CAA Technologies Pte Ltd *v* HP Construction & Engineering Pte Ltd [2015] SGHC 32

Case Number : Suit No 333 of 2013

Decision Date : 28 January 2015

Tribunal/Court : High Court

Coram : Tan Siong Thye J

Counsel Name(s) : Choh Thian Chee Irving and Lim Bee Li (Optimus Chambers LLC) for the plaintiff; Chung Khoon Leong John, Amy Tan and Priscylia Wu Bao Yi (Kelvin Chia Partnership) for the defendant.

Parties : CAA Technologies Pte Ltd — HP Construction & Engineering Pte Ltd

Building and construction law – drawings

Building and construction law – contractor's duties – duty as to materials and workmanship

Building and construction law – termination – termination under terms of contract

Building and construction law – damages – damages for defects

Building and construction law – quantum meruit

Building and construction law – damages – liquidated damages

Building and construction law – building and construction related contracts – guarantees and bonds

28 January 2015 Judgment reserved.

Tan Siong Thye J:

Introduction

1 The defendant, HP Construction & Engineering Pte Ltd, was the main contractor for a Housing Development Board ("HDB") project at Ang Mo Kio Neighbourhood 6 ("the Project"). The plaintiff, CAA Technologies Pte Ltd, was the concrete precaster and the defendant's sub-contractor. The defendant terminated the plaintiff's services as the latter had been consistently late in the delivery of the pre-cast components, some of which were also defective.

2 The plaintiff sues the defendant for: (a) wrongful termination of the subcontract between them ("the Subcontract"); (b) the defendant's wrongful call on the banker's guarantee ("the Guarantee Agreement"); and (c) compensation on a *quantum meruit* basis for precast components that had been manufactured but undelivered. The defendant counter-claims for: (a) the cost of engaging another concrete precaster to complete the plaintiff's outstanding work; (b) the costs of rectifying the plaintiff's defective pre-cast components; (c) damages for the delay caused by the plaintiff; and (d) damages for other costs that the defendant had paid on behalf of the plaintiff.

The background facts

The parties

The parties

3 The defendant is in the business of providing preconstruction, project management, architectural design and construction and interior design services. The HDB awarded the Project to the defendant as the main contractor ("the Main Contract"). The Project commenced on 20 December 2011, with the completion date agreed to be 4 March 2014.

4 The plaintiff is a concrete pre-caster that designs, produces and installs pre-stressed and precast concrete structures for building projects. [note: 1] The defendant awarded the precast contract to the plaintiff. The parties hence entered into the Subcontract. The plaintiff's scope of work under the Subcontract was to prepare the shop drawings, as well as supply, fabricate and deliver all precast components to the Project worksite.

5 The Subcontract was worth $3,377,661.87, and contained a termination clause set out at [47] below. Its commencement date was 20 December 2011, and the completion date was 13 September 2013.

6 The civil and structural engineer for the Project was Surbana International Consultants Pte Ltd, and the Project's architect was Architects 61 Pte Ltd. They are referred to collectively as "the Consultants" in this judgment. They were involved, *inter alia*, in the approval of the shop drawings that were essential for the plaintiff's production of the precast components.

The advance payment and the Guarantee Agreement

7 Under the Subcontract, the plaintiff requested for an advance payment equivalent to 10% of the Subcontract sum, which was $337,766.19. The plaintiff required this money to buy materials and moulds required for the performance of its obligations under the Subcontract. [note: 2] Provision was made for this through a handwritten term ("the Handwritten Clause") in the Subcontract at para 1 of Appendix C – General Terms & Conditions which states: [note: 3]

> 10% down payment shall be paid upon signing of the contract. [The plaintiff] will provide a banker guarantee as security.

8 Pursuant to the Handwritten Clause, the defendant made advance payments amounting to 10% of the Subcontract sum in two equal tranches to the plaintiff on 23 February 2012 and 23 May 2012. In consideration of the advanced payment, the plaintiff gave the defendant a guarantee for the sum of $337,766.19 under the Guarantee Agreement. The terms of the Guarantee Agreement will be discussed in greater detail later in this judgement. However, in summary, under the Guarantee Agreement, ABN Amro Bank N V (as Guarantor) undertook to pay the Defendant the sum of $337,766.19 on the latter's demand. [note: 4] The parties also agreed that the defendant was allowed to deduct 10% of each of the plaintiff's progress payments as the project progressed, and the plaintiff did just that. [note: 5]

The issues

9 The relevant issues in these proceedings are as follows:

(a) Was the plaintiff in breach of the Subcontract?

(b) Was the defendant entitled to terminate the Subcontract?

(c) What are the damages for the successful party?

(d) How much was the plaintiff entitled to for work done under the Subcontract?

(e) Was the plaintiff liable for the defective precast components delivered to the site?

(f) Was the defendant legally entitled to call on the Guarantee Agreement upon termination of the Subcontract?

10 I shall deal with these issues accordingly.

Was the plaintiff in breach of the Subcontract?

11 For a better appreciation of the issues, it is useful first to set out the work processes in the production of precast components. Precast components are modular concrete structures which are like "building blocks" used in modern construction techniques. [note: 6] Each component is fashioned by casting concrete over reinforcement bars and welded mesh within a metal mould to assume a desired shape and dimension. [note: 7] These components are usually produced in off-site factories. Thereafter they would be transported to the construction site for assembly and installation into the main building structure. [note: 8]

12 In order to obtain the correct dimensions, the precaster has to follow the approved shop drawings. These are detailed drawings used to prepare the moulds for the production of the concrete precast components. [note: 9] According to the plaintiff, it is only when the shop drawings have been approved that work can proceed. [note: 10]

13 In this case, the plaintiff claims that it was in full compliance with its contractual obligations and is claiming money owed to it by the defendant under the Subcontract. However, the defendant alleges that the plaintiff had breached its contractual obligations under the Subcontract and sues for damages.

14 To this end, the parties agree that there were delays in the production of the precast components. However, they disagree about who is responsible for the delays, and hence, in breach of the Subcontract and liable to pay damages to the other. I turn now to examine the parties' submissions in this regard.

The defendant's submissions

15 The defendant claims that the delays in the production of the precast components are wholly attributable to the plaintiff. In its submissions, the defendant cited several reasons for the delays in the production of the precast components, which showed that the plaintiff was responsible for the delays. The first category of reasons pertains to the plaintiff's inefficiency. First, the defendant submits that the plaintiff was incompetent. Second, it submits that the plaintiff's workers who were in charge of the production of the shop drawings were inexperienced, and that led to more revision and amendments, causing delays. [note: 11] Third, it submits that because Mr Chi Chao-Ton Tony ("PW1"), the plaintiff's chairman, travelled frequently and that meant that his approval of the shop drawing drafts, which was necessary before they were submitted to the defendant and the Consultants, was not given in a timely manner. [note: 12] Fourth, it submits that that the plaintiff had a shortage of workers, which led to the delays.

16 The defendant next submits that the plaintiff experienced cash flow problems. The following evidence was presented in support of that submission:

(a) the plaintiff was unable to pay for the transport of precast components from its casting yard in Johor to Singapore;

(b) the plaintiff was unable to pay its suppliers for materials; and

(c) the plaintiff's workers threatened to stop work in February 2013 due to the cash flow problems. [note: 13]

17 Finally, the defendant submits that the delays were caused by the plaintiff's shortage of materials as a result of its cash flow issues. Despite the Subcontract stating that the plaintiff was to supply all materials for the production and casting of the precast components, the defendant was occasionally asked to supply the materials. [note: 14] The shortage affected the casting work and hence the work progress as the plaintiff could not carry out its casting work without the materials. Furthermore, the plaintiff's machinery was old and broke down frequently, leading to further delays in the production of precast components.

18 For the above reasons, the defendant submits that the plaintiff caused delays of up to seven months. The precast components were critical to the building project and they were not produced according to schedule. [note: 15]

The plaintiff's submission

19 The plaintiff denies that it breached its Subcontract obligations.

20 First, it submits that the precast components were to be completed only by 13 September 2013, and it could have done that if the Subcontract had not been terminated. PW1 testified that on average, the plaintiff was able to manufacture and deliver two stories worth of precast components per month. Based on its work rate, it would have completed the manufacture and delivery of the precast components on time. However, it had not been given the opportunity to do so and hence, could not be said to be in breach of its obligations under the Subcontract. [note: 16]

21 Second, the plaintiff submits that there was no delay in its submission of the shop drawings to the Consultants for approval. Any delay was caused by the lateness of the Consultants and other subcontractors in giving their approval and input respectively for the shop drawings. There were also amendments made to the shop drawings after 27 August 2012, even after final approval was given. Moreover, the plaintiff submits that delay was also caused by (a) the delay of the timber mock-up's finalisation, which was necessary for the production of the precast moulds; and (b) the defendant's late delivery of the cast-in items, which were necessary for the production of the precast components.

22 Third, the plaintiff submits that there was a shortage of wire mesh which was an essential part of the fabrication process. [note: 17] Coupled with the shortage of cast-in items, the production of precast components could only begin by the end of November 2012, and hence, the delay. [note: 18]

My decision

23 There are several important factual disputes which must be considered in order to ascertain

whether the plaintiff breached its contractual duties. I shall now give my findings in relation to those disputes.

