Chen Qiangshi *v* Hong Fei CDY Construction Pte Ltd and another
[2014] SGHC 177

Case Number : Suit No 540 of 2013
Decision Date : 09 September 2014
Tribunal/Court : High Court
Coram : George Wei JC
Counsel Name(s) : Namasivayam Srinivasan (Hoh Law Corporation) for the plaintiff; Appoo Ramesh and Rajashree Rajan (Just Law LLC) for the defendants.
Parties : Chen Qiangshi — Hong Fei CDY Construction Pte Ltd and another

Tort – Negligence – Duty of care

Tort – Negligence – Breach of duty

Tort – Negligence – Contributory negligence

9 September 2014 Judgment reserved.

George Wei JC:

1 The plaintiff was the casualty of an unfortunate accident occurring at a construction site at No 11 Mandai Estate, Singapore 729908 ("the Worksite") on Boxing Day in 2012. He is a national of the People's Republic of China ("PRC") and was employed as a construction worker at the Worksite. The plaintiff suffered injuries as a consequence of the accident.

2 The injuries caused by the accident were severe. They include a burst fracture of the plaintiff's L1 lumbar spine and a dislocation of the T12 thoracic spine. The plaintiff is paralysed waist-down and is incontinent. [note: 1] He is now confined to a wheel chair.

3 Under construction at the Worksite was a multi-storey industrial building known as Eldix. The second defendant, Evan Lim & Co Pte Ltd, was the main contractor for the construction of the industrial building. The first defendant, Hong Fei CDY Construction Pte Ltd, was a sub-subcontractor engaged to carry out reinforcement, concreting and formwork at the Worksite. The first defendant was the plaintiff's employer.

4 The dispute is in substance about whether the accident was caused by the negligence of the defendants and/or their employees for whose actions they are vicariously liable.

Background

5 The accident occurred at the fifth and, what was then the highest, floor of the partially-constructed industrial building. A rebar cage collapsed on the plaintiff as it was about to be lifted by a tower crane.

Rebar cages in construction work

6 An understanding of the accident in its proper context will require a brief description of the use

and installation of a rebar cage. A rebar cage is a grid of interlocking steel bars that is utilised in the construction of reinforced concrete columns. It has the appearance of a long rectangular box-like structure open at the top and bottom. The rebar cage that collapsed on the plaintiff was a rectangular column said to have a height of 6.8m, a length of 1.5m and a breadth of 0.6m. [note: 2] It is not disputed that it also had a considerable weight, although the precise figure was not in the evidence.

7 A rebar cage is installed on a concrete floor by securing each steel bar at the bottom end of the rebar cage to a corresponding starter rebar using three wire ties. Starter rebars are steel bars that protrude from the concrete floor which the rebar cage is to be installed on. Once the rebar cage is installed, it will be cast in concrete to form a reinforced concrete pillar.

8 The installation of a rebar cage requires the lifting assistance of a tower crane. This is especially so when the rebar cage is to be installed on a floor above ground level. The rebar cage is fabricated off-site. It is transported to the construction site by vehicle and off-loaded onto the ground level in a lying-down position.

9 While the rebar cage is still in a lying-down position, it is rigged up (*ie*, attached) to two hoist chains. The hoist chains have hooks on one end, which are used to rig up a load for lifting. The other end of the hoist chains is connected to the tower crane.

10 Both hoist chains are inserted through the top opening of the rebar cage and run along the inside of the entire height of the rebar cage. Both hoist chains are then looped around on either side of the base of the rebar cage. The hooks at the end of each hoist chain are connected to one of the horizontal bars along the breadth of the rebar cage about 1.5m from its base. A simplified diagrammatic representation of how a rebar cage is rigged up is found in the annexure to this judgment. The diagram was exhibited in the plaintiff's affidavit of evidence-in-chief ("AEIC") filed in this suit. Parties do not dispute that the diagram depicts the usual method for rigging up a rebar cage for a lifting operation.

11 Once the rebar cage is rigged up, it is lifted by the tower crane. Because of the manner in which it is rigged up, the rebar cage will naturally be suspended in an upright position. The pivot of the suspended rebar cage rests *below* its centre of gravity, resulting in an unstable system. The rebar cage is nonetheless prevented from toppling over and held in position by the hoist chains running through the entire height on the inside of the cage (see the annexure to this judgment).

12 The rebar cage is lifted to the floor where it is to be installed. It is guided to the precise location for installation and lowered. The rebar cage is, all this while, suspended by the tower crane in an upright position. When the rebar cage is close enough to the concrete floor where it is to be installed, rebar workers will begin securing the rebar cage to the starter rebars with wire ties. At this point, the hoist chains connected to the tower crane are kept taut and they still bear at least some of the weight of the rebar cage. The tension in the hoist chains keeps the rebar cage in an upright position while it is being secured to the starter rebars by the rebar workers.

13 At the trial, a good deal of evidence was heard on the sequence and number of wire ties which were used to secure the starter rebars to the rebar cage. The significant point is that not all the starter bars would be secured to the rebar cage before the hoist chains are released. It is sufficient to secure only alternate starter bars (working inwards from each corner). [note: 3] Once this is done, the hoist chains are loosened and released. The rebar workers would then complete the installation of the rebar cage by securing the remaining steel bars to their corresponding starter rebars.

14 The practice is not to release the hoist chains only after securing *all* the starter rebars. The rebar cage was considered sufficiently secure once the alternate starter rebars were secured – the tower crane would accordingly be freed up at that point. The tower crane is in high demand, and requiring all the starter rebars to be secured would tie the tower crane down for a longer period of time.

15 No independent witness was called to testify on what would be the proper procedure for the installation of the rebar cage. There is no evidence from witnesses to suggest that the procedure used for the installation of rebar cages at the Worksite was out of line with industry practice.

Roles and responsibilities of the persons involved in the installation of rebar cages

16 Rebar workers work in teams of two or three. The plaintiff was an experienced rebar worker and a *de facto* leader of one of these teams. [note: 4] He had worked as a rebar worker in Singapore for about four years, [note: 5] and "many years" before in the PRC. [note: 6] The rebar workers were employed by the first defendant, the sub-subcontractor. The teams of rebar workers at the Worksite were supervised by Chen Dongyu. Mr Chen, a PRC national, was a Singapore permanent resident and a director of the first defendant at the material time.

17 Two other persons who play an instrumental role in the lifting and installation of the rebar cage are the rigger and the signalman. The rigger is responsible for rigging up loads to the hoist chains. His duty is to ensure that a load is properly rigged up and balanced before it is lifted by a tower crane. The signalman is responsible for communicating with the tower crane operator. The signalman gives all the commands on when to lift or move the load. He is the only person on the ground (barring the lifting supervisor, who I shall come to in a moment) with a direct line by walkie-talkie to the tower crane operator and the only person on whose instructions the tower crane operator will act.

18 A construction worker is required to attend courses and obtain qualifications before he is permitted to perform either of these roles. The rigger and signalman therefore have roles that are functionally distinct from those of the rebar workers. But a close degree of cooperation between these two functional groups is necessary for the successful lifting and installation of a rebar cage.

19 Masum Miah Benjir Ahamd, whom I shall refer to as Mr Masum, was both the rigger and the signalman. Mr Masum was a Bangladeshi who was employed by the first defendant. He had obtained all the necessary qualifications, but was a relatively inexperienced rigger/signalman. Mr Masum started work at the Worksite in around July or August 2012. At that time, he was assigned odd jobs or simple concreting work, such as transporting wet cement in a wheel barrow. [note: 7] Mr Masum started rigging and signalling work in early October 2012 after completing the requisite courses. He only had about three months of experience as a rigger/signalman at the time of the accident. [note: 8]

20 Mr Masum's evidence was that he would often ask one of his more experienced colleagues, Palani Kumar, to be present to ensure that he did everything correctly. Mr Kumar, also a rigger/signalman, appears to have more experience than Mr Masum. Indeed, even after working as a rigger/signalman for about three months, Mr Masum candidly admitted that while he was experienced, he would "keep Mr Kumar with me to avoid a mistake, which can indicate by me, highlight by me". [note: 9]

21 The final two persons who play subsidiary, albeit arguably more pivotal, roles in the lifting and installation process are the lifting and safety supervisors. Their responsibilities are as their titles suggest. Arumugam Thirunavukkarasu, whom I shall refer to as Mr Arasu, was the lifting supervisor

and Sangussubramanian Nambimohan, whom I shall refer to as Mr Mohan, was the safety supervisor. Both were Indian nationals and employed by the second defendant, the main contractor.

The installation of the rebar cage in the incorrect position on 25 December 2012

22 The accident did not occur during the course of a routine rebar cage lifting and installation operation. Rather, the accident occurred when the construction workers were attempting to relocate a rebar cage that had been installed at an incorrect location the day before.

23 Relocating a rebar cage presents peculiar difficulties not present in a usual installation operation (*ie*, lifting the lying-down rebar cage from the ground level up to the floor where it is to be installed). For one, it first requires the installation procedure to be performed in the reverse order to uninstall the incorrectly-positioned rebar cage. It also necessitates the rigging up of the 6.8m-tall rebar cage while it is in an upright position, as opposed to it being rigged up while it is lying flat on the ground. These difficulties are not insignificant – they will become apparent as I describe the manner in which the accident occurred below.

24 On 25 December 2012, the plaintiff's team of rebar workers had installed a rebar cage in an incorrect location close to the edge on one side of the fifth floor. [note: 10] The responsibility for the mistake appears to have been the plaintiff's. He had instructed his team of rebar workers to position the rebar cage in accordance with an outdated schematic diagram of the fifth floor. Mr Masum was working with the plaintiff's team on 25 December 2012.

25 The plaintiff's evidence was that Mr Masum and the other rebar workers knew on 25 December 2012 that the rebar cage had been fixed in an incorrect position. [note: 11] Mr Masum disputed that he found out that the rebar cage had to be re-installed on 25 December 2012. He claimed he only found out the following morning. Either way, the rebar cage had to be relocated the next morning.

26 Prior to this incident, neither Mr Masum nor the plaintiff (who had numerous years of rebar-work experience under his belt) had been involved in the relocation of an incorrectly-positioned rebar cage. It is not disputed that installing rebar cages in an incorrect position was a rare occurrence.

The accident on 26 December 2012

27 On the morning of 26 December 2012, the plaintiff instructed Mr Masum to call the hoist chains from the tower crane over to assist in the relocation of the incorrectly-positioned rebar cage. Mr Masum complied. Before the hoist chains arrived, the plaintiff and his co-worker undid the wire ties on alternate steel bars of the incorrectly-positioned rebar cage. [note: 12]

28 What happened from this point on is the subject of deep disagreement between both sides. The turn of events leading up to the accident spanned no more than 20 minutes. What is agreed is that the rebar cage was eventually rigged up in an improper manner. The hoist chains were not lowered through the top of the rebar cage and allowed to run on the inside through the entire height of the rebar cage, as was usual. The evidence as to how exactly the rebar cage was hooked up was difficult to follow. Instead, it appears from oral evidence [note: 13] and exhibits that the hoist chains were simply hooked up from the outside of the rebar cage about 1.5m–2m from the base of the rebar cage.

29 Once the rebar cage was (improperly) rigged up, the plaintiff, with the help of a co-worker (known only as "Mr Shamsul"), undid the remaining wire ties which secured the rebar cage to the starter rebars. With this, the 6.8m-tall rebar cage was upset from its precarious equilibrium and it

tipped over and collapsed on the plaintiff.

30 The evidence was unclear as to what led the rebar cage to collapse rather than to stand upright once the remaining wire ties were removed. There are two possibilities.

31 The first is that the tower crane operator tautened the hoist chains (which were already hooked up to the rebar cage at this point). This would mean that at least some, if not all, of the weight of the rebar cage was supported by the tautened hoist chains. Once the remaining wire ties were removed, the weight of the 6.8m-tall rebar cage pivoted about the point where the hoist chains were hooked up to it (about 1.5–2m from its base). The pivot, which would have been below the centre of gravity of the rebar cage, coupled with the upward force from the tautened hoist chains could have destabilised the rebar cage and caused it to collapse.

32 The second possibility is that the hoist chains were *not* tautened. The rebar cage would then have been a free-standing object once the wire ties which secured it to the starter rebars were removed. The rebar cage did not remain in balance in an upright position and as a result, collapsed on the plaintiff.

33 In either scenario, even without the benefit of expert evidence, it is clear and undisputed that the root cause of the collapse was the improper rigging up of the rebar cage. If it had been rigged up in a proper manner and the usual lifting procedure adhered to in reverse, the accident would not have occurred.

34 It is undisputed that Mr Chen, the rebar workers' supervisor, as well as Mr Arasu and Mr Mohan, the lifting and safety supervisors, were not present while the relocation operation was being carried out. The only persons who perceived the accident directly were the plaintiff, his co-worker, Mr Shamsul, and the rigger/signalman, Mr Masum.

The issues

35 There are four broad issues that arise in this case. The first is factual, the other three are legal:

(a) The first issue concerns the sequence of events leading up and immediately prior to the accident. There are numerous factual disputes between both sides, but I will group them together for the sake of convenience. The various factual disputes will be fleshed out as sub-issues below.

(b) The second issue is whether the defendants were negligent.

(c) The third issue is whether Mr Arasu and Mr Masum were negligent and if so, whether either of the defendants is vicariously liable for their negligence.

(d) The fourth issue is whether there was contributory negligence on the part of the plaintiff and if so, the extent to which the defendants' liability should be reduced.

The witnesses and evidence

36 There are three observations I would like to make on the witnesses and evidence before turning to deal with the issues. The first concerns the witnesses that testified in court and their demeanour in general. The second is on the contemporaneous documentation on the accident, especially the

post-accident investigation. The final observation concerns expert evidence.

37 The plaintiff, who was his only witness, was in some physical discomfort during his testimony. He was candid and frank in admitting that he wanted to relocate the incorrectly-positioned rebar cage on 25 December 2012 itself, so that his supervisors would not discover his mistake.

