IN THE SUPREME COURT OF JUDICATURE OF JAMAICA

IN COMMON LAW

SUIT NO. C.L. 1980/E017

BETWEEN OWEN ELLIS PLAINTIFF

A N D INDUSTRIAL CHEMICAL CO. (JA) LIMITED DEFENDANT

R. Codlin instructed by R. Codlin and Company for the Plaintiff.

B.J. Scott Q.C. instructed by B.J. Scott and Company for the Defendants.

Hearing on: 9th - 11th May, 1983 and 10th - 14th October, 1983

Delivered : 16th January, 1984

JUDGMENT

BINGHAM J:

The plaintiff, a young man, was seriously injured on 13th December, 1978, while he was working at the defendants' chemical plant. He was employed at the time as an Acid Plant Operator.

It is common ground and not in dispute that the defendant was engaged in the manufacture of sulphuric acid which is sold in various forms to persons using the product and that the manufacture of this acid is a highly dangerous operation.

The plaintiff was first employed at the plant in June 1975 and after a three month period as a trainee operator he was appointed an Acid Plant Operator.

From the evidence it is apparent that the plaintiff is a well educated person who after attending a well-known High School in Clarendon, attended the College of Arts Science and Technology where he was successful in obtaining the ordinary Diploma in Engineering. He had prior to taking up

his position with the defendants' company held responsible positions in Industry.

Among the subjects that the plaintiff excelled in at High School was Chemistry.

In his Statement of Claim the plaintiff alleged at paragraph 3 "that on or about 13th December, 1978, while working on a circulation tank the stem of a discharge valve came off thereby causing sulphuric acid to gush out and severely burn him. That the loosening away of the said stem was caused by the negligence of the defendants who failed to maintain the said valve and to ensure that it was in proper working order."

The particulars of negligence are then set out and were as follows:

1. "Failing to keep an apparatus in a factory in such condition as to enable it to work properly and not endanger the safety of workers.

2. Failing to make regular checks of a discharge valve a safe system of work which would prevent the corroded point of the said valve from remaining in use thus endangering the safety of the workers."

It was further alleged that it was the failure of the defendant to do the aforementioned which by their "sins of ommission or commission" resulted in the injury to the plaintiff.

The injuries suffered by the plaintiff are then set out followed by the Particulars of Special Damage and the claim ends with a list of the various reliefs sought.

That the plaintiff was injured in the manner set out in paragraph 3 of the Statement of Claim is not disputed or that he was severely burnt as a result. The evidence of Dr. H.A. Jackson, a Plastic Surgeon, was not challenged by Mr. Scott for the defendants and is accepted.

In the Defence filed the defendants sought to counter the allegations of negligence set out in the Statement of Claim and at paragraph 3 it is alleged that:

3. "Save that it is admitted that on 13th December, 1978, at about 1.55 O'Clock in the afternoon, the plaintiff climbed the staircase leading to the acid circulation pumps which are located on the top of the circulation tank and upon reaching the top of the said circulation tank, proceeded to work by manipulating the valve which controls the flow of acid from an acid circulation pump and that while so working the spindle of the valve and the handle were forced off by acid which spewed out on the plaintiff, negligence as alleged in paragraph 3 of the Statement of Claim is denied."

In paragraphs 4 and 5 the defendants further alleged negligence and or contributory negligence on the part of the plaintiff.

The particulars of negligence of the plaintiff are then set out at paragraph 6:

(i) "Failing to have proper or any regard to the caution notice distinctively published in relation to the area in which the accident occurred, namely CAUTION ACID PROTECTIVE CLOTHING MUST BE WORN IN THIS AREA.

(ii) Failing to wear the acid protective clothing issued to him by the defendant to wear in the area where the accident occured.

(iii) Failing to obey the express instructions of the Defendant to wear the acid protective clothing issued to him by the Defendant to wear in the area where the accident occured.

(iv) Failing to heed the several and repeated warnings given to him by the Defendant of the risk of injury to his person if he neglected to wear the acid protective clothing issued to him by the Defendant to wear in the area where the accident occured.

(v) Entering the area where the accident occured without wearing the acid protective clothing issued to him by the Defendant for wearing in the said area, contrary to,

(a) the distinctive notice referred to in (i) above,

(b) the express instructions given to him by the Defendant referred to in (iii) above,
and notwithstanding the several and repeated warnings given to him by the Defendant referred to in (iv) above.

(vi) Working in the area in which the accident occured without wearing the acid protective clothing issued to him by the Defendant for wearing in the said area well knowing of the danger in so doing.

(vii) "Failing to inspect the discharge valve on the circulation tank, to observe its condition and to report its condition to the Defendant to enable the Defendant to replace it.