The delay in the shop drawings submission was mainly caused by the plaintiff

24 The first dispute concerns the delay in the shop drawings submission. It is an undeniable fact that the plaintiff had failed to comply with the Master Schedule ("the Schedule") as agreed to in the Subcontract. The Schedule states that preparation of the shop drawings was to commence on 2 February 2012, and be completed on 3 March 2012. [note: 19] The documentary evidence shows that this was not done.

25 The issue before for me then, is to whom the delay is attributable to. In my view, the delay was largely the fault of the plaintiff. By 7 March 2012, the shop drawings had not yet been fully submitted by the plaintiff to the defendant for approval. In the plaintiff's letter to the defendant dated 7 March 2012, the plaintiff mentioned that: [note: 20]

> *For shop drawing submission, we have submitted 10 items of precast elements till today. For the whole project, the total items are about 20 items.* And regarding to (*sic*) the P.E endorsement, please understand the initial drawings is (*sic*) for your consultant and other related contractors to comments (*sic*) and update with their information. The initial drawings are not for construction and to revise according to the comments. … [emphasis added]

26 In the defendant's reply, the defendant expressed unhappiness with the plaintiff's delay in its submission of the shop drawings. It reminded the plaintiff that it was crucial for all subcontractors to abide by the timeline in the Schedule. In that same reply, the defendant also informed the plaintiff that it would hasten the Consultants to approve the shop drawings so that the precast components could be delivered by 15 May 2012 as per the original deadline. [note: 21]

27 The next letter from the plaintiff was a *tacit* admission that it could not abide by the Schedule. In its letter dated 13 May 2012, PW1 stated that "After our study, we [cannot] improve on our submission schedule. And we are trying our best to proceed (*sic*) the shop drawing submission according to our schedule." [note: 22] By contrast, on 13 May 2012, the defendant was ready to deliver essential precast supplies to the plaintiff for the latter to commence production of the precast components. In its email on 28 March 2012, the defendant also reminded the plaintiff to ensure that all the requirements were approved two weeks before the delivery of the precast supplies. It also reminded the plaintiff to submit all the necessary requirements for the Consultants' approval. [note: 23]

28 Despite the defendant's constant reminders, two weeks later, the shop drawings were still not approved. The correspondence between Ms Qian Lili ("Ms Qian"), who was one of the plaintiff's staff in charge of the shop drawings, and the defendant, shows that the shop drawings were only approved much later, between July and August 2012. In my view, the facts highlighted above show that much of the delay was caused by the plaintiff's shop drawings being defective, or the plaintiff being tardy in its replies to the defendant regarding the shop drawings. This is further evidenced by the defendant's email to the plaintiff on 29 June 2012, stating that while the shop drawings had been given to Ms Qian between 11 June 2012 and 21 June 2012, by 29 June 2012, the plaintiff still had not submitted any shop drawings to the defendant to address the Consultants' comments. [note: 24]

29 In its defence, the plaintiff submits that the continual amendments to the shop drawings after they were finalised on 27 August 2012 contributed to the delay in the production of the precast

components. [note: 25] However, its credibility was diminished as PW1's testimony was inconsistent. There were material contradictions in his testimony with respect to whether *all* the shop drawings had to be approved before preparation of the moulds could begin and one stark example is as follows: [note: 26]

A To me, all the shop drawings had to be in order before we buy the [wire mesh]

Q Would you agree with me that by about 11th July, all the shop drawings had been approved and you were ready for casting, and that is why you started to order the [wire mesh]?

A I disagree. On 22nd of July, Mr Tan wrote an official letter stating that all the shop drawings were approved.

Q Okay, can I now refer you to … minutes of sub-contractors' meeting dated 18th of July.

…

Q … [Reads] "[The plaintiff] confirmed that all the moulds are ready at the plant except staircase wall and lift wall."

…

Q Would this not suggest that by this date of 18th July, all the shop drawings had been approved to enable you to fabricate the moulds, except for these two items of course, the staircase wall and lift wall?

A The ready he---"the moulds are ready" here meant that the fabricators have delivered the mould to our factory. But we need the shop drawing before we can cast because we need to make adjustments based on the shop drawings.

Court "We need to make adjustment"?

A Based on the shop drawings. This statement here is very general. It doesn't mean that if the mould was ready, the casting was also ready.

Q … Dr Chi, you are changing your story again. The last day---few days, you were telling us that you cannot fabricate the moulds unless all the shop drawings had been approved. …

30 I thus found it hard to believe the evidence of PW1 in relation to the shop drawings and correspondingly placed little weight on what he said.

31 Furthermore, it is apparent that it was the defendant and not the plaintiff which showed more initiative in seeking to resolve the underlying causes of the delays regarding the shop drawings. [note: 27] In its email dated 17 May 2012, the defendant specifically mentioned that it was "extremely worried" that the precast components could not be produced on time. The defendant's top management also offered to meet up with the plaintiff to resolve "whatever problems which are delaying the precast coordination". Such initiative was not forthcoming from the plaintiff.

32 Finally, the evidence shows that the plaintiff was not cooperative in working with the other subcontractors as well. In an email dated 10 May 2012, the defendant stated that it was "surprised and amazed" when the plaintiff informed it that the incorporation of the mechanical and engineering

("M&E") details had to be done separately by the defendant, without the plaintiff's endorsement. That went against industry norms and was also not acceptable to the Consultants. [note: 28] The plaintiff disagreed with the defendant in its reply, and defendant's reply dated 16 May 2012 to the plaintiff's disagreement was as follows: [note: 29]

> It is the Pre-caster (specialist) responsibility to get their shop drawing approved by the consultant prior to [producing] the precast components. Nevertheless, since it is against your company's regulation as per your claim, we shall engage other parties to do it in order not to delay our submission to consultant.

33 On a balance of probabilities, I find that the plaintiff was the party which had caused the significant delays in the shop drawings submission. It is possible that others might have contributed to the delay. However, on the evidence before me, it is clear that the main delays were attributable to the plaintiff. In a prefabricated construction the plaintiff as precaster played a pivotal role in the progress of the project.

The plaintiff experienced cash flow issues

34 Second, I find that there is evidence to suggest that the plaintiff faced cash flow issues, which hindered its ability to pay its material suppliers and workers. This was probably another reason why the plaintiff was tardy in his discharge of his contractual duty.

35 The documentary evidence reveals that the plaintiff had sought financial assistance from the defendant. This was encapsulated in its letter dated 8 January 2013 to the defendant: [note: 30]

> Further, we also look for your help to release our progress claim before 25th of every month, so we can pay all our sub-contractor (*sic*) and [suppliers] by [the] end of [the] month.

36 The evidence shows that the defendant did indeed assist the plaintiff by paying the plaintiff's subcontractors when the plaintiff could not do so. The defendant also paid for the transportation of the precast components to the Project site even though that was the responsibility of the plaintiff [note: 31]. Some of this assistance was rendered specifically at the plaintiff's request. These acts demonstrate the plaintiff's lack of financial means. I am thus satisfied that the plaintiff did face cash flow issues, which hindered its ability to produce the precast components as scheduled.

The plaintiff faced a shortage of materials

37 Third, I find that the plaintiff faced a shortage of materials which affected its production of the precast components. The Agreed Bundle shows that numerous emails were sent by the defendant to the plaintiff, informing the latter that it was, *inter alia*, (a) falling behind in its production of precast components; [note: 32] and (b) non-compliant with its promise to HDB to increase its number of workers. [note: 33] The plaintiff did not respond to many of the emails.

38 One of the main complaints in the emails concerned the shortage of materials. In particular, the defendant complained about the lack of wire mesh, an essential raw material for the production of the household shelter component. [note: 34] On this point, I am persuaded that the plaintiff had experienced problems with its supplier of wire mesh, BRC Asia Ltd ("BRC Asia").

39 The documentary evidence shows that while the plaintiff had placed its order for BRC wire mesh

on 4 July 2012, [note: 35] it later received an email from a representative of BRC Asia, stating that BRC Asia no longer supplied wire mesh to Malaysia. [note: 36] That the plaintiff did not have enough wire mesh to produce the precast components at a rate that was satisfactory to the defendant can be seen in its letter to the defendant dated 13 July 2012: [note: 37]

> Regarding … the wire mesh problem, it will take at least 2~3 weeks to receive the order from the date of purchase. Especially for the mesh of Household Shelter, BRC have informed us that they would like to stop supplying the mesh of [Household Shelter] to our Malaysia plant.
>
> We are continuing discussing (*sic*) with them and we also keep (*sic*) looking for alternative solutions such as order from other suppliers, buy mesh fabricating machine, etc. We haven't succeeded till now, and will still work on it.

40 PW1 acknowledged that besides BRC Asia, National Iron was a potential supplier of wire mesh. [note: 38] However, no evidence was given as to whether the plaintiff placed an order with that company. In its letter to the defendant dated 6 August 2012, the plaintiff said that it needed about ten weeks from the delivery of the cast-in window frames and designs to purchase the wire mesh, set the mould and cast before the first delivery of the precast components. [note: 39] From this letter, it is clear the plaintiff (a) did not meet its casting and delivery schedule as agreed to on 24 July 2012 [note: 40], and (b) could not meet the defendant's requirement that it produce precast components in a week from 6 August 2012 so that work could commence on the second storey's precast planks, parapet wall and air-con ledge. [note: 41]

41 There is also evidence to suggest that on 16 January 2013, the plaintiff ran out of wire mesh again. [note: 42] PW1 conceded in cross-examination that this was indeed the case. [note: 43] I therefore find that the plaintiff did have a shortage of wire mesh, which led to a delay in the production of the precast components. This delay is clearly attributable to the plaintiff. I move on to the next issue on the shortage of workers.

