

Transnational Recycling Industries Pte Ltd v Semac Pte Ltd
[2003] SGHC 130

Case Number : Suit 1330/2001, 676/2002
Decision Date : 18 June 2003
Tribunal/Court : High Court
Coram : MPH Rubin J
Counsel Name(s) : Foo Maw Shen and Daryl Ong (Ang & Partners) for the plaintiffs in both suits;
Davinder Singh SC, Tan Boon Khai and Walter Thevathasan (Drew & Napier LLC)
for the defendants in both suits.
Parties : Transnational Recycling Industries Pte Ltd — Semac Pte Ltd

Contract – Breach – Whether recycling agreements between parties breached – Whether consequent termination proper – Whether damage has been suffered by parties.

1 These two actions, Suit No 1330 of 2001 ('the 2001 action') and Suit No 676 of 2002 ('the 2002 action'), involving claims and counterclaims, were heard by me over 14 days. In both the suits, the plaintiffs were Transnational Recycling Industries Pte Ltd ('Transnational') and the defendants were Semac Pte Ltd ('Semac'). Transnational's claim against Semac was for about S\$11.8 million. Both actions were, in substance, tried together and the evidence proffered in one action was by agreement used in the other.

2 From the pleadings and the facts presented, it would appear that sometime in 1998 or 1999, the Ministry of Environment, Singapore ('ENV') decided to privatise the collection of municipal waste in Singapore. For this purpose, ENV divided Singapore into nine sectors – Pasir Ris-Tampines, Bedok, Jurong, Clementi, Tanglin-Bukit Merah, Hougang-Punggol, Ang Mo Kio-Toa Payoh, Woodlands-Yishun and City and called for tenders from pre-qualified companies. Semac was one of the pre-qualified companies and was at all material times a public waste disposal collector to collect waste material from domestic and trade premises, as appointed by the Commissioner of Public Health. It was unsuccessful in its first two tenders for the sectors of Pasir Ris-Tampines and Bedok. It was, however, subsequently successful in securing the tenders for five other sectors, namely, Clementi, City, Hougang-Punggol, Ang Mo Kio-Toa Payoh and Woodlands-Yishun. As was the case, Semac teamed up with Transnational, a waste recycling company also registered with the Commissioner of Public Health in Singapore in relation to these five sectors.

3 The dispute in the two actions revolved around the acts and obligations of the parties arising from five separate written agreements entered into between them in relation to recycling services for the said five sectors. Of the five agreements, the first two were the subject matter of the 2002 action and the remaining three the subject of the 2001 action. They were:

- (a) An agreement dated 4 September 2000 under which Transnational was to carry out, inter alia, recycling services in the Clementi sector for a period of five years;
- (b) An agreement dated 21 October 2000 under which Transnational was to carry out, inter alia, recycling services in the City sector for a period of five years;
- (c) An agreement dated 21 October 2000 under which Transnational was to carry out, inter alia, recycling services in the Hougang-Punggol sector for a period of five years;
- (d) An agreement dated 11 November 2000 under which Transnational was to carry out, inter alia, recycling services in the Ang Mo Kio-Toa Payoh sector for a period of five years; and

(e) An agreement dated 11 November 2000 under which Transnational was to carry out, inter alia, recycling services in the Woodlands-Yishun sector for a period of five years.

4 For all intents and purposes, the terms of the said agreements were identical except in relation to the sector names and it would appear from the pleaded case that Transnational commenced providing recycling services for the Clementi sector from 23 April 2001 and for the City sector from 11 June 2001. As for the Hougang-Punggol and Ang Mo Kio-Toa Payoh sectors, Transnational was obliged to commence its services on 1 July 2001 and for the Woodlands-Yishun sector on 1 August 2001.

5 Except where occasion would warrant specific reference, the Clementi and City sectors will be referred to in this grounds as the "Existing sectors" and the other three as the 'Remaining sectors'.

6 Insofar as material, a few significant terms of the agreement require reproduction and they are:

1.1 Definition

...

The term "Designated Premises" shall mean all premises within the Sector at the time of the issue of the Licence and such other premises designated by the Commissioner of Public Health during the period of the Licence.

