
HIGHER RIGHTS OF AUDIENCE ASSESSMENT

IN RESPECT OF CIVIL PROCEEDINGS

THE PRACTICAL ASSESSMENT

TRIAL BUNDLE FOR INTERIM APPLICATION AND MINI-TRIAL

**DIXIE TOYS INCORPORATED and
CRANBERRY INDUSTRIAL LIMITED**

Pleadings

IN THE HIGH COURT OF THE
HONG KONG SPECIAL ADMINISTRATIVE REGION
COURT OF FIRST INSTANCE
HIGH COURT ACTION NUMBER 321 OF 2012

BETWEEN

DIXIE TOYS INCORPORATED

Plaintiff

and

CRANBERRY INDUSTRIAL LIMITED

Defendant

STATEMENT OF CLAIM

The Parties

1. The Plaintiff is a company which is incorporated in the United States of America. It designs and distributes toys throughout the southern states of the United States of America.
2. The Defendant is (and was at all material times) a manufacturer and supplier of toys to the retail market.

The Contract

3. The Plaintiff had been doing business with the Defendant since 2007. The Plaintiff would design toys and the Defendant would manufacture these toys.
4. In April 2010, the Plaintiff entered into an agreement with the Defendant for a range of dolls called 'Dixie Darlings'. These dolls were manufactured by the Defendant in their Factory A, in Guangdong Province.
5. In October 2011, the Plaintiff entered into a new agreement with the Defendant for the Defendant to manufacture a range of dolls called 'Dixie Babies'. The dolls were designed to look and sound like babies which have a urinating function and require

diaper changing when they pass water. The ‘Dixie Babies’ overall design and the internal water pathway and bladder is designed so that when water enters the unit, it is not almost immediately emitted but takes 60 seconds before the first emission occurs.

6. In May 2012, the Plaintiff placed its first written contract for ‘Dixie Babies’ for 50,000 units under the new agreement signed in October 2011. In May and June 2012, a further 4 written purchase orders were placed with the Defendant each for 50,000 units. The terms of the agreements arose partly by conduct, were partly oral, partly in writing and arose partly by implied operation of the law.

7. The following were, amongst others, express terms of the Contract, namely, that:

ii. The Buyer is entitled to inspect the goods during the process of manufacture or at any time during working hours and the Manufacturer shall provide all reasonable facilities for such inspections provided always that such inspections shall not relieve Manufacturer of any liability in respect of the quality or quantity of the goods whether or not any defects are latent or apparent or have or have not been ascertained during such inspections and provided that such inspections shall not in any way whatsoever prejudice the Buyer’s right, as its option, to reject any of the goods or to claim damages.

iii. The goods shall be properly packed and secured in such a manner as to reach their destination in good condition under normal conditions of transport and in accordance with the instructions of the Buyer shall be delivered to the place or places that the Buyer shall nominate by sea or air freight at the lowest freight rate available.

v. The Manufacturer warrants that the goods supplied comply in all respect with all relevant requirements of any statute, ordinance, regulation or other instrument having the force of law which may be in force from time to time in Hong Kong and other places as may be indicated by Buyer and in particular shall meet or exceed the standards of the U.S. Consumer Products Safety Commission ... (“the Standards”).

8. Further and/or in the alternative, the Plaintiff and Defendant were each acting in the course of their respective businesses and therefore the following were implied terms of the Contract:

- a. that, pursuant to section 16(2) of the Sale of Goods Ordinance, Cap. 26, the Dixie Babies to be supplied would be of merchantable quality; and
- b. that, pursuant to section 16(3) of the above Ordinance, the Dixie Babies would be reasonably fit for the Plaintiff's purpose which had been made known to the Defendant, namely, for use by children. At all material times the Plaintiff informed the Defendant and/or the Defendant knew or ought reasonably to have known that the dolls were to be used by children.

9. On 20 June 2012, the first shipment was sent to Atlanta, and received on 30 July 2012.

BREACH

10. On 21 August 2012, upon inspection of the dolls, it was discovered that the dolls had been contaminated with a dynamic fungi growth, the dominant strains being penicillium chrysogenum and aspergillus fumigatus which effectively rendered all the dolls defective and unfit for sale. On the following day, the same was discovered of the dolls that had been shipped to Dallas and Birmingham. As such, all the dolls sent by the Defendant were defective and unfit for sale.

11. On 22 August 2012, the Plaintiff informed the Defendant of the defects in all three shipments that had been received so far, and that production should be ceased immediately.

12. On 25 October 2012, the 100,000 dolls waiting at the Defendant's factory were jointly inspected. All 100,000 units were found to be visibly contaminated with mould. It was subsequently found that the contamination was the same as that identified in the earlier samples and that the units were unfit for sale.

13. The Defendant acted in breach of the above express and implied terms.

Particulars of breaches of contract

The Dixie Babies:-

- (a) did not conform as to quality, description and/or did not conform with specifications and/or were not free from.
- (b) did not comply with the express written term set out in Clause v of the purchase contract.
- (c) did not comply with the Standards prohibiting their import.
- (d) were not of merchantable quality.
- (e) were not fit for their purpose including use by children.
- (f) posed a potential health hazard to humans.
- (g) were defective including (but not limited to) latent and/or inherent defects not detectable by the Plaintiff on reasonable examination.

14. As a result of the matters set out above, the Plaintiff has suffered loss and damage.

15. The Plaintiff is entitled to claim interest on such sum found due and at such rate and for such period as the Court deems fit pursuant to s. 49 of the High Court Ordinance.

AND accordingly the Plaintiff claims;

1. damages;

2. interest;

3. costs; and

4. further or other relief.

[Please assume that the signatory, service and statement of truth details are duly endorsed together with a backsheet]

IN THE HIGH COURT OF THE
HONG KONG SPECIAL ADMINISTRATIVE REGION
COURT OF FIRST INSTANCE
HIGH COURT ACTION NUMBER 321 OF 2012

BETWEEN

DIXIE TOYS INCORPORATED

Plaintiff

and

CRANBERRY INDUSTRIAL LIMITED

Defendant

DEFENCE AND COUNTERCLAIM

1. Unless otherwise expressly stated:-
 - a. References herein to numbered paragraphs are references to the corresponding paragraphs in the Statement of Claim.
 - b. The Defendant adopts the defined terms contained in the Statement of Claim
2. Paragraphs 1, 2, 3, 4 and 5 of the Statement of Claim are admitted.
3. Save that it is not admitted that the terms of the agreement arose by implied operation of the law, paragraph 6 of the Statement of Claim is admitted.
4. Paragraph 7 of the Statement of Claim is admitted.
5. Paragraph 8 of the Statement of Claim is not admitted. The Defendant relies on section 57 of the Sale of Goods Ordinance, Cap. 26 in that the implied terms have been excluded or negated because the Defendant manufactured the dolls in accordance with the Plaintiff's specifications and directions.
6. Paragraph 9 of the Statement of Claim is admitted.
7. Further, the Defendant avers that it was acting in accordance with the Plaintiff's instructions and specifications. The designs were produced by the Plaintiff and the Defendant was to manufacture the dolls according to such specifications and directions.