The plaintiff faced a shortage of workers

42 Fourth, I find that the plaintiff faced a shortage of workers. The defendant makes two submissions to support its position that the plaintiff was short on workers. The first submission is that generally, the plaintiff had insufficient workers at its Johor casting yard. [note: 44] This is evidenced by the defendant's repeated emails to the plaintiff on the fact that the plaintiff had insufficient workers on its production yard [note: 45]. The plaintiff never replied to those emails. As a result, the defendant had to engage more welders at its own expense in order to hasten the production of the precast components. [note: 46]

43 The second submission is that the plaintiff had failed to keep its promise to HDB and the defendant at a meeting on 11 January 2013 to increase its available manpower from 17 to 40 in order to expedite the work. [note: 47] The documentary evidence shows that in the immediate period after the meeting, there was in fact a decrease in the number of workers available to work on the precasting of the components. [note: 48]

44 I am inclined to believe that there was a shortage of manpower. The plaintiff's case is that the defendant had simply heaped all blame for the delayed works onto it. However, if the allegations were untrue, PW1 could and should have replied the defendant with cogent evidence to rebut the

allegations made by the defendant in its numerous emails. With respect to the meeting with HDB, the plaintiff could also have rebutted those allegations and presented its side of the story to HDB. It did not, and these facts substantially weaken the plaintiff's case.

45 I shall now address the issue of whether there was wrongful termination of the Subcontract, as alleged by the plaintiff.

Was the defendant entitled to terminate the Subcontract?

46 I have found that the plaintiff repeatedly failed to improve its rate of production of the precast components, and the components it supplied continued to have numerous defects. All this culminated in the defendant sending the plaintiff a Notice of Termination ("the Notice") on 3 April 2013, alleging that the plaintiff had failed to meet its obligations by: [note: 49]

(a) failing to meet planned delivery schedules of precast components thus causing delay to the progress of the Main Contract and failing to satisfy clauses 11(a) and (c) of Appendix D – Standard Conditions of Contract of the Subcontract; and

(b) failing and/or refusing to rectify the defective precast components delivered to the defendant in breach of clause 11(b) of Appendix D – Standard Conditions of Contract of the Subcontract.

47 The plaintiff failed to comply with the Notice of Termination. On 8 April 2013, the defendant sent a Letter of Termination ("the Letter") to the plaintiff. The Letter alleged that the Project was more than seven months behind schedule, and that the plaintiff had failed to deliver the precast components for the sixth storey slab and rectify the defective precast components delivered on or before 6 April 2013. [note: 50] The issue that arises is whether the defendant's termination of the plaintiff in the above manner and circumstances is wrongful.

The law on termination of contracts

48 In *RDC Concrete Pte Ltd v Sato Kyogo (S) Pte Ltd* [2007] 4 SLR(R) 413 ("*RDC Concrete*") at [91], the Court of Appeal noted that one ground for terminating a contract is a contractual clause which "clearly and unambiguously states that, in the event of a certain event or events occurring, the innocent party will be entitled to terminate the contract". In this case, the defendant bases its termination of the Subcontract on cl 11 of Appendix D of the Standard Conditions of Contract in the Subcontract. It states that the Subcontract may be terminated in the following instances: [note: 51]

11. TERMINATION OF CONTRACT

This Sub-contract shall be terminated in the event the Sub-Contracted default in the following:

(a) *failure to proceed with the sub-contract works with due diligence and expedition after being required in writing so to do by the Main Contractor*, or

(b) refuses or *neglects to* remove defective materials or *making good defective work after being directed in writing to do so by the Main Contractor*, or

(c) *fails to perform his obligations in accordance with this Sub-Contract Agreement after being required in writing to do so by the Main Contractor*

…

For items (a) to (c), the Sub-Contractor will be given three(3) (*sic*) days to comply. Upon such determination, the rights and liabilities of the Main Contractor shall be the same as if the Sub-Contractor has repudiated this contract. The Main Contractor reserves the right to recover all loss and cost from the Sub-Contractor.

[emphasis added]

49 The pertinent issue is whether the plaintiff's conduct falls within at least one of these limbs, such that the defendant has a right to terminate the Subcontract under cl 11. In this case, the evidence shows that the plaintiff was consistently and persistently unresponsive to the defendant's concerns about the slow progress of the Project. For that reason, and the reasons provided below, I am of the view that there was sufficient justification for the defendant to terminate the Subcontract under cl 11.

The delivery of the precast components was significantly delayed by the plaintiff

The defendant's submissions

50 One of the main reasons which the defendant relied on to terminate the Subcontract was the plaintiff's lateness in delivering the precast components. According to the Schedule, the plaintiff was obliged to deliver the precast components for the second storey by 25 May 2012, and to deliver the precast components for the third to the 21st storey by 25 February 2013. [note: 52] However, the defendant submits that the plaintiff only started delivering the precast components for the second storey in October 2012, and by the end of March 2013, it had not even completed delivery of the precast components for up to the sixth storey.

The plaintiff's submissions

51 In response, the plaintiff first submits that the defendant's allegation that it failed to deliver the precast components for the sixth storey slab by 6 April 2013 was untrue. [note: 53] The defendant had stated in its weekly report to the HDB that all the sixth storey slab components had been manufactured and delivered by 27 March 2013. Second, the plaintiff submits that it did not delay the delivery of the precast components by more than seven months. Third, the plaintiff submits that even if there was a delay of more than seven months, it was not a valid reason for termination. In support of this argument, the plaintiff cites *San International Pte Ltd v Keppel Engineering Pte Ltd* [1998] 3 SLR 871 ("*San International*"), where the Court of Appeal held that the materiality of the refusal of the defaulting party to be bound by the terms of the contract must be weighed in the context of the obligations then remaining unperformed. [note: 54] In its view, termination can only be justified if the defaulting party shows an intention to repudiate the contract and its breach deprives the innocent party of substantially the whole benefit of the contract (*Shia Kian Eng (trading as Forest Contractors) v Nakano Singapore (Pte) Ltd* [2001] SGHC 68 ("*Shia Kian Eng*") at [83]). In this case, the plaintiff was in the process of manufacturing more precast components for the defendant. There was no indication that it intended to stop production or was unable to proceed with the works or complete the works on time. Thus the defendant did not have a right of termination. [note: 55]

My decision

52 I have earlier found that the plaintiff had caused inordinate delays in the production of the

precast components through (a) delays in the submission of shop drawings (see [22]–[32] above); (b) its cash flow problems (see [33]–[35] above); and (c) its shortage of materials and workers (see [36]–[43] above). In my view, they constitute sufficient reasons for the plaintiff to terminate the Subcontract under cl 11(a). Moreover, the following facts show that the plaintiff's acts come within the three limbs of cl 11:

(a) The documents and photographs show that when the precast components were supplied, there were numerous defects in the precast components supplied that had to be rectified. When the plaintiff was notified of these defects via email, it did not reply. Additionally, despite overwhelming evidence, PW1 repeatedly denied during cross-examination that there were defects in the precast components. Of course, I must note that PW1 did admit that there were defects several times during cross-examination. [note: 56] Given the plaintiff's shortage of manpower, the defendant had to undertake the rectification works itself. In my view, the plaintiff's acts and omissions fall within cl 11(b).

(b) The documentary evidence shows that the defendant repeatedly and consistently wrote emails and letters to the plaintiff, asking the plaintiff to speed up its production of precast components as it was falling behind schedule. Yet, the plaintiff *persistently* refused to reply the emails sent to it. In my view, the acts fall within cl 11(c).

The above breaches of the Subcontract over the course of 2012 contributed to the Project being delayed by up to seven months. According to the Schedule, the plaintiff was obliged to complete most of the precast components for the first to the 21st storeys by the end of April 2013. [note: 57] Yet it only completed the precast components for the first to the seventh storeys. I am thus satisfied that the three limbs in cl 11 were met and in the premises, the Subcontract was validly terminated by the defendant.

53 The plaintiff cited *San International* and *Shia Kian Eng* in its submissions. However, they are not relevant to the present dispute as they concerned the right of termination under common law, rather than under a contractual termination clause. *San International* dealt with whether a repudiatory breach of contract had taken place, as this was required to terminate a contract under common law. It did not deal with the issue of termination on the basis of a contractual termination clause, like in the instant case. Similarly, *Shia Kian Eng* is a case which predated *RDC Concrete* and followed the holding in *San International* (see *Shia Kian Eng* at [82]). In *Shia Kian Eng*, Judith Prakash J held that the defendant could not rely on the contractual termination clause he invoked as that clause was merely appended to the purchase orders and *did not* form part of the agreement between the parties. Consequently, the defendant had to rely on the common law to justify termination and under the common law, the contractual breach had to be such as to deprive the innocent party of substantially the whole benefit. This was premised on the common intention of the parties.

54 I also wish to deal with the plaintiff's assertion that it would have been able to fulfil its obligations under the Subcontract if the contract was not terminated. Given the performance and conduct of the plaintiff prior to the termination, it is highly unlikely that the plaintiff could have satisfactorily fulfilled its contractual obligations. At the end of April 2013, the defendant had five months to complete 14 storeys of precast components. On its best case, which is that it could have completed two storeys of precast components per month, there is no way it could have completed the Subcontract obligations by 13 September 2013.

