

OSHI v PPP Piping Systems Ltd

2023 IND 78

Cause Number 126/17

**In the Industrial Court of Mauritius
(Criminal side)**

In the matter of:

OSHI

v.

PPP Piping Systems Ltd

Judgment

Accused being an employer is charged under Section 5(1) and Section 94(1) (i) (vi) of the Occupational Safety and Health Act – Act No.28 of 2005 coupled with Section 44(2) of the Interpretation and General Clauses Act with unlawfully failing on or about the 26th day of April 2016 to ensure so far as is reasonably practicable the safety and health at work of its employees to wit: one of its employees to wit: Loann Curtis Marc Lindor sustained crush injury and 3rd degree burn injuries on his right hand when he was operating the corrugator machine make Alpha-60 bearing serial number 2814 at its place of work at La Tour Koenig.

The Accused represented by Mr. Vishwamber Gopauloo in his capacity as Health and Safety Officer pleaded not guilty to the amended information and was assisted by Counsel at his trial.

The case for the Prosecution unfolded as follows:

Mrs. Poomalay Poinen Sohoraye, in her capacity as Principal Occupational Safety and Health Officer enquired into an accident at work which occurred on 26.4.2016 at the premises of PPP Piping Systems Ltd situated at La Tour Koenig where Loann Curtis Marc Lindor sustained crush injury and 3rd degree burn injuries on his right hand while he was operating the corrugator machine make Alpha-60 bearing serial number 2814 at his said workplace as per medical certificates produced viz. Docs. A and B respectively.

In the course of her enquiry, on 2.6.2016, she took 10 photographs which she bound in a booklet form as per Doc. C (C1 to C10) showing the extruder, dye set and the corrugator table namely the mould block. She recorded a statement from a duly authorized representative of Accused as per a letter dated 18.8.2016 (Doc. D) under warning on 19.8.2016 as per Doc. E.

Her observations during her investigation were as follows:

The Accused company is a factory which is involved in the manufacture of pipes and makes use of a corrugator machine (Alpha-60 machine) which was involved in the present accident and which was shown to her.

The machine consists of several parts including the extruder. There is one part of the machine, that is, the extruder and the dye set. She has explained the different functioning of those components namely the dye set and the corrugator table (viz. the mould block) as per the said photographs:

- (a) The raw material in the form of granular plastic is fed into the extruder where it is melted at a temperature of 200 degrees centigrade.
- (b) The molten product then is removed from the dye set and it goes directly into the mould to be moulded. When it is moulded, then it enters in a cooling tank to be cooled and to be solidified.
- (c) After the solidification process, the pipe is straightened and it moves to another part, another machine which is a cutting machine which cuts the pipe according to the required length and then the pipe is coiled in a coiler.

On the day of the accident, her enquiry has revealed that during the manufacturing process, it happened that the molten material that came out, that is,

moulded in the mould, could get stuck inside the mould. In such a case, the damaged molten moulded material had to be removed manually as per the common practice.

During that operation, it could happen that when the stuck material was being removed in between the mould and the dye set, that mould block which is the corrugator table would move towards the dye set and would press against it. Under such circumstances, there was a possibility that the hand of the person involved in that intervention to get crushed in between the mould block and the dye set.

According to her enquiry, on the day of the accident namely on 26.4.2016 in the course of the third shift which was the night shift, the molten material happened to get stuck while it was being removed from the dye set and at that time Mr. Lindor was working as Supervisor in the corrugator machine.

He was required to intervene and to remove the stuck material and which he did manually as per the common practice. So, he set the machine in the manual mode in order to remove the stuck material (with his hand in between the dye set and the corrugator table viz. the mould block) back and forth.

In the manual mode, while doing so, the corrugator table (meaning the mould block) suddenly moved towards the dye set and pressed against it causing his right hand which was in between the dye set and the mould block to get crushed and to get burnt as the molten product was about 200 degrees centigrade.

Given the common practice for the employees at the said factory to use their hand to remove the stuck material from the dye set, during that exercise, the Supervisor having to remove the stuck material manually and the possibility that the mould block could move towards the dye set to press against it so that the risk that the hand of that Supervisor to get crushed existed , the safest way would have been the provision of a long tongue by the accused employer in order to remove the stuck material. The use of a long tongue would prevent hand access to the dangerous part created by the dye set and the mould block when it moved towards that dye set. Had a long tongue been provided by the employer, the hand of the Supervisor would not have been crushed and the accident would not have occurred. That employer had failed to provide that long tongue.