The Defendant had concerns with the design in that there would always be water trapped in the internal system of the doll. This would lead to fungal contamination. The Defendant informed the Plaintiff of such. The Plaintiff dismissed such concerns. The Defendant subsequently obtained expert advice from Dr. Peter Ma. Dr. Ma put forward several solutions all of which were rejected by the Plaintiff. The Plaintiff stated that a simple solution would be the use of distilled water. The Defendant placed trust in the Plaintiff's design, specification and expertise on the matter.

8. By reason of the matters pleaded above, it is denied that the Defendant is in breach of the contract as alleged or at all.
9. It is denied that the Plaintiff is entitled to interest whether as alleged or at all.
10. It is denied that the Plaintiff is entitled to any relief as claimed in the Statement of Claim or at all.
11. Save as is expressly admitted or stated to be not admitted, each and every allegation in the Statement of Claim is denied as if the same were set out herein and traversed seriatim.

[Please assume that a Counterclaim was added at the end of the Defence.]

[Please assume that the signatory, service and statement of truth details are duly endorsed together with a backsheet]

Plaintiff's Witnesses

[Please assume that the headings and formalities for each statement comply with the relevant Practice Direction]

Witness statement of Rae White

1. My name is Rae White. I am a director of Dixie Toys Incorporated ('Dixie'), a company incorporated in the United States of America with its head office in Atlanta, Georgia. Dixie designs and markets all types of toys, but particularly dolls, throughout the southern states of the United States of America. Dixie is the plaintiff in this action.
2. I make this statement to deal with the issue of liability only.
3. I have been employed by Dixie for the past 20 years and presently hold the position of Vice President (Quality Control). I am an engineer by profession, having graduated from the University of Texas and being duly licensed under the laws of that State to practise as a mechanical engineer.
4. For the past 15 years Dixie has had its toy designs manufactured in the Peoples' Republic of China, working with a number of Hong Kong companies that own and operate factories in Guangdong Province. Over that period of time, among other manufacturers, Dixie has worked regularly with the defendant in this action, Cranberry Industrial Limited ('Cranberry'). Until the present action, Dixie's working relationship with Cranberry has been successful and profitable.
5. In April 2010, Dixie entered into an agreement with Cranberry for a range of dolls called 'Dixie Darlings'. These are dolls dressed in *ante bellum* southern style clothing which, when pressed in the torso section, emit a coquettish laugh. They proved very popular and 285 units were manufactured for us by Cranberry in their Factory A building in Chung Tong, Guangdong Province.
6. In October 2011, Dixie entered into a new agreement with Cranberry, this time for the manufacture of a range of dolls called "Dixie Babies". These dolls are of the same size and are made of the same materials as the 'Dixie Darlings'. They also contain the same unit in the torso section that, when pressed, emits the sound of laughter. 'Dixie Babies', however, are designed to look and sound like babies; they are dressed in modern-day baby clothing. Part of the attraction of the range is that, like babies, they need to be looked after, especially by way of the need to change their diapers when they pass water.
7. To enable a urinating function, 'Dixie Babies' have an internal water pathway leading from the mouth. When fed from a water bottle (which is part of the package together with extra diapers), the water moves slowly down the internal water pathway and through a rubber bladder to be emitted.
8. Many dolls have contained urinating functions. That in itself is not original. The attraction of 'Dixie Babies' is their overall design and the fact that the internal water pathway and bladder is designed so that, when water enters the unit, it is not almost immediately emitted but takes 60 seconds before the first emission occurs.

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9. As with all previous manufacturing agreements with Cranberry, the terms of agreement arose partly by conduct; were partly oral, partly in writing and arose partly by implied operation of law.
 10. In January 2012, there was a formal meeting in Chung Tong with the CEO of Dixie, Chuck Allard, and the CEO of Cranberry, Terence Li, present. The purpose of the meeting was to launch procedures for setting up the production line for 'Dixie Babies'.
 11. Cranberry had just finished work on the construction of their third factory premises in Chung Tong, Factory C, and it was agreed that it would house the production facilities for the 'Dixie Babies'.
 12. It should be mentioned at this stage that Factory C was situated about 400 metres east of Factories A and B. While Factories A and B were behind 4 metre high security walls in an enclosed area, Factory C stood on its own on the edge of farmland. Nobody from Dixie was aware of it at the time but behind a line of avocado trees, less than 100 metres from Factory C, was a large chicken farm and at the perimeter of that farm were a series of compost heaps.
 13. As to the setting up of the production facilities, Dixie supplied all necessary drawings and specifications for the 'Dixie Babies' line. We also supplied all design moulds (including the two moulds for the internal water pathways) while Cranberry submitted the more standard moulds, rubber bladder and sample parts for our approval. Samples of fabric for the clothing (and extra diapers) were sourced by Cranberry and submitted to us for approval.
 14. In May 2012, having worked together on the preliminaries, and being satisfied that the first sample products met fully with our specifications, Dixie placed its first written purchase order with Cranberry for 50,000 units.
 15. The 'Dixie Babies' line was well received by buyers across the southern states and in the months of May and June 2012 a further 4 written purchase orders were placed with Cranberry, each for 50,000 units. This made for a total order in those two months of 250,000 units.
 16. Dixie was contractually permitted to inspect the progress of the production line to ensure all units were manufactured according to specifications. At all times, Dixie had one employee in Factory C for this purpose.
 17. The first consignment of 50,000 dolls was shipped from Hong Kong to our air-conditioned Atlanta warehouse on 20 June 2012, being received on 30 July 2012.

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18. On 21 August 2012, I was present when a number of the dolls were unpacked in the Atlanta warehouse for display purposes. It was on that occasion that it was first discovered that the dolls had been contaminated with a virulent strain of fungi which rendered all of the dolls defective and unfit for sale.
19. I recall that, when the first contaminated doll was shown to me, the hem of the doll's dress appeared to have a grey, cobweb-like fluff on it. To the lay person it appeared to be some sort of mould. I attempted to brush it off the material only to find that it was ingrained in the cloth. I attempted to brush away the mould on over a dozen of the contaminated dolls that were shown to me. On each occasion, however, the mould was found to be ingrained in the cloth.
20. I immediately ordered that all 50,000 'Dixie Babies' stored in the Atlanta warehouse be examined for the presence of mould. A total of 16,500 units (33% of the total) were found to have been contaminated to differing degrees with the mould.
21. A photograph of every third contaminated doll was taken. The photographs constitute an exhibit in these proceedings. As the photographs reveal, in approximately 80% of cases, the greatest concentration of visible mould was to be found in the fitted diaper and on the hem of the doll's dress. In 25% of the cases, visible mould had begun to eat into the upper legs.
22. As the inspection of the dolls in the Atlanta warehouse began to reveal such disastrous results, I knew that we faced a major problem. I therefore gave orders that same day for the immediate inspection of the 50,000 dolls shipped to each of our air-conditioned warehouses in Dallas and Birmingham.
23. On the following day, Dallas reported that 14,000 units (28%) were contaminated with mould while Birmingham reported that 13,500 (27%) were contaminated with mould.
24. On the same day that I received the returns from Dallas and Birmingham, I contacted Miami Forensic Laboratories by telephone to request that a sample analysis of the contaminated dolls from each warehouse be conducted. I was instructed by a member of their biological laboratory to immediately send to them by courier 36 samples from each warehouse: 24 showing visible signs of mould contamination and 12 showing no signs. I gave the necessary instructions and to the best of my knowledge and belief understand that within 24 hours Miami Forensic had received the required 36 samples from our Atlanta, Dallas and Birmingham warehouses.¹
25. On the morning of 22 August 2012 (Hong Kong time), I telephoned Cranberry's senior manager at Factory C. I informed him that we appeared to have a major problem with mould contamination in all 3 shipments received so far and that

¹ In this regard, see the witness statements of the managers of Dixie's Atlanta, Dallas and Birmingham warehouses duly filed in these proceedings.

further production should be ceased immediately pending results received from Miami Forensic.