...

The term "Recyclable Materials" shall mean such recyclable waste that, without this recycling program, would otherwise have entered into the waste stream covered under the Licence for the Sector, including all types of papers (including old newspapers, magazines and books), textile and old clothing, used beverage cans, pots, pans, tins, soft toys, shoes and bags and such other recyclable materials as determined by the Registered Recycler and approved by Semac from time to time, such approval not to be unreasonably withheld.

The term "Recycling Services" shall mean the provision of regular Recyclable Materials collection services by the Registered Recycler to the Designated Premises."

...

2.1 Recycling Services

Subject to Clause 3, [the Defendants agree] to engage and [the Plaintiffs agree] to provide the Recycling Services subject to the terms and conditions of this Agreement.

...

5.1 Termination

(a) Subject to the consent of the Commissioner of Public Health, and without prejudice to any other rights or remedies which the Parties may have one against the other, this Agreement may be terminated by either [the Plaintiffs] or [the Defendants] for breach of any terms and conditions of this Agreement if the breach which is capable of remedy is not remedied within 30 days after the service of

a written notice thereof.

...

7.1 Methodology

[The Plaintiffs] shall be required to collect the Recyclable Materials in the following manner:

- (a) [The Plaintiffs] will provide the Recycling Services to all public housing units, private condominium, private apartment and landed properties covered under the Licence for the Sector ("Recycling Location"). The Recycling Services will later be offered to include tertiary institutions and commercial complexes over a period of twelve (12) months, commencing from the Commencement Date, unless otherwise directed by ENV.
- (b) The Recycling Location will be divided into twelve (12) segments.
- (c) A segment will be scheduled as a one-day collection exercise resulting in each household unit being serviced once in two (2) weeks.
- (d) The collection day will not be on a Sunday or a public holiday.
- (e) Each participating household will be provided with a plastic recycling bag of a specific colour and design as agreed between the Parties, together with a reminder notice of the next collection date, to be given at least 3 or 4 days prior to the next collection day.
- (f) The plastic recycling bag will carry the following printed instructions:
 - (i) informing the residents to place the Recyclable Materials without the need for segregation into the plastic recycling bag provided;
 - (ii) the type of recyclable materials that are currently being collected under the Recycling Program;
 - (iii) informing the residents to put the plastic recycling bag outside their doorway by 8.30 am on the scheduled collection day.
- (g) On the scheduled collection day, the authorized employees of [the Plaintiffs] will carry out door-to-door collection of the plastic recycling bags.
- (h) The door-to-door collection of the plastic recycling bags will be carried out between 8.30 am and 12.30 pm or such other time as may be agreed to between ENV, [the Defendants] and [the Plaintiffs], from Monday to Saturday, except public holidays.
- (i) The collected plastic recycling bags will be placed onto metal cage trolleys, which will then be loaded onto collection trucks, for transporting directly to the sorting and processing center in Tuas and or other location as the Parties may agree.
- (j) Subject to the prior consent of ENV and [the Defendants], [the Plaintiffs] shall be entitled to improve the methodology for the collection of the Recyclable Materials.

7.3 Non-exclusivity

The Registered Recycler will not have exclusive rights to collect Recyclable Materials from the

Designated Premises.

8.1 Methodology

The method for determining and tracking the amount of Recyclable Materials collected in the Sector shall be as follows:

- (a) Each sector serviced by [the Defendants] will be assigned a specific colour and design. All Recycling Locations will be divided into segments and all segments will use plastic recycling bags of the designated colour and design.
- (b) [The Plaintiffs] shall obtain the tare weight of each of the collection trucks loaded with twenty-one (21) metal cage trolleys from a public weigh bridge. The record of such tare weight will be available for inspection by [the Defendants] at any time and [the Plaintiffs] will produce a copy of it to [the Defendants] upon request.
- (c) The collection trucks will proceed to the segment designated for collection on that day and in the case of public housing estates, the employees will unload the metal cage trolleys at each block of the public housing estate.
- (d) The employees will collect the plastic recycling bag from door-to-door between 8.30 am and 12.30 pm and in the case of public housing estates, the plastic recycling bag will be brought down the staging point at the void deck of each block of the public housing estate.
- (e) The plastic recycling bags will be placed onto the metal cage trolleys for temporary storage and handling pending transportation to the sorting/processing center.
- (f) The employees then start loading up the metal cage trolleys filled with the plastic recycling bags onto the collection truck.
- (g) The collection truck loaded with the filled twenty-one (21) metal cage trolleys will proceed to a public weighbridge to record its gross weight for that particular trip of the day. A copy of the weight ticket is retained and presented to the sorting/processing center upon delivery of the Recyclable Materials, as evidence of the gross weight of that trip.
- (h) The sorting/processing center will keep a report which will record each delivery made by the collection truck including the program identification, truck vehicle registration number, date and time, the gross weight (as evidenced by the weight ticket) and the tare weight for that vehicle.
- (i) The difference between the gross weight and the tare weight will reflect the net weight of the plastic recycling bags, containing the Recyclable Materials, collected on that trip. This net weight shall be the basis for determining the amount payable by [the Defendants] to [the Plaintiffs].
- (j) In the sorting/processing center, the metal cage trolleys will be placed for sorting. The plastic recycling bags will be discharged onto the sorting line so that the different materials may be segregated into the respective bulk containers. [the Plaintiffs] will weigh each bulk container and will record the weight of the empty bulk container in its record kept for this purpose.
- (k) Upon completion of sorting of each batch of metal cage trolleys, each bulk container will be weighed again for its gross weight and the gross weight will be recorded in the record kept by [the Plaintiffs] for this purpose. The difference between the gross weight of a bulk container and the weight

of an empty bulk container will reflect the net weight of the Recyclable Materials in each bulk container. The total weight of all the segregated Recyclable Materials from each collection will reconcile with the net weight reported by the truck team.

(l) [The Plaintiffs] will prepare a daily report showing the total net weight of Recyclable Materials brought in by the collection trucks and the net weights of the different recyclable materials sorted for each respective program. All documents, including the weight receipt and records kept by [the Plaintiffs] in relation to the Recycling Services, will be available for review and audit by [the Defendants] and the Auditor appointed for the program at any time.

(m) [The Defendants] reserves the right, subject to consultation with and agreed by [the Plaintiffs], such approval not to be unreasonably withheld, to change the reporting requirements for determining the amount of Recyclable Materials collected by [the Plaintiffs].

(n) Subject to the prior consent of ENV and [the Defendants], [the Plaintiffs] shall be entitled to improve the methodology for the determination of the amount of Recyclable Materials collected.

...

10.4 ***Compliance with law, regulations/code of practice***

[The Plaintiffs] represents and warrants to [the Defendants] that it has complied with and undertakes that it will comply with all applicable law and regulations (including without limitation all law and regulations relating to the health and safety of the employees of [the Plaintiffs], labour laws and requirements as set out by the Ministry of Manpower, requirements of the Land Transport Authority), code of practice/guidelines/directions from ENV, if any."

7 As it happened, matters did not proceed smoothly. Soon there was discord, arguments bred bitterness and bitterness led to the actions now being addressed. In order to understand the issues that require resolution in the disputes between the parties, it would be necessary to briefly set out the parties' respective averments in their pleadings in both actions.

2001 action – Remaining sectors

8 In respect of the 2001 action concerning the Remaining sectors, the allegation by Transnational was that Semac had evinced an intention not to be bound by the relevant agreements and repudiated them. Particulars provided by Transnational in its statement of claim read:

8. By the Defendants' conduct as particularised herein, the Defendants have evinced an intention no longer to be bound by the Agreements and have repudiated the same.