38 The general impression that I formed was that the plaintiff was a hardworking employee who had been working on Christmas Day and who was keen on earning overtime pay. [note: 14] He appeared to be sincere and candid for the most part. There are, however, some specific areas of his evidence which were riddled with inconsistencies. One such area concerns the circumstances in which the rebar cage was rigged up, which will be dealt with below.

39 There was some suggestion from Mr Chen, the plaintiff's supervisor, that the plaintiff had been careless in his work on some previous occasions. That was a bare assertion. There is no other evidence to corroborate this allegation. [note: 15] No details of previous instances of carelessness were given. If the plaintiff was an anxious worker prone to making mistakes, it begs the question why the first defendant put him in charge of a small team of rebar workers. The evidence (including the plaintiff's) only went as far as to suggest that the plaintiff was an eager worker, anxious to complete the task at hand. [note: 16] It is clear that the plaintiff regarded himself as an experienced rebar worker. He was also embarrassed by his mistake of installing the rebar cage in an incorrect position.

40 The witnesses for the defendants were: (a) Mr Masum (the rigger/signalman); (b) Mr Chen (the rebar workers' supervisor); (c) Mr Arasu (the lifting supervisor); and (d) Mr Mohan (the safety supervisor).

41 Mr Masum was younger and had less experience than the plaintiff. The morning of the accident appears to be one of the few occasions he was working on his own as a rigger/signalman, without the supervision of either the lifting supervisor or his more experienced colleague, Mr Kumar. [note: 17]

42 Mr Chen, Mr Arasu and Mr Mohan all stated they did not witness the accident. Their evidence focused on what happened in the immediate aftermath of the accident. Their testimony also covered general procedures at the Worksite.

43 Neither party called Mr Shamsul or the tower crane operator as witnesses. Mr Shamsul would have provided valuable evidence since he was one of only three persons (apart from the plaintiff and Mr Masum) who had perceived the accident first-hand. Attempts at contacting Mr Shamsul were apparently unsuccessful because he had left for Bangladesh.

44 The tower crane operator might have given evidence on what instructions he received from Mr Masum prior to the accident. The defendants claimed that they provided the tower crane operator's particulars to the plaintiff, who chose not to call him as a witness.

45 The contemporaneous documentary evidence relating to the evidence is scant. In particular, the incident report and investigation into the accident appears to be rather cursory.

46 Mr Chen stated that he was not involved in the safety investigation because that was the duty of the safety officer. [note: 18] Mr Mohan, the safety supervisor (not to be confused with the safety officer), also stated that the post-accident investigations were the duty of the safety officer. Mr Mohan nonetheless arrived on the scene of the accident shortly after it occurred. Mr Mohan took only three photographs of the accident scene. They were taken from a wide-angle perspective; no

close-up photographs were taken. Mr Mohan stated that he did not take more photographs because he was more concerned with the safety of the plaintiff at that point in time.

47 Curiously, these photographs, which were taken just after the accident occurred, showed the accident scene *after* the hoist chains had already been unhooked from the collapsed rebar cage. The defendants claimed that they were unable to discover the identity of who unhooked the hoist chains from the collapsed rebar cage just after the accident had occurred. There was therefore no photographic evidence of the exact manner in which the rebar cage was improperly rigged up. There was also no evidence as to why the hoist chains were unhooked after the accident and before any photographs were taken.

48 A post-accident Incident Investigations and Analysis Report ("the Investigation Report") was also placed before the court. The Investigation Report was purportedly prepared by the safety officer, who was not called to give evidence. No explanation was provided for this.

49 As part of the post-accident investigations, Mr Masum was the only person from whom a statement was taken. The statement was a bare one with few details of what had occurred leading up to the accident. No statement was taken from Mr Shamsul, who was the only other eye-witness of the accident (apart from the plaintiff). No statement was taken from the tower crane operator, who could have shed light on the instructions Mr Masum had given him. Given the severity of the plaintiff's injuries and the seriousness of the accident, it is surprising that no statements were taken from these two persons as part of the post-accident investigations.

50 In cross-examination, Mr Mohan accepted that it was important to obtain statements from all witnesses to the accident. He explained that a statement was not obtained from Mr Shamsul because he was a supply worker who had been "supplied" to another worksite the following day. [note: 19] Mr Mohan stated that the tower crane operator was asked what happened, but the tower crane operator simply claimed that he did not know anything and that he simply followed Mr Masum's commands. [note: 20]

51 Finally, no expert evidence was placed before the court as to proper rigging and lifting procedures for lifting rebar cages, especially non-routine lifts where a rebar cage which is installed at the wrong location is to be relocated. No evidence was provided on what could or might have caused the collapse of the rebar cage: whether the rebar cage simply could not stand upright once the wire ties had been removed, or whether the imbalance must have been caused by tautened hoist chains (see [15] and [30]–[32] above).

52 While these were highly technical issues, the absence of expert evidence and material witnesses and the deficiency in contemporaneous documentation meant that they had to be resolved by deciding between the conflicting accounts of the witnesses called at the trial.

Issue 1: The sequence of events leading up to the accident

53 Four factual points arise, all of which are crucial to the outcome of the dispute.

54 The first is whether Mr Chen, the plaintiff's supervisor, was aware on the morning of 26 December 2012 that the rebar cage had been installed in an incorrect position and that the plaintiff's team of rebar workers intended to relocate it to the correct position. The plaintiff claims that Mr Chen had such knowledge. The defendants deny that Mr Chen had such knowledge until after the accident occurred.

55 The second point is whether Mr Masum informed Mr Arasu about the need to relocate the rebar cage prior to attempting to execute the lifting operation. Mr Masum's evidence was that he had radioed Mr Arasu to tell him. Mr Arasu's evidence was that he was not told anything about the relocation of the rebar cage prior to the accident.

56 The third point concerns who rigged up the rebar cage in the improper manner. The plaintiff alleges that Mr Masum took the lead and attached one of the hoist chains and that he (the plaintiff) followed suit with the other hoist chain. The defendants allege that the plaintiff attached both hoist chains to the rebar cage in the improper manner against the profuse protestations of Mr Masum who stood on watching.

57 The fourth point concerns what happened after the hoist chains were hooked up to the rebar cage. The question is whether Mr Masum gave instructions to the tower crane operator to tauten the hoist chains. The plaintiff alleges that Mr Masum instructed the tower crane operator to tension the hoist chains. The defendants deny that he did.

Whether Mr Chen was aware that the rebar cage was mounted in an incorrect position on the morning of 26 December 2012

58 The defendants claim that Mr Chen, the plaintiff's supervisor, was unaware of the incorrectly-positioned rebar cage until after the accident occurred. The defendants argue that the plaintiff had a motive to hurry the rigging up of the rebar cage, so that it could be relocated without Mr Chen finding out about the mistake.

59 The plaintiff's evidence was that on the afternoon of 25 December 2012, he realised that his team had installed the rebar cage in an incorrect position. [note: 21] According to the plaintiff, the rebar workers in his team and Mr Masum were aware that a mistake had been made and that "we all realised it was wrong". [note: 22] It is clear and not disputed is that the plaintiff did not, however, tell his supervisors about the mistake. [note: 23]

60 The plaintiff candidly admitted in cross-examination that he and his team of rebar workers intended to relocate the rebar cage on the afternoon of 25 December 2012 and keep their mistake from Mr Chen. They were unable to relocate the rebar cage that day. They had to wait till the morning of 26 December 2012 to relocate it. [note: 24] The plaintiff's evidence was that by the morning of 26 December 2012, they could not keep the mistake from Mr Chen, who found out about the incorrectly-positioned rebar cage and the need to relocate it as he was doing his rounds in the morning on that day. [note: 25]

61 Under cross-examination, the plaintiff stated that on the morning of the 26 December 2012, Mr Chen and Pu Wei Hai (a project manager) noticed the improperly located rebar cage and were informed of the mistake and the need for relocation. According to the plaintiff, the response of Mr Chen was short: relocate it to the right place. [note: 26] In re-examination, the plaintiff's account changed slightly. The plaintiff stated that, after Mr Chen and Mr Pu discovered the mistake, they did not say much and walked away. [note: 27]

62 Mr Chen gave evidence for the defendants on this point. Mr Chen's evidence was that he did not know the rebar cage was incorrectly positioned prior to the accident. [note: 28] Mr Chen also denied that Mr Pu was together with him [note: 29] on the morning of 26 December 2012 when he was patrolling the fifth floor of the then partially-constructed building. The defendants did not call Mr Pu

to give evidence. Mr Chen claimed that he was unaware that the incorrectly-positioned rebar cage was being relocated. He claimed that, when he "turned over, [the rebar cage] was already falling". [note: 30] By this, Mr Chen appeared to mean that he was walking around the fifth floor when he turned and saw the rebar cage falling. It was only after the accident occurred that he discovered what had gone on.

63 Under cross-examination, Mr Chen stated that he did not hear any shouting between the plaintiff and Mr Masum on the morning of the accident while he was walking on the fifth floor. The Worksite was a noisy place at the time. [note: 31] Further, while he was the director of the first defendant, his role was not to supervise the plaintiff's work; rather, it was to follow the progress of the project. His evidence was that even though he had been in the construction industry for many years, the first defendant was a new and small company. His evidence was that if he was approached by a worker with a problem, he would usually refer the worker to the supervisor. [note: 32]

64 While this is understandable, I note that on the morning of the accident, the lifting and safety supervisors were on the ground floor, the safety officer was on leave, [note: 33] and Mr Kumar (Mr Masum's more senior colleague who was also a rigger/signalman) whom the plaintiff normally worked with was working elsewhere at the Worksite. In short, it appears that there were no supervisors or safety officers on the fifth floor at the time of the accident.

65 I prefer the plaintiff's evidence to Mr Chen's. In cross-examination, it was suggested to Mr Chen that he knew that the rebar cage was incorrectly positioned prior to the accident. [note: 34] Mr Chen responded that this was "totally impossible" because he was not at work on 25 December 2012 as it was Christmas. [note: 35] Mr Chen then explained that "on the second day [26 December 2012], [I] ... will come very late, about 8 to 9[am]; and then I went up to patrol". Mr Chen was suggesting that he came too late to have found out about the incorrectly-positioned rebar cage before the accident occurred.

66 Learned counsel for the plaintiff then suggested to Mr Chen that "the accident happened at about 9.30[am]". [note: 36] The point was then put to Mr Chen that the contemporaneous documentary evidence recorded that the accident occurred at 9.30am. Mr Chen then responded that the accident occurred at "around 9.00[am]" [note: 37] and attempted to explain his position: [note: 38]

> Q Okay. So now, the accident happened about 9.30, correct?
>
> A I'm not sure whether it was 9.30.
>
> Q Okay. What time do you think it is?
>
> A I was saying it was around 9.00.
>
> Q Because [9.30] is what you had given in the notification. You knew the rebar cage has fallen in your own notification, done by you. It was stated as 9.30 at page 33. I can show it to you.
>
> A I'm not specific---I---I can't tell the specific time because when I saw the rebar falling, I wouldn't look at my watch. This is---I would just give a [*sic*] approximate time. So it would be around 9.00-plus.

I am unimpressed by Mr Chen's explanation. It contradicted the contemporaneous documentation about the time of the accident. It was also a departure from the defendant's prior apparent acceptance of the plaintiff's position that the accident occurred at about 9.30am.

67 Further, I am of the view that it is unlikely Mr Chen would have patrolled the fifth floor on 26 December 2012 without detecting that the rebar cage was installed in an incorrect position. In Mr Chen's words, "the usual thing I do is to walk around and to see the progress". [note: 39] I find it unlikely that after being away from the Worksite the previous day, while doing his rounds on the morning of 26 December 2012, Mr Chen would not have inspected the work that had been done the previous day to ensure that everything was in order.

68 Indeed, in re-examination, Mr Chen stated that when he went up to the fifth floor on the morning of 26 December 2012, he recalled that there were people doing work at Row 11 "at the very side, at the edge after I went up". Mr Chen, however, added that when he walked past the column which was involved in the accident (said to be some 30m away), "there were [*sic*] nobody there and I was thinking, why is this column here?" [note: 40]

69 The difficulty however is that on Mr Chen's own evidence, by the time he arrived at the Worksite at about 9am on 26 December 2012, it would be very likely that the plaintiff was already at the incorrectly-positioned rebar column. In response to a question from the court, Mr Chen explained that he meant that as he was patrolling, he noticed workers at Row 11 and that when he walked past the wrongly placed rebar cage, he was puzzled as to why the rebar cage was at that location. Nevertheless, he continued with his patrol of the fifth floor. Shortly after, as he turned, he saw the rebar cage falling and that the workers were at the site of the rebar cage. [note: 41]

70 I find this aspect of Mr Chen's evidence hard to accept. If he was puzzled by the rebar cage being in an incorrect position, why did he not ask for a clarification? After all, Mr Pu, the project manager was on-site even if he was not at the fifth floor at the time. Even if no workers were there, the natural thing to have done would have been to find out what had happened. Further, given the short span of time, it seems very unlikely that the plaintiff, his co-worker and Mr Masum could have arrived and commenced the lifting operation only after he walked past the column, and did what they did, resulting in the collapse of the rebar column, only just as Mr Chen turned round.

71 The defendants, on the other hand, submit that the plaintiff's evidence was "inconsistent, confusing and vague". [note: 42] The defendants rely on apparent contradictions between the plaintiff's evidence in cross-examination and re-examination. The defendants say that in cross-examination, the plaintiff stated that Mr Chen "knew about" the wrongly-positioned rebar cage. [note: 43] In re-examination, however, the plaintiff contradicted himself by stating that on the morning of 26 December 2012, he told Mr Chen about the mistake that he had made the previous day. [note: 44]

72 I reject this submission. One would be hard-pressed to find an inconsistency in the plaintiff's evidence on this point. The plaintiff's statement in cross-examination merely indicated that Mr Chen possessed such knowledge on the morning of 26 December 2012; it did not address the means through which Mr Chen acquired that knowledge, which was what the plaintiff's later statement in re-examination concerned. And even if there is in fact an inconsistency, I am of the view that it is largely immaterial.