26. I understand that production was ceased at Factory C that same morning.

27. On 26 August 2012, I received a faxed report from Miami Forensic to inform me that all samples received with visible mould were found to be contaminated with a dynamic fungi growth, the dominant strains being *penicillium chrysogenum* and *aspergillus fumigatus*. The report stated that *aspergillus fumigatus* posed a danger to the health of young children and susceptible adults and rendered the samples unfit for sale.

28. On 29 August 2012, I received a second faxed report from Miami Forensic to inform me that all samples received by the laboratory without any visible signs of mould were now showing fungi growth of the same nature, that is, a dynamic fungi growth, the dominant strains being *penicillium chrysogenum* and *aspergillus fumigatus*.

29. Further checks in our warehouses showed that all dolls were now showing visible signs of fungi contamination. It meant that 100% of the 'Daixie Babies' dolls received were unfit for sale.

30. Cranberry's senior manager at Factory C was of course informed immediately of the contents of both faxed reports received from Miami Forensic.

31. I recall that on 1 September 2012 I received a very panicky telephone call from Terence Li, the CEO of Cranberry suggesting that there had to be some way of mitigating our joint loss. As politely as I could I informed him that, subject to taking legal advice, I believed it was Cranberry's loss and not Dixie's. I said, however, that the first issue surely was to discover the cause of the contamination and that we could talk about responsibility for losses later.

32. Terence Li seemed more concerned with potential financial losses to Cranberry than working with Dixie to discover the source of the contamination problem. He asked if the dolls could be salvaged, perhaps by dry cleaning the clothing. I informed him that it was not possible economically to salvage the dolls as the fungi contamination was not only in the fabric of each doll's clothing but had begun to eat into the internal workings and the legs – a fact clearly stated in the reports from Miami Forensic. All the dolls that had been shipped, I said, would have to be destroyed.

33. Again, I emphasized, that Dixie wanted to make the 'Dixie Babies' a successful line and that we would work with Cranberry to find out what had caused the fungal contamination so that the problem could be eliminated and we could start production again. Finding the cause of the problem, I said, had to be our prime concern.

34. Terence Li asked about the final 100,000 dolls that had been purchased in terms of the written purchase orders and were at Factory C awaiting shipment. I informed him that Dixie would have to rely on its contractual rights to inspect all of these dolls before shipment and, to the extent that they showed signs of contamination, they would also have to be destroyed.

35. On hearing this, Terence Li became angry. He said that we were talking about all 250,000 having to be re-manufactured at Cranberry's expense and Cranberry could not afford the cost. I tried to avoid a wasteful confrontation by saying that, once we had determined the problem together, I was sure that there was some way in which we could agree the consequential finances. Because of the potential importance of the conversation I had it recorded. The relevant portion of the recording is as follows –

Me: Believe me Terence, Dixie doesn't want to bleed you.

Li: So will Dixie meet the costs of re-manufacture?

Me: Possibly, initially. I'll have to speak to our financial people.

Li: You're a director. Tell me.

Me: It's not that simple, you know that.

Li: So at the end of the day you'll still hold Cranberry liable?

Me: This is for the lawyers Terence. Let's work on the immediate problem.

Li: The immediate problem is Cranberry's financial viability. I'm prepared to go fifty/fifty with Dixie on the costs. It's your doll, your design, you have the copyright. You have inspectors telling us what to do every step of the production process. This is your problem, not ours.

Me: Not everything is immediately visible to the naked eye Terence.

Li: All we did was make to your standards and specifications. Fifty/fifty – speak to your people. We share the losses. I am not interested in fancy financial deals that look good in the short term and leave us bankrupt at the end of it. Speak to your people. I'll give you a week. I've got plenty other orders waiting in the wings, orders that will make Factory C some good profits.

Me: Let's not draw the battle lines Terence.

Li: I'm not drawing anything, I'm trying to mediate. But if you want a battle, you've got it. And you are going to have to fight me here – Hong Kong lawyers, Hong Kong judges. This is my playground, remember that.

Me: What do you mean by that?

Li: Wait and see...

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36. The following day I spoke to the CEO of Dixie, Chuck Allard, and to the Chief Financial Officer, Mary May. While it was agreed that we would assist Cranberry with a loan to re-manufacture the contaminated dolls, we were not prepared to share the cost of re-manufacture as suggested by Terence Li. I informed Terence Li of the decision in an email dated 6 September 2012.
37. Terence Li sent a reply email dated 7 September saying that Cranberry denied any liability to Dixie arising out of any “alleged fungal contamination” and, while Cranberry would agree to a joint inspection of the 100,000 units still waiting to be shipped, it was not prepared to accept any more purchase orders for the production of “Dixie Babies”. Put succinctly, our business was at an end.
38. In the same email, Terence Li said that Cranberry was not prepared to enter into a joint investigation and that all Dixie employees should vacate Cranberry’s factories within 24 hours.²
39. It should be recorded that, after correspondence between the lawyers for Dixie and Cranberry, the 100,000 units waiting at Factory C to be shipped were jointly inspected on 25 October 2012. All 100,000 units were found to be visibly contaminated with mould. A random sampling of 36 units were sent by courier to Miami Forensic which reported that the contamination was the same as that identified in the earlier samples and that the units were unfit for sale.
40. It should be recorded that Dixie has, since the cessation of its working relationship with Cranberry, attempted to enter into a contract with other manufacturers in the People’s Republic of China for the production of ‘Dixie Babies’ but without success. It appears that, while any uncertainty remains as to the true cause of the contamination, other manufacturers are not prepared to commit themselves to production.
41. In order to assist in ascertaining the cause of the contamination, although no longer permitted to enter any of Cranberry’s 3 factories, on 30 January 2013, having travelled to Hong Kong on other business, I made a site visit to the vicinity of Factory C. In the course of that visit, I was able to measure the distance (given above) between Factory C and the western perimeter fence of the chicken farm, the only ‘barrier’ between the two being a single line of avocado trees. While the owner of the chicken farm was not prepared to testify in these proceedings, he did allow me to take photographs of the farm and, in particular, of the 6 compost heaps that lie to the south of the farm, the compost being sold to local farmers. The photographs form part of the evidence in this litigation. I was informed by the owner (who has supplied documentation by way of proof) that he is licensed to house 14,000 chickens and to slaughter chickens.