PARTICULARS

(1) At a meeting on 11 June 2001, held between the Plaintiffs and the Defendants, the Defendants informed the Plaintiffs that the Defendants would be engaging another recycling company to carry out the recycling programs for each of three Sectors in questions. This was reiterated in a letter dated 11 June 2001 sent by the Defendants to the Plaintiffs;

(2) At the meetings held on 26 July 2001 and 23 August 2001 respectively, between the Plaintiffs and the Defendants, the Defendants again reiterated that they would not be honouring/complying with their obligations under the Agreements;

(3) On or about 1 July 2001, an article appeared in the Straits Times, wherein it was stated that the recycling programs in the three Sectors would be carried out by Semac Recycling;

(4) Since July 2001, the Defendants had put in place the necessary mechanisms and the publicity for the recycling programs to be carried out by Semac Recycling, in place of the Plaintiffs, for the three Sectors in question. In fact, Semac Recycling had carried out such recycling programs in the three Sectors, in place of the Plaintiffs.

9 Transnational averred that, as it was entitled to do, it accepted Semac's repudiation and claimed damages for \$8 million, comprising \$1.9 million for expected profit from sale of recyclable materials and \$6.1 million for amount receivable under cl 6 of the respective agreements entered into between them. (The final claim, however, was more. In relation to the Remaining sectors, the amount actually claimed was \$8,761,426).

10 As regards the 2001 action, Semac's declared position was (paras 7 and 8 of the amended defence) that in or about late May and early June, Semac decided, as it was entitled to under cl 7.3 of the agreements, to engage another recycling company to provide recycling services concurrently with the plaintiffs in the Remaining sectors. It averred that this decision was conveyed to Transnational during a meeting held on 11 June 2001 as well as in a letter dated 11 June 2001 from Semac to Transnational. On or about 26 July 2001 and 23 August 2001, Semac further confirmed that it would be engaging another recycling company to provide recycling services in the Remaining sectors concurrently with Transnational. Semac averred that since 1 July 2001, Semac Recycling Pte Ltd ('Semac Recycling') began preparations to provide recycling services in the Remaining sectors. Semac maintained that cl 7.3 of the agreements provided that Transnational 'will not have exclusive rights to collect Recyclable Materials' from the premises in the sectors. Alleging breaches on the part of Transnational (see para 16 to 25 of Semac's amended defence and counterclaim filed in the 2001 action), Semac counter claimed against Transnational for damages and other relief.

11 Transnational in its reply and defence to counterclaim – amended on 30 October 2002 – denied that Semac was entitled to the position claimed by it, contending that cl 7.3 of the agreements did not confer on Semac any right to engage another recycling company to provide recycling services under the agreements. It further averred (see para 3 (1) of their reply and defence to the counterclaim) that at about the time the agreements were executed, the understanding between the parties was that Transnational would be the recycling company to provide the recycling services for all the sectors and cl 7.3 of the agreement (which provided that "[t]he Registered Recycler will not have exclusive rights to collect Recyclable Materials from the Designated Premises") was included in the agreements on the understanding that the *karang gunis* operating in the sectors were beyond the control of both parties.

2002 action – Existing sectors

12 In respect of the 2002 action concerning the Existing sectors (Clementi and City), Transnational averred (paras 3 to 11 of the statement of claim) that under the terms of the agreements, it was told by Semac to commence recycling services with effect from May 2001 for the Clementi sector and from 1 June 2001 for the city sector. But whilst Transnational was still providing such recycling services pursuant to the agreements, Semac by its letter dated 12 March 2002, wrongfully terminated and repudiated the said agreements. The termination according to the said letter was to take effect on 15 April 2002. Transnational accepted the said repudiation by their letter dated 19 March 2002 and claimed damages. (The sum claimed as damages for the existing sectors was \$3,125,334). The said letters dated 12 March 2002 from Semac and the reply from Transnational dated 19 March 2002 read as follows:

(a) 12 March 2002

Transnational Recycling Industries Pte Ltd

No. 22 Tuas Avenue 2

By Fax & Registered Post

Singapore 639453

6897 8488

Attention: Mr Daron Liew

Dear Sir,

Recycling Agreements for City and Clementi Sectors between Semac Pte Ltd ("Semac") and Transnational Recycling Industries Pte Ltd ("TRI")

We refer to our letter dated 25th June 2001 and the Recycling Agreement for the Clementi Sector dated 4th September 2000 and the Recycling Agreement for the City Sector dated 21st October 2000 ("the Recycling Agreements").

