suppply for the town.

Furthermore, I am of opinion that the second-named Defendants having designed and erected the waterworks and having thereafter undertaken for reward the periodical service and maintenance of the equipment installed, owed an obligation to the Urban District Council to keep them informed as to changes which modern standards might require in the system from time to time. They appear to me to have recognised this duty by the recommendation made in the report of the service engineer in August, 1985, but unfortunately this came just too late to save the Plaintiff from harm. I believe they should have reacted sooner to the developments in their field

and should have been aware of serious accidents which had occurred elsewhere and which could be guarded against by technology which had evolved since the waterworks were constructed.

If the joint at the time of the accident was merely of the crude type illustrated by the photograph taken later on the same day, then I am of opinion that it did not require the particular expertise of the second-named Defendants to recognise it as being potentially dangerous, and that this should have been apparent to, and observed by, persons with reasonable expertise on the UDC staff, among whom I would include Mr. Clarke.

On these grounds I make a finding of liability for the accident against both Defendants and I exonerate the Plaintiff from the charge of contributory negligence brought against him. I find that the two Defendants were equally responsible for the accident and therefore entitled to be indemnified one against the other to the extent of 50% of the damages and costs awarded in favour of the Plaintiff, and each Defendant to be responsible for its own costs of the proceedings.

Turning to the question of damages, I assess damages in favour of the Plaintiff as follows:-

As regards the claim for loss of earnings, I find that the Plaintiff was employed by the UDC as a general operative and

by Managerial Order made on the 3rd January, 1986, prior to the accident, and after consideration of the determination by the Waterworks Sewerage Appeal Committee heard on the 26th June, 1984, the Plaintiff was appointed to the higher grade of Waterworks Caretaker Grade 3, giving him a weekly wage of £145.65 plum maximum week-end allowance of £11.10. Although this was a source of dissatisfaction to the Plaintiff and his Union representative, it appears to me to have been the Plaintiff's only legal entitlement at the time and I propose to deal with his claim for loss of earnings to date and into the future on this basis.

For loss of earnings to date I award the sum of £25,314.77. For loss of earnings to age 65 I award the further sum of £78,813.

As regards the award of general damages, while it is impossible to overstate the disastrous effect the accident has had on the Plaintiff and will, in all probability, have on him for the rest of his life, I also have regard to two factors - one, the award of a very large sum for loss of earnings, totalling £104,127.77, and the other, my belief based on the evidence I have heard, and from seeing and listening to the Plaintiff, that no award of damages, however large, is likely to enhance his enjoyment of life or bring him much in the way of comfort or consolation. For general damages to date I award a sum of £75,000, and for general damages for the future I award a sum of £100,000.

To summarise	-	Loss of Earnings to date£25,314.77
		Loss of Earnings for the future £78,813.00
		General Damages to date£ 75,000.00
		General Damages for the future £100,000.00
		TOTAL £279,127.77
		Plus - Medical Expenses £ 1,600.00
		TOTAL: £280.727.77

I give judgment for the Plaintiff against both Defendants for the said sum of £280,727.77, together with the costs of the proceedings.

As I have formed the opinion that the Plaintiff is incapable at the present time of managing his own affairs, I propose to direct that the sum of £20,727.77 should be paid by the Defendants as to £19,127.77 to the Plaintiff's wife to be utilised for his benefit; £1,600 to Plaintiff's Solicitors to discharge medical expenses and that the balance of the damages, amounting to £260,000 should be paid into Court to the credit of this suit and invested pending the making of an application to the President of the High Court to admit the Plaintiff to wardship.

R. J. O'Hanlon

7th February, 1990

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