² The relevant part reads: “Cranberry is not prepared to enter into a joint investigation to ascertain the cause of the alleged fungal contamination. If there has been any contamination, the fault lies with Dixie and it must ascertain the cause at its own cost. As the business relationship between our companies is now ended, all Dixie employees must vacate our factory premises within 24 hours or be treated as trespassers.”

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42. Well after this litigation commenced, in December 2014, an agreement was reached between Dixie and Cranberry that, to avoid the high cost of storing the contaminated “Dixie Babies” units in the United States and at Factory C, all units could be destroyed, each party retaining sufficient samples as each believed would be required to advance their respective cases in this litigation.
43. Finally, for purposes of liability only and not damages, I make reference to the written terms of Dixie’s agreement with Cranberry. Those written terms were contained in each of the 5 purchase orders as follows:
- i. “The goods shall conform as to quantity, quality and description with all specifications provided and be of sound materials and workmanship, being equal in all respects to the samples, patterns and specifications provided, and shall be capable of the specified standards of performance, be fit for any purposes expressed or implied and shall be free of defects.
 - ii. The Buyer is entitled to inspect the goods during the process of manufacture or at any time during working hours and the Manufacturer shall provide all reasonable facilities for such inspections provided always that such inspections shall not relieve the manufacturer of any liability in respect of the quality or quantity of the goods whether or not any defects are latent or apparent or have or have not been ascertained during such inspections and provided that such inspections shall not in any way whatsoever prejudice the Buyer’s right, at its option, to reject any of the goods or to claim damages.
 - iii. The goods shall be properly packed and secured in such a manner as to reach their destination in good condition under normal conditions of transport and, in accordance with the instructions of the Buyer shall be delivered to the place or places that the Buyer shall nominate by sea or air freight at the lowest freight rate available.
 - iv. The Buyer assumes no liability for loss or damage to the goods while in transit.
 - v. The Manufacturer warrants that the goods supplied shall comply in all respects with all relevant requirements of any statute, ordinance, regulation or other instrument having the force of law which may be in force from time to time in Hong Kong and other places as may be indicated by the Buyer and in particular shall meet or exceed the standards of the US Consumer Products Safety Commission which requires the Manufacturer to comply the Code of Federal Regulations Title 16 (16 CFR) issued under the Federal Hazardous Substances Act and the Consumer Product Safety Act.”
44. By way of summary, as may be relevant to the present issue of liability, the standards laid down by the US Consumer Products Safety Commission prohibit the import of –

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- a. Any toy which is contaminated by hazardous substances including pathogens, opportunistic pathogens and sensitizers, contamination being the presence of hazardous substances.
 - b. Any toy which is a potential health hazard to children or to susceptible adults.

45. Finally, I am informed that, in supplying contaminated toys, Cranberry was in breach of the terms of contract implied by virtue of the Sale of Goods Ordinance, Cap 26, in that –

- a. The goods were not of merchantable quality;
- b. Were not fit for their purpose;
- c. Were defective, including latent and/or inherent defects not visible on reasonable examination,

all by reason of the contamination of micro-organisms.

Witness statement of Carl Black

1. I have been employed by Dixie Toys Incorporated since 2005 as a production manager, my job being to supervise the manufacture of products commissioned by the company. In the course of my employment I have been stationed in Vietnam and Indonesia but mostly in Southern China.
2. In January 2012 I was briefed to go to Chung Tong in Guangdong Province to help set up an assembly line for the manufacture of a new range of dolls called 'Dixie Babies'. The manufacturer was a Hong Kong company called Cranberry Industrial. I had worked with Cranberry before on several occasions, never with any problems.
3. I should mention one matter that was initially an area of dispute in respect of the assembly of the 'Dixie Babies' and that relates to the testing of each doll to ensure its internal water pathways had been correctly put together –
 - i. While it was agreed that water testing was necessary in respect of each doll, the Cranberry people were concerned that residual water left inside the dolls may be a source of contamination.
 - ii. The Cranberry people suggested that the water testing should take place before the clothing was fitted on the dolls and that the dolls should then be placed in a baking oven to dry out any residual water before the clothing was fitted.
 - iii. The Cranberry people accepted that the baking process may not remove all of the residual water but argued that it would greatly reduce the chance of contamination.
 - iv. When we looked at costings, however, the baking process would add another 15% to the cost of manufacture. This increase was considered unacceptable to the Dixie management.
 - v. After discussions, it was therefore agreed that the water testing would be conducted with distilled water, water that was recognized as being pure and would not be the source of contamination. This, Dixie believed, would just as adequately meet the risk of contamination from residual water left inside the dolls.
4. The 'Dixie Babies' line was to be assembled in a new factory built by Cranberry known as Factory C. This factory stood some 400 metres from Cranberry's other two factories, A and B.

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5. When I first went to Factory C in order to begin setting up the assembly line, I noticed that there was still a lot of work to be done to complete the building. I expressed my concern to Jason Ng, the manager of Factory C, who assured me the building work would be completed by the time the assembly operation commenced.
 6. In late February I returned to the United States for the birth of my son. I was away for 10 days. When I returned, I was told that the building work had been completed. In a general sense that may have been true but from the time of my return to the time when relationships between Dixie and Cranberry broke down there always appeared to be builders in and around the factory making good in one way or another. All of this work created excessive air pollution in the form of dust, paint fumes and the like.
 7. My principal concern, however, was the state of the changing area and toilets. If there had been an attempt to clean them it had been minimal. Porcelain surfaces still showed stains and in late April, as a result in part of my complaints, the whole area was re-painted. The plumbing in the toilet area was also a major concern. On at least two occasions there was an overflow of effluent that made the toilets unusable. The smell was terrible.
 8. I suggested to Jason Ng that our workers use the facilities in Factory A or B. When the overflow of effluent took place this was done, a bus being on hand to take the workers the 400 metres. But once the plumbing was fixed, Jason Ng informed me that it was better that Factory C workers remain in Factory C.
 9. My concern always was to maintain the required level of industrial hygiene. In this regard, I was concerned that soiled clothing and dirty hands would inevitably come into contact with the dolls as they were assembled – 75% of the assembly work being manual – leaving dirt marks and rendering them unfit for sale. I was also concerned that germs may be transferred; for example, with the poor state of hygiene in the toilet area that there may be a transfer of faecal matter.
 10. I would add that, as the summer months approached, it was noticeable that the air-conditioning in Factory C was incapable of providing a comfortable working temperature or, more likely, that Jason Ng was under instructions not to set the air-conditioning at too low a temperature in order to save money. In the result, every afternoon, when the sea breeze blew up, the large doors and windows would be opened on the east side of the factory to allow the breeze to flow through the factory. While I accept it made working conditions much more comfortable, I was concerned as to pollutants being carried into the factory.
 11. I would add that there was a chicken farm on the eastern side of the factory. Once the windows and doors were opened the chickens could easily be heard.
 12. While I did my best to persuade Jason Ng to improve hygiene standards, I could not demand that he did so. Dixie had the contractual right to inspect all stages of

the manufacturing process but maintenance of the manufacturing environment was a matter entirely for Cranberry.