Under cross-examination, she admitted that she was not present when the accident happened and that she relied on the statement of the injured person namely the Supervisor and on the other documents which she produced in Court. She also relied on the statement of Mr. Ramkissoon namely the Operator. She went on to say the following. Just before the accident, the machine was set on manual mode. According to the statement of the Accused, there were instructions displayed next to the machine. At the time of her visit, there were instructions displayed, but according to the statement recorded from the injured person, there were no such instructions at the time of the accident displayed on the machine. She was able to check the instructions manual for that machine. A risk assessment was carried out by Accused but it was not specific as to when materials were stuck. She was aware that Management dispensed training procedures to employees operating that machine. Before becoming Supervisors, they had to act as Operator. Prior to that and in the present case, Mr. Lindor was an Operator for 3 years. It was after 3 years as Operator that he was promoted to the rank of Supervisor. During those 3 years, Mr. Lindor was not allowed to interact with the machine because Operators were supposed to learn about the machine and how to operate it. But it was a common practice that they might intervene when materials were stuck. However, it was correct to say that Supervisors were allowed to intervene when materials were stuck as they had been trained for years before they could handle that machine. Such situation could happen unexpectedly so that training would not have prevented the accident from happening. There was an engineer of the company at the factory who checked the machine and according to his report, there was neither technical nor mechanical defect on the machine.

She was aware that indeed a technician report was made in relation to the accident and the accused company carried out many simulation exercises with the same scenario as stated by Mr. Lindor in order to ascertain the possibilities of what might have happened on that day but could not get any similar result.

She had checked the log book in relation to that machine from the Accused for the past years and a similar accident had never happened. Every time any object was stuck, procedures or protocol established were followed by the Accused and there had never been such accident. When material was stuck, according to her, it had to be removed on the manual mode and the machine had to remain on and then switched off. The machine had to be put on the manual mode in order to remove the stuck material gradually and that the machine had to be kept on at that time. She

recommended the use of a tongue with a reasonable length as it did not depend on the length of the material. A tongue could remove the object from that stuck pipe. The molten plastic that had become defective namely the stuck material had to be removed by the tongue because if it could be removed with a hand, it could be removed with a tongue.

Both the injured person, Mr. Loann Curtis Marc Lindor, in his capacity as Supervisor and Mr. Kishore Kumar Ramkissoon in his capacity as Operator on the machine concerned gave evidence in Court.

On 26.4.2016, Mr. Lindor who was injured at work at Accused's premises was still working for the Accused. On that day, the Operator namely Mr. Ramkissoon who was working on the Corrugator machine, it got blocked and he called him. On seeing the machine, Mr. Lindor noticed that a piece of plastic pipe got stuck in the mould block. Thus, the machine being on automatic mode, Mr. Lindor put it on the manual one to remove the pipe at the back when the mould block went backwards for about one minute and crushed his right hand which also got burnt. Mr. Ramkissoon turned off the switch in front of the machine where the mould block passed and the machine went forward. All the switches were turned off including emergency ones.

It was normal for the machine to get blocked. It was in the course of production that the machine got blocked and it was the job of the Supervisor to put his hand in it and to unblock it. Mr. Lindor had double woolen gloves as the mould block was hot. He put the machine on manual mode in order to be able to remove the plastic pipe manufactured when the machine went backwards. He held the plastic pipe with his right hand and when he put on the switch, the machine reversed. When the machine was put on manual mode, it had no right to move backwards at all as it was equipped with several systems of locks thereon. Although he was experienced enough to use the machine and that he used to unblock the machine, it never happened that way and he did not have the time to remove his hand as the accident occurred too quickly. When there was an automatic mode, the machine was pushed at the rear in order for the production to start anew. But when the machine was put on manual mode, it meant that there was a problem which meant that they had to remove the mould or a pipe which got stuck in it as there was the front and the rear as well. The procedure was to use hands and a switch had to be turned on for the product to come out.