55 If the state of affairs were allowed to continue, the plaintiff would have certainly failed to meet the contractual completion date of the Subcontract. It would take an extraordinarily long time before the project would be completed. The defendant would have to face considerable liquidated damages

from HDB who might even terminate the Main Contract. The indifferent attitude of the plaintiff was holding the Project at ransom.

The Notice of Termination was sufficiently particularised

56 The second reason given by the plaintiff as to why termination was wrongful is that the defendant did not sufficiently particularise the Notice. [note: 58] It submits that in *AL Stainless Industries Pte Ltd v Wei Sin Construction Pte Ltd* [2001] SGHC 243 ("*AL Stainless*"), Woo Bih Li J held at [158]–[159] that such notices should leave recipients "in no doubt that the notice was sent pursuant to a particular provision since complaints or chasers in the construction industry are not uncommon".

57 The plaintiff submits that the defendant's factual basis for terminating the plaintiff was misconceived. [note: 59] The defendant relied on the plaintiff's failure to deliver the sixth storey slabs as one of two reasons for terminating the Subcontract. Under cross-examination, that was revealed to be erroneous. It should have been the seventh storey instead. [note: 60] On this basis, the defendant submits that the Letter was without basis. [note: 61]

58 In response, the defendant submits that the facts of *AL Stainless* can be *clearly* distinguished from the instant case. Paragraph 7 of the Notice states that: [note: 62]

> Take notice and we hereby demand that unless you take immediate steps to mitigate your delays and comply with the attached schedule and/or make good your defective precast components that previously sent to you within the next three (3) days, we shall have no alternative but to exercise our right to terminate your employment under the Sub-Contract pursuant to clause 11 of Appendix D – Standards Conditions of Contract.

59 According to *AL Stainless*, it is important that the plaintiff must be alerted, put on notice and given an opportunity to comply before the Subcontract is terminated. In my view, the facts in *AL Stainless* are different from the facts in the present case. In *AL Stainless*, Woo Bih Li JC (as he then was) made his observations in the context of an ambiguously worded Notice of Termination. The Notice of Termination stated that a one week grace period would be given to the subcontractors to complete all outstanding work, failing which a new sub-contractor would be engaged and losses claimed from the subcontractors (at [155(q)]). It was in that context that Woo JC made his observations that a party who wishes to exercise its right to terminate should leave the recipient of the notice in no doubt that the notice was being sent pursuant to a particular contractual provision, although specific identification of the provision in question is not always required (at [157]–[159]).

60 In *AL Stainless*, the main contractors did not even mention that it intended to terminate the contract in the Notice of Termination relied on. By contrast, in the present case, the defendant made its intentions clear in the Notice. It is clear from the Notice that the plaintiff was required to deliver the said components within the next three days, and failure to do so would give the defendant the right to terminate the Subcontract. Further, the evidence indicates that the plaintiff knew what the components were. Thus I am satisfied that the defendant had a right to terminate the Subcontract as sufficient particulars were given under the Notice and the procedure for termination was observed.

The defendant's advance planning of the termination does not negate the defendant's right to terminate the Subcontract

61 Third, the plaintiff submits that the defendant pre-planned the plaintiff's termination and would

have terminated it regardless of the reasons given in the Notice and the Letter. It submits that the evidence shows that as early as 12 March 2013, the defendant already had an intention to terminate the plaintiff. This is evinced by the following acts undertaken before it was aware of Qingjian Precast Pte Ltd's ("Qingjian") appointment as its replacement: [note: 63]

(a) DW2 was ordered to deliver as much of the precast components that the plaintiff already fabricated as possible to the Project site just prior to the plaintiff's termination;

(b) DW3 was instructed to hand over all the shop drawings submissions, production schedule and mould fabrication schedule to Qingjian; and

(c) the defendant gave instructions that no further cast-in items were to be delivered to the plaintiff's factory. [note: 64]

62 In response, the defendant submits that the question of whether the plaintiff's termination was pre-planned is irrelevant to whether the defendant is entitled to terminate the Subcontract. In any event, the plaintiff was given every opportunity to catch up with the delivery schedule but it failed to do so. As a result, it was proper and necessary for the defendant to plan ahead before deciding to terminate the Subcontract. A change of precaster could not be done overnight and some lead time was required before full production and delivery of the precast components could begin.

63 I agree with the defendant that this submission is irrelevant to the wrongful termination issue. I also observe that it was the Consultants that suggested the termination and substitution of the plaintiff. Moreover, given the extensive delays that had already taken place, it was appropriate for the defendant, having been denied an extension of time by HDB, to be worried about whether it could complete the Project on time. This was because it was potentially liable to pay liquidated damages to HDB. The key issue here is whether the defendant was *in fact and in law* entitled to terminate the Subcontract under cl 11. The answer is in the affirmative.

What are the damages that result from the breach of the Subcontract?

64 The next question concerns the quantum of damages flowing from the breach. The defendant's claim is for a total of $1,814,374.51. The plaintiff rejects all the heads of claim and insists that it is liable for *nothing*. I find that the defendant succeeds partially in this respect.

The plaintiff is liable to pay the defendant for the additional costs to complete

65 First, the defendant submits that the plaintiff should be liable to pay for the additional costs the defendant incurred in completing the Project due to the plaintiff's breach. The defendant had to engage a new precaster via a tender process as it had terminated the Subcontract. [note: 65] In this regard, the plaintiff objected on the basis that the price was too high. However, it did not provide any evidence to show that Qingjian's rate was above the market rate. Instead, the defendant provided evidence to show that Qingjian's bid was the lowest among those that it received. [note: 66]

66 I find that the plaintiff's breach caused the defendant loss. This loss has been correctly quantified by the defendant. Consequently, I find that the plaintiff is liable for the additional costs to complete. I thus award the defendant $838,078.26 as claimed.

The plaintiff is liable to pay the defendant for payments the plaintiff made on its behalf

67 There are two issues to address under this head of claim: (a) the payments made in respect of additional and miscellaneous costs incurred by the defendant on behalf of the plaintiff ; and (b) whether the plaintiff is liable to pay the defendant in respect of Mr Saifunasman bin Saidin's ("Mr Saidin") salary. Mr Saidin is a subcontractor whose employment status is disputed and whether he is hired by the plaintiff or defendant will have a bearing on which party is liable to pay him his salary.

68 On the first issue, the evidence shows that due to the plaintiff's inability to pay its own subcontractors and hire sufficient workers to complete the works, the defendant had to hire workers to complete various aspects of the Project which fell within the Subcontract's scope of works. Its claim was sufficiently supported by receipts and invoices. I thus also allow the defendant's claim for $91,206.25.

69 On the second issue, Mr Saidin was engaged to assist in the completion of the works but at present, his employment status is disputed. The defendant submits that due to the plaintiff's shortage of manpower, it tried to help by introducing Mr Saidin to the plaintiff. Its story is that while Mr Saidin was employed by the plaintiff, it was the defendant which paid Mr Saidin his salary as the plaintiff was experiencing cash flow problems. The plaintiff on the other hand denies that Mr Saidin was its subcontractor and insists that Mr Saidin was employed by the defendant as a "nominee subcontractor. [note: 67]

70 In its submissions, the plaintiff bases its assertion on DW2's concession made under cross-examination. [note: 68] However, in my view, DW2's testimony did not support the plaintiff. It was clear that DW2 meant that the defendant had merely introduced Mr Saidin to CAA. It was in that context that he said that Mr Saidin was the defendant's nominated subcontractor. DW2 had *categorically* maintained that Mr Saidin was employed by the plaintiff although the defendant paid Mr Saidin's wages. I set out the passage below: [note: 69]

> Q Mr Gan, Mr Saidin was nominated by [the defendant], correct?
>
> A Yes.
>
> Q Ah.
>
> A We introduced him to [the plaintiff].
>
> Q [The plaintiff] had no say in this appointment, correct?
>
> A They did. They were responsible for the sub-contractors and all we did was to introduce someone to them, seeing that they had a shortage in manpower.
>
> …
>
> Q Well, my instructions are that Mr Saidin is actually under the nomination and charge of your company, [the defendant]. Do you agree or disagree?
>
> A I disagree. Saidin knew that [the plaintiff] did not pay their workers and so Saidin asked that we pay him and then deduct the money from [the plaintiff]. [The plaintiff] was agreeable to this arrangement.

71 Next, Mr Saidin's contract was with CAA Technologies (M) Sdn Bhd, a subsidiary of the plaintiff.

[note: 70] From PW1's perspective, the plaintiff was forced by the defendant to employ Mr Saidin. I set out the relevant passage of his cross-examination: [note: 71]

> Q Dr Chi, my question was: You could have refused to accept this Mr Saidin. Right?
>
> A My pressure is from [the defendant]. They said that now all the drawings were ready, we can commence work. So we need more workers. "I have someone here to introduce to you." How can I refuse the main contractor's help?
>
> Q Dr Chi, I suggest to you that you were never forced by [the defendant] to employ Mr Saidin. Do you agree?
>
> A I disagree.

72 After considering the evidence, I am of the view that Mr Saidin was employed by the plaintiff. I give three reasons for my finding. First, there are material contradictions in the plaintiff's case. The plaintiff made two contradictory assertions. In its submissions, it alleged that Mr Saidin was a nominee contractor employed by the defendant. Yet, under cross-examination, PW1 stated that the plaintiff was forced to employ Mr Saidin. If the former is true, then Mr Saidin was never under the plaintiff's employment. If the latter is true, then Mr Saidin was under the defendant's employment. The two are irreconcilable.