13. When, in August 2012, I learnt that a large number of the dolls already shipped to the United States showed signs of toxic fungal contamination – something that I had never come across before – I knew that the most likely cause was a failure to maintain good industrial hygiene practices in Factory C.

Expert evidence given by Dr Abraham Fisher on behalf of Dixie Toys, the Plaintiff

1. I, Abraham Fisher, do hereby affirm as follows.
2. I presently hold the position of Chief of Biological Analysis at Miami Forensic Incorporated ('MFI'). MFI undertakes all forms of forensic analysis whether for corporations, private individuals or state authorities. MFI is regularly employed by the Federal Government as well as the governments of foreign states.
3. I am a doctor of biological sciences and a doctor of organic chemistry, both doctorates having been obtained at Princeton University. I joined MFI in 2005 as Deputy Chief of Biological Analysis and was promoted to my present position in 2010. I have testified as an expert in the fields of organic chemical and biological sciences on more than 200 occasions in both state and federal courts in the United States of America as well as in the courts of Mexico, Venezuela and Chile. On no occasion has my status as an expert in my two fields of specialty been rejected.

The request to carry out an analysis

4. On 22 August 2012, MFI was requested by Dixie Toys Incorporated, an old customer, to examine certain toy dolls. The following day samples of dolls described as 'Dixie Babies' were received at my laboratory, all had been delivered to me by courier service: 36 samples from Atlanta, Georgia, 36 from Dallas, Texas, and 36 from Birmingham, Alabama.
5. In each case, the 36 samples were still in the boxes manufactured for them, each box bearing the name 'Dixie Babies' with the words underneath: "Care for your own little Dixie doll".
6. All 36 samples in their boxes were loosely wrapped in dry tissue paper and placed in a tea chest lined with metal foil. Each tea chest was sealed and wrapped in plastic sheeting. There was no evidence of any damage or contamination in transit.
7. As requested by MFI, in each shipment 24 samples had shown visible fungal contamination at the time of shipment, 12 had not. MFI had requested that the 12 samples not showing visible signs of contamination should be shipped separately. This was not done.
8. The accompanying documentation revealed the following:
 - i. The 36 samples from Atlanta had been part of a shipment of 50,000 dolls shipped from Hong Kong on 12 July 2012 and received at the warehouse of Dixie Toys in Atlanta on 30 July 2012.

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- ii. The 36 samples from Dallas had been part of a shipment 50,000 dolls shipped from Hong Kong on 26 June 2012 and received at the warehouse of Dixie Toys in Dallas on 30 July 2012.
 - iii. The 36 samples from Birmingham had been part of a shipment of 50,000 dolls shipped from Hong Kong on 30 June 2012 and received at the warehouse of Dixie Toys in Birmingham on 3 August 2012.
9. An accompanying letter signed by Mr Rae White, the executive in charge of quality control at Dixie Toys, informed me of the following:
- i. On 21 August 2012, a number of the toys delivered to the Atlanta warehouse of Dixie Toys had been opened for inspection. Among that original number, several were found to have a “grey, cobweb-like substance” on their clothing, a substance that resembled “mould”. By reason of this discovery, the entire shipment of 50,000 dolls was inspected, it being found that 33% were contaminated by the same apparent “mould”.
 - ii. Instructions were then given to inspect the shipments delivered to Dallas and Birmingham. Of the 50,000 dolls delivered to the Dallas warehouse, 28% were contaminated; of the 50,000 dolls delivered to the Birmingham warehouse, 27% were contaminated, both by the same apparent “mould”.

The first set of instructions from Dixie Toys

10. The original set of instructions received from Dixie Toys was to identify the nature of the “mould” and to advise whether it rendered the dolls unfit for sale.

The analysis

11. Mr White was correct to identify the “grey, cobweb-like substance” found on the samples as “mould”.
12. Moulds are organisms that are part of the fungi kingdom. In respect of all the samples received showing visible signs of contamination, there were two dominant strains of fungi identified; first, *penicillium chrysogenum* and, second, *aspergillus fumigatus*. Both are common in subtropical and tropical climates.
13. Under observation it was seen that the fungi growth on all these samples was dynamic, meaning that it was proliferating and not dormant.
14. While *penicillium chrysogenum* is essentially harmless, I regret that the same cannot be said of the second dominant strain identified, that is, *aspergillus fumigatus*.

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15. Fungi spores – *conidia* – are ubiquitous. They are found everywhere, indoors and out and may even be found in operating theatres. They are carried by air currents and being buoyant are easily inhaled. It is estimated that we all inhale several hundred spores a day. Typically, these are quickly eliminated by our immune systems. In immunocompromised individuals, however, such as organ transplant recipients or people with AIDS or leukemia, the spores are more likely to become pathogenic, causing a range of diseases termed *aspergillosis*. Because of the increase in immunosuppressive therapies in the past decade, *aspergillus fumigatus* has become the most prevalent of airborne fungal pathogens.
16. That being the case, I have no hesitation in concluding that all the dolls contaminated with the fungi that I have identified are unfit for sale. They are unfit for sale because they present a real health risk to young children and to susceptible adults. In respect of the latter, the health risks may be grave.

The samples not showing visible signs of contamination

17. The samples received from all 3 sources that did not show visible signs of contamination when shipped were kept in the laboratory of MFI for observation. With 48 hours of receipt, all samples had begun to show visible signs of fungal contamination. Within 7 days the contamination, being dynamic, had spread to all parts of the dolls. The contamination was of the same make-up as all the other samples. These samples also were therefore rendered unfit for sale.

The second set of instructions from Dixie Toys

18. On 30 September 2012, in anticipation of imminent litigation, Dixie Toys requested MFI to attempt to analyse the source of the fungal contamination.
19. By that time the assembly operation had been terminated and all Dixie Toys supervising staff had been requested to leave Factory C. On the basis that I may nevertheless still be able to obtain value from a site inspection, I sought permission to visit Factory C. The request was denied. The relevant portion of the letter from the solicitors for Cranberry Industrial stated:

“While our client does not wish to obstruct a neutral examination by forensic specialists, it does not feel that an inspection at this time will be of any assistance. This is because, in order to prepare for the production of a new line of toys, Factory C was fumigated and fully scrubbed down. All the machinery, moulds and parts used in the production of the ‘Dixie Babies’ line were removed, the property of Dixie Toys being returned to it and the property of Cranberry being destroyed. Factory C is presently being used to manufacture a line of teddy bears. To date, no sign of any fungal contamination has been found on the manufactured goods.”

20. I would pause to observe that on all the evidence known to me Factory C was not fumigated nor professionally cleaned in any way prior to the commencement of the assembly of the ‘Dixie Babies’ line, despite the fact that it was a new factory.