Under cross-examination, Mr. Lindor stated that he had been working for the Accused since the year 2009 so that in the year 2016, he had already 7 years of experience. Before doing the job of Supervisor, he was working as Operator. In the latter capacity, he was not in contact with the machine as he was learning the job which he did for 3 years. In 2016, on the day of the incident, it was not for the first time that he handled the machine as it was something he was used to. Because of his experience, he was promoted to Supervisor and his job was to intervene when an issue arose with the mould block and the dye set. On the material day, there was a stuck pipe in the machine and then he intervened. The corrugator table and the dye set touched each other and he could not put his hand inside. When the machine was in operation, he did not get in touch with the machine but intervened only when a pipe got stuck.

He was aware of the procedure to be followed when there was such an incident and in relation to which he had followed training dispensed by the Accused. When he had to intervene, he needed to switch off the machine. On the material day, he switched off the machine and moved the corrugator table viz. the mould block backwards. Then, he put his hand to be able to remove the stuck pipe and the machine was not in operation at that time. The machine was switched off and he used his woolen gloves provided by Accused as the temperature was high. The stuck pipe had to be removed by hand by pulling it as there was no other way to do so. So, when having such an incident like the present one, he switched off the machine and followed all the procedures in place. He had done that in the past and he never had any problem. The problem with that corrugator table was that it reversed on him because when he pressed the switch for back, the machine reversed and it was not supposed to reverse on him. The problem emanated from the machine on the material day and it was not his employer who was at fault. He had followed the procedure. There was a system in place how to unblock a pipe. At times when the pipe was blocked, the mould block was dismantled and removed, if not possible then the switch for back was pressed to remove the pipe from the back. Then, the pipe needed to be held, pushed and then removed.

Mr. K. K. Ramkissoon stated that he was working as Operator for the Accused on the corrugator machine at the material time on 26.4.2016 doing the third shift till 7.00 a.m. and Mr. Lindor was his Supervisor. He was already running the production corrugator machine as he was Operator on it which got blocked at about

2.45 a.m. when he called Mr. Lindor informing him about it. Mr. Lindor came to unblock the machine by pressing the switch meant for backwards. When a pipe got stuck in the mould, there was something in the machine called vacuum which continued to work. Supposedly the machine had to be switched on for backward, because if it was switched on for forward, it would not have moved. When the backward switch was turned on, the pipe did not return, it was the corrugator table meaning the mould block that returned on Mr. Lindor's hand. It was normal for the machine to be blocked and which happened on several occasions while he was working for Accused. He never had a through training how to run that machine and was working under the supervision of Mr. Lindor. In case there was an incident like what happened in 2016, it was Mr. Lindor who had to intervene as he would not have known what to do in such a situation. It was Mr. Lindor who received training and he was the one who knew what to do at the material time as he was the Supervisor. There was an old switch on the machine and then a new sensor switch was put on it.

No evidence was led by the Defence in Court.

I have given due consideration to all the evidence put forward before me and the submissions of learned Counsel for the Defence.

It is undisputed and uncontested that-

1. At the material time, Mr. Lindor was working on a corrugator machine when his right hand was caught in between the mould block (corrugator table) and the extruder of the machine (forming part of the dye set) as he was removing a stuck pipe from the extruder in line with Docs. C4, C5 & C6.
2. The extruder and the mould block become entangled between them when the machine is in running position and nothing can be caught in between as there is no space between the parts. This is in line with the unsworn version of the Accused, Docs. C4, C5 & C6 and the testimony of the injured person.
3. There is no evidence to show that not all the switch buttons found on the control panel as per Doc. C2 were present on that control panel at the material time.

Therefore, Mr. Lindor had necessarily switched on the "stop button" manually as per Doc. C2 on the control panel in line with the unsworn version of the Accused in order to have space to intervene so that the unsworn version of the Accused is plausible in that when the machine is stopped on the control panel manually, the

extruder moves backwards from the mould block and comes into contact with the limit switch fixed on the machine preventing the extruder from moving in the direction of the mould block and the machine becomes isolated automatically and thus, he could remove the stuck material. Furthermore, there was bound to be space for his right hand to have reached in between the mould block and the dye set as per Docs. C4, C5 and C6.