(viii) Working at and on the discharge valve on the circulation tank well knowing that having regard to the nature of the sulphuric acid, the flow of which was controlled by the said valve, periodically the spindle and the handle of the said valve become inefficient, unsafe and dangerous, subject to replacement and liable to cause injury, damage and expense, and neglecting to wear the aforesaid acid protective clothing while so working."

In the Reply filed on behalf of the plaintiff at paragraph 2 there is a traverse of (i) to (viii) of the particulars set out in the Defence. At paragraph 3 it is now alleged for the first time that "the plaintiff will further say that no protective clothing was, on the day in question, supplied to the plaintiff because none was available, except a pair of short gloves reaching only a portion of the plaintiff's forearms thus causing spewed acid to burn portions of the plaintiff's forearm and hand as the protection offered by the said pair of gloves was insufficient."

4. The plaintiff further alleged at paragraph 4 that, "a new valve was installed less than three months before the accident occurred but that the wrong valve was installed, that is, an ordinary valve, instead of an acid valve."

It may be convenient at this stage to make one or two comments in passing on paragraphs 3 and 4 of the Reply in so far as they bear on at least one of the critical issues that emerged from the Pleadings.

It is to be observed that the allegation by the plaintiff as to "a failure to provide protective clothing" emerged in the Reply. It was not a part of the Statement of Claim. As such an allegation would have amounted to a breach by the defendants of their statutory duty under section 76(b) of

the Factories Regulations and as such would have given rise to an additional claim by the plaintiff, it is, to say the least, surprising that had this been a part of the instructions given by the plaintiff to his Attorneys that such an allegation by the plaintiff's Attorneys when filing the Statement of Claim, a matter so vital to the plaintiff's case, could have been ommitted from it from the outset of the matter.

In so far as paragraph 4 of the Reply was concerned there was during the hearing no evidence lead by the plaintiff in support of this contention. In fact the evidence lead by the defendants as to the valve in question went for the most part unchallenged. What the plaintiff sought to establish on the other hand was that the valve in question had no gate. As this was never alluded to in the Pleadings, and in particular paragraph 4 of the Reply, it was therefore not properly a part of the case for the plaintiff on the pleadings but as Mr. Scott has quite rightly observed during his final submissions quite a lot of time was spent, during the hearing, by Mr. Codlin in seeking to establish a fact which was not a part of his client's case.

Having regard to the matters pleaded there were a number of questions raised for determination but the two main questions which emerged were given the admitted fact that the injury to the plaintiff is not being denied by the defendants:

(i) Did the defendants take reasonable care for the safety of its workers including the plaintiff?

(ii) Was there adequate protective clothing available for the use of the workers at the defendants plant?

(iii) Assuming (i) and (ii) to be in the affirmative what is the duty of the employer to his workers as regards (ii)?

Evidence

What emerged on the evidence was to a large extent not disputed although there were one or two areas where there was some conflict. Among the common areas it emerged that the plaintiff was at the date of the accident one of the senior Acid Plant Operators at the defendants' plant and as such was a Supervisor. There were four Plant Operators employed at the Acid Plant each operating on daily eight hour shifts with one operator usually off duty.

This Acid Plant is an highly automated one in which the Plant Operator, once the operations have been started up, spent most of his working day in the control room observing the plant by inspecting guages and recording the data in a log book. It is true to say that on the evidence the Plant Operator from his vantage point in the control room was the best person to determine how the plant was performing. The plant in question was manufactured by a well-known firm, Simon Carbs of England, who built Chemical Plants for companies all over the world. They were responsible for building and installing the plant. Once started up, it continued on a non stop basis on a twenty-four hour per day, seven days per week operation. As one Plant Operator came off duty he would be replaced by another Plant Operator who would just take over where the other Operator left off carrying out just about the same type of functions.

It is the unchallenged evidence of Mr. Thomas Blakeley Markes, the Operations Manager at the time of the injury to the plaintiff, that a Plant

Operator had the authority to shut down the plant if in his opinion he observed anything unusual taking place from his observation point in the control room. It would have been necessary for him to leave the control room only if from the guages he observed anything unusual about the way the plant was behaving, and also when it was necessary to carry out certain essential functions such as manipulating valves during the starting up or shutting down process. Although the plant during normal operations continued on a non stop basis, there were around the time of the incident intermittent periods of dislocation when due to a failure in the power supply the plant had to be temporarily shut down due to the resulting failure in the water supply system, a factor without which the plant could not function.