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21. As to my analysis, it has been necessary to rely on the factual findings of Carl Black, the production manager sent by Dixie Toys to oversee the full production process in Factory C.
22. That said, I am satisfied that my analysis, which is set out hereunder, gives the only reasonable explanation for the source and/or cause of the contamination.
23. I start by making two basic observations –
- i. Contamination must have occurred in Factory C, this being the only place where the dolls were extensively handled in the course of their construction, most of the assembly operations being manual. This is supported by the fact that dolls waiting in storage in Factory C were also subject to contamination.
 - ii. For the contamination to be as great as it was, the original inoculum must have been greater than in the case of toys being manufactured in the other two factories. What could have caused this?
24. As indicated, in Carl Black's statement, the 'Dixie Babies' assembly operation was the first in Factory C. The factory had only just been built and it appears that finishing work on the building was still being completed when the assembly operation began. There was therefore almost constantly dust drifting through the factory premises.
25. It further appears that only minimal attempts were made to properly clean the factory premises before the assembly operation began.
26. While the factory premises were air-conditioned, Carl Black was of the opinion that the level of air-conditioning was not set high enough, the obvious intent being to save money. In the result, he said, towards the late afternoon when a refreshing sea breeze arose it became common to open the factory doors and windows.
27. Carl Black was especially concerned that good industrial hygiene practices may be at risk. In this regard, he noted that very little had been done to clean the changing and toilet area. Porcelain surfaces remained stained and occasionally, because the plumbing had not been fully tested, there would be an effluent spill, the smell being very rank.
28. Carl Black was concerned not only that dirt carried to the assembly line on workers' hands and/or clothing might soil the dolls but that they may also be the cause of contamination of all kinds.

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29. Carl Black had reason to make regular visits to Factory A and Factory B and noticed the difference in hygiene standards in these older factories that had been subject to a continued cleaning regime for several years. Carl Black suggested to Jason Ng, the manager of Factory C, that until the teething problems in Factory C had been sorted, it may be better if the workers changed and attended to their toilet requirements in Factory A or B. Mr Ng, however, so it appears, felt that it would be better if the workers in Factory C remained in that factory.
30. Compounding the risks caused by the lack of good industrial hygiene standards is the fact that only about 100 metres east south east of Factory C was a series of compost heaps built by the chicken farm for sale to local farmers.
31. *Aspergillus fumigatus* is one of the most ubiquitous of the saprophytic fungi. Its natural ecological niche is the soil where it thrives on organic debris. Compost heaps provide a perfect breeding ground, especially as they heat up.
32. *Fumigatus* does not have an elaborate mechanism for releasing its conidia into the air, dissemination relying simply on disturbances in the environment; air currents and the like. Their small size makes them buoyant.
33. Chung Tong being just 800 metres from the sea, there would be constant sea breezes, these being ideal for dissemination.
34. It is also to be noted that there was no barrier between the compost heaps and the open windows and open doors of Factory C. By contrast, Factories A and B were both behind high walls. While those walls would not have afforded full protection from the very small buoyant conidia, they would at least have blunted the density of the conidia. Factory C had no such protection.
35. Much has been made by Cranberry Industrial of the assertion that the true cause of the fungal contamination was the failure to ensure that after each doll was tested to ensure the correct working of its internal 'water ingestion and emission system' (commonly described its 'water works') the water used to test the system was not fully dried. In the result, so it has been suggested, such water as remained in the system formed a perfect breeding ground for the fungal contamination. Water trapped in the internal workings, it has been asserted, would provide a far more likely breeding ground for fungi.
36. First, it must be emphasized that the water used to test each doll was distilled water. It was agreed that distilled water would be used as the testing medium after negotiations between the parties. While I accept that a failure to ensure good industrial hygiene practices and therefore to handle the distilled water in an aseptic manner may have led to internal fungal contamination, the true cause of any such contamination (which I am satisfied would have been minor) would not have been the fact that some distilled water residue remained in the dolls but rather that the distilled water was contaminated by a failure of good industrial hygiene practices.

37. In my professional opinion, therefore, the contamination of the dolls was almost certainly due to a combination of the following, there being no other realistic explanation –

- i. an unacceptable industrial hygiene environment and practices which resulted in the dolls contacting unsanitised surfaces and being handled by improperly washed hands;
- ii. allowing Factory C to be in such close proximity to the compost heaps which would have provided a dense source of fungi conidia, especially in the hot and humid summer months; and
- iii. failing to ensure that the factory was air-conditioned to the required level and strength so that it was not necessary to open the factory doors and windows.

38. I understand my duty to the court and have complied and will continue to comply with it. I have acted in accordance with the Code of Practice for Experts. I have read the Code of Conduct set out in Appendix D of the Rules of the High Court (Cap. 4A) and O. 38 and agree to be bound by it.

39. I confirm that I have made clear which facts and matters referred to in this report are within my own knowledge and which are not. Those that are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer.

[Please assume that the statement has been signed and dated]

Defendant's Witnesses

[Please assume that the headings and formalities for each statement comply with the relevant Practice Direction]

Witness statement of Terence Li

1. I am the Chief Executive Officer of (and major shareholder in) Cranberry Industrial Limited, a company that manufactures all types of small goods, particularly toys, for design and distribution companies. Cranberry owns a complex of three factories in the Chung Tong area of Guangdong Province.
2. Cranberry has had a long business relationship with Dixie Toys Incorporated, the Plaintiff in this matter, and, until this present litigation, it was a very harmonious and profitable relationship.
3. In October 2011, I was approached by Rae White of Dixie with a proposal for a further manufacturing contract, this time for a line of newly designed dolls called 'Dixie Babies'. Rae White said that it was planned to produce 250,000 units and, if the dolls sold well, to continue production.
4. Dixie traditionally designs a better quality of toy, more expensive than most toys but very popular in up-market stores throughout the southern states of the United States. Dixie describes itself as a 'brand name' in the toy industry and that would certainly be correct.
5. By reason of our past relationship and Dixie's high standing in the industry, it did not occur to me to seek drawings and specifications before agreeing to manufacture the new line. Our previous five agreements had all been very profitable for both Dixie and Cranberry. It was therefore orally agreed in principle that Cranberry would manufacture the 'Dixie Babies' line, it being anticipated that this would entail an initial run of 250,000 units.
6. Rae White agreed to come to Hong Kong in January 2012 to confirm the arrangement and, as with our past contracts, matters were then handed over to the technical people to agree an assembly production process, costings and the like. At the very end of December 2011, just before my family and I went skiing in Japan, my technical team brought me the figures on the proposed 'Dixie Babies' contract. The 'bottom line' looked very good for Cranberry – as good as our past contracts with Dixie – and that satisfied me. At that time I received no warnings as to potential production difficulties.
7. In January 2012, Rae White and Chuck Allard, the CEO of Dixie, came to Hong Kong and we went up to the Cranberry factory complex together. Because Factory A and B were both fully utilised, it was

agreed with Rae White that the assembly process for the 'Dixie Babies' line would take place in the new factory, Factory C. Rae White had a tour of the new factory and seemed very pleased.