73 On balance, I accept the plaintiff's evidence that Mr Chen was aware of the incorrectly-positioned rebar cage on the morning of 26 December 2012, and that Mr Chen knew that it had to be

repositioned.

74 This finding is consistent with the Work Accident Notification Report ("the Notification Report") which was submitted by Mr Chen for the first defendant. The report stated that "on the day of the incident, the injured worker and his co-worker were *tasked* to relocate a wrongly erected column reinforcement cage to the correct location" [emphasis added]. I am aware of the danger of reading too much into the Notification Report. The expression used ("tasked") is nonetheless consistent with Mr Chen being aware of the need to relocate the rebar cage, as it would suggest that Mr Chen had indeed *directed* the plaintiff to do so.

75 I also note that para 4 of the defence filed by the defendants in this suit states that "on the morning of 26 December 2012, the Plaintiff and his co-worker were instructed to relocate a column rebar reinforcement cage … erected in the wrong position … on the 5th storey of the building". The defendants' own pleading is consistent with the plaintiff's evidence that Mr Chen discovered the mistake on the morning of the 26 December 2012 and instructed the plaintiff to correct it.

Whether Mr Masum informed Mr Arasu about the need to relocate the rebar cage prior to attempting to execute the lifting operation

76 It is clear from the evidence that Mr Arasu, the lifting supervisor, was not present during the relocation operation. [note: 45] Mr Arasu therefore was not supervising the lifting operation and did not witness the accident. There was an inconsistency between Mr Masum's and Mr Arasu's evidence about whether the former had radioed the latter to inform him about the need to relocate the rebar cage prior to the relocation operation.

77 According to Mr Masum, he radioed Mr Arasu to come to the fifth floor. [note: 46] Mr Masum told Mr Arasu that there was a rebar cage which had been installed in an incorrect position and needed to be relocated. Mr Arasu replied that he was "busy with some other job ... he need [*sic*] to receive another rebar column", [note: 47] and that Mr Masum "can proceed if [he] can. Otherwise, [Mr Arasu] asked [Mr Masum] to wait". [note: 48]

78 Mr Arasu's evidence was that he was not told about the operation to relocate the rebar cage. The first time he found out about the lifting operation was when he was informed there was an accident. [note: 49]

79 I prefer Mr Masum's evidence over Mr Arasu's. Mr Masum appeared to me generally honest and reliable. He would have had no reason to give untrue evidence on whether he radioed his supervisor before proceeding with the lifting operation.

80 The fact that Mr Masum would have radioed Mr Arasu to inform him about the lifting operation was consistent with his earlier evidence. Mr Masum stated that "whenever I hoisting [*sic*] this rebar cage, I keep Mr Kumar with me, we worked together". [note: 50] As mentioned earlier, Mr Masum went on to state that, although he considered himself competent at his job, he nonetheless "keep Mr Kumar with me to avoid a mistake, which can indicate by me highlight by me [*sic*]". [note: 51]

81 It seems to me unlikely that Mr Masum would have proceeded with a non-routine lifting operation without at least informing his lifting supervisor about it when he did not have the benefit of Mr Kumar's supervision and guidance that day. I therefore prefer the evidence of Mr Masum and find that he had radioed Mr Arasu before calling the tower crane over to the incorrectly-positioned rebar

cage to carry out the relocation lift.

Whether the plaintiff or Mr Masum rigged up the rebar cage in the improper manner

82 It is not disputed that the plaintiff and Mr Shamsul began removing wire ties on the rebar cage before Mr Masum directed the tower crane to lower the hoist chains at their location. [note: 52]

83 There is some dispute as to how many wire ties were removed at this juncture and whether it was safe to do so. The plaintiff stated that he only removed the middle wire tie securing each alternate starter rebar to the rebar cage. The rest were left in place to secure the structure. [note: 53] Mr Masum's evidence was equivocal. He stated that the plaintiff and Mr Shamsul had removed some wire ties which would have affected the stability of the structure. Mr Masum however could not say whether the structure was "strong or not". [note: 54] No expert evidence was led to show that the removal of the middle wire tie or some wire ties was a departure from usual practice or unsafe. I am of the view that the evidence tends to support the plaintiff's case that the rebar cage was still sufficiently secure notwithstanding the removal of the middle wire tie or some wire ties attached to alternate starter rebars.

84 Turning to the question of who rigged up the rebar cage in the improper manner, the plaintiff's and defendants' accounts were markedly different.

85 The plaintiff's evidence was that when the hoist chains were called over and lowered, Mr Masum was wondering how to rig up the rebar cage. Mr Masum asked the plaintiff to climb the rebar cage in order to guide the hoist chains through the centre of the rebar cage as they were being lowered. [note: 55] This would allow the rebar cage to be rigged up in the usual manner. The plaintiff refused to do so because rigging up loads was not his job. The plaintiff's evidence was that Mr Masum did not want to climb the rebar cage either because of its height. [note: 56]

86 The plaintiff's evidence was that at that moment, he "left the scene and went to join [his] other co-workers in their work elsewhere on the [Worksite]". [note: 57] The plaintiff then returned to the scene "very quickly", within "3 to 4 minutes" of leaving. [note: 58] The plaintiff gave evidence that when he returned, Mr Masum his co-worker had attached one of the two hoist chains to one side of the rebar cage with the hoist chain running largely outside of the rebar cage. [note: 59] The plaintiff got back in time to see Mr Masum doing the final adjustment to the position of the hook of that hoist chain. [note: 60]

87 The plaintiff's evidence on how exactly the hoist chain was attached was convoluted and difficult to follow. In essence, it appears from (a) a drawing [note: 61] of how the rebar cage was improperly rigged from the outside; and (b) oral testimony, that the hoist chains were inserted from outside to inside the rebar cage at the height which was readily reachable by the workers (without climbing) and allowed to run down the inside for a short length before being looped outside again and attached.

88 The result was a highly unstable system which *did not* have the restraint of the hoist chains threaded through almost the entire inside length of the rebar cage thereby holding it upright. But it is clear that the plaintiff's claim was that he followed Mr Masum's lead and attached the other hoist chain to the other side of the rebar cage in the same manner. [note: 62] The plaintiff stated that he realised that the method of rigging up the rebar cage was not the usual manner only *after* he had

attached the hoist chain on his side. [note: 63] After this realisation, he asked Mr Masum: "You see good or no good. Open you, you clip" to which he received the response: "Okay, okay". [note: 64]

89 Mr Masum was the defendants' witness on this point. His evidence was that when he directed the hoist chains to the position of the incorrectly-positioned rebar cage, he realised that the hoist chains had to be raised again, so that they could be lowered through the top opening of the rebar cage in order for it to be rigged up in the usual manner. Mr Masum testified that he asked the plaintiff to attach the hoist chains from the inside of the rebar cage. [note: 65] That said, Mr Masum denied that he asked the plaintiff to climb the rebar cage.

90 Mr Masum claimed that all he told the plaintiff was to use the correct procedure to do the rigging up. The plaintiff refused to do so, apparently because he was in a hurry and wanted to complete the job quickly. [note: 66] I stress that Mr Masum accepted that he did ask the plaintiff to rig up the rebar cage using what he said was the "correct procedure." As will be discussed later, the plaintiff was a rebar worker. Senior as he may have been, the plaintiff should not have been asked to rig up or assist in the rigging up of the rebar cage at all. Mr Masum claimed that the plaintiff subsequently of his own accord proceeded to attach both hoist chains from the outside of the rebar cage, thus rigging up the rebar cage in an improper manner. [note: 67]

91 I reject the plaintiff's account that Mr Masum had rigged up one of the hoist chains and the plaintiff merely followed suit, for three reasons.

92 First, it is inexplicable that the plaintiff would "leave the scene" only to return three to four minutes later. The plaintiff, in cross-examination, attempted to explain why he had left: [note: 68]

> A: At the time [Mr Masum] wanted me to climb [the rebar cage] and I didn't want to climb and I want him to climb and he didn't want. And I---and I stood there and he didn't want to move, so what was I standing there for? I just went to do the work, other work elsewhere.

I find this explanation unsatisfactory. From the entirety of the plaintiff's evidence and his demeanour in court, my impression was that the plaintiff was a man of action. It is unlikely that he would have abandoned the operation in the thick of it, especially when it was his mistake that caused the rebar cage to be installed at the incorrect position. Further, while the plaintiff's explanation may account for why he left the scene, it does not explain why he would have returned a mere three to four minutes later. Within that time, he would not have accomplished any of the other "work" that he had purportedly helped with when he left the scene. If his annoyance with Mr Masum was the reason for him leaving, logic would suggest that he would stay away until at least the rigging up of the rebar cage was complete, lest Mr Masum make the same requests that drove him away.

93 Second, the plaintiff's account of what happened is inconsistent. The plaintiff's AEIC did not state that he had left the scene because Mr Masum asked him to climb the rebar cage and guide the hoist chains into the cage. It merely stated that the plaintiff left while Mr Masum was "figuring out how to rig the hooks of the hoist chains to the rebar cage". [note: 69] In his cross-examination on 25 March 2014, the plaintiff mentioned for the first time that the reason he left was because Mr Masum asked him to climb the rebar cage. During the plaintiff's cross-examination on 26 March 2014, the plaintiff supplemented his account by stating that he had first asked Mr Masum to climb the rebar cage to guide the hoist chains in. [note: 70] Mr Masum refused to do so, and asked the plaintiff to climb, which the plaintiff refused. This was not mentioned in the plaintiff's AEIC or his oral evidence in court the previous day.

94 Third, and most importantly, the plaintiff's account, even if it were accepted in its entirety, was internally incoherent. The plaintiff claimed that he did not realise that the rebar cage was improperly rigged until after he had finished securing the hoist chain on his side. If the plaintiff had first asked Mr Masum to climb the rebar cage and guide the hoist chains through the centre of the rebar cage, he must have been alive to the fact that that was the proper way to rig up the rebar cage. Being alive to that consideration, the plaintiff must have known, based on his version of the events that it was well-nigh impossible for Mr Masum to have attached the hoist chain in the proper manner in the three to four minutes that the plaintiff was away. Mr Masum would have had to climb the 6.8m-tall rebar cage, while at the same time coordinating the raising and lowering of the hoist chains with the tower crane operator. He would finally have hooked up one of the hoist chains to the rebar cage. All that would have had to occur within narrow window of the three to four minutes which the plaintiff claimed he was away.

95 Indeed, Mr Masum's evidence was that rigging up the rebar cage properly would have been a slow process. [note: 71] Mr Masum agreed with learned counsel's suggestion that the proper way was to climb the rebar cage or, if this was not possible, to erect some sort of platform so that the top opening of the rebar cage could be reached and the hoist chains guided inside. [note: 72] The plaintiff would therefore have likely been aware that the only way Mr Masum could have attached one hoist chain within the span of three to four minutes was if it was done improperly.

96 The plaintiff stated in cross-examination that it was only after he had finished rigging up the rebar cage that he knew the hoist chains were attached in a "different" manner. The plaintiff claimed that he nonetheless left it to Mr Masum, who was the trained rigger.

97 The plaintiff disagreed that he must have realised that the rebar cage had been rigged up in an unsafe manner even though he claimed to have had a dispute with Mr Masum on who should climb the rebar cage to insert the chains inside. [note: 73] And yet the plaintiff had earlier testified that he knew that the point of placing hoist chains inside the rebar cage, as depicted in the diagram in the annexure, was "to prevent it from swaying and to prevent it from toppling down". The plaintiff also agreed that if the rebar cage was rigged from the outside, it would topple over. [note: 74]

98 Taking the plaintiff's evidence at its highest, it was internally incoherent. I prefer Mr Masum's evidence that the plaintiff, of his own accord, rigged up the rebar cage with the hoist chains substantially on the outside of the rebar cage.

Whether Mr Masum instructed the tower crane operator to tauten the hoist chains

99 This point was hotly contested. The plaintiff stated that after both hoist chains were attached and the rebar cage was rigged up, he saw Mr Masum speaking into the walkie-talkie. The hoist chains were then raised by the tower crane operator until the chains were taut. [note: 75] Once the hoist chains were taut, the plaintiff proceeded to remove the remaining wire ties with the assistance of another Bangladeshi worker and, within ten minutes of that, the rebar cage collapsed on him. [note: 76]

100 Mr Masum's evidence was that he did no such thing. Mr Masum's evidence was that he did not give any instructions to the tower crane operator to lift the hoist chains. [note: 77] According to Mr Masum, the hoist chains were slack, and were not supporting the weight of the rebar cage. Mr Masum claimed that the plaintiff proceeded to undo the remaining wire ties, [note: 78] against his

profuse protestations to stop. [note: 79]

101 I am of the view that the plaintiff's evidence on this point is to be preferred. At the time when the hoist chains were attached to the rebar cage, there must have been sufficient slack to permit the chains to be manoeuvred into position. The hoist chains could not have been taut then, because it would have been impossible to hook them up to the rebar cage if that were the case.

102 While Mr Masum's evidence in cross-examination was that he had not instructed the tower crane operator to tauten the hoist chains, he stated that he was not sure if the hoist chains were taut when the rebar cage collapsed on the plaintiff. [note: 80] This is puzzling. If he was sure that he had not given instructions to the tower crane operator to tauten the hoist chains, then it must follow that they could not have been taut. It is clear that Mr Masum was the only person with the walkie-talkie who could instruct the tower crane operator.