I accept the unsworn version of the Accused which I find to be more plausible and reliable in that the space being thus provided in between the extruder and the mould block for such intervention, the corrugator machine was to be set into operation in that position by operating the “jog button” (found on the control panel viz. Doc. C2) which would have pushed the stuck material slowly outside till the stuck pipe would have been completely removed, because in that position, the extruder and the mould block stayed isolated to allow space for the Supervisor to remove the stuck material and for the following reasons:

- (a) There is unrebutted evidence from the enquiring officer to the effect that the machine was in good working order at the material time and was not defective based on expert opinion.
- (b) Mr. Lindor candidly admitted that it was not the fault of the accused employer that the accident happened but that it was the operation of the machine bearing in mind that neither the enquiring officer nor the injured person and nor his Operator testified to the fact that the “jog button” found on the control panel as per Doc. C2 was switched on manually by Mr. Lindor in his capacity as Supervisor in order to gradually remove the stuck material.
- (c) In fact, Mr. Lindor admitted that the mould block came backwards thus depriving him of space causing him to get injured at his right hand so that it is abundantly clear that he pressed the wrong switch button namely the “back button for the mould” on the control panel as per Doc. C2 instead of the “jog button” thus causing the accident for the first time to happen although he was trained for that purpose for more than 3 years. Indeed, Mr. Ramkissoon admitted that Mr. Lindor, his Supervisor, switched on the backwards button. Such a state of affairs lends support to the unsworn version of the accused party that Mr. Lindor switched on the wrong button and that the accused employer was not at fault for the accident. The use of a tongue would not have served any meaningful purpose in such an unexpected situation.

At this juncture, I find it relevant to reproduce both Section 5(1) of the Occupational Safety and Health Act 2005 and Section 96(6) of the said Act which read as follows:

“5. General duties of employers”

- (1) *Every employer shall, so far as is reasonably practicable, ensure the safety, health and welfare at work of all his employees.*

96. Special provisions as to evidence

- (6) *In any proceedings for an offence under any provision of this Act consisting of a failure to comply with a duty or requirement to do something so far as is practicable, or so far as is reasonably practicable, or to use practicable means or to take practicable steps to do something, it shall be for the accused to prove that it was not practicable or not reasonably practicable to do more than was in fact done to satisfy the duty or requirement, or that there was no better practicable means or step than was in fact used or taken to satisfy the duty or requirement, as the case may be.” (emphasis added)*

In the circumstances, I fail to see how the Accused has failed to ensure the safety of its employee so far as is reasonably practicable because it is clear enough that it was not reasonably practicable for it *to do more than was in fact done to satisfy the duty or requirement, or that there was no better practicable means or step than was in fact used or taken to satisfy the duty or requirement* which enjoins the reasoning in the Supreme Court case of **Jeanneton v Cie Sucrière de Bel Ombre [1993 SCJ 455]** which reads as follows:

“Section 5(1) of the Occupational Safety, Health and Welfare Act, 1988 lays down that:

“*Every employer shall, so far as is reasonably practicable, ensure the safety, health and welfare at work of all his employees.*”

The test of what would be reasonably practicable was considered in Edwards v National Coal Board (1949) 1 K.B. 704, 712 where Asquith L.J. had this to say:

'Reasonably practicable' is a narrower term than 'physically possible' and seems to me to imply that a computation must be made by the owner, in which the quantum of risk is placed on one scale and the sacrifice involved in the measures necessary for averting the risk(whether in money, time or trouble) is placed in the other; and that if it be shown that there is a gross disproportion between them – the risk being insignificant in relation to the sacrifice the defendants discharge the onus on them. " (emphasis added)

(see also *Marshall v Gotham Co Ltd* (1954) A.C. 360 and *Jenkins v Allied Ironfounders Ltd* (1970) 1 W.L.R. 304)."

I take the view that there is a gross disproportion between the risk to be averted by the accused employer and the sacrifice involved in the measures for averting the risk (whether in money, time or trouble) because the risk being clearly insignificant in relation to the sacrifice as it is plain enough that the wrong button was switched on by the injured employee at the material time in total disregard to the training he received from his accused employer. Thus, I hold that the onus placed upon the Accused has been discharged on a balance of probabilities (see - **Talbot Fishing Co Ltd v Ministry of Labour & Industrial Relations (Occupational Safety and Health Inspectorate)** [\[2005 SCJ 76\]](#)).

For all the reasons given above, I am unable to find that the case for the Prosecution has been proved beyond reasonable doubt. I accordingly dismiss the amended information against the Accused.

S.D. Bonomally (Mrs.) (Vice President)

17.11.23