8. While in the Mainland with Rae White, I obtained a set of the specifications for the 'Dixie Babies' line. On my return to Hong Kong, when I had a chance to study them in depth, I became very concerned with the viability of the internal system that allowed each doll to be given water in the mouth, the water passing through a system of coiled plastic tubes and a rubber bladder before being emitted from the doll some 60 seconds later by way of simulated urination. My concern was simple but based on extensive experience. To me, there would always be water trapped in the internal system. In my view, depending on the environment in which the dolls were kept, that could give rise to bad odours, even unwanted leakage and, of course there was the possibility of fungal contamination.
9. I therefore telephoned Rae White to discuss the matter with him. He told me not to worry, that his design people were aware of the potential problem – which he said his experts believed was more theoretical than real - but believed that use of distilled water would deal with any risk, no matter how far-fetched. For that reason, he told me, there would be a recommendation on the box to use only distilled water.
10. My concern, of course, was to ensure that the potential problems I had identified did not occur at any stage when Cranberry had legal liability for the fitness for use of the dolls, this was especially so as Dixie was insisting that, as part of the assembly process, the 'water works' of each doll should be water tested. That was why I contacted Dr Peter Ma, an old friend, and put the problem to him and his team. Dr Ma's statements accurately records what occurred between us.
11. Although Dr Ma put forward a number of practical solutions, they were all rejected by Dixie which was 'sold' on the simple solution that the use of distilled water would be sufficient.
12. I expressed my concerns to Rae White but, to be frank, our relationship had been good in the past and I did not want to spoil matters over an issue that may never materialize as a real problem. I therefore sent him the note which is reproduced in Dr Ma's witness statement.
13. I placed my trust in the expertise of Dixie. That is why, I think, I was so stung when I was informed of a massive problem with fungal contamination before even one of the dolls had reached the shops. While I naturally looked for some way of salvaging what had been

assembled, Rae White made it clear to me that the fungal contamination was too dynamic. Every last doll was unfit for sale.

14. I knew the reason of course. It was as I had feared in the beginning. But Rae White would have none of it. He came up with some fanciful idea about compost heaps situated on a chicken farm in the proximity and blamed the lack of sanitary conditions in the new factory. Yes, we had had a few hiccups there but nothing that serious, nothing that would explain the proportions of the fungal contamination that took place.

15. I was anxious to settle the matter and suggested that we should share the costs of re-assembly equally. That, I thought, was more than fair considering that I had warned Rae White at the outset what could happen. More than that, of course, the following had always been hallmarks of our agreements –

- a. Cranberry manufactured absolutely according to Dixie's plans and specifications.
- b. Dixie's supervising staff had the right to 'oversee' every step in the assembly process.
- c. In the past, if Dixie's supervisors had any concerns whatsoever about the viability of the assembly process they would share them with us and we would do our best to solve the problems with them.

16. It was for that reason that I told Rae White that Cranberry would not accept any more orders for the 'Dixie Babies' line and that the assembly line would be dismantled. Cranberry had taken a bad 'hit' financially and the company needed to begin recouping that loss.

Witness statement of Jason Ng

1. I joined Cranberry Industrial Limited in 2005 as a trainee manager. In 2008 I was appointed manager of the company's Factory A in Chung Tong and in January 2012 I was asked to take over management of the company's new premises, Factory C.
2. In that January, an agreement had been reached with a US company, Dixie Toys Incorporated, for the production of a line of dolls called 'Dixie Babies', it being agreed that the assembly line would be in the newly built Factory C. I was informed by the CEO of Cranberry, Mr Terence Li, that, all being well, there would be an initial run of 250,000 units. I had worked with Dixie Toys on several earlier occasions and understood fully how that company liked to work.
3. As to the 'Dixie Babies' line, I was aware that it contained an internal unit which became known as its 'water works' which was sophisticated in design and that part of the process of assembly of each doll would consist of testing that the water works had been correctly assembled and fitted into the torso. The testing would be done by passing water through the unit.
4. To avoid microbial contamination, only distilled water was to be used in the testing. I was responsible for seeking out and purchasing a high quality distilled water that was delivered to Factory C in sealed containers and kept in the factory storeroom.
5. The occupation permit for Factory C was obtained in December 2011 from the local authorities and we were therefore able to commence setting up the production line for the 'Dixie Babies' without delay.
6. As in the past, I was joined by a member of the production team from Dixie Toys, Carl Black, a man who I had worked with before and whom I considered a good friend.
7. While the occupation permit for Factory C was granted in December 2011, as is invariably the case with all new buildings, there were a number of 'teething problems'. In particular –
 - i. Because of the need to complete certain painting works and testing of the air-conditioning system, while the best was done to clean the factory with a small team, it was not possible to bring in a professional cleaning team until late February 2012. I

explained the difficulty to Carl Black, telling him that in any event assembly production itself would not start until well into March and that no materials would be brought into the factory until the professional cleaning had been completed, Carl Black did not raise an objection. In late February, when Carl went back to the USA for family reasons, I was able to bring in a team of professional cleaners, Apex Cleaners. The statement of the proprietor of that company forms part of the evidence in this case. Accordingly, when assembly commenced, the factory had been professionally cleaned.

- ii. On his return, Carl did mention to me on a number of occasions that the toilet area was “basic” and “not operating properly”. On one occasion he complained that toilet effluent had risen up in a toilet he was using, spilling over his shoes. On another occasion he showed me that water from the taps into the wash basins was badly discoloured. The plumbers were called in and the problem was fixed.
- iii. I further agreed with Carl that the white painting of the concrete walls in the toilet and changing areas was below standard and in late April 2012 I arranged for a re-paint.
- iv. Without doubt the toilet area caused the worst teething problems. There was undoubtedly a very bad smell coming from the toilets for much of March and April. The plumbers did their best to locate and fix the problem but experienced difficulties.
- v. On 20 April and again on 5 May 2012 there were further backwash problems that caused effluent to wash back into the toilets, spilling onto the floor. Immediately it was noticed that the effluent was washing into the assembly area itself, Carl and I closed down the assembly line. The assembly line remained closed until the problem was fixed and all staff were bused to Factory A and/or B to change and go to the toilet.
- vi. After the over-flow problem in early May had been fixed, we had no further problems with the toilet area.
- vii. I should mention that, when we started to bring materials into the area of the assembly line, we discovered that an internal wall had been built in the incorrect place. The wall had to be knocked down and a new one built. This of course caused some minor dust problems.

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8. I know that Carl was angry about these teething problems. But at no time did he suggest to me that there was below-standard hygiene that was threatening the viability of production of the 'Dixie Babies' line. As I explained to Carl on a number of occasions, factories were designed as production units and not hotels.
 9. I should also mention that at no time did Carl complain to me that the air-conditioning in the assembly area was not cool enough. The temperature was set at the same level in all three factories, A, B and C. I also mention that the windows and doors of the factory were opened in the late afternoon to catch the sea breeze at the request of the assembly line workers who found it a much more pleasant working environment.
 10. As for the location of the chicken farm, nothing was ever said of the matter. I am susceptible to hay fever and did not find that my hay fever was any worse when the factory doors and windows were opened to allow for the sea breeze.
 11. Finally, it must be said that, having worked with Carl in the past, I know that, if he ever felt that something needed to be improved or changed, whether strictly it fell under the responsibility of Cranberry or not, he would not hesitate in raising the issue with me. We never raised barriers between each other. In light of this, if Carl at any time had felt that hygiene conditions in Factory C were threatening the viability of the production line I have no doubt that he would immediately have raised the issue with me.