103 Further, Mr Masum also agreed in cross-examination that it was "only natural" that the plaintiff would remove the remaining wire ties only if he had thought that the hoist chains were taut. [note: 81] The plaintiff indeed testified under cross-examination that he saw Mr Masum speak into the walkie-talkie and that the hoist chains were subsequently tautened. [note: 82]

104 As I have stated above (at [30]–[33]), the collapse of the rebar cage would have been possible whether or not the hoist chains were tautened. I am of the view that the chains were tautened because it is unlikely that the plaintiff would have continued removing the remaining wire ties if the hoist chains were not first tautened. It is true that in view of the improper rigging up of the rebar cage, the tautening may have actually *destabilised* the rebar cage rather supporting it in an upright position. But the accident occurred within a short span of time and what might appear obvious in the cold light of day may not have been so apparent to the plaintiff.

Summary of my factual findings

105 In summary, I find that on the morning of 26 December 2012, the plaintiff informed Mr Masum that a rebar cage was incorrectly-positioned the day before and had to be relocated.

106 Mr Masum radioed his lifting supervisor, Mr Arasu, who was on the ground floor, to inform him about relocation of the rebar cage. Mr Arasu told Mr Masum that he was occupied and that the lifting operation could be proceeded with as long as he (Mr Masum) was confident. Mr Masum decided to proceed and instructed the tower crane operator to assist with the relocation of the incorrectly-positioned rebar cage.

107 Once the hoist chains had arrived and were lowered, Mr Masum requested that the plaintiff climb the rebar cage to guide the chains through the top of the rebar cage to rig it up properly. The plaintiff was in a hurry to relocate the rebar cage, probably because the incorrect placement of the rebar cage was caused by a mistake on his part. The plaintiff recognised the time and effort that would be occasioned if the rebar cage was to be rigged up in the usual manner. The plaintiff therefore, of his own accord, rigged up the rebar cage improperly.

108 The plaintiff was probably under impression that Mr Masum was going to call for the hoist chains to be tautened since the rebar cage had been rigged up, albeit in an unusual manner. When the plaintiff saw the hoist chains being tautened, he proceeded to loosen the remaining wire ties, which led to the collapse of the rebar cage on him.

109 It is clear that while the root cause of the accident was the improper rigging up of the rebar cage, the collapse of the rebar cage was precipitated by the plaintiff's removal of the remaining wire ties after the hoist chains had been tautened. Indeed, Mr Mohan, the safety supervisor, agreed that, if only a few wire ties were taken off before the hoist chains were attached, the integrity of the structure may not be affected. [note: 83] Had the plaintiff not gone on to remove the remaining wire ties, the accident would not have occurred.

110 The events as they unfolded that day were probably further confused because of the significant language barrier between the plaintiff and Mr Masum. The plaintiff was a PRC national and spoke primarily Mandarin. Mr Masum, a Bangladeshi, spoke primarily Bengali. Both had very limited competence in English, which was the only common language between them. [note: 84] Both gave their evidence through an interpreter at the trial. At separate instances during the course of the trial, the plaintiff and Mr Masum were asked to give the evidence of their attempts at communication with the other in English and with hand gestures without the assistance of an interpreter. [note: 85]

111 Their attempts at expressing the evidence of what they had said to the other bordered on unintelligibility. It bears mentioning that on the plaintiff's own evidence, after he had hooked up hoist chain, he asked Mr Masum to look at the way in which the rebar cage was rigged in the following terms: "See lah" and "Masum, you see good or not good? You clip." According to the plaintiff, Mr Masum's response was "Okay, okay lah". [note: 86] Mr Masum's evidence was that he shouted to the plaintiff: "Hook lock no good – hook lock, no good" to which the plaintiff responded: "No understand, talking many, many." [note: 87]

112 Irrespective of whose evidence is believed as to what was said (or more accurately shouted), it is readily apparent that the communication between the plaintiff and Mr Masum was poor. It was in these general circumstances that the plaintiff, seeing the hoist chains tautened, proceeded to remove the remaining wire ties.

113 With the factual background set out, I now turn to the legal issues.

Issue 2: Whether the defendants were negligent

114 Accidents at worksites may trigger the liability of an employer in two modes: primary or secondary (*Chandran a/l Subbiah v Dockers Marine Pte Ltd* [2010] 1 SLR 786 at [13]). The former is concerned with duties that the employer owes directly to its employees, such as the employer's non-delegable duty to take care of the health and safety of its employees. The latter is concerned with duties that one employee owes to another employee, for which the employer is made vicariously liable.

115 These two modes of liability are complicated somewhat for accidents that occur at construction worksites. The multiplicity of parties at a construction site – from the main contractor to subcontractors, each carrying out different activities – gives rise to intersecting and overlapping duties owed by and to each other. Further, a construction worker can be the "employee" of a contractor for the purposes of vicarious liability even if there is no direct contractual relationship between the construction worker and the contractor (see, for example, the Court of Appeal decision of *Awang bin Dollah v Shun Shing Construction & Engineering Co Ltd and other appeals* [1997] 2 SLR(R) 746 ("*Awang v Shun Shing*") at [19] and [20]).

116 Counsel for both sides did not distinguish between the defendants in their pleadings or submissions. Learned counsel for the defendants, Appoo Ramesh, further confirmed in open court that

he was instructed by the insurers who had issued the work injury compensation policy which covered both defendants. Mr Ramesh therefore stated that no distinction needed to be drawn between the defendants. [note: 88] I will nonetheless preserve the distinction between both defendants as far as is necessary. Practically, the payment may be made by the same insurance company whichever defendant (if either) is liable. But the theoretical distinction is important because the scope of duties owed to the plaintiff by one defendant may not be coterminous with the scope of duties owed by the other.

117 I also note in passing that the interface between the tort of negligence and the traditional common law rules on occupier's liability (much of which predated the birth of the modern tort of negligence in 1932) was discussed at length and clarified by the Court of Appeal in the recent decision: *See Toh Siew Kee v Ho Ah Lam Ferrocement (Pte) Ltd* [2013] 3 SLR 284 ("*See Toh Siew Kee*").

118 In that case, V K Rajah JA described the complicated and arbitrary distinctions drawn between events connected with the static condition of the property (occupier's liability) and dynamic activities (tort of negligence) as well as the distinction drawn by occupier's liability law between different classes of entrants: invitees, licensees and trespassers. See also the review and observation in Michael Rutter, *Occupier's Liability in Singapore and Malaysia* (Butterworths, 1985) at p 21 that the failure of the law to deal with all cases of unintentional damage under the tort of negligence led to complexity and confusion.

119 Rather than attempt to try and untie the Gordian knot that was said to have shackled traditional common law rules on occupier's liability, Rajah JA held (at [52] of *See Toh Siew Kee*) that the time had come to cut the Gordian knot by subsuming occupier's liability under the general tort of negligence as expounded on by the Court of Appeal in Singapore in *Spandeck Engineering (S) Pte Ltd v Defence Science & Technology Agency* [2007] 4 SLR(R) 100 ("*Spandeck*").

120 This means that the general principles set out in *Spandeck* on when a duty of care arises under the tort of negligence should be the very same principles used to determine the question of duty arising from facts and circumstances formerly falling with the realm of occupier's liability rules. Many of the distinctions drawn by the occupier's liability rules on lawful entrants and unlawful entrants, *etc*, could be subsumed within the general test of factual foreseeability, proximity and policy set out in *Spandeck*.

121 It follows that whether a duty of care is owed by an occupier to an entrant depends on the facts and circumstances of each case. In cases where the entrant is an unlawful entrant, it was said in *See Toh Siew Kee* case that much will depend on the circumstances which render the entry unlawful.

122 Delivering a largely concurring judgment, Sundaresh Menon CJ agreed (at [132] of *See Toh Siew Kee*) that all occupier's liability claims could and should be assessed and dealt with within the framework of the tort of negligence. In the case of unlawful entrants, the *Spandeck* approach with its stress on proximity and policy was flexible enough to take on board the fact that an entrant may be unlawful for a myriad of reasons: from the innocent toddler wandering where he should not be to a housebreaker and more. Indeed, Menon CJ pointed out that even where the entrant was lawfully on the premises there could be special and unusual circumstances which might negate a duty of care.

The relevance of the statutory framework governing construction activities

123 The accident occurred in the course of operational activities which are embraced entirely by

the Workplace Safety and Health Act (Cap 354A, 2009 Rev Ed) ("the WSHA") and its accompanying regulations (collectively, "the WSH Framework").

124 Where statutory duties exist, two threshold questions arise. First, does the statutory provision, in and of itself, create and confer a right of action to the affected individual. Second, is there in any case, a concurrent common law duty of care under the tort of negligence which can be relied on by the individual who claims to have been affected by the facts underlying the breach of statutory duty. In the present case, it is noted that s 60 of the WSHA provides that the WSHA is not to be construed as conferring a right of action in any civil proceedings in respect of any contravention, whether by act or omission. While the plaintiff does not enjoy a right to sue for a breach of statutory duty, this does not mean that he does not enjoy a right under the common law tort of negligence.

125 Before addressing the question of negligence proper, it will be apposite to consider the WSH Framework and its effect on negligence liability at common law. The four-fold test for negligence is trite: (a) the defendant must have owed the claimant a duty of care; (b) the defendant's conduct must have breached the duty of care by falling below the requisite standard of care; (c) the claimant must have suffered loss; and (d) the defendant's breach of duty must have been a cause of the claimant's loss. The WSH Framework intersects with the tort of negligence at the first two stages of the inquiry.

126 The principles on a statutory duty shaping the existence of a duty of care were discussed by the Court of Appeal in *Tan Juay Pah v Kimly Construction Pte Ltd and others* [2012] 2 SLR 549 at [53]–[54]:

> 53 Under the first limb of the *Spandeck* test, *one of the many factors taken into consideration is the existence of a statutory duty*. However, as amply clarified in *Animal Concerns*, *the mere existence of a statutory duty owed by the defendant to the relevant authorities is* not *in itself conclusive in establishing that the defendant owes a common law duty of care to the plaintiff*. As for the second limb of the *Spandeck* test, one important policy consideration that the courts will evaluate in determining whether a particular statutory duty gives rise to a concomitant common law duty of care is that *the imposition of the alleged common law duty of care should not be inconsistent with the statutory scheme concerned and the statutory duties owed under that scheme* (see *Harris v Evans* [1998] 1 WLR 1285 at 1297, applying *X (Minors) v Bedfordshire County Council* [1995] 2 AC 633).
>
> 54 Several general principles inform the law in this area. First, the party seeking to establish that a private right of action exists for a breach of statutory duty must show that Parliament, in imposing the statutory duty in question to protect the members of a class, intended those members to have such a right of action. Here, it must also be borne in mind that such right is not immediately established just because a statute is intended to protect a particular class of persons. Ordinarily, something more is required to demonstrate a statutory intention to confer a private right of action. In matters where the statute's objective is to protect the public in general, exceptionally clear language will be required before an intention to confer a private remedy for a breach of statutory duty can be established. Second, *a concurrent common law duty of care may be found alongside a statutory duty imposed by subsidiary legislation provided there are clear indications that the primary legislation contemplates the creation of such a common law duty*. Third, while the existence of a statutory remedy for a breach of statutory duty is relevant and may suggest the absence of a private right of action for such breach, it is not in itself decisive (see *Charlesworth & Percy on Negligence* (Christopher Walton gen ed) (Sweet & Maxwell, 12th Ed, 2010) at paras 12-43-12-44). Similarly, the existence of a statutory sanction for a breach of statutory duty neither necessarily nor conclusively indicates that the

Legislature intended to preclude a private right of action for such breach (see, *eg*, *Animal Concerns* at [81]). Fourth, we caution that in this complex area of the law, formulas are not helpful. While the general principles stated here may help in terms of setting out relevant factors for consideration, they are mere guidelines and will not yield answers as to whether a common law duty of care exists alongside a statutory duty in a particular case. The variety of statutory duties and the different objects which different statutes are directed at make it impossible to have a universal formula. Each statute will have to be considered contextually, and precedents will illuminate only infrequently the right legal path to be taken. Fifth, *we emphasise that the underlying statutory scheme and the parliamentary intention behind the enactment of that scheme are not controlling factors in determining whether an alleged common law duty of care exists concurrently with a statutory duty, but rather go towards the alleged common law duty of care* (*ie*, these factors are considered under the second limb of the *Spandeck* test, rather than under the first limb).

[emphasis added]

127 These principles were later considered by the Court of Appeal in *Jurong Primewide Pte Ltd v Moh Seng Cranes Pte Ltd and others* [2014] 2 SLR 360 ("*Jurong Primewide v Moh Seng Cranes*").

1 2 8 *Jurong Primewide v Moh Seng Cranes* concerned the collapse of a tower crane at a construction site. The owner of the collapsed crane brought an action in negligence against the main contractor and a subcontractor who were operating on the construction site at the time of the collapse. One of the questions before the Court of Appeal was the extent to which the WSH Framework affects the duty of care owed by the main contractor and the subcontractor to persons present on the construction site.

129 The Court of Appeal undertook a detailed analysis of the WSH Framework and its statutory purpose. It cited the speech of Dr Ng Eng Hen, the then Minister for Manpower, at the second reading of the Workplace Safety and Health Bill 2005 (No 36 of 2005) (*Singapore Parliamentary Debates, Official Report* (17 January 2006) vol 80 ("the WSH Parliamentary Debates") at cols 2208–2210). It will be helpful to reproduce in full the portions of Dr Ng's speech cited by the Court of Appeal:

Third, this Bill will better *define persons who are accountable, their responsibilities and institute penalties* which reflect the true economic and social cost of risks and accidents. Penalties should be sufficient to deter risk-taking behaviour and ensure that companies are *proactive in preventing incidents*. Appropriately, companies and persons that show *poor safety management* should be penalised even if no accident has occurred.

This Bill will put into place a new and more effective framework to reduce accidents at the workplace – to bring about a quantum improvement in OSH standards and to achieve our intermediate goal of halving the present occupational fatality rate by 2015.