73 Second, I am of the view that PW1 could not have been so easily coerced. He came across as a very strong-willed person. Third, there is no evidence to show that the plaintiff was forced to employ Mr Saidin. Instead, the circumstances show that the converse is more likely to be true. At that point in time, the Project had already fallen significantly behind schedule and the defendant was sourcing for a subcontractor *for the plaintiff* so that the production of the precast components could be hastened. I note further that it is the defendant's evidence that it might have to pay liquidated damages to HDB in the event that the Project could not be finished on time. [note: 72] This was one likely factor that provided the defendant the impetus to source for the subcontractor and to pay his wages. Therefore the plaintiff is liable to pay the defendant for Mr Saidin's wages which amount to $23,709.30.

The plaintiff is not liable for liquidated damages

74 Third, the defendant claims that it is entitled to liquidated damages. I shall elaborate more on this head of claim as it is the point on which the parties made the most submissions. In short, I find that the defendant has not made out its claim.

The parties' submissions

(1) The defendant's closing submissions

75 The defendant claims for liquidated damages of $885,090 from the plaintiff. [note: 73] It derived the figure on the basis that liquidated damages were chargeable at a rate of $5,430 daily, and the period of delay amounted to 163 days.

76 The defendant submits that the plaintiff acknowledged that the Subcontract was subordinate to the Main Contract. In its view, the two contracts were meant to run in tandem unless otherwise stated. [note: 74] The Subcontract was thus subject to the Public Sector Standard Conditions of

Contract for Construction Works 2008 (Building and Construction Authority, 6th Ed, 2008) ("the Public Sector Conditions") which states at cl 31.3 that: [note: 75]

> If the employment of [the plaintiff] has been terminated for default pursuant to Clause 31.1 and completion of the Works or any phase or part by [the defendant] or by other contractors or persons appointed by [the defendant] to complete the works, phase or part has been delayed beyond the Time for Completion, the following provisions shall have effect:
>
> > [The defendant] shall be entitled to the same liquidated damages for delay as those which would have been payable if [the plaintiff] had completed the Works or phase or part on the actual completion date of [the defendant] or the other contractors or persons appointed by [the defendant].

77 The defendant submits that it is entitled to claim for liquidated damages if work was not done as per the Schedule. [note: 76] It thus takes the position that the plaintiff is liable for liquidated damages for up to 163 days, the period of delay.

(2) The plaintiff's closing submissions

78 On the other hand, the plaintiff's first submission is that the defendant did not show that it had suffered losses to the extent of $885,090. [note: 77] It had not shown that HDB had imposed liquidated damages on it. Instead the plaintiff submits that the defendant is bound by cl 4.3 of the Public Sector Conditions which states that:

> **4.3 Contractor's Responsibility for Subcontractors**
>
> Save as otherwise expressly provided in the Contract, the Contractor shall make good any damage, loss or injury suffered by the Employer by reason of any breach of contract, repudiation, default or failure, whether total or partial, on the part of any subcontractor or supplier whether nominated or privately engaged by the Contractor, and shall indemnify the Employer against all and any loss, expense, costs, damages, liability or claim arising therefrom.

Based on cl 4.3, the plaintiff submits that it is the defendant who should be responsible for delays in delivery and defective components supplied by the plaintiff as it was responsible for ensuring that the works were well-coordinated between subcontractors. [note: 78]

79 Second, the plaintiff submits that *Robertson Quay Investments Pte Ltd v Steen Consultants Pte Ltd* [2008] 2 SLR(R) 623 at [28] held that a party could not simply make a claim for damages without showing sufficient evidence of the loss it had suffered even if it was otherwise entitled to recover damages in principle. [note: 79] Since the defendant had not shown any evidence that it had or would have suffered loss as a result of the alleged delays, it was not entitled to liquidated damages.

80 Third, the plaintiff submits that in its Internal Meeting Minutes, there was indication that SWP Engineering Pte Ltd ("SWP"), the erector, had also contributed to the Project's delay as it did not have sufficient manpower and the quality of its work was poor. Therefore, the delay could not be attributed to the plaintiff alone. Other subcontractors should share the blame.

81 Fourth, the plaintiff submits that no liquidated damages should be imposed on the defendant as the contract was one where the time was "set at large". In *Dodd v Churton* [1897] 1 QB 562, it was held that the subcontractor's obligation to complete the works within the time prescribed is premised

on the requirement that the contractor was not delayed by any "act of prevention" committed by either the main contractor or the other subcontractors. Such an act is one which prevents, impedes or makes it hard for a contractor to complete the works by the stipulated date (*Yap Boon Keng Sonny v Pacific Prince International Pte Ltd and another* [2009] 1 SLR(R) 385 at [34]). The plaintiff submits that by failing to return the shop drawings, the defendant committed an "act of prevention" as defined in *Roberts v Bury Commissioners* [1870] LR 5 CP 310. This meant that the stipulated date for completion under the Subcontract would cease to be effective (*Chua Tian Chu and another v Chin Bay Ching and another* [2011] SGHC 126 at [60]) and the plaintiff would lose its right to enforce the liquidated damages provision (*Trollope & Colls Ltd v North West Metropolitan Regional Hospital Board* [1973] 1 WLR 601 at [607]).

(3) The defendant's reply submissions

82 In reply, the defendant submits that while HDB has not imposed liquidated damages on it yet, there were indications that HDB was likely to do so. [note: 80] With respect to SWP, the defendant submits that the progress of the works was fully dependent on the plaintiff's delivery of the precast components. While the plaintiff took 48 days to deliver the fifth storey vertical components and sixth storey slab components, SWP only took 38 days to erect the fifth storey components and cast the sixth storey slab components. [note: 81] Finally, the defendant submits that it did not prevent the plaintiff from carrying out its work and time in the Subcontract could not be set at large.

My decision

83 I agree with the plaintiffs on this point. The issue of entitlement to liquidated damages was considered in *Re Sanpete Builders (S) Pte Ltd* [1989] 1 SLR(R) 5. In that case, Chao Hick Tin JC (as he then was) framed the issue as such: whether a party can claim liquidated damages in a situation where the building contract has been terminated, the date for completion has not arrived, and there has been no certificate from the architect certifying that the works ought reasonably to have been completed by the prescribed date (at [20]). Chao JC held that a condition precedent for imposing liquidated damages on a defaulting contractor is that the contractor must have had until the last hour of the day fixed for completion to finish the works (at [21]). In this case, the defendant terminated the Subcontract before the completion date. Thus, its right to claim liquidated damages from the plaintiff did not arise.

84 In any case, the defendant's quantification of the liquidated damages appears to be very arbitrary. Typically in construction disputes, there are provisions for a trigger date from which liquidated damages start to run (see Chow Kok Fong, *Law and Practice of Construction Contracts* vol 1 (Sweet & Maxwell, 2012) at para 9.57), usually a date certified by the architect or engineer. In this case, the clause providing for liquidated damages in the Subcontract is cl 3, which reads: [note: 82]

> **3. LIQUIDATED DAMAGES**
>
> The Liquidated and Ascertained Damages to be imposed shall be as per main contract inclusive of Sunday and Public Holidays, for each day that your subcontract work remains incomplete.

85 Reading that clause alone, there is no mechanism stipulating how a liquidated damages claim is to be quantified. In its submissions, the defendant relies on the interaction of the Subcontract with the Main Contract as the basis for its claim: [note: 83]

> 198) CAA acknowledges that the Sub-Contract is subordinate to the Main Contract, and was

intended to operate in tandem with the regime in the Main Contract unless specified otherwise. In other words, unless the Sub-Contract specifically provides otherwise, the Main Contract terms would equally apply to CAA. In particular, CAA acknowledges that the Sub-Contract was subject to the Public Sector Standard Conditions of Contract (2008) ("PSSCOC").

199) Clause 31.3 of the PSSCOC on "*Liquidated Damages after Termination*" provides as follows:

> "*If the employment of [CAA] has been terminated for default pursuant to Clause 31.1 and completion of the Works or any phase or part by [HP] or by other contractors or persons appointed by [HP] to complete the Works, phase or part has been delayed beyond the Time for Completion, the following provisions shall have effect:*
>
> > *[HP] shall be entitled to the same liquidated damages for delay as those which would have been payable if [CAA] had completed the Works or phase or part on the actual completion date of [HP] or the other contractors or persons appointed by the [HP]*"

200) In the contractual relationship between HP and CAA, Clause 31.1 regarding termination for default would be replaced by Clause 11 of Annexure D of the Sub-Contract set-out at paragraph 199 above.

201) If this Court finds that HP had rightfully terminated CAA"s contract for default, HP submits that it is entitled to claim against the Plaintiff for liquidated damages arising from CAA's delay pursuant to Clause 3 of Appendix C of the Sub-Contract, read with Clause 31.3 of the PSSCOC stated above.

202) Under Clause 3 of Appendix C of the Sub-Contract, CAA agreed that liquidated damages shall be imposed as per the main contract for each day that the subcontract work remained incomplete. Pursuant to Clause 1 of Appendix D of the Sub-Contract, CAA was required to complete the required work before each milestone date given in the Main Construction Programme.