Pursuant to clause 5.1(a) of the Recycling Agreements read with clause 14(a), by our letter of 25th June 2001, we put you on notice that you are in breach of various terms and conditions of the Recycling Agreements.

To date, these breaches have not been remedied.

Therefore, with the consent of the Commissioner of Public Health, we have decided to terminate the Recycling Agreements with you pursuant to clause 5.1(a) of the Recycling Agreement.

So that you will be able to make the necessary arrangements, the termination will take effect on 15th April 2002.

Yours faithfully

(signed)

WONG KAN POR

Executive Vice President/General Manager

Semac Pte Ltd

...

(b) 19 March 2002

Our Ref DL/L075/02/TRI

Semac Pte Ltd

3 Lim Teck Kim Road

#08-01 Singapore Technologies Building

Singapore 088934

Attention: Ms Loh Wai Kiew/Mr Wong Kan Por

Dear Sirs

Recycling Agreement for City and Clementi Sectors between Semac Pte Ltd ("Semac") and Transnational Recycling Industries Pte Ltd ("TRI")

1. We refer to your letter of 12 March 2002.
2. We disagree with your purported bases for termination of the agreements of 4 September 2001 and 21 October 2001 (the "Agreements") effective 15 April 2002. We are of the view that your termination of the Agreements was wrongful.
3. Nevertheless, we accept your repudiation of the Agreements. As per your request, please let us know what arrangements you wish to be made come 15 April 2002. We reserve all our rights including our right to state our position in full at the appropriate stage and forum.

Yours faithfully

Transnational Recycling Industries Pte Ltd

(signed)

DARON K W LIEW

Chairman/Chief Executive Officer

13 Semac's defence was that it was Transnational who breached the terms of the agreements. Particulars of the alleged breaches on the part of Semac were set out in para 3 to 5 of Semac's amended defence and counterclaim and they read:

3. The Plaintiffs breached the terms set out in paragraph 2 above.

Particulars of Breaches

(i) In breach of clause 2.1 of the Recycling Agreements, the Plaintiffs failed to provide and/or adequately provide Recycling Services in that they failed to collect:-

(a) Recyclable Materials namely glass and plastics which were generated by the households participating in the recycling program. By their facsimile dated 21 August 2000, the Plaintiffs admitted that they were obliged to collect, inter alia, glass. Despite repeated requests and reminders by the Defendants to do so, the Plaintiffs refused to collect glass and plastics. The particulars of the Defendants' requests and reminders are set out in paragraph 5 below; and

(b) Recyclable Materials from HDB premises within the City and Clementi Sectors. A list of the said HDB premises is set out in Annex 1 hereto.

- (ii) In breach of clause 7.1(i), the Plaintiffs, *inter alia*, did not place the collected recycling bags onto metal cage trolleys on the collection trucks for transport to the sorting and processing centre.
- (iii) In breach of clause 8.1(a), the Plaintiffs failed to ensure that all Recyclable Materials collected were collected in plastic bags of the colour and design assigned to each Sector. The Plaintiffs were concurrently involved in other recycling programs in the City and Clementi Sectors. This breach made it impossible for the Defendants to identify which Recyclable Materials had been collected under the Defendants' recycling program. Given that the Defendants were obliged under clause 6.1(a) to pay the Plaintiffs for the weight of the Recyclable Materials collected, this made it impossible for the Defendants to verify the Plaintiffs' claim for payment.
- (iv) In breach of clause 8.1(I), the Plaintiffs failed to prepare a report showing the total net weight of recyclable materials brought in by collection trucks and the net weight of the different recyclable materials sorted for each respective program on a daily basis and/or failed to provide such a report to the Defendants upon their request.
- (v) In breach of clause 10.4, the Plaintiffs failed to comply with various codes of practice / guidelines / directions issued by the Ministry of Environment ("ENV") in respect of:-
- (a) the collection of glass and plastics. The Plaintiffs did not at any time collect glass and plastic;
 - (b) the provision of an operations plan with a timetable for collection of recyclable materials and the location covered by collections on a particular day. The Plaintiffs failed to provide such plans on a timely basis or at all;
 - (c) the provision of 2 recycling bags and the use of deep recycling bags. The Plaintiffs distributed 1 recycling bags to each household;
 - (d) the replacement of recycling bags on the date of collection. TRI refused to issue fresh recycling bags on the date of collection;
 - (e) the provision of a carton/plastic box to each HDB/landed property household to hold the 2 recycling bags. The Plaintiffs failed to provide such cartons/plastic boxes; and
 - (f) the compilation and completion of the return on recycling for HDB flats and landed properties, illustrating the location and number of households involved, the weight of each type of recyclable materials collected and the participation rates, once each cycle of collection of recycling materials was completed. The Plaintiffs failed to provide such returns on a timely basis or at all.