[emphasis of the Court of Appeal adopted]

130 The Court of Appeal concluded at [41]–[42] that:

41 From the foregoing it is clear that [*main*] *contractors and subcontractors ... are precisely the entities which the WSHA seeks to increase direct liability on for workplace safety*. They have "primary responsibility" in all areas of safety, given their "operational control" of workplaces. In fact, *the main purpose of the WSHA is to strengthen the accountability of and impose responsibilities on parties such as the main contractor and subcontractors so as to ensure a*

safer working environment at construction sites. These statutory responsibilities also complement the very aims of the common law tort of negligence, which is concerned with ensuring that negligent conduct, within legal limits, would attract corresponding liability. The law of tort serves two functions here: it is an engine of compensation as well as a financial deterrent. The law governing the establishment of a duty of care in turn helps to limit claims in negligence to only parties with sufficient proximity and foreseeability, so that the net of liability is not cast too widely. *Plainly, contractors and subcontractors are parties whose negligence on construction sites has the most potential to result in fatal, or at least costly, consequences, given their well-placed abilities to foresee and be aware of the various possible mishaps that others without operational responsibilities and control may not be able to identify. In fact, it would be very hard to think of situations where sufficient proximity to give rise to a common law duty of care will not be found to exist due to the control contractors and subcontractors have over the worksite and the on-going activities on it.*

42 *The WSHA is clearly focussed on strengthening the safety management of worksites as its primary aim. By placing heavy responsibilities on contractors and subcontractors, the scheme of the WSHA intends that the burden of making worksites as free from hazards as possible and installing necessary systems and safeguards would fall on these parties.*

[emphasis added]

131 The Court of Appeal's reasoning makes clear that there is a parity of objectives between the tort of negligence and the WSH Framework. The latter would therefore have an impact on the existence of a duty of care owed by the main contractor and subcontractors operating in a construction site.

132 The WSH Framework is also relevant in ascertaining the appropriate standard of care expected of the defendant. The standard of care is the general objective standard of a reasonable person using ordinary care and skill. Industry standards and normal practice are indicative of this standard (see for example, *Tesa Tape Asia Pacific Pte Ltd v Wing Seng Logistics Pte Ltd* [2006] 3 SLR(R) 116 at [17]). The Court of Appeal in *Jurong Primewide v Moh Seng Cranes* endorsed (at [43]) reference to the WSH Framework and other guidelines which lay down such industry standards.

The existence of a duty of care

133 The question whether the defendants owed the plaintiff a duty of care in respect of his duties as a rebar worker depends on the *Spandeck* test: a threshold question of factual foreseeability and the twin requirements of proximity and policy – the latter as a factor negativing a *prima facie* duty. The threshold requirement of factual foreseeability is definitely satisfied in respect of both defendants.

134 I have no doubt that there was a sufficient relationship of proximity for the first defendant to owe a duty of care by virtue of the employment relationship that existed. There are no reasons of policy which would suggest otherwise.

135 While the second defendant was not the employer of the plaintiff as such, this does not mean that there is insufficient proximity to lead to a duty of care (policy aside). After all, as Menon CJ affirmed in *See Toh Siew Kee* at [129] that factors relevant in determining legal proximity include physical proximity, circumstantial proximity, causal proximity and the extent to which a party has assumed responsibility to take care or to avoid or minimise risk of injury.

136 Section 4(1) of the WSHA defines "occupier" as meaning, *inter alia*, "the person who has charge, management or control of those premises ... whether or not he is also the owner of the premises." Even though there was no direct evidence as such on whether the second defendant had charge, management or control of the work site, I am of the view that the second defendant had sufficient control such as to make him an occupier.

137 It is also clear to me that the second defendant was the contractor which was responsible for the conduct and execution of lifting operations at the Worksite, at least insofar as the lifting of rebar cages for installation was concerned. This inference is drawn from three facts.

138 First, the daily lifting permits, which were a regulatory necessity under the Workplace Safety and Health (Construction) Regulations 2007 (Cap 354A) ("the Construction Regulations"), were applied for under the letterhead of the second defendant. The Construction Regulations implemented a "permit-to-work system", under which the "supervisor of a person who is to carry out any high-risk construction work in a worksite" is required to obtain permits-to-work from the project manager of the worksite (reg 13(*a*) of the Construction Regulations). Lifting operations involving a tower crane are considered high-risk construction work (reg 10(*c*) of the Construction Regulations), which require the supervisor of such operations to apply for and obtain a permit-to-work.

139 Second, the entire lifting crew (including the tower crane operator and the riggers/signalmen) set out in the daily lifting permits took instructions from and were controlled by the lifting supervisor, Mr Arasu. This was so notwithstanding that the riggers/signalmen, such as Mr Masum and Mr Kumar, were employed by the first defendant rather than the second defendant.

140 Third, the appointed lifting supervisor, Mr Arasu, was an employee of the second defendant. Under the Workplace Safety and Health (Operation of Cranes) Regulations 2011 (Cap 354A) ("the Crane Regulations"), a principal who directs a person to operate a crane in a workplace is responsible for appointing a lifting supervisor (reg 17(1) read with reg 2(*b*) of the Crane Regulations).

141 In view of the position of the second defendant as an occupier and its control over and conduct of the lifting operations carried out on the Worksite, I am of the view that there was legal proximity between the second defendant and the plaintiff, a rebar worker. The Court of Appeal in *Jurong Primewide v Moh Seng Cranes* stated at [45] that "[the] main contractor ... would already *prima facie* have owed a duty of care to [the crane owner] simply by virtue of being identified heavily as a responsibility bearer by the WSHA".

142 The second defendant also had a statutory duty to take reasonably practicable measures to ensure the safety and health of persons who may be affected by the lifting operations under s 12(2) of the WSHA:

> It shall be the duty of every employer to take, so far as is reasonably practicable, such measures as are necessary to ensure the safety and health of persons (not being his employees) who may be affected by any undertaking carried on by him in the workplace.

143 The existence of a statutory duty does not, *ipso facto*, create a concomitant duty of care upon the second defendant for the purpose of the tort of negligence. However, there was a high degree of integration between lifting operations and the rebar workers' tasks. The rebar workers would have been a category of construction workers most directly affected by the lifting operations performed by the second defendant.

144 There are also no policy considerations which militate against the existence of a duty of care.

On the contrary, policy considerations would reinforce the existence of such a duty (*Jurong Primewide v Moh Seng Cranes* at [41]).

145 I accordingly find that both defendants owed the plaintiff a duty of care.

The standard of care

146 As mentioned above, the WSH Framework is relevant in ascertaining industry standards and practices that should be adhered to in determining the standard of care.

147 It would be appropriate at this juncture to make some remarks on the *approach* of the current WSH Framework towards ensuring safety in the workplace. The current WSH Framework aims at making businesses responsible for managing their own risks. Its introduction marked a sharp departure from the previous regulatory regime which focused on prescriptive rules, which led to a "morass of legislative rules and regulations ... ill-suited to particular sets of circumstances". Dr Ng's speech in the WSH Parliamentary Debates at cols 2211–2213 is instructive:

> The present OSH regulatory regime defines which workplaces and aspects of work are regulated, and also prescriptively fixes the methods of achieving OSH competency on the ground, in other words, *the law tells you what to do and how to do it. Such an approach has led to a morass of legislative rules and regulations, which may be ill-suited to particular sets of circumstances but must be followed nonetheless. It promotes a mindset of simply following the letter of the law, without applying one's mind to how the measures should be implemented to be effective or if there is a better or more efficient solution.*
>
> Over the past three decades, leading OSH countries, including the UK and Sweden, have realised that as work processes become more sophisticated and more customised, it is increasingly difficult for the Government or any central authority to prescribe standards which can be applied uniformly to all companies, across all industries. The speed of technological development means that regulators which try to micro-manage will always be playing catch-up.
>
> These countries have therefore changed their regulatory mindset. *Rather than tell businesses how to run their factories or do their jobs, they have made businesses responsible for managing their own risks. Their legislation has moved from being prescriptive to performance-based. In other words, no longer does the law prescribe that your factory windows must be 10% of the floor size. The duty is simply to ensure that there is sufficient ventilation according to the number of people at work. You decide how to achieve this.* If there is inadequate wall space for windows, or if windows are not practical in the work environment, alternatives such as forced ventilation or suction fans can be used.
>
> *The Bill adopts this performance-based approach* ... [*i*]*t requires stakeholders to take all reasonably practical measures to ensure the safety and health of their workers and the public* ... To make sure companies internalise this, they will be *required to conduct risk assessments, and take steps to eliminate or minimise identified risks, and disseminate this information. The requirement for risk assessments will be contained in new Regulations made under ... the Bill* ... .
>
> [emphasis added]

148 The industry standards have evolved towards requiring contractors to *establish and implement effective systems of risk assessment, management and supervision*, rather than their adherence to operating procedures prescribed down to the minutiae.

149 The sea change in the approach towards standards of behaviour in workplace safety manifests itself in at least two ways in the regulations promulgated under the WSHA. First, in relation to generic high-risk activities, the permit-to-work system (described above at [138]) places the onus on the project manager of a worksite to assess the risk and safety measures present before allowing high-risk work to be undertaken.

150 Second, and more pertinently, the Crane Regulations, which regulates lifting operations, require all lifting operations to be conducted in accordance with a "lifting plan". In his speech to Parliament, Dr Ng Eng Hen, quoted above at [129], explained that a goal of the WSH Framework was to ensure that companies were proactive in preventing accidents. The fact that no accident had yet occurred did not mean that companies with a poor safety record were to be excused.

151 The second defendant is a "responsible person" under reg 2(*b*) of the Crane Regulations, as it was the principal under whose direction a tower crane was being operated. A responsible person has certain duties in respect of a lifting operation. Regulation 4(1) of the Crane Regulations requires a responsible person to establish and implement a lifting plan:

> **Lifting plan**
>
> **4.**—(1) Where any lifting operation involving the use of any crane is carried out in a workplace by a crane operator, it *shall be the duty of the responsible person* to *establish and implement a lifting plan* which shall be in accordance with the generally accepted principles of safe and sound practice. [emphasis added]

152 The responsible person is also under a duty to appoint a lifting supervisor, a rigger, and a signalman under regs 17(1), 18(1) and 19(1) of the Crane Regulations:

> **Appointment and duties of lifting supervisor**
>
> **17.**—(1) It shall be the duty of the responsible person to appoint a lifting supervisor before any lifting operation involving the use of any crane is carried out in a workplace.
>
> ...
>
> **Appointment and duties of rigger**
>
> **18.**—(1) It shall be the duty of the responsible person to appoint a rigger before any lifting operation involving the use of any mobile crane or tower crane is carried out in the workplace by a crane operator.
>
> ...
>
> **Appointment and duties of signalman**
>
> **19.**—(1) It shall be the duty of the responsible person to appoint a signalman before any lifting operation involving the use of any mobile crane or tower crane is carried out in a workplace by a crane operator.
>
> ...

153 The Crane Regulations also imposes duties on the persons appointed by the responsible person.

For example, reg 17(3) of the Crane Regulations states that the lifting supervisor is under a duty to co-ordinate and supervise all lifting activities in accordance with the lifting plan, brief all crane operators, riggers and signalmen on the lifting plan, and ensure the lifting operations are carried out safely:

> (3) It shall be the duty of the lifting supervisor appointed under paragraph (1) —
>
> (a) to co-ordinate all lifting activities;
>
> (b) to supervise all lifting operation by a mobile crane or tower crane in accordance with the lifting plan referred to in regulation 4;
>
> (c) to ensure that only registered crane operators, appointed riggers and appointed signalmen participate in any lifting operation involving the use of a mobile crane or a tower crane;
>
> (d) to ensure that the ground conditions are safe for any lifting operation to be performed by any mobile crane;
>
> (e) to brief all crane operators, riggers and signalmen on the lifting plan referred to in regulation 4; and
>
> (f) if any unsatisfactory or unsafe conditions are reported to him by any crane operator or rigger, take such measures to rectify the unsatisfactory or unsafe condition or otherwise ensure that any lifting operation is carried out safely.

154 The duty of the rigger is to ensure that the load to be lifted is properly secured to the hoist chains, as stated in reg 18(4) of the Crane Regulations:

> (4) It shall be the duty of a rigger appointed under paragraph (1) to —
>
> (*a*) check the slings to be used for slinging the loads to ensure that the slings are of good construction, sound and suitable material, adequate strength and free from patent defect;
>
> (*b*) ensure that an adequate number of legs of the sling are used and that the slinging angle is correct so as to prevent the sling from being overloaded during the hoisting;
>
> (*c*) ascertain the weight of the load which is to be lifted and inform the crane operator of the weight of the load;
>
> (*d*) ensure that only proper lifting gears are used in conjunction with the sling;
>
> (*e*) ensure that the load to be lifted is secure, stable and balanced;
>
> (*f*) ensure that any loose load (which includes any stone, brick or tile) is placed in a receptacle to prevent the load or part thereof from falling during the lifting operation;
>
> (*g*) place adequate padding at the edges of the load which come in contact with the sling so as to prevent the sling from being damaged; and
>
> (*h*) report any defect in the lifting gear to the lifting supervisor.

155 The duty of the signalman is to ensure that the load is properly rigged up before giving the

signal to the crane operator to lift the load, and to guide the crane operator to manoeuvre the load safely to its destination, as stated in reg 19(1) of the Crane Regulations:

> (4) It shall be the duty of the signalman appointed under paragraph (1) to —
>
> (*a*) ensure or verify with the rigger that the load is properly rigged up before he gives a clear signal to the crane operator to lift the load; and
>
> (*b*) give correct and clear signals to guide the crane operator in the manoeuvre of the load safely to its destination.

156 The WSH Framework therefore envisages a sharp distinction between the duties of the contractor responsible for the conduct of activities, and the duties of the persons on the ground actually carrying out such activities. The contractor is responsible for creating and enforcing an effective system of risk assessment, management and supervision. On the other hand, prescriptive duties are imposed on the rank-and-file workers executing the activities on the ground.