[original emphasis in italics]

86 It appears that the plaintiff has acknowledged that the Public Sector Conditions are also applicable to the Subcontract regarding the issue of liquidated damages as it did not contest that issue. That being the case, I find that the conditions for liquidated damages have not yet been fulfilled. Clauses 31.3(b) and (c) of the Public Sector Conditions state that: [note: 84]

> 31.3 **Liquidated Damages After Termination**
>
> …
>
> (b) For the purpose of giving effect to the above, the Superintending Officer shall, upon the completion of the Works or phase or part issue a certificate. Such certificate shall state the date upon which the Contractor should have completed the Works or phase or part and shall also state the full period of delay for which the Contractor is responsible and shall compute the total damages due to the Employer therefore. The certificate shall give credit for events occurring after the termination of the Contractor's employment which would have entitled the Contractor to an extension of time had he duly executed and completed the Works or phase or part and duly complied with Clause 14. In assessing the period of delay, the Superintending Officer shall also reduce the period of delay to the extent that there has

been any failure by the Employer or by any other contractors or persons engaged by the Employer to use due diligence and expedition in arranging for or completing the remaining parts of the Works or phase or part.

(c) Upon the issue of a certificate under Clause 31.3(b), the amount of damages certified by such certificate shall be immediately recoverable by the Employer from the Contractor

87 Clause 1.1 of the above document defines "Superintending Officer" and "Employer" as follows:

"Employer" means the government or the statutory body specified in the Appendix

"Superintending Officer" means the person, firm or corporation appointed as such by the Employer for the purposes of the Contract.

88 The above provisions are germane and they make it clear that the Superintending Officer has to issue a certificate that works out the exact period of delay that is attributable to the plaintiff. He also has to take into account the impact of any extension of time that the plaintiff might have previously been given, delays caused by the defendant, or assistance from any other contractors or persons engaged by the defendant.

89 In this case, the defendant did not produce any such certificate from the Superintending Officer that quantified the liquidated damages reasonably and fairly. In my view, the defendant's computation of 163 days was very arbitrarily done and is unfair to the plaintiff. To make its case even weaker, the HDB has not even imposed any liquidated damages onto it. Therefore on a balance of probabilities, I am not satisfied that the defendant has proven its entitlement to liquidated damages against the plaintiff and I disallow this head of the defendant's counterclaim.

What is the quantum of work done by the plaintiff?

90 With regard to this head of claim, the plaintiff submits that the total outstanding amount owed to it by the defendant is $436,133.33, [note: 85] while the defendant submits that it owes the plaintiff nothing and in fact overpaid it. On this issue, there are two primary areas of disagreement: (a) the valuation of the precast components; and (b) whether the defendant is obliged to pay for parts manufactured but undelivered.

The defendant's valuation of the precast components is preferred

91 The plaintiff submits that the total amount owed by the defendant is $436,133.33. This comprised precast components which had been manufactured and delivered, as well as precast components which had been manufactured but were not delivered. The value of the latter is $132,466.19. The plaintiff submits that if the court finds that it is not entitled to be paid for the precast components that had been manufactured but not delivered, it should at least be paid $303,687.14. [note: 86]

92 The defendant disagrees with the plaintiff's valuation of the precast components which were manufactured and delivered. The defendant's quantity surveyor's valuation of the aforementioned precast components is $21,351.55 less than the plaintiff's engineers' valuation of the same. [note: 87]

93 PW1 conceded under cross-examination that the plaintiff did not have a quantity surveyor, a person trained to value the quantity of work done. Most of its valuation was done by Mr Chen Linhui

("PW2"), its General Manager. I set out the evidence as follows: [note: 88]

Q Incidentally, Dr Chi, did [the plaintiff] have a in-house quantity surveyor?

A Mr Chen, from our company, is the person in charge.

Q Apart from Mr Chen, was there another ---a quantity surveyor?

A There are many engineers in oru company who also helped out. Similarly at our factory, there will be production personnels (*sic*) responsible for sorting out the production issues.

Q Dr Chi, my question was: Apart from Mr Chen and your other engineers, did [the plaintiff] have a trained and qualified quantity surveyor?

A We have productions in our company who will have the rates. And Chen---

…

A ---also quoted prices. We don't have a so-called qualified quantity surveyor but we do have licensed engineer.

Q Now Dr Chi, would you agree with me that an engineer is not trained to do measurements of quantities of building construction work and materials?

A I disagree.

…

Q Dr Chi, I will put it to you that these so-called measurements may not be entirely accurate because Mr Chen---neither Mr Chen nor your other engineers were trained as quantity surveyors.

A I do not agree with your comment. You as an architect should know how the volume was calculated. Even primary school students would know.

94 In contrast, the defendant's valuation was carried out by its own quantity surveyor, Ms Yan Teng, and this is an undisputed fact. [note: 89] I am more inclined to accept the defendant's valuation over the plaintiff's valuation because the plaintiff's valuation was not done by a person with the appropriate expertise. [note: 90] Moreover, the plaintiff seemed to have suggested that a licensed engineer could do the job of a quantity surveyor and trivialised the work of the quantity surveyor. PW1 testified that in his opinion, even *primary school students* could perform the job of a quantity surveyor. That clearly reveals a lack of sophistication and understanding in its approach towards valuing the work done.

The defendant is obliged to pay for the precast components manufactured, but undelivered

The parties' submissions

95 With respect to the precast components that were manufactured but undelivered, the plaintiff first submits that it is entitled to be paid as the precast components would have been delivered had the Subcontract not been terminated. At the time of termination, the entire casting process was

ongoing. The plaintiff's last delivery was made on 8 April 2013, which was also the date of termination. According to the plaintiff, after the Subcontract was terminated, there was no way for it to deliver the precast components which were either still being casted or being cured to the defendant. [note: 91]

96 Second, the plaintiff submits that it is entitled to a *quantum meruit* claim for the precast components that had been manufactured but were undelivered. The plaintiff cited the case of *Foo Song Mee v Ho Kiau Seng* [2011] SGCA 45. In that case, although there was no agreement on the appellant's commission rate, the Court of Appeal held that since the services were not rendered on a goodwill basis, the appellant was to be paid a reasonable sum for the services rendered. [note: 92] In this case, the plaintiff submits that it had fabricated the component parts and performed its end of the bargain. Therefore, it is entitled to be paid for the precast components that had been manufactured but did not deliver by reason of the termination of the contract by the defendant. [note: 93]

97 The defendant submits that it does not have to pay for the precast components which had been manufactured but were not delivered. First, the defendant submits that there is no provision in the Subcontract that mandates it does so. [note: 94] Second, the defendant submits that there is no way of verifying how many precast components were in the plaintiff's casting yard on the date of termination. The plaintiff's claims are based solely on its bare assertions, without any further verification. The casting records do not show exactly how many precast components were cast but not delivered. [note: 95]

98 Third, the defendant submits that there are significant factual inconsistencies between the testimonies of the plaintiff's witnesses, and the defendant's witnesses. There were contradictions in the accounts of PW1 and PW2. PW1 testified that 116 pieces of precast components had not been delivered, while PW2 testified that 160 pieces of precast components that had not been delivered. [note: 96] On the other hand, DW2 testified that when he left the plaintiff's casting yard in April 2013, there were less than ten components left in the yard that had not been delivered. The defendant submits that DW2's evidence is more credible than that of the plaintiff's witnesses. [note: 97]

My decision

99 First, I am satisfied that the defendant has to pay the plaintiff on a *quantum meruit* basis for precast components which have yet to be delivered, but have been manufactured. The evidence shows that payment was made for the plaintiff's work under two separate headings: first, for the manufacture of the precast components, and second, for the delivery of those components. This is true of the first six progress payments, where the abovementioned headings were present under the itemised bill which was sent by the plaintiff to the defendant. The bill specifically mentioned "PC Components Manufacture" and "PC Components Delivery". That being the case, I am of the view that the defendant has an obligation to pay the plaintiff for precast components that have already been manufactured but had not been delivered on the date of the termination of the contract.

100 The second issue is whether the plaintiff has proven its claim that there was $132,466.19 worth of precast components which had been manufactured but were not delivered on the date of termination. What was the quantity of precast components that were at the plaintiff's yard at the time of the Letter of Termination on 8 April 2013? The difficulty is that there were material contradictions in the evidence offered by the plaintiff's witnesses. PW1 said that there were 116 precast components, while PW2 said the number was 160. The difference of 44 components is

substantial. On the other hand, DW2 said that there were less than ten in April 2013. What is clear is that there were precast components which were produced by the plaintiff and yet to be delivered to the defendant on 8 April 2013. The quantum remains unknown.

101 I am unable to accept the plaintiff's assertion that a very large quantity of precast components was manufactured but left undelivered at its yard on the date of termination. First, prior to the termination, the defendant had made numerous complaints to the plaintiff that it was late in its production and delivery of the precast components. The plaintiff did not refute those allegations in its correspondence with the defendant. This indicates that the plaintiff was not able to fabricate sufficient precast components to meet the defendant's demand. Logically, this means that there could not be a large surplus of precast components at the plaintiff's yard. Compared with the plaintiff's claim that it had produced over a hundred components that had yet to be delivered, I find the defendant's claim more probable.

102 Second, the plaintiff alleges that as the Subcontract had been terminated, it could not deliver the precast components to the Project site. However, I find it strange why it was impossible to do so. According to DW2, the defendant wanted all of the precast components to be delivered to the Project site before the termination took place. DW2 also received instructions from the defendant to deliver all the components that belonged to the defendant to the worksite. [note: 98] Thus the situation was not one where the plaintiff's delivery of the precast components would have been rejected by the defendant. In fact, if it was the case that the defendant wished for all the precast components to be manufactured to be delivered, it was the plaintiff's contractual obligation to do so.