On the occasion which necessitated the Plant Operator leaving the control room and venturing into the danger area in the vicinity of the acid circulation tanks to carry out these functions, it was a clear rule of the company that there was the necessity for acid protect've clothing to be worn in that area. There was a large notice,visible for all workers to be able to observe, placed in a position at the entrance to the circulation tank warning workers of the need to observe the rule. The evidence is further that the protective equipment consisted of the following:-

1. Safety boots
2. A face shield
3. Safety helmet
4. Safety gloves
5. An acid suit

When the plaintiff suffered the injury he was wearing neither the face shield nor the acid suit.

The weight of the evidence supports a causative finding that had the plaintiff been wearing the acid protective suit he would not have received the serious injury which he suffered on the day in question. The evidence of the plaintiff, himself, under cross examination by Mr. Scott is that had he been wearing the acid suit he would have sufficient time to get out of it and into the safety shower before being burnt by the acid. Mr. Markes testified, and his evidence in this area was not challenged, that it would take about five minutes for sulphuric acid to burn through an acid suit. On the issue of causation, therefore, on the evidence presented and having regard to the proximity of the safety shower in relation to the platform on which the plaintiff was standing when the acid gushed out unto him, there would have been ample time available to him to get out of the acid suit and into the safety shower before receiving any injury.

The injury to the plaintiff occurred while he was in the process of manipulating one of the discharge valves on what was at that time a reserve tank which was being put in service because of a pin hole leak which the plaintiff had observed to the No. 2 pump in the control room during the starting up operations on 13th December. The start up operations were necessary because the failure in the water supply to the plant which had resulted in the plant being shut down on the previous day, had been remedied resulting in the necessity for the plant to be put back in service. This was what the plaintiff was in the process of effecting just prior to handing

over to the Plant Operator who was to relieve him when he suffered the injury. According to the plaintiff when he observed the leak by the foot of the pump in question he had shut off the controls to that tank and having been given the go ahead from the Maintenance Section that the No. 3 reserve pump was operative he started up that reserve pump. It was while the plaintiff was in the act of manipulating the discharge valve by the No. 3 tank that he suffered the injury in question.

The evidence in relation to the valve in question as related by Mr. Thomas Blakeley Markes, is that it was supplied by a highly reputable firm of valve manufacturers, Cranes of the United States of America, who specialise in manufacturing valves for Chemical Plants. It was supplied upon an order which contained certain specifications which included the use to which the valve would be put, that is, for exposure to sulphuric acid under the relevant conditions of concentration and temperature. It had been installed on the particular tank some three months prior to the mishap taking place. Following the incident on 13th December, 1978, the valve was replaced by another valve which had been supplied at the same time that the defective valve was ordered. The evidence is that the replacement valve was still in service operating efficiently up to nine months following the incident. These acid valves are supplied as one complete unit, and not in parts to be assembled by the Maintenance Personnel at the plant. As they were ordered from reputable manufacturers there was no need for them to be disassembled for inspection before being fitted unto the circulation tank. Once fitted and in place the only section that was visible on an external examination would be the handle of the valve and the spindle, or what has

also been referred to as the stem attached to it. The spindle is attached to a gate and when properly fitted is screwed into or embedded into the gate. When properly fitted and the handle of the valve is turned, the flow of the acid is controlled by being released or contained in the various pipes during the starting up or closing down operations. The spindle is protected from corrosion by acid by a gland or washer.

A valve similar to the one in question was tendered in evidence in order to enable the Court to see how it functioned.

As the plaintiff sought to open the discharge valve in question to allow the sulphuric acid to circulate through the pipes to which it was connected the handle of the valve and the spindle "loosened away from the gate" causing the sulphuric acid to gush out unto him.

I pause here to observe that having regard to the plaintiff's pleadings as set out in paragraph 3 of the Statement of Claim and which is admitted in the Defence, the only reasonable inference to be drawn from the evidence is that the end of the spindle loosened away and became separated from the gate. This has to be so as although quite a lot of time was spent during the hearing by Mr. Codlin in seeking to explore the possibility of establishing the non existence of a gate on the valve in question this course was taken in direct conflict with the plaintiff's own pleadings. All that emerged during the hearing was some evidence coming from Mr. Vinton King, who was called in support of the plaintiff's case, that after the mishap he overheard certain maintenance workers saying that the valve in question had no gate. This is so, despite the allegations in paragraph 4 of the Reply

that "the wrong valve was installed, that is, an ordinary valve and not an acid valve." (Underlining mine). This was alluding no doubt to the valve which the plaintiff was in the act of manipulating when injured.

The evidence in this case has established beyond question that for a valve to be so by any definition it must of necessity possess a gate in order to control the flow of liquid passing through the pipes to which it is affixed. Having regard to the plaintiff's assertions in paragraph 4 of the Reply the question as to whether there was a gate or not on the valve in question hardly seems to arise on the plaintiff's case.