157 At this point, the divergence of duties and responsibilities between the both defendants becomes material. It is clear that Mr Chen, a director of the first defendant and the plaintiff's supervisor, was aware that the relocation operation was to occur that morning. Indeed, Mr Chen likely gave the plaintiff the *instructions* to relocate the rebar cage. Mr Chen then left the plaintiff and his team to their own devices, and continued on his rounds at the fifth floor. The question is whether in doing so, the first defendant had failed to provide a system of proper supervision for the rebar workers in general and the plaintiff in particular.

158 While the first defendant does owe the plaintiff a duty of care by virtue of the employer-employee relationship the question remains as to whether there was a breach of the first defendant's duty of care by Mr Chen's failure to take adequate care in ensuring that there was proper supervision of the rebar workers. There are two contrasting views.

159 The first is that the evidence and facts do not establish a breach of duty by the first defendant. The plaintiff was injured in the course of lifting operations which fell entirely within the purview of the second defendant by reference to the WSH Framework relating to lifting procedures. The requirements of proper role-allocation, supervision, and safety systems, which were a necessity in view of the high-risk nature of lifting operations, fell solely within the remit of the second defendant. On this basis it could be said that, if primary liability on the part of the defendants was to arise, it would be on the part of the second defendant.

160 The alternative view is that while the first defendant was not specifically responsible for overseeing lifting operations, it was still subject to a general duty to take reasonable care of their employees at the Worksite. Even though the first defendant was a sub-subcontractor engaged to do concreting work and rebar column work, it is clear that the installation and removal of a rebar cage was a dynamic process involving close co-operation between different sets of workers: the rebar workers, the rigger, the signalman and the tower crane operator.

161 In my view, the first defendant's duty of care at common law may not have extended to giving instructions on the technical aspects of the rigging and lifting operations. But the fact remains that the plaintiff was asked to proceed in circumstances when the first defendant, through Mr Chen, ought to have known there was no lifting supervisor or safety supervisor on the scene. A reasonable man in the position of Mr Chen (a director of first defendant and general supervisor of the rebar workers) would not have merely given terse verbal instructions to the plaintiff to proceed without having

required that the lifting supervisor be called to the scene, as Mr Chen had done. This amounted to a breach of the first defendant's duty of care to the plaintiff through Mr Chen's actions.

162 Even if this is incorrect, the first defendant is, in any case, the employer of Mr Masum. Subject to what will be discussed below, the first defendant may accordingly still be vicariously liable for Mr Masum's acts.

163 I turn now to consider the position in respect of the second defendant. The Crane Regulations required the second defendant to establish and implement a lifting plan in accordance with safe and sound practice. Lifting operations were to be conducted in accordance with the lifting plan; compliance was to be ensured by a lifting supervisor. The lifting plan is a key process in achieving the objective of establishing systems of risk assessment, management and supervision envisaged by the WSH Framework.

164 Mr Masum's evidence was that in general, the daily lifting permit was a formality. There was little or no risk assessment or discussion within the lifting team or with the lifting supervisor about what was to be done each day. [note: 89] Mr Masum's evidence reveals that while safety briefings and daily tool-box meetings were held, these were of a routine nature and tended to focus on what work was to be carried out. [note: 90] Mr Masum admitted that he did "not know much about the documents" that he had to sign. [note: 91] Mr Masum agreed that "all the lifting supervisor does [at the start of the] day is, 'Today you work in this place', and that's it you sign the lifting permit, you go ahead, and you start work". [note: 92]

165 I accept the evidence of Mr Masum that by and large, the daily briefings were quick and just a formality. Even though Mr Mohan was not present at the daily tool-box meetings, he agreed in cross-examination that if they were a formality (*ie*, merely signing documents without a briefing on the safety details), then there would be a breach of the regulations.

166 The apparent disregard for the WSH Framework was not confined merely to the more procedural aspects of the briefing and documentation. It also manifested in the actual conduct of lifting operations.

167 Mr Masum stated that the lifting supervisor was not present during all lifting operations; "sometimes [the lifting supervisor] was around sometimes he was not". [note: 93] There were two tower cranes in operation at the Worksite. On occasion, the lifting supervisor would be attending at the other tower crane, in which case "he gives us the instruction to proceed and if any difficulties, advise us to go back to him". [note: 94] It has been said that a lifting supervisor may be able to handle two lifting operations at the same time. But this will still require him to be in a position where he has clear sight of both operations and is able to direct both operations. It goes without saying that where a lifting operation is non-routine, the complete and immediate attention of the lifting supervisor will be required.

168 Indeed, on the morning of the accident, Mr Arasu was not even on the fifth floor. Instead, he was on the ground floor supervising the unloading of rebar cages brought to the Worksite. [note: 95] When informed by Mr Masum of the need to relocate the rebar cage on the fifth floor, his response was that he was busy with another job (receiving a rebar cage) and that Mr Masum was to proceed if he could, otherwise he should wait. [note: 96]

169 The lack of supervision in the conduct of lifting operations was corroborated by the

Investigation Report (see [48] above) prepared by the safety officer of the Worksite after the accident occurred. The Investigation Report states that while there were safety procedures at the Worksite, these were not followed by the plaintiff, who was not a trained rigger. What is especially interesting, however, are the recommendations (to prevent recurrence) of the safety officer set out at the end of the Investigation Report. These are: "to deploy adequate, competent supervisors for all works" and "to have standing supervision by competent supervisors while carrying out non-routine activities". Mr Mohan agreed in cross-examination that the Investigation Report indicates that there was inadequate supervision on the morning of the accident. He also agreed that standing supervision was required for non-routine work. [note: 97]

170 I accept that it is not surprising that the briefings (tool-box meetings, *etc*) early on the morning of 26 December 2012 did not include specific discussion on the correct procedure to relocate the incorrectly-positioned rebar column. After all, the need for this was not revealed by the plaintiff to his superiors on 25 December 2012.

171 Nevertheless, my findings are that: (a) on the morning of 26 December 2012, Mr Chen became aware (during his patrol) that the rebar cage was incorrectly positioned and needed to be located; and (b) Mr Arasu was told of the need to relocate the incorrectly-positioned rebar cage before the lifting operation was engaged in. The question therefore remains why Mr Arasu, in particular, did not take immediate action to ensure that a proper lifting plan was developed and that he was there to supervise the lifting in accordance with the lifting plan. A construction work site is a dynamic place where new or unexpected events can arise which must be properly handled.

172 In *Jurong Primewide v Moh Seng Cranes*, the lifting supervisor was described (at [62]) as the "key person in the entire lifting operation", and his duties (set out above at [153]) were also described as "non-delegable" (*Jurong Primewide v Moh Seng Cranes* at [64]). The lifting supervisor is required to "supervise *all lifting activities* and *ensure that the lifting operation is carried out safely*"; *a fortiori* in the present case, where the lift was a *non-routine* lift.

173 The *Code of Practice on Safe Lifting Operations in the Workplaces* (Workplace Safety and Health Council, 2014) ("the Lifting Code") is a code which is "aimed at practitioners who are involved in lifting operations" and was "produced after extensive analysis of current practice in Singapore" (the Lifting Code at p 1). The Lifting Code categorises a routine lift as one that is "repetitive in nature and involves loads that are similar in shape, size and weight". A non-routine lift, on the other hand, is categorised as a "lifting operation that is complex, *carried out for the first time* or lifting close to the lifting capacity of the crane" [emphasis added]. The Lifting Code states that a non-routine lift:

> ... will require a detailed risk assessment and engineering method before the lift is carried out. Specific control measures to mitigate the risks involved in such a complex operation will need to be put in place ... In short, a non-routine lift will require extensive planning.

There is no dispute that the relocation of the incorrectly-positioned rebar cage was a non-routine lift.

174 It is clear that Mr Arasu was in breach of his non-delegable statutory duties to supervise the lifting operation and to ensure that it was conducted in a safe manner. It is also apparent from Mr Arasu's evidence that the rebar cage was rigged up in such an obviously haphazard manner that if he had been there, he "would have stopped this accident". [note: 98] When he was informed of the non-routine lift that was required on the fifth floor, Mr Arasu should have instructed Mr Masum not to proceed until he was able to assess the scene and provide proper instructions.

175 If Mr Arasu had instructed Mr Masum not to proceed, there is no reason to think that

Mr Masum would still have gone ahead to call for the tower crane. After all, it is not disputed that the tower cranes had to assist with many operations and it was undesirable for the tower crane to be kept waiting and unutilised. If Mr Arasu was supervising the lift, it is unlikely that the accident would have occurred. Indeed, Mr Arasu accepted the recommendation of the safety officer that, to prevent similar accidents, adequate and competent supervisors had to be deployed. [note: 99]

176 In the circumstances, I find that the second defendant is in breach of their duty to take reasonably practicable measures which are necessary to ensure the safety and health of persons who may be affected by the lifting operations.

Issue 3: Whether Mr Arasu and Mr Masum were negligent

177 I turn now to address the question of secondary liability: whether either defendant is vicariously liable for the negligence of their employees.

The existence of a duty of care

178 I am of the view that both Mr Arasu and Mr Masum owed a duty of care to the plaintiff, a rebar worker. Factual foreseeability would have been easily satisfied in the present case.

179 The relationship between Mr Arasu and Mr Masum on one hand and the plaintiff on the other was also proximate. Both Mr Arasu and Mr Masum played key roles in the performance and execution of lifting operations. Further, the mounting of rebar cages required close cooperation and coordination between the two functional groups that were responsible for the lifting operations and the installation of the rebar cages respectively.

180 Second, both Mr Arasu and Mr Masum were under statutory duties imposed by the Crane Regulations (reg 17 for lifting supervisors, at [153] above; regs 18 and 19 for riggers/signalmen, at [154] and [155] above). Dr Ng's remarks during the WSH Parliamentary Debates (at col 2211) are pertinent. They indicate that the WSH Framework was not intended only to increase the direct liability of contractors and subcontractors (as *Jurong Primewide v Moh Seng Cranes* observed at [41]), but in certain situations, that of *employees* as well:

> While management commitment is critical, it is not sufficient if employees ignore clear instructions. Under this new liability regime, *responsibility for the safety and health of others will lie not only with employers, but also with employees, whether they be supervisors or rank-and-file workers*. [emphasis added]

181 The spirit of these remarks is captured by the Crane Regulations. The Crane Regulations draw a sharp distinction between duties of the *responsible person* (who would in most cases be a contractor or a subcontractor), and the duties of the *employees or persons appointed by* the responsible person to perform the roles of a lifting supervisor, rigger or signalman. The statutory duties of the responsible person relate more broadly to the development and implementation of a safe system of work. The statutory duties of the lifting supervisor and rigger/signalman on the other hand demarcate clearly the scope of responsibility for each in a lifting operation.

182 I am therefore of the view that there was a legally proximate relationship between both Mr Arasu and Mr Masum and the plaintiff. There are no policy factors that militate against the existence of a duty of care. The relevant policy considerations fortify its existence rather than detract from it.

The standard of care

The standard of care

183 I have discussed how Mr Arasu's actions fell short of the standard of care expected of a lifting supervisor at [172]–[175] above. I therefore find that Mr Arasu was negligent.

184 I now turn to whether Mr Masum acted in breach of his duty of care. I am of the view that he did. Under the Crane Regulations, a rigger is under a duty to ensure that the load was "secure, stable and balanced" (reg 18(4)(*e*) of the Crane Regulations). A signalman, is under a duty to "ensure ... that the load [was] properly rigged up before [giving] a clear signal to the crane operator to lift the load" (reg 19(4)(*a*) of the Crane Regulations).

185 First, Mr Masum should not have attempted to lift and relocate the rebar cage without supervision. This was a non-routine lifting operation. Mr Masum was relatively inexperienced. It was the first time he had encountered such a lift. Mr Masum should not have proceeded with the lift in the absence of Mr Arasu or at least his colleague, Mr Kumar, who was the more experienced rigger/signalman.

186 Second, Mr Masum should not have asked, much less allowed the plaintiff to assist in the rigging at all. The plaintiff was not trained or qualified in rigging. That was not the kind of work a rebar worker had the necessary expertise or training to deal with safely and effectively. Mr Masum realised that the rigging up of an installed rebar column presented special difficulties. It is clear that, on Mr Masum's own evidence, he asked the plaintiff to rig up the rebar cage in what he termed as "the correct procedure." [note: 100]

187 Even if Mr Masum protested profusely at the improper manner in which the plaintiff hooked the hoist chains to the rebar cage, Mr Masum should not even have asked the plaintiff to rig up the rebar cage to begin with. By asking the plaintiff to rig up the rebar cage (or assist in doing so), the scene was set for the subsequent unfortunate chain of events. To merely shout protests at the manner in which the plaintiff rigged up the load was clearly insufficient, given the communication problems and the scale of the danger. Mr Masum should have at least tried to stop the plaintiff directly – and not just shout at him.

188 Mr Mohan, the safety supervisor, testified that he would not allow a rebar man to assist in rigging. This was something that was strictly not allowed, even if there were insufficient riggers/signalmen available to assist. [note: 101] Mr Arasu, the lifting supervisor, agreed that it would be wrong and a breach of the rules if Mr Masum had asked a rebar worker to rig up loads. [note: 102]

189 Third, Mr Masum should not have instructed the tower crane operator to tauten the hoist chains after the rebar cage was rigged up in the improper manner. By doing so, Mr Masum was in breach of his duty to ensure the load was properly rigged up before giving instructions to the tower crane operator to lift the load. The tautening of the hoist chains in what was already a confused and chaotic situation may also have led the plaintiff to believe that it was safe to continue. All this supports my finding that Mr Masum, as the sole trained rigger and signalman present at the time, failed to take reasonable care.

Whether and if so which of the defendants are vicariously liable for Mr Arasu's and Mr Masum's negligence

190 While the defendants did dispute whether Mr Arasu and Mr Masum were negligent, neither contended that they would not be vicariously liable for Mr Arasu's and Mr Masum's acts if they were found to be negligent.