103 For the above reasons, I am unable to accept the plaintiff's submission that a large quantity of precast components was manufactured but not delivered. However, I am of the view that there must have been some spare precast components at the plaintiff's production site when the contract was terminated. After all, even the defendant had admitted that there were spare parts present at the plaintiff's yard. From the evidence, I am unable to come to a definitive factual finding on the precise quantity of precast components that were manufactured by the plaintiff, but not delivered to the defendant, on the date of termination. However, in the interest of being fair to the plaintiff, I am prepared to award it some money.

104 This was a 22 storey project, *ie*, 21 storeys plus a roof, and the total value of the Subcontract was $3,377,661.87. Hence, each storey is worth about $153,530.09 on average. However, the evidence shows that the plaintiff started production and delivery sometime in August 2012 [note: 99] and by March 2013 the plaintiff had supplied about six storeys of precast components. This would be about two-thirds of a storey per month as opposed to the plaintiff's claim that it could produce two storeys of precast components per month. [note: 100] The Letter of Termination was sent on 8 April 2013 and the plaintiff would therefore have completed less than a quarter of a storey then. Hence, the estimated amount of precast components as of 8 April 2013 should be about $25,000 and I award this sum to the plaintiff on a *quantum meruit* basis.

What is the extent and cost of the rectification works?

105 The parties disagree on liability and quantum in respect of the rectification works. With respect to the issue of quantum, the parties jointly made an application under O 40 r 1 of the Rules of Court (Cap 353, R 5, 2006 Rev Ed) for the Court to appoint an expert to determine the appropriate quantum of rectification costs incurred by the defendants. Both parties agreed to be bound by the expert's findings. [note: 101] I will thus address the issue of who should bear the cost for the rectification works first, before looking at the expert's findings on the quantum of liability.

The plaintiff is obliged to pay for the rectification works

106 The defendant submits that the precast components delivered by the plaintiff were defective and could not be used until they were rectified. [note: 102] To this end, the defendant sent numerous letters and emails with photographs about the defects to the plaintiff. The plaintiff was informed to rectify them in the correspondence. However, because the plaintiff failed to take any action, the defendant had to carry out the rectification works at its own expense. [note: 103]

107 The plaintiff's case is that there were no defects in the precast components. This is because there was a system of quality control procedures which the plaintiff, the defendant and HDB had adopted. Any defects would have been detected through this process. The quality control process was described by the plaintiff as follows:

(a) Before concrete was cast into the mould, the Resident Technical Officer ("RTO") from HDB would have to check the mould and ensure that the dimension and reinforcement of the cast-in items are correct. This was to ensure that production is correct and accurate.

(b) After concrete had been cast into the mould, the defendant's supervisor and the RTO would check once more to ensure that the precast components had successfully demoulded after the concreting process. In this regard, casting inspection forms would be signed by the RTO to ensure that the processes were followed for every precast component casted.

(c) If there were no defects, the precast components would then be sent to the storage yard for delivery. If any defects were discovered, rectification works would be carried out.

(d) After loading the precast components, and before their delivery, another delivery order chit would be filled up and signed by the respective parties conducting the inspection. Acknowledging the delivery order chit would indicate that a particular load has been inspected by the RTO and the defendant.

(e) After the precast components were delivered, the defendant would conduct a last inspection on the precast components.

108 The plaintiff submits that if there were any defects, they would have been rejected by the RTO during the inspection process and rectification works would have been carried out immediately so that the components could be delivered as soon as possible, free of defects. In any event, the particulars of the defects allegedly caused by the plaintiff had not been pleaded and there was no proof of how many components were defective. [note: 104]

109 I first deal with the plaintiff's submission on inadequate pleadings. For context, I set out the relevant passage in the defendant's defence:

> The precast components supplied by the Plaintiffs were defective as a result of which the Defendants also had to incur costs to rectify the defective precast components. …

110 While the pleadings are short and the relevant claim is only dealt with through the abovementioned passage, the pleadings are adequate for the case at hand. In *OMG Holdings Pte Ltd v Pos Ad Sdn Bhd* [2012] 4 SLR 231 at [18], the Court of Appeal held that pleadings were meant to "narrow the parties to definite issues", and defective pleadings can be overcome as long as the other party is not taken by surprise, or is not irreparably prejudiced. I find that the abovementioned

passage from the pleadings adequately narrowed the parties to the issues at hand. Hence, the pleadings were not defective. Furthermore, even if the pleadings were indeed defective, that was not fatal to the defendant's case, as the evidence led in this case could overcome the defects in the pleadings, as long as the other party was not taken by surprise or prejudiced in any way. In this case, all parties were aware that the defendant was disputing the quality of the precast components delivered. During the trial, PW1 and PW2 were extensively cross-examined with respect to whether the precast components supplied were defective. They did not look surprised at all, and no objection was raised by the plaintiff. Thus, the plaintiff cannot be said to have been taken by surprise or to have been prejudiced by the further evidence of defects given by the defendant.

111 On the evidence before me, I find that the plaintiff's components were indeed defective, and that the plaintiff should be responsible for the defective components. The strength of the plaintiff's case is based on the quality control process that was put in place to ensure that the precast components supplied would not be defective. However, there was evidence to suggest that the process was not fool proof. Under cross-examination, PW1 admitted that a component known as the "HHS" was rejected, [note: 105] meaning that there was a major defect in the precast components. PW1 also agreed that there were defects in other components which he described as "minor". [note: 106] However, in my view, the photographic evidence shows that the defects which PW1 described as minor were *not* minor. There was evidence to suggest that honeycombing and concrete stains were present on the parts. Additionally, there were incorrectly threaded bars present. There were also numerous other defects that were present according to the photographic evidence presented before me, such as incorrect beam links, [note: 107] incorrect placing of lifting wires, [note: 108] and sagging window frames. [note: 109]

112 In the circumstances, I find that the quality control process in place was not as stringent as the plaintiff described. I further find that there were defects in the precast components that were delivered to the site.

The plaintiff has to pay $125,455 for the rectification works

113 Mr Lam Chye Shing ("CW1"), a partner with Rider Levett Bucknall LLP, was appointed as the quantity surveyor at the mutual consent of the parties. His findings were presented to the court. CW1 made the following observations about the defendant's claims: [note: 110]

a) Defects

> The photos generally show the state of the precast components before installation. It is difficult to visualise the claimed defects with the photos.

b) Number of Workers / Number of Hours

> The photos lack pictorial evidence of the number of workers involved in [the defendant's] claims. Most photos show 1 or 2 workers. Very few photos show 3 or 4 workers which many of [the defendant's] claims are based on. There are no other documents to support both the number of workers and number of hours. To the best of my ability, I have gauged the necessary manhours required assuming most precast panels do not exceed 4 m^2 per panel.

c) Number of Precast Components with Defects

The numbers were only given on 20 November 2014. The photos and description of [the defendant's] claims do not provide or support these numbers. Given the time constraint and the differing views on the numbers by [the defendant] and [the plaintiff] in subsequent emails of 21 November 2014 and 23 November 2014 as described in paragraph 8 above, I am unable to truly ascertain the exact numbers.

I have used [the defendant's] numbers not as concurrence but as a basis of computation to derive a total costing which I believe is a fair and reasonable assessment should [the defendant's] numbers as well as defects are found to be correct and accepted by [the plaintiff].

d) Materials / plant

These items are stated in [the defendant's] claims. Apart from the photos which hardly show these items, there are no other documents to support [the defendant's] claims.

e) Unit Rates

Based on market norms, the unit rates of manpower, plant and materials are generally fair and reasonable. [The plaintiff] appears to concur with most of [the defendant's] unit rates.

114 Based on those observations, CW1 made the following findings as to the cost of the rectification, and they are set out in the table below:

Period	Amount
September 2012	$9,788.00
October 2012	$4,206.80
November 2012	$3,169.20
December 2012	$3,190.00
January 2013	$5,167.00
February 2013	$0.00
March 2013	$1,925.00
April 2013	$75,684.00
May 2013	$0.00
June 2013	$10,920.00
Post June 2013	$1,925.00
Total rectification cost (inclusive of administrative charge of 10%)	$125,455.00

115 Given that the parties have agreed to be bound by the findings of CW1, I hold that the rectification costs are to be quantified at $125,455, and the plaintiff is liable to pay that to the defendant.

Was the defendant legally entitled to call on the Guarantee Agreement?