The weight of the evidence, however, clearly established that the gate was in place and the spindle became loosened from it when the handle of the valve was turned. The gate was in place because:

1. There was no evidence of any leakage of acid seen by the plaintiff or any of the Plant Operators around the valve in question during the three months that it was installed and on the evidence this would have been highly unlikely if there was no gate on the valve.

2. The evidence of Mr. Roy Harding, a Chemical Engineer and the then Process Engineer at the plant is that, had the valve in question no gate attached to it, it would not have been possible for the start up operations to reach the stage where there would be the need to open the valve in question. He gives as his reason the process adopted during the starting of the plant. At the commencement stage when the pumps are turned on the 1½" valve is opened and the 4" valve closed. The closure of the 4" valve causes the ameter to show the load the pump is carrying and when the load reaches to a certain level, the 1½" valve is closed and the 4" valve is opened. If the 4" valve had no gate, it would be open, so the pressure could not build up to prime the pump. The ameter, therefore, would not show a build up of pressure as the acid, far from being controlled by the gate, because of the absence of a gate, would be running freely through the pipes. On the plaintiff's account, as the priming stage had to be reached before he was required to go into the danger area to manipulate the valves, that stage would not have been reached due to the absence of a gate.

I accept the evidence of Mr. Harding as being both logical and reasonable in this regard.

There is further support for the fact that there must have been a gate on the valve for it is highly unlikely as Mr. Scott has submitted that Crane's a highly reputable manufacturer would ship abroad a valve without the sole purpose of the valve, its gate, or further that the maintenance workers at the defendants' plant would fit a valve in place without first checking to see whether it was functioning. The demonstration using the valve in Court clearly showed that when the handle of the valve was manipulated the gate would control the moment of the acid from passing from one section of the pipes at the joint which it was fitted to the other. It is not, however, possible to see the gate or the end of the spindle once the valve is installed.

When the evidence in this matter is examined and assessed the matter boils itself down to the determination firstly of a question of fact as to the availability of protective clothing which in itself is bound up with another question as to whether there was in place a safe system of work at the defendants' plant.

The weight of the evidence tends to suggest an affirmative finding being given to both questions. I will now proceed to examine these two issues.

The Question of Protective Clothing

It is common ground that this was the critical issue to be determined.

The evidence here is that there was a pool of acid suits in the control room for use by the Plant Operators which they were required to wear when carrying out the following tasks:

1. Pouring acid to cool for the demineralisation unit to make distilled water.

2. Collecting oleum samples.

3. Manipulating the discharge valves during the starting up and shutting down operations.

The plaintiff was carrying out the last of these three functions when injured.

The acid suit had to be worn in conjunction with a face shield. All the other protective gear used at the defendants' acid plant was issued to Plant Operators individually and were usually kept by them in their lockers in the control room. It is the evidence of Mr. Roy Harding, the plaintiff's boss, that acid suits were not issued to Plant Operators individually but a pool of acid suits were kept on racks in the control room from which the Operator on duty could select one when he was required to perform any of the three functions previously referred to, in the danger area outside the control room.

The plaintiff's evidence is that the acid suit which he wore, prior to going on his vacation leave in August 1978, was missing when he returned from leave in September 1978. When he was required to perform functions which necessitated the use of the acid suit during the period between September when he returned from leave and prior to 13th December; he would use one from the pool of suits readily available in the control room. This was the same pool from which both Vinton King and Roy Harding testified that they procured acid suits when they had to venture into the danger area around the acid circulati tanks. For some strange reason, still unexplained, when the plaintiff received his injury and his evidence is supported by that of

Vinton King, there were no acid suits hanging from the usual place on the racks behind the door in the control room. Mr. Harding's evidence is, to the contrary, that there were acid suits seen by him on the racks in the control room within minutes following the injury to the plaintiff. Mr. Harding testified that he saw them there when he had gone into the control room to turn off the control switches and shut down the plant. Apart from this there is the evidence of Mr. Thomas Blakeley Markes, the Operations Manager and the then Safety Officer for the plant that sometime later in the afternoon following the injury to the plaintiff, deeply concerned about the injury suffered by the plaintiff and distressed over the fact that the plaintiff's serious injury was due to the fact that he was not wearing the acid suit, he made a personal check of the stores and found some thirty-one new acid suits in stock. This discovery came as a great measure of relief to him. It was the plaintiff's evidence that when he missed the acid suit which he had been wearing before going on leave, he had requisitioned a replacement but was informed by the stores that there were none in stock.