4. Full particulars in respect of ENV's codes of practice / guidelines / directions are set out in paragraph 5 below.

5. Between May and October of 2001, the Defendants notified the Plaintiffs to remedy the breaches referred to in paragraph 3 above. The Plaintiffs wrongfully failed to do so.

14 Transnational in its reply (amended on 30 October 2002) averred that the breaches relied on by Semac were not material breaches (para 3) and at any rate (see paras 4 and 5 therein) that under cl 5.1 (a) of the agreements, it was a condition precedent that a 30-day notice in writing be given before the right of termination conferred under the said clause could be exercised. Transnational

maintained that inasmuch as such a written notice in compliance with the said clause was not given to them, Semac's claims were flawed for want of fulfilment of the said condition precedent.

Evidence - Transnational

15 As stated at the outset, the evidence adduced by witnesses in one suit could be used for the purposes of the other suit. As for Transnational, there were altogether four witnesses: Mr Daron Liew Kuan Wye ('Daron Liew'), their chairman and chief executive officer, Ms Irene Chan Geok Lian ('Irene Chan'), their operations manager, Ms Ng Soh Cheng ('Ng'), their finance manager and Mr John Nolan, an expert witness for Transnational, presently a director of an Australian company known as Nolan-ITU Pty Ltd.

16 The evidence of Daron Liew, insofar as was material, was to the following effect.

17 He is an accountant by profession and was not new to recycling. In 1977, he started a business known as Metascrap, a company specialising in the collection and recycling of scrap metal. Metascrap was converted into a private limited company and its name was changed on 21 June 1999 to Transnational Recycling Industries Pte Ltd. Transnational became a registered recycler with ENV on 28 July 2000. Subsequently, he initiated discussions with Mr Cheong Quee Wah, the president of Sembcorp Waste Management Pte Ltd ('SembWaste') to explore the possibility of Transnational collaborating with them in respect of tenders called by ENV in connection with the Singapore Government's decision to privatise refuse collection. Discussions ensued between the parties. In the course of the discussion, he came into contact with one Kelly Landrum from Semac's side. Kelly Landrum and Daron Liew were directly involved in the negotiations on the terms of the agreements that were finally signed between the parties.

18 During discussions, Daron Liew proposed that the amount to be paid to Transnational for each tonne of recyclable materials collected, be 80% of the prevailing ENV's waste disposal fee. At that time, ENV charged a sum of \$67 as waste disposal fee for each tonne of waste incinerated. The sum payable to Transnational worked out to \$53.60. Kelly Landrum was agreeable to this. In the event, a draft agreement was received by him from one Ms Yee Pui Phing, a legal officer from SembWaste.

19 After going through the draft agreement in its entirety, it was clear to Daron Liew that the parties were intent on entering into a binding agreement to carry out recycling services for the entire sector in question for five years, unless the agreement was terminated under cl 5 therein. In other words, the relationship between the parties was meant to be exclusive. As a result, he took the view that the proposed inclusion of a non-exclusivity clause would not be helpful. So he called Kelly Landrum and told him about his proposal to delete cl 7.3. The reply from Kelly Landrum was that it was a standard clause stipulated by ENV to be included in any contract that was to be entered between the public waste collectors and the registered recycler. Kelly Landrum told him that he could well understand the need for such a clause, for there was no constraint on the *karang gunis* operating in the sector by either the Government/ENV or the public waste collectors, or for that matter, any other party