116 I now turn to address the final issue in this case. After the termination of the Subcontract, the defendant sent a letter to ABN Amro Bank N V ("the Amro Bank") to demand immediate payment of $337,766.19. [note: 111] The pertinent clauses in the Guarantee Agreement are as follows: [note: 112]

> … WHEREAS the Guarantor [ABN Amro Bank N V] has agreed to guarantee the due performance of the Sub-contract in the manner hereinafter stated:
>
> NOW THE GUARANTOR HEREBY AGREES with the Contractor [the defendant] as follows:
>
> 1. In consideration of the [defendant] not insisting on the [plaintiff's] paying ten per cent (10%) of the total value of the Sub-Contract (including Prime Cost and Provisional Sums) *as a security deposit for the said Sub-Contract, the Guarantor hereby guarantees [the defendant] the sum of Singapore Dollars Three Hundred Thirty Seven Thousand Seven Hundred and Sixty Six and Cents Nineteen Only (SGD337,766.19) … being the total value of the Security Deposit required under the Sub-Contract*.
>
> 2. The Guarantor unconditionally and irrevocably undertakes and covenants to pay in full forthwith upon demand in writing any sum or sums that may from time to time be demand by the [defendant] up to the aforementioned sum *without requiring any proof that [the defendant] is entitled to such sums or sums under the Sub-Contract* or that [the plaintiff] has failed to execute the Sub-Contract or is otherwise in breach of the Sub-Contract …
>
> 3. Partial or multiple payments under this Guarantee are permitted, at the rate of 10% of each progressive payment as determined by the [defendant] from time to time up to a maximum of the Guaranteed Amount or any unpaid balance of the Guaranteed Amount, whichever is lower, provided the liability of the Guarantor shall be reduced with each payment …
>
> [emphasis added]

117 The words of the Guarantee Agreement are clear. The defendant is entitled to call on the Guarantee Agreement in writing at any time, and may be paid the sum of money without the bank requiring proof of its entitlement to such sums. However, the parties have also agreed that the defendant had to account for this sum to the plaintiff. That being the case, I trust that the defendant will do so.

General observations

118 PW1 was cross-examined for several days in the witness box. He was a persistent witness who insisted on his version of the events, even when the contemporaneous documentary evidence indicated otherwise. For instance, he disagreed that the slow progress was due to the plaintiff's slow precasting work even though the evidence was against him; he also disagreed that Qingjian's price was reasonable despite the defendant's evidence that a tender was carried out and Qingjian's price was the lowest. Overall, I found PW1 to be an untruthful witness. Nevertheless, I did not jettison his evidence, but treated it with extra caution.

119 It is undeniable that the defendant was very serious about the Schedule. Perhaps, its attitude was due to the severe liquidated damages of $5,430 per day which it would have to pay HDB for each day the Project was delayed. Whatever the case, it was the more proactive party. On many occasions, the defendant even solved problems for the plaintiff so that the work would progress expeditiously. The plaintiff, on the other hand, appeared to have faced many problems in keeping with

the Schedule. Each time the defendant informed the plaintiff about the issues it had with the plaintiff's contractual performance (such as delays, and defective products), the plaintiff was defensive and not contrite. It would blame others, or refuse to respond. Thus the exasperated and helpless defendant terminated the Subcontract at the suggestion of the Consultants.

Conclusion

120 In conclusion, my finding on the facts are as follows:

(a) The plaintiff was in breach of its Subcontract obligations and owes the defendant the following sums:

Payment to Qingjian [note: 113]	$838,078.26
Payments made on behalf of the plaintiff [note: 114]	$91,206.25
Payment to Mr Saidin [note: 115]	$23,709.30
Total	$952,993.81

(b) The defendant is not entitled to liquidated damages.

(c) The defendant had validly terminated the Subcontract, and the plaintiff's claim for wrongful termination fails.

(d) The plaintiff is entitled on a *quantum meruit* basis to payment for precast components manufactured but undelivered. The sum due to it is $25,000.

(e) The plaintiff is liable for the rectification works amounting to $125,455.

(f) The defendant was legally entitled to call on the Guarantee Agreement.

121 As neither party has fully succeeded in their respective cases, I will hear the parties on costs.

[note: 1] SDB at p 30.

[note: 2] SDB at p 30.

[note: 3] SDB at p 29.

[note: 4] SDB at p 47.

[note: 5] SDB at pp 30 & 47.

[note: 6] PBAEIC vol 1, Tab 1 at para 23.

[note: 7] PBAEIC vol 1, Tab 1 at para 24.

[note: 8] PBAEIC vol 1, Tab 1 at para 25.

[note: 9] PBAEIC vol 1, Tab 1 at para 73.

[note: 10] PBAEIC vol 1, Tab 1 at para 26.

[note: 11] Df's closing submissions at para 114.

[note: 12] Df's closing submissions at paras 112–113.

[note: 13] Df's closing submissions at paras 128.

[note: 14] Df's closing submissions at para 133.

[note: 15] Gan Wan Young's AEIC at paras 5–7.

[note: 16] Pf's written submissions at para 115.

[note: 17] Pf's written submissions at para 133.

[note: 18] Pf's written submissions at para 131.

[note: 19] AB ("Agreed Bundle") vol 1 at p 25.

[note: 20] PBAEIC1 at p 178.

[note: 21] AB vol 1 at p 86.

[note: 22] AB vol 1 at p 88.

[note: 23] AB vol 1 at pp 111 & 113.

[note: 24] AB vol 1 at p 207.

[note: 25] Pf's written submissions at para 126; PBAEIC vol 1 at pp 127A–127J.

[note: 26] NE Day 3 at p 71, lines 7–16.

[note: 27] AB vol 1 at pp 313–314.

[note: 28] AB vol 1 at pp 176–177.

[note: 29] AB vol 1 at p 180.

[note: 30] AB vol 2 at p 802.

[note: 31] AB vol 2 at pp 869, 871 & 883.

[note: 32] AB vol 2 at p 783.

[note: 33] AB vol 2 at p 818.

[note: 34] NE Day 3 at p 74, line 19; df's closing submissions at para 134.

[note: 35] AB vol 1 at p 214.

[note: 36] AB vol 1 at p 250.

[note: 37] AB vol 1 at p 247.

[note: 38] NE Day 3 at p 74, line 25.

[note: 39] AB vol 1 at p 300.

[note: 40] AB vol 1 at p 310.

[note: 41] AB vol 1 at p 304.

[note: 42] AB vol 3 at p 832.

[note: 43] NE Day 6 at p 18, lines 1–3.

[note: 44] Df's closing submissions at para 119.

[note: 45]

[note: 46] AB vol 3 at p 892.

[note: 47] PBAEIC vol 4, Tab 5 at para 22.

[note: 48] AB vol 3 at p 838.

[note: 49] SDB at p 34.

[note: 50] SDB at p 35.

[note: 51] AB vol 1 at p 21.

[note: 52] Df's closing submissions at para 36.

[note: 53] Pf's written submissions at para 82.

[note: 54] Pf's written submissions at para 99.

[note: 55] Pf's written submissions at para 108.

[note: 56] See for eg NE Day 9 at p 30, lines 26–29.

[note: 57] AB vol 1 at pp 25–26.

[note: 58] Pf's written submissions at paras 90–95.

[note: 59] Pf's written submissions at paras 95–96.

[note: 60] NE Day 12 at pp 33–35.

[note: 61] Pf's written submissions at para 89.

[note: 62] Df's reply closing submissions at para 22.

[note: 63] Pf's written submissions at para 70.

[note: 64] Pf's written submissions at paras 73–75.

[note: 65] Df's closing submissions at paras 194–195.

[note: 66] Df's reply closing submissions at para 50.

[note: 67] Df's closing submissions at para 196.

[note: 68] Pf's written submissions at para 198.

[note: 69] NE Day 12 at p 25, lines 12–29.

[note: 70] AB vol 2 at p 754.

[note: 71] NE Day 2 at pp 32–33, lines 30–2.

[note: 72] AB vol 1 at p 309.

[note: 73] Df's closing submissions at para 221.

[note: 74] Df's closing submissions at para 198.

[note: 75] AB vol 7 at pp 2863–2864.

[note: 76] Df's closing submissions at para 202.

[note: 77] Pf's written submissions at para 137.

[note: 78] Pf's written submissions at para 144.

[note: 79] Pf's written submissions at para 149.

[note: 80] Df's reply closing submissions at paras 43–44.

[note: 81] Df's reply closing submissions at para 44.

[note: 82] BAEIC vol 1 at p 56.

[note: 83] Df's closing submissions at paras 198–202.

[note: 84] AB vol 1 at pp 149–150.

[note: 85] Pf's written submissions at para 37.

[note: 86] Pf's written submissions at para 64.

[note: 87] Pf's written submissions at para 47.

[note: 88] NE Day 11 at pp 4–6, lines 18–4.

[note: 89] AB vol 2 at p 802.

[note: 90]

[note: 91] Pf's written submissions at para 55.

[note: 92] Pf's written submissions at para 59.

[note: 93] Pf's written submissions at para 65.

[note: 94] Df's closing submissions at para 152.

[note: 95] Df's closing submissions at para 156.

[note: 96] Df's closing submissions at para 153.

[note: 97] Df's closing submissions at para 154.

[note: 98] NE Day 12 at p 30, lines 14–15.

[note: 99] BAEIC at p 766.

[note: 100] NE Day 11 p 15 lines 23-32, p 16 lines 1-4

[note: 101] NE Day 13 at p 1, lines 26–31.

[note: 102] Df's closing submissions at para 158.

[note: 103] Df's closing submissions at para 164.

[note: 104] Pf's written submissions at para 182.

[note: 105] AB vol 2 at p 539.

[note: 106] AB vol 2 at p 542.

[note: 107] AB vol 2 at p 729.

[note: 108] AB vol 2 at p 628.

[note: 109] AB vol 2 at p 641.

[note: 110] QS Assessment on Rectification Costs at p 2.

[note: 111] SDB at p 20.

[note: 112] AB vol 1 at pp 183–184.

[note: 113] Df's closing submissions at para 215.

[note: 114] Df's closing submissions at para 220.

[note: 115] Df's closing submissions at para 221.