Who is to be believed? Mr. Harding or the plaintiff and Mr. King? Clearly all cannot be speaking the truth. Even assuming that the suit the plaintiff was accustomed to wear was missing there would still have been at least three other acid suits available on the racks from which the plaintiff could select one. The unchallenged evidence being, that apart from the plaintiff there were at least three other Plant Operators working at the Acid Plant on December 1978. The fact that prior to 13th December, Harding, King and the plaintiff himself all had no difficulty finding a suit from the

pool of suits in the control room when required to go into the danger area at the plant, the weight of the evidence is therefore clearly supportive of the finding on a balance of probability that on 13th December, 1978, there were acid suits on the racks in the control room when the plaintiff was in the process of carrying out the starting up operations. The evidence of Mr. Roy Harding which went unchallenged in this regard was that although the acid suits offered ample protection to Plant Operators and those wearing them, there was a tendency by Plant Operators and rank and file workers to disregard the safety instructions laid down not only in the Acid Manual which was available for them to read, but also the directives issued to them by him, as well as the Caution Notice placed in the danger area by the circulation tanks. It is the evidence of Harding, Markes and the plaintiff, that the acid suits were uncomfortable to wear as they were hot, being unpervious to water, and because of this became smelly after being used for a period of time as a result of the retention of the perspiration and moreso when acid spilled unto them. What cannot be overlooked, however, is that they offered adequate protection from injury by acid when worn.

Mr. Codlin has submitted that even if I were to find that there were acid suits available for the plaintiff to wear the defendants would still be liable as they were under a duty to see to it that the acid suits were worn. This rule had to be rigidly enforced, otherwise the duty placed upon the defendants was not properly discharged.

I see this submission as placing the duty on the defendants as the employer on too high a plane. Given that the employer is under a duty at

common law to take reasonable care for the safety of his employees and thereby protect them from such forseeable danger, the evidence in this case is that the operations at the plant was a highly dangerous one. To this end as part of their responsibility the defendants provided for safety of their workers protective clothing to be worn which protected employees in event of an emergency such as that which occurred on 13th December, 1978. The defendants further warranted that the plant was as reasonably safe as care and skill on their part could make it. They certainly did not warrant that it was absolutely safe. There were additional safeguards provided, therefore, such as the protective clothing in event of the plant malfunctioning. The defendants duty in so far as the plaintiff was concerned was completed by providing him with a safe plant in the manner as indicated above, with the protective clothing and by instructing him as to its use. As far as supervision in the manner as submitted by Mr. Codlin there was no necessity for there to be any such course adopted in so far as workers who fell into the category of the plaintiff was concerned. As Plant Operators persons such as the plaintiff were supervisors and they were expected to set an example by not only following the safety measures laid down for their own protection as well as that of fellow workers, but to supervise the workers in the lower categories as to the carrying out of these measures.

In this regard I agree entirely with the observations of Mr. Scott that whereas the Factories Regulations placed a duty on the employer to provide suitable protective equipment for a worker to wear at the work place,

it also laid down a complementary duty by Regulations 79(b) and 79(c) on the worker to wear the equipment and in so doing it is in keeping with the common law duty of the worker thereby to take reasonable care for his own safety. The plaintiff, apart from being a supervisor, was also an experienced Acid Plant Operator. He needed no supervision. He must be taken to have been well acquainted with the safety procedures at the plant. He admits that he knew that he was taking a risk by going into the area where the mishap occurred without wearing the acid suit and the face shield. In this regard he may be likened to the steel worker who was injured in similar circumstances by molten metal when a ladle containing the substance overturned unto his foot while working. He was not wearing spats which were available to him at his request if he required them. The spats would have protected his feet from injury. He had been accustomed to working in the operation for sometime without wearing spats.

It was held by the House of Lords that the duty of care on the part of the employers was discharged by making the spats available to the plaintiff. Their duty did not go as far as to insisting that the men either wear the spats or dismissing them. Qualquast Wolverhampton Limited vs Haynes 1959 2 A.E.R. 510.

I see the defendants duty in the instant case as being no different from that in the case referred to. Although there were based upon my finding, sufficient acid suits available at hand for the plaintiff to select one, he failed to take such reasonable care for his own safety and suffered the consequences of his own folly. He was therefore, in breach of his common law duty as well as that placed upon him as a complementary duty under 79(b)

and 79(c) of the Factories Regulations.