191 Mr Arasu was employed and controlled by the second defendant at the material time. His negligence occurred in the course of his employment with the second defendant. I accordingly find that the second defendant is vicariously liable for his negligence.

192 The position in respect of Mr Masum is less clear. Mr Masum's negligent acts were performed while he was an employee of the first defendant and in the course of his employment by the first defendant. But while Mr Masum was an employee of the first defendant, it does not necessarily follow that the first defendant is liable for Mr Masum's negligence.

193 In the House of Lords case of *Mersey Docks and Harbour Board v Coggins & Griffiths (Liverpool) Limited* [1947] AC 1 ("*Mersey Docks*"), Lord Macmillan stated that as a general rule, the employer of a person would usually be vicariously liable for the person's negligence. Lord Macmillan nonetheless recognised (at 13) that:

> ... it is always open to an employer to show, if he can, that *he has for a particular purpose or on a particular occasion temporarily transferred the services of one of his general servants to another party* so as to constitute him *pro hac vice* the servant of that other party with consequent liability for his negligent acts. The burden is on the general employer to establish that such a transference has been effected. [emphasis added]

194 The Court of Appeal in *Awang v Shun Shing* held (at [19]) that the plaintiff-worker, who had an employment contract with a subcontractor, was an "employee" of the main contractor, because the main contractor "at the material time exercised control or had the right to exercise control over [the worker] in relation to the work he was engaged to do". The Court of Appeal also cited *Mersey Docks* with approval, remarking that:

> It has long been recognised, especially *in cases dealing with employer's vicarious liability for damage caused by his employee to a third party, that an "employer" in such a case means not only the party who actually employs the employee, but also the one who at the material time exercises or has the right to exercise control over the employee in respect of the work he was engaged to perform*, notwithstanding that there is no contract of employment between him and the party who exercises or has the right to exercise control. [emphasis added]

195 The evidence on whether the first or the second defendant was exercising control, or had the right to exercise control over Mr Masum at the material time was regrettably thin. None of the parties raised the issue in submissions in the light of Mr Ramesh's concession in open court that the distinction between both defendants was immaterial from a practical standpoint.

196 I am nonetheless of the view that, at the material time, Mr Masum was the second defendant's employee *pro hac vice*. The second defendant was exercising control over Mr Masum in respect of the lifting operations. Mr Masum's evidence was that he received instructions from Mr Arasu, the second defendant's lifting supervisor. [note: 103] Further, Mr Masum was to report to Mr Arasu and seek his guidance if he was unable or unsure of how to proceed with the lifting work. [note: 104] Mr Masum was also recorded as the appointed rigger/signalman under the daily lifting permit applied for by the second defendant and under its letterhead. Mr Masum played an integral role in the lifting operations, which the second defendant had control of at the Worksite.

197 There is English authority that in appropriate cases, two employers may be dually vicariously liable for an employee's negligence. In *Viasystems (Tyneside) Ltd v Thermal Transfer (Northern) Ltd and others* [2006] QB 510 ("*Viasystems*") the English Court of Appeal held that liability for a worker's

negligence was shared by two employers.

198 In *Viasystems*, X had supplied to Y a worker on a labour-only basis to carry out some ducting work. The work was carelessly performed and resulted in damage to a factory. The English Court of Appeal held that it was possible for X and Y to be dually vicariously liable for the negligence of the worker. In doing so, the English Court of Appeal considered (at [31] of *Viasystems*) a Privy Council case which was on appeal from Singapore: *Karuppan Bhoomides v Port of Singapore Authority* [1978] 1 WLR 189 ("*Karuppan v PSA*"). In *Karuppan v PSA*, the Privy Council appears to have assumed that where an employee is "loaned" by one employer to another, then either one or the other – but not both – will be subject to vicarious liability. May LJ in *Viasystems*, however, pointed out that the possibility of dual vicarious liability was not argued (nor was it possible on the facts) before the Privy Council in *Karuppan v PSA*. In short, the English Court of Appeal was of the view that there was no binding authority in England against dual vicarious liability.

199 The English Court of Appeal elaborated that the essence of dual vicarious liability was *shared control*. It was, however, divided on whether there was an additional requirement that dual liability had to be just in the circumstances. Rix LJ stated at [79] that he was "a little sceptical that the doctrine of dual vicarious liability is to be wholly equated with the question of control." He went on to elaborate:

> I would hazard ... the view that what one is looking for is a situation where the employee in question, at any rate for relevant purposes, is so much a part of the work, business or organisation of both employers that it is just to make both employers answer for his negligence.

That notwithstanding, it is clear that the possibility of dual responsibility was thought to provide a coherent solution in the context of vicarious liability for borrowed employees and analogous situations.

200 Dual vicarious liability was not addressed in the submissions. I nonetheless agree in principle that vicarious liability can be borne by two employers in the appropriate cases.

201 Given the fact that Mr Masum, the rigger/signalman was: (a) employed by the first defendant; (b) working with the plaintiff, who was also employed by the first defendant; and (c) in a task that required coordination of workers with different functional skills and responsibilities, I am of the view that the first defendant (bearing in mind that Mr Chen was on-site and patrolling the fifth floor) retained sufficient control to fall under the principle of dual responsibility for Mr Masum's acts.

202 On the facts of this case, I need not resolve the disagreement in the English Court of Appeal whether there is a superadded requirement that dual vicarious liability be just in the circumstances. But given the fluid and dynamic relationship between the work of the riggers/signalmen and that of the rebar workers, I would say that the requirement would have, in any event, been satisfied in this case.

203 Given the position taken by Mr Ramesh, learned counsel for the defendants, that no distinction was to be drawn between the first and second defendant, I will not address the question of the relative proportion of their responsibility. Instead, I now move to consider the question of contributory negligence.

Issue 4: Whether there was contributory negligence on the part of the plaintiff, and if so, the extent to which the defendants' liability should be reduced

204 Contributory negligence arises where a claimant has acted in a careless manner that has

contributed in part to the loss that was suffered. The Court of Appeal in *Parno v SC Marine Pte Ltd* [1999] 3 SLR(R) 377 ("*Parno v SC Marine*") at [59] cited with approval the observation of Lord Denning MR in *Froom v Butcher* [1976] QB 286 at 291:

> Negligence depends on a breach of duty, whereas contributory negligence does not. Negligence is a man's carelessness in breach of duty to others. Contributory negligence is a man's carelessness in looking after his own safety. He is guilty of contributory negligence if he ought reasonably to have foreseen that, if he did not act as a reasonable prudent man, he might hurt himself.

The label "contributory negligence" is therefore, to a certain extent, a misnomer. There is no need for the defendant to show that a claimant has breached a legal duty of care, as is necessary in a claim for negligence (Gary Chan, *The Law of Torts in Singapore* (Academy Publishing, 2011) ("*The Law of Torts in Singapore*") at para 7.071).

205 Contributory negligence is a statutory concept encapsulated in s 3(1) of the Contributory Negligence and Personal Injuries Act (Cap 54, 2002 Rev Ed) ("the Contributory Negligence Act"), which states as follows:

> **Apportionment of liability in case of contributory negligence**
>
> **3.**—(1) Where any person suffers damage as the result *partly of his own fault* and partly of the fault of any other person or persons, a claim in respect of that damage shall not be defeated by reason of the fault of the person suffering the damage, but *the damages recoverable in respect thereof shall be reduced to such extent as the court thinks just and equitable having regard to the claimant's share in the responsibility for the damage*. [emphasis added]

206 Returning to the facts of the present case, I am of the view that there was contributory negligence on the part of the plaintiff for rigging up the rebar cage in an improper manner.

207 The plaintiff was an experienced rebar worker. On his own evidence, he was aware of the proper manner of rigging up a rebar cage in an upright position even though he was not a qualified rigger. He was nonetheless eager, perhaps overly so, to complete the job as quickly as possible and with minimum hassle. Indeed, his failure to notify his superiors of the mistake he made on 25 December 2012 should not and does not go un-noticed. If he had notified his supervisors, the defendants would have had much more time to assess the situation and develop a proper lifting plan. The plaintiff rigged up the rebar cage in an improper and unsafe manner. He then proceeded to release the remaining wire ties after the rebar cage was improperly rigged. The accident would not have occurred if the plaintiff had performed neither of these acts. I am of the view that the plaintiff's act of folly was a substantial cause of the accident.

208 I am further of the view that the negligence of the first and second defendants was also a substantial cause of the accident and the consequential injuries sustained by the plaintiff.

209 If Mr Masum had not asked the plaintiff to rig the rebar cage and had exercised his authority as the qualified rigger to take charge of the rigging, the accident is unlikely to have occurred. His failure to do this and his instructions to the tower crane operator to tauten the hoist chains when the rebar cage was not properly secured set the scene for the plaintiff removing the remaining wire ties. The fact that Mr Masum shouted protests to the plaintiff in these circumstances was insufficient to discharge his duty of reasonable care.

210 Mr Arasu's failure to respond properly when informed of the need to relocate the rebar cage on

the fifth floor was also a cause of the accident. Mr Arasu accepted that if he had been present the accident would not have occurred. He would not have permitted the plaintiff, who was not a qualified rigger, to do the rigging at all, much less in the manner in which it was done.

211 The plaintiff's carelessness in the manner in which he carried out the rigging up of the rebar cage and the removal of the wire ties is undoubtedly a serious matter. However, the *key purpose* of the duties of the first and second defendants as well as those of their employees was precisely to prevent, or at least lessen, the risk of untrained hands foolishly meddling in high-risk operations. It bears repeating that the WSH Framework was intended to provide safety for all persons at the worksite. The new statutory scheme was introduced on the back of a perceived need to change mind sets towards a more proactive approach to safety.

212 A rebar column of the size and weight that was wrongly installed at the edge of the fifth floor presented obvious challenges. The rebar cage toppled onto the deck of the fifth floor trapping and causing the injuries to the plaintiff. If the rebar cage had toppled in a different direction or manner the accident may have been far more serious. The rebar cage would have fallen off the fifth floor and endangered all the persons on the ground floor. While there is no expert evidence that this might have happened, it is an inference which may be drawn from the photographs taken after the accident.

213 The point that is being made is that lifting operations, especially non-routine lifts, are dangerous operations. They require proactive responses. Lifting supervisors who are not present when informed of the need of an unanticipated non-routine lift, must respond in the appropriate manner. The fault of Mr Arasu was not that he did not have a lifting plan at the start of the work day: after all he did not know at that point that the rebar cage had to be uninstalled, lifted and relocated. The fault arose when, after he had been apprised of the need to conduct the non-routine lift, he responded in an inappropriate manner. What is the proper response by a lifting supervisor when he is informed of a new development will depend on the circumstances of the case. In the present case, Mr Arasu's instruction to Mr Masum to proceed if he could, or wait if could not, was an inadequate response.

214 I am mindful that there is some evidence that part of the problem at the Worksite was the poor communication between workers from different functional groups. Indeed, Mr Mohan under cross-examination agreed that the rules required that the lifting team use a common language. [note: 105] In the light of the absence of sufficient evidence on the effect of language competence (or lack of it) resulting in the accident, I will only make the passing observation that the need for supervision is *heightened* especially where different groups of workers of different nationalities and varying degrees of language fluency are carrying out dynamic work activities. Supervisors should plan not just for the routine and expected events of the day. In a busy complex worksite, unexpected events can quickly arise and develop.

215 I am therefore of the view that the breaches of the defendants and their employees were also a substantial cause of the accident. The accident would not have occurred had the proper procedures been in place.

216 Overall, I am of the view that it is just and equitable that the liability of the defendants to the plaintiff should be reduced by 50%. In coming to the decision, I am reminded by the remarks of V K Rajah JC in *Cheong Ghim Fah v Murugian s/o Rangasamy* [2004] 1 SLR(R) 628 that apportionment is more an exercise in discretion rather than clinical science.

217 I am aware that a reduction of 50% is sizeable. Indeed, it may be thought that once

contributory negligence crosses the 50% threshold, it approaches the end of the spectrum so far as reductions for contributory negligence are concerned. After all, at some point, the contributory negligence of the claimant will shade into a break in the chain of causation of the defendant's negligence or a plea of *volenti non fit injuria*.

218 In *Dennis Toole v Bolton Metropolitan Borough Council* [2002] EWCA Civ 588, in the context of a breach of statutory duty, Buxton LJ remarked at [13] that:

> It is not usual for there to be marked findings of contributory negligence in a breach of statutory duty case, and it is, I am bound to say in my experience, very *unusual indeed for there to be a finding of contributory negligence at the level of 75 per cent. If in a statutory duty case the judge finds himself driven in that direction, he should, in my judgment, seriously consider whether he is not in fact finding that there has been no causal connection at all between the breach of statutory duty and the injury.* [emphasis added]

2 1 9 *Munkman on Employer's Liability* (Daniel Bennett gen ed) (LexisNexis, 16th Ed, 2013) ("*Munkman on Employer's Liability*") states at para 6.17 that:

> Having reviewed the reported cases available over the last ten years, there has not been found a higher court award in which a reduction has been made that exceeded 75% ... In practice, the maximum reduction is now 75%.

220 Buxton LJ's observation is an instructive one. His experience also appears to conform with practice as far as the review of the case law conducted by *Munkman on Employer's Liability* suggests. There are nonetheless two points which colour the context in which these observations are made.

221 First, the remarks quoted above appear to have been directed at cases of breaches of statutory duty rather than negligence (although admittedly, the distinction between the two is diminished in cases such as this where the governing statutory framework intersects substantially with negligence liability). It has been said that the court is slower to find contributory negligence in cases of breach of statutory duty, as opposed to negligence. The reason for this was stated by Lord Tucker in the case of *Staveley Iron & Chemical Co Ltd v Jones* [1956] AC 627 at 648:

> ... the purpose of imposing the absolute obligation is to protect the workmen against those very acts of inattention which are sometimes relied upon as constituting contributory negligence so that too strict a standard would defeat the object of the statute.