Witness statement by Dr. Peter Ma

1. I am the Managing Director and founder of Peter Ma Consulting Associates Limited ('my company'), a company which, for the past 15 years, has specialized in providing technical consulting services in respect of the manufacture of all types of goods. At this time, the company employs 25 professional consultants with a diverse range of qualifications and skills.
2. By qualification, I am a mechanical engineer, having obtained my doctorate through the University of New South Wales, Australia.
3. My company is regularly employed by Cranberry Industrial Limited ('Cranberry') and its associate companies to give advice in respect of difficult production matters.
4. On 16 January 2012, I was telephoned by Terence Li, the CEO of Cranberry, who was seeking advice on the proposed manufacture of a line of dolls called 'Dixie Babies'.
5. I was informed by Terence Li that the line of dolls would be assembled with an internal system that allowed them to take in water through the mouth by way of a bottle fitted with a dummy and, some 60 seconds later, to pass out the water by way of a simulated urination. The internal system that allowed this was relatively sophisticated, consisting of 3 plastic tubes called 'water pathways' which were shaped in a coil-like fashion similar to the human gut and one rubber bladder, all made to interlock.
6. When I was later shown the design drawings and specifications, it was obvious to me that special care would have to be taken with the assembly of what became known as 'the water works'. This was obviously generally accepted to be the case, hence the agreement that the water works of each doll would have to be tested as part of the assembly process.
7. Terence Li's concern, however, was that, in passing water through each doll in order to test its water works, not all of the water would be emitted. He told me that he recalled that a similar line of dolls manufactured by a rival company some three or four years earlier had run into trouble because of a failure to ensure that, after water testing, there was no water left inside the dolls.

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8. After discussion with members of my team specializing in toy manufacture, my concern with the use of distilled water was a simple one. Distilled water may be pure when it is removed from its sealed container but thereafter, like all water, it is open to the elements. To illustrate the point, my company carried out a simple test. An equal amount of tap water and distilled water were placed into two petrie dishes. Both dishes were then left outside. Within 24 hours both showed the same levels of microbial counts.
 9. Having considered the problem, my company sent a written advice to Terence Li which may be summarized as follows:
 - i. To avoid the risk of residual water left in the dolls after water testing becoming a breeding ground for contamination, it would be best for there to be no testing at all. The need for water testing could be avoided if the internal water works were re-designed. A re-design, however, one that simplified the water works, would mean that water would then pass through the system at a far greater speed, the original design being intended to avoid exactly that.
 - ii. Alternatively, there could be random testing or testing of say 1 in every 10 dolls assembled.
 - iii. If water testing was necessary in respect of each doll, the water works could be tested before being fitted into the dolls. Thereafter, before being fitted into the dolls, hot air could be passed through the water works to remove any residual water. The waterworks, as a full unit, could then be fitted into the dolls. This alternative, however, would require the generation of hot air being blown into the water works for a minimum, it was estimated, of 5 minutes. The other concern was that, in fitting the water works into the tight cavity in each doll after testing, there was the real possibility that the water works assembly may be disturbed.
 - iv. A further alternative was to assemble each doll, water test it and then put each doll into an oven with the temperature set so as not to harm the doll but to dry out the water. Thereafter, the clothing could be fitted. The estimated time, however, that each doll would have to remain in the oven would be 20 minutes and there was no certainty that all the water left within the water works would be evaporated. This would, of course, add to the cost of assembly because of the need to purchase a series of ovens and would add to the time taken to assembly each unit.

10. After submission of my company's report, Terence Li informed me that

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- i. Dixie Toys, the US company which had designed the 'Dixie Babies' line, felt that a failure to water test each and every doll would result in the risk of a commercially unviable rate of returns from customers. The 'Dixie Babies' line was a quality product and the reputation of the Dixie Toys brand was of critical importance.
- ii. Dixie Toys were also of the view that the two drying methods suggested would be too costly and time-consuming and, in the view of the senior production personnel, "entirely unnecessary".
- iii. Dixie Toys was strongly of the view that, provided distilled water was used in the water testing, that would be sufficient.

11. As there was considerable pressure to move forward with production, a short letter was composed by Terence Li to a gentleman called Rae White who, I was informed, was in charge of quality control for Dixie Toys. The letter was concessionary which I did not think was a good idea but Terence was anxious to maintain good relations. The letter read:

"When we first began to discuss this matter, I expressed concern that, having regard to the constricted design of the internal water works of each doll, water testing would inevitably leave a residue of water in each doll's water works which may be a breeding ground for bad odours or other forms of contamination. Suggestions for avoiding the risk were put before you, more specifically suggestions as to the drying of the water works after testing but before completion of assembly and packaging. You were of the view that these suggestions were costly, time-consuming and unnecessary and that the simple expedient of testing with distilled water would be sufficient. As you are keen to press ahead with production, I agree to the distilled water solution. But I must express my on-going concern as to the risks inherent in that course of action."

12. On 8 September 2012, when I was informed that large numbers of the 'Dixie Babies' shipped to the United States were contaminated with a dynamic form of fungal contamination, I made a visit to Factory C together with two associates, one being a chemist who specializes in plastics and the other an environmental specialist.

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13. At the time of the site visit, the factory was not by any means a closed, sterile environment but I believe it was good enough. The production area, the assembly line itself and tables, were all clean. It is to be remembered that the factory was not designed for food or pharmaceutical production. It was designed for the production of plastic items, toys and the like.
14. A study of the production records shows that out of 250,000 units assembled, exactly 84 were rejected because, according to the record sheets, they had: "incorrect stitching/soiled". Assuming a 50/50 ratio of rejections based on incorrect stitching or being soiled, it means that just 42 units were rejected because they had been soiled in some way. I do not consider that to be an indicator of poor industrial hygiene standards.
15. As for the proximity of the chicken farm, it is to be remembered that fungi spore – conidia – are everywhere, indoors and outdoors. This includes *aspergillus fumigatus*. Fungi feeds on decaying matter of all kinds, dead animals, rotting vegetation. It breeds in warm, humid conditions. I agree that compost heaps provide an ideal breeding ground for the propagation of spores. But it is further to be remembered that the spore is buoyant and on a brisk breeze can be carried over a much wider area than a circumference of just 100 metres. Yet no contamination has been reported from Factory A or B or indeed (in so far as it can be ascertained) from other factories in the immediate vicinity.
16. I understand my duty to the court and have complied and will continue to comply with it. I have acted in accordance with the Code of Practice for Experts. I have read the Code of Conduct set out in Appendix D of the Rules of the High Court (Cap. 4A) and O. 38 and agree to be bound by it.
17. I confirm that I have made clear which facts and matters referred to in this report are within my own knowledge and which are not. Those that are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer.

[Please assume that the statement has been signed and dated]