Mr. Codlin further submitted that there was no evidence of there being any regular and periodic inspections carried out by the defendants at the plant to ensure that the equipment were in working order and functioning efficiently. Contrary to this being so, the weight of the evidence is decidedly the opposite. According to Mr. Markes there were periodic checks made on equipment by the Maintenance Department and there is the further evidence that the plant was usually taken down for overhauling annually. At that time the plaintiff, himself, stated that Plant Operators were required to assist in carrying out minor repairs. As the plant when in operation was engaged on a non stop production basis around the clock it would have been highly impractical for there to be the sort of routine inspection called for by Mr. Codlin on valves to ensure that they were functioning properly. Moreover, Plant Operators were required to report any leakages seen to the Maintenance Department for correction. There was none observed by the plaintiff by the discharge valves when he shut down the plant on the day prior to the mishap when the water supply failed. Given the fact that the valve had been ordered from a highly reputable manufacturer this meant that no such inspections as contended for by Mr. Codlin had to be made. The defendants were entitled to assume that the valve in question was proper for the purpose for which both themselves and Crane's the manufacturers intended it to be used and not require regular and periodic inspections. The evidence of Mr. Markes was that the ordinary life of an acid valve was twelve months. The valve in question had been installed a mere three months prior

to the mishap. On somewhat similar facts Finnermore J. in Mason vs Williams and Williams Limited 1955 1 W.L.R. 549 at 551 had this to say:

> "Employers have to act as reasonable people and they have to take reasonable care, but if they buy their tools from well known makers, such as the second defendants are, they are entitled to assume that the tools will be proper for the purposes for which both sides intended them to be used, and not require daily, weekly or monthly inspections to see if in fact all is well."

Cited with approval by the House of Lords in Davie vs New Merton Board Mills Limited 1959 2 A.E.R. 331.

In that case a maintenance fitter was knocking out a metal key by means of a drift and a hammer, when at the second blow of the hammer, a particle of metal flew off the head of the drift and into his eye, causing injuries. The drift which had been provided for his use by his employers, although apparently in good condition, was of excessive hardness, and was in the circumstances a dangerous tool; it had been negligently manufactured by reputable makers and sold to a reputable firm of suppliers, who in turn had sold it to the employers, whose system of maintenance and inspection were not at fault.

The plaintiff claimed damages for negligence against his employers on the ground that they had supplied him with a defective tool.

It was held that the employers, being under a duty to take reasonable care to provide a reasonably safe tool, had discharged that duty by buying from a reputable source a tool whose latent defect they had no means of discovering. They were therefore not liable.

I now wish to turn to consider the ancillary question as to how safe was the system of working at the defendants plant? The evidence as to the system in place at the plant made it difficult if not impossible for something unusual to be taking place and this escape the observations of the Plant Operator who as the person in charge of the control room where he would spend most of his working hours according to the plaintiff "observing the behaviour of the plant" from a check of the guages and instruments in that room. It bears some reminding that it was the duty of the Plant Operators to report all leakages to the Maintenance Department. Moreover, in event of any unusual occurrences he had the authority to close down the plant if necessary. Plant Operators, therefore, were as much an essential part of the process of ensuring that the safety procedures in place were successfully implemented.

Irrespective as to what was the practice before 1977 when Roy Harding assumed duties as the Process Engineer, it is the unchallenged evidence of this witness that he vigorously set out to implement well needed safety measures at the plant. Among some of these measures put in place were:

1. The revision and updating of the Acid Plant Manual which laid down guidelines for Plant Operators to follow.

2. Safety drills were carried out.

3. Safety lectures were conducted.

4. Safety showers were installed.

5. Plant Operators were reminded of their responsibility for ensuring that the safety measures in place were carried out for their own safety and that of fellow workers.

6. Adequate stocks of safety equipment which included safety boots, helmets, gloves, face shield and acid suits were obtained and made available to workers.

With all these measures adopted one would have at least expected that the worker in order to ensure his own safety would have adhered to the safety instructions. The evidence of Mr. Harding is that there was a lack of co-operation and marked resistance to these safety measures from middle management such as Plant Operators and the rank and file workers. The plaintiff on his own admission had flouted the safety instructions in the past by handling the acid valves without wearing the acid protective suit. He has taken solace in the fact that other Plant Operators and the trainee operator Vinton King as well as Roy Harding did likewise. These two persons gave evidence which contradicted the plaintiff's evidence on this very fact. Vinton King, the plaintiff's own witness, admitted that he wore the acid suit when going into the danger area around the circulation tanks. It is highly unlikely that Roy Harding who was the Safety Officer for six months and who was endeavouring to set certain standards with regard to safety would have been one of the malefactors. His evidence confirmed that my belief in this area of the evidence was certainly not misplaced.

What made the plaintiff's position as a Senior Plant Operator even more lamentable is that he was aware of similar accidents around acid valves in which at least three other Plant Operators were injured. Two of them were not wearing acid suits. The one wearing the suit sustained a minor injury. These incidents came "readily to his mind" when giving evidence. Did these events of which he was aware stir him to greater caution? The evidence is that he continued to flout the rules and to run the risk of carrying out this hazardous task without wearing the protective suit and in the

end suffered the consequences. That he has suffered such a serious injury is indeed most regrettable. That by itself is no basis upon which to arrive at a finding of negligence on the part of the defendants. The ultimate question in all such cases where negligence is alleged is, whose fault was it that caused the particular injury? In the light of my previous observations it is in my view without question that it was the failure on the plaintiff's part to wear the acid suit and face shield, which suit on the evidence covered his entire body, that despite the malfunctioning of the acid valve resulted in his injury.