222 Second, notwithstanding this more protectionist approach in cases of a breach of statutory duty, the English courts have drawn a dichotomy between situations of "momentary inattention" referred to by Lord Tucker and situations where a risk has been consciously accepted by an employee. In *Sherlock v Chester City Council* [2004] EWCA Civ 201, Latham LJ cited portions of Buxton LJ's judgment (quoted at [218] above) and stated:

> In *Toole v Bolton Metropolitan Borough Council* [2002] EWCA Civ 588, Buxton LJ said:
>
> "It is not usual for there to be marked findings of contributory negligence in a breach of statutory duty case."
>
> *There may well be some justification for that view in cases of momentary inattention by an employee. But where a risk has been consciously accepted by an employee, it seems to me that*

different considerations may arise. That is *particularly so where the employee is skilled and the precaution in question is neither esoteric nor one which he could not take himself*. In the present case he could have made himself a run-off bench, or ensured that Mr Webb was there when he cut the relevant fascia board. In those circumstances, it seems to me that the appellant can properly be required to bear the greater responsibility. I would assess his responsibility for the accident at 60%. Accordingly he is entitled to 40% of whatever damages are ultimately considered to be appropriate for the dreadful injury he suffered to his hand.

[emphasis added]

Arden and Auld LJJ agreed with Latham LJ's reasoning.

223 In coming to my decision, I have also borne in mind the observation of the learned author of *The Law of Torts in Singapore* at para 7.079 that where contributory negligence is alleged against an employee, the law tends, on balance, to lean in favour of the employee who had suffered damage due to the employer's negligence. Where the negligence of the employer related to the failure to ensure that there was a safe system of work, the fact that an employee took a risk or made an error of judgment does not inevitably support a heavy finding of contributory negligence (or at all). Following the observation in the *Parno v SC Marine* case at [64], "the primary responsibility for ensuring safety rests on the employer". One factor that is relevant is whether the employee took a risk in circumstances (giving rise to the taking of the risk) which arose (in whole or in part) due to the negligence of the defendant.

224 I note also the observations of Rajah JA in *Zheng Yu Shan v Lian Beng Construction (1988) Pte Ltd* [2009] 2 SLR(R) 587 at [38] that in carrying out his duty to provide a safe system of work, an employer must take "the employee's carelessness in relation to safety into account when devising a safe system of work." Thereafter it behoves the employer to take reasonable care to see that the system is complied with. These observations are relevant not just in determining whether the employer has breached his duty of care. They are also pertinent in determining whether there is contributory negligence by the employee and, if so, the degree as compared to the negligence of the employer.

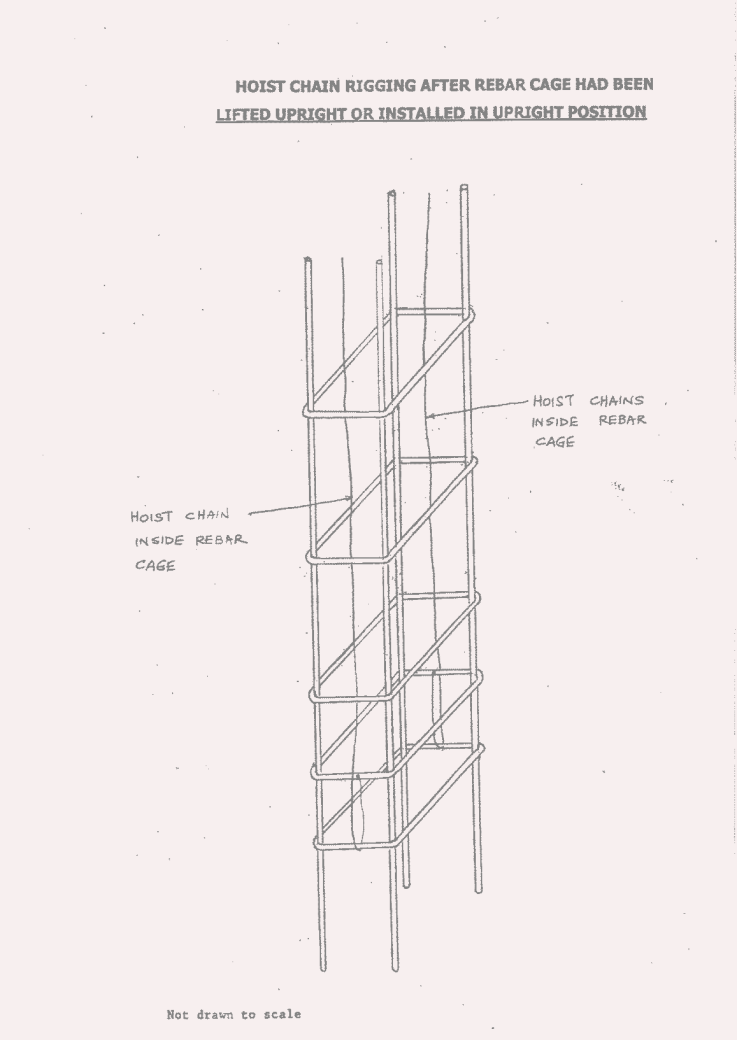
225 Bearing these cases in mind, in view of the plaintiff's own act of folly, the fact that he was an experienced rebar worker leading a small team of rebar workers, balanced against the negligence of the defendants, it is just and equitable that the defendants' liability to the plaintiff be reduced by 50%. Whilst this is undoubtedly a high reduction, it is supported by the unusually high degrees of responsibility borne by *both* sides on the facts of this case.

Conclusion

226 I find the defendants liable in negligence to the plaintiff. I also find that a reduction is appropriate as a consequence of the plaintiff's contributory negligence. The defendants are to bear 50% of the loss and damage that the plaintiff suffered as a consequence of the accident.

227 Costs are to be agreed or taxed.

ANNEXURE



[note: 1] Statement of claim, Annexure A.

[note: 2] Statement of claim, at para 6; Defence, at para 4.

[note: 3] N/E 26 March 2014, at pp 4–6.

[note: 4] N/E 25 March 2014, at p 23 line 3.

[note: 5] N/E 25 March 2014, at p 7 lines 11–27.

[note: 6] N/E 25 March 2014, at p 7 lines 28–30.

[note: 7] N/E 4 June 2014, at pp 18–19.

[note: 8] N/E 4 June 2014, at p 21.

[note: 9] N/E 4 June 2014, at p 32 lines 2–8.

[note: 10] N/E 4 June 2014, at p 80 line 19 –p 82 line 8.

[note: 11] N/E 27 March 2014, at p 12 lines 12–28.

[note: 12] N/E 26 March 2014, at p 11 line 30–p 12 line 20.

[note: 13] Plaintiff's bundle of documents, at p 20; N/E 26 March 2014, at p19 line 26–p 24 line 16.

[note: 14] N/E 25 March 2014, at p 20 lines 3–5.

[note: 15] N/E 5 June 2014, at p 88 lines 5–8.

[note: 16] N/E 5 June 2014, at p 87 lines 7–13.

[note: 17] N/E 4 June 2014, at pp 31–32.

[note: 18] N/E 5 June 2014, at p 81 lines 4–5.

[note: 19] N/E 6 June 2014, at p 15 lines 8–13; N/E 6 June 2014, at p 17 lines 28–30.

[note: 20] N/E 6 June 2014, at p 19 lines 3–25.

[note: 21] N/E 25 March 2014, at p 37 line 1.

[note: 22] N/E 27 March 2014, at p 12.

[note: 23] N/E 25 March 2014, at p 37 lines 6–30.

[note: 24] N/E 25 March 2014, at p 38 line 31–p 39 line 12.

[note: 25] N/E 25 March 2014, at p 38 line 31–p 39 line 12.

[note: 26] N/E 25 March 2014, at p 38 lines 5–11.

[note: 27] N/E 27 March 2014, at p 17 line 2.

[note: 28] N/E 5 June 2014, at p 76 lines 16–26.

[note: 29] N/E 5 June 2014, at p 81 lines 6–11.

[note: 30] N/E 5 June 2014, at p 78 lines 16–20.

[note: 31] N/E 5 June 2014, at p 77 lines 14–17.

[note: 32] N/E 5 June 2014, at p 79 lines 5–18.

[note: 33] N/E 6 June 2014, at p 8 lines 9–11.

[note: 34] N/E 5 June 2014, at p 81 lines 12–13.

[note: 35] N/E 5 June 2014, at p 81 lines 14–15.

[note: 36] N/E 5 June 2014, at p 81 line 19.

[note: 37] N/E 5 June 2014, at p 81 lines 22.

[note: 38] N/E 5 June 2014, at p 81 lines 19–28.

[note: 39] N/E 5 June 2014, at p 79 line 8.

[note: 40] N/E 5 June 2014, at page 92 lines 3–6.

[note: 41] N/E 5 June 2014, pp 95–96.

[note: 42] Defendants' closing submissions, at para 122.

[note: 43] Defendants' closing submissions, at para 121.

[note: 44] Defendants' closing submissions, at para 123.

[note: 45] N/E 5 June 2014, at p 61 lines 30–32; N/E 6 June 2014, p 119 lines 5–7.

[note: 46] N/E 4 June 2014, at p 67 lines 4–6.

[note: 47] N/E 5 June 2014, at p 61 lines 12–18.

[note: 48] N/E 5 June 2014, at p 61 lines 22–23

[note: 49] N/E 6 June 2014, at p 118 lines 9–30.

[note: 50] N/E 4 June 2014, at p 31 line 20–p 32 line 1.

[note: 51] N/E 4 June 2014, at p 32 lines 5–8.

[note: 52] N/E 25 March 2014, at p 48 line 25–p 49 line 6.

[note: 53] N/E 25 March 2014, at p 40 line 21–p 41 line 25; N/E 25 March 2014, p 50.

[note: 54] N/E 4 June 2014, at p 69 lines 1–10.

[note: 55] N/E 25 March 2014, at p 51 line 2–p 52 line 4.

[note: 56] N/E 25 March 2014, at pp 51–52.

[note: 57] Plaintiff's AEIC, at para 21.

[note: 58] N/E 25 March 2014, at p 53 line 1.

[note: 59] N/E 25 March 2014, at p 54 lines 9–10.

[note: 60] N/E 25 March 2014, at p 55 lines 6–8; N/E 26 March 2014, at p 15 lines 2–3.

[note: 61] PBOD, page 20. See also N/E 26 March 2014, at p 19 line 26 – p 24 line 6.

[note: 62] N/E 26 March 2014, at p 26 lines 14–27.

[note: 63] N/E 26 March 2014, at p 30 lines 18–31; N/E 26 March 2014, at p 31 lines 14–26.

[note: 64] N/E 26 March 2014, at p 33 lines 28–29.

[note: 65] N/E 4 June 2014, at p 70 lines 30–32; N/E 4 June 2014, at p 74 lines 13–23.

[note: 66] N/E 4 June 2014, at p 71 lines 2–4.

[note: 67] N/E 5 June 2014, at p 5 line 16.

[note: 68] N/E 25 March 2014, at p 53 lines 5–8.

[note: 69] Plaintiff's AEIC, at para 21.

[note: 70] N/E 26 March 2014, at p 34 lines 3–5.

[note: 71] N/E 4 June 2014, at p 77 line 14.

[note: 72] N/E 4 June 2014, at p 78 lines 16-22.

[note: 73] N/E 26 March 2014, at p 32 line 18–p 33 line 24.

[note: 74] N/E 26 March 2014, at p 32 lines 10–17.

[note: 75] N/E 26 March 2014, at p 45 lines 15–p 46 line 1.

[note: 76] N/E 26 March 2014, at p 47 lines 4–15.

[note: 77] N/E 5 June 2014, at p 10 lines 9–10.

[note: 78] N/E 5 June 2014, at p 5 lines 18–20; N/E 5 June 2014, at p 6 lines 18–20.

[note: 79] N/E 5 June 2014, at p 6 lines 14–31.

[note: 80] N/E 5 June 2014, at p 38 line 25; N/E 5 June 2014, at p 57.

[note: 81] N/E 5 June 2014, at p 38 lines 26–29.

[note: 82] N/E 26 March 2014, at p 45 line 31–p 46 line 4.

[note: 83] N/E 6 June 2014, at p 93.

[note: 84] N/E 4 June 2014, at p 25 lines 17–26.

[note: 85] N/E 26 March 2014, at p 33; N/E 5 June 2014, at pp 6–7.

[note: 86] N/E 26 March 2014, at p 31 line 29–p 32 line 3.

[note: 87] N/E 5 June 2014, at p 6 line 24–p 7 line 3.

[note: 88] N/E 4 June 2014, at pp 7–8.

[note: 89] N/E 4 June 2014, at p 29 lines 11–13.

[note: 90] N/E 4 June 2014, at p 29 lines 7– 25.

[note: 91] N/E 4 June 2014, at p 29 line 25.

[note: 92] N/E 4 June 2014, at p 29 lines 7–9.

[note: 93] N/E 4 June 2014, at p 33, lines 29–30.

[note: 94] N/E 4 June 2014, at p 43 lines 21–23.

[note: 95] N/E 4 June 2014, at p 54 lines 19–32.

[note: 96] N/E 5 June 2014, at p 61.

[note: 97] N/E 6 June 2014, at p 23 lines 1– 21.

[note: 98] N/E 6 June 2014, at p 119.

[note: 99] N/E 6 June 2014, at p 132 lines 1–19.

[note: 100] N/E 4 June 2014, at p 71 line 9.

[note: 101] N/E 6 June 2014, at p 38 line 21–p 40 line 21.

[note: 102] N/E 6 June 2014, at p 124 lines 14–21.

[note: 103] N/E 4 June 2014 at p 40 lines 8–9.

[note: 104] N/E 4 June 2014 at p 43 lines 21–23.

[note: 105] N/E 6 June 2014, at p 47 lines 9–27.