The Law applicable to the facts and the issues as they arise is correctly stated at paragraphs 966, 968, 970 and 971 of Clerk and Lindsell on Torts, 14th Edition. The following extracts are of relevance:

966 "Scope of Duty - The standard of care of a master's duty towards his servant is to see that reasonable care is taken; the scope of that duty extends to the provision of safe fellow-servants, safe equipment, safe place of work and access to it and a safe system of work. The classical exposition of this is to be found in the speeches of Lord Wright and Lord Maughan in Wilson and Clyde Coal Co. Ltd. vs English 1938 A.C. 57 in which the former, quoting from earlier authorities formulated it as follows: 'The obligation is threefold - the provision of a competent staff of men, adequate material and a proper system and effective supervision.' To this may be added a safe place of work and access to it.

In dealing with each different aspect of the master's duty....it must be remembered that they are part and parcel of one duty within the law of negligence. To use the words of Lord McDermott they are not absolute in nature. They lie within and exemplify the broader duty of taking reasonable care for the safety of his workmen which rests on every employer!'

"The duty is owed to each servant individually, so that all the circumstances relevant to each servant must be taken into account. Thus if a servant is known to have only one eye a greater degree of care must be shown towards him than a man with two eyes, so that if he is employed at work involving the risk of a chip of metal entering his eye. goggles should be provided for him, although this may not be necessary for a man with two eyes."

Paris vs Stephney Borough Council 1951 A.C. 367.

968 "Safe Equipment.....The obligation to provide and maintain proper plant and appliances is a continuing obligation. (per Lord Wright in Wilson and Clyde Coal CO. Ltd. vs English Supra at 84.) Lord Herchell in Smith vs Baker and Sons 1891 A.C. 325 at 362, described it as 'a duty of taking reasonable care to provide proper appliances and to maintain them in a proper condition.' As has already been pointed out, the duty is not an absolute one. There has to be fault in someone. <u>So a master is not liable for a latent defect due to no one's fault and which cannot be detected on reasonable examination. If he knows the equipment is dangerous and does nothing about it, he will be liable.</u> (Underlining mine).

Defect having regard to the facts and circumstances ofthis case can be taken to mean 'everything which renders a plant, machinery and equipment unfit for the use for which it is intended when used in a reasonable way and with reasonable care.' Per Linley L.J. in Yarmouth vs France 1887, 19 Q.B.D.647 at 658.

Reasonable care is taken if the appliances are used are of the type usual for the work in question. Theyduty is 'limited to reasonable exercise of care and skill to guard against danger which as reasonable people the employers ought to have anticipated.... They will also not be liable if the workman fails to make proper use of the equipment provided.'"

This last paragraph is in my view of particular relevance to the instant case.

970 Safe System of Work

"A master does not warrant that the equipment or process is unattended by danger, but he is

"under a duty to see that a safe system of work and adequate supervision are provided. (Underlining mine).

....A master is under a duty to prescribe a system of work when it is necessary in the interest of safety, whether the operation is complicated or highly dangerous or prolonged or involves a number of men performing different functions....a system should be prescribed... In deciding this question regard must be had to the nature of the operation, whether it is one which requires proper organisation and supervision in the interest of safety or whether it is one which a reasonable prudent master would properly think could be safely left to the man on the spot.

Where commercial necessity require that the workmen should be exposed to risk, the master is not liable merely on that account, but he must supply the necessary protective clothing or appliances and take reasonable care to see that they are used. This may be done by giving the workmen instructions in the protective steps to be taken."

971 "When there is a duty to provide a safe system of work, the master has not discharged his whole duty merely by providing it; he must take reasonable steps to see that it is carried out. This involves instruction of the workman in the system as well as some measure of supervision. It does not mean, 'that an employer is bound to through his foreman, to stand over workmen of age and experience every moment they are working and every time that they cease work to see that they do what they are supposed to do.' Per Singleton L.J. in Woods vs Durable Suites Ltd. 1953 1 W.L.R. 857 at 862. (Underlined for emphasis).

The master's duty does not extend to protecting servants from exposure to injury to the point of having to dismiss them."

After a careful consideration of all the evidence in this case it is my opinion that the defendants took the requisite care towards ensuring the protection of the workers at their Chemical Plant. That there was a mishap causing a serious injury to the plaintiff there is no doubt. The protective clothing available provided the necessary means whereby the worker was

safeguarded if such an eventuality took place.

Finally, it needs to be stressed that the duty of care of the employer towards his employee varies from worker to worker, depending upon the status and experience of the particular employee.

In conclusion I do not find it necessary to refer to all the several authorities cited by both Attorneys. I need without ignoring them to also remind myself that they are for the most part guides and signposts along the course that must lead eventually to a determination of the real issues in any case. Suffice it to say that most of the authorities cited by Mr. Codlin were not of assistance being for the most part cases which when examined went to establishing factual situations in which the systems of work with which the plaintiff had to contend were far from being safe and the employer was found to be negligent by the Courts in those matters. What amounts to the exercise of reasonable care and is a proper system of work is a matter of evidence and not for the law books and there is no need therefore to multiply authorities. Of the two cases which were referred to by Mr. Codlin in some detail, that is, Crookhall vs Vickers Armstrong Ltd. 1955 2 A.E.R. 12 and Baker and Another vs T.E. Hopkins and Sons Ltd. 1958 3 A.E.R. 147, both cases are clearly distinguishable from the instant case and must therefore be examined in the light of their own particular facts and circumstances.

In the first of the cases referred to the Court was there dealing with the ordinary unskilled and inexperienced workers in a foundry who for the most part need to be protected against their own folly and indiscretions

and in respect of whom therefore the duty of care may be higher than when one is dealing with an employee who is a Supervisor or a worker who can be left to work on his own. The former category may require almost constant supervision, unlike the latter. There was also a clear breach by the employer of his statutory duty in failing to take steps to protect the employee. This is not the case here.

The second case referred to, on the facts the system of work provided for the workmen to carry out their task in attempting to clear the well of water containing fumes exposed the men to unnecessary risks and was clearly not safe. It was this fact that placed the men in peril from the outset. The attempts of the deceased doctor to try and rescue them despite a warning that it was dangerous to go down into the well did not absolve the defendants from liability for the doctor's death as his actions were such that any reasonable person would have undertaken.

On the other hand, I found the authorities cited by Mr. Scott to be more relevant to issues which arose in this matter and to be of greater assistance. This of course, does not mean that I have not sought to familiarise myself with the cases cited or with the principles which each sought to elucidate for my assistance. Of the cases which I have been referred to several of the authorities referred to by both Counsel were considered and distinguished by the House of Lords in both Davie vs New Merton Board Mills Ltd and Qualquast (Wolverhampton) Ltd. vs Haynes (both referred to supra). The learned Law Lords also took the opportunity in reviewing the authorities cited in Davie vs New Merton Board Mills Ltd. which included

Wilson and Clyde Coal Co. Ltd. vs English (one of the cases cited by Mr. Codlin). They were also very careful to sound out a warning to those who were attempting to advocate too high a duty on the part of the employer in Industry amounting to almost an absolute one.

Beyond this I need go no further as I fear that I have already overstepped my bounds and gone beyond the limits of what may be considered a lengthy judgment. That this is so has been to ensure that every possible aspect of this matter was explored. If this has not been so, then it has not been due to any lack of conscious effort on my part.

From the evidence and the Law applicable, therefore, it is my opinion that the presumption of negligence raised up on the pleadings and on the part of the defendant due to the sudden malfunctioning of the discharge valve which caused sulphuric acid to gush out injuring the plaintiff, has been successfully countered by evidence from the defendants which establishes on a balance of probability that they took all reasonable care both in the operations at their plant, by their method of selecting competent management personnel such as Roy Harding and Thomas Markes and in the procuring of proper machinery and equipment to protect their workers including the plaintiff.

The fact that the defendants delegated the duty of providing their plant with proper equipment, in particular the discharge valve in question, would not ipso facto absolve them from liability unless the defect which caused the injury to the plaintiff was a latent one, and one for which the defendants taking all reasonable care could not have forseen. Having regard

to the fact that the manufacturer Cranes was a reputable one and the evidence of the plaintiff that when installed it was not possible to see the gate on the valve and the fact that the said valve had been in service for only three months, there was nothing on the face of it which would have placed the defendants upon enquiry that there was anything wrong with the valve in question. The loosening away of the spindle from the gate has to be seen therefore in the light of all the evidence as a defect in the manufacture of the valve by the manufacturer Cranes, a defect which having regard to the position of the gate was a latent one and one which the defendants taking all reasonable care could not have forseen, and for which they were not responsible for the resulting injury to the plaintiff.

This conclusion means that as the issue of liability has been determined in the defendants favour the further question of damages does not fall for my consideration; as on the facts as I have found the question of contributory negligence also does not arise.

The plaintiff's claim is accordingly rejected and there must be Judgment entered for the defendant with costs to be taxed if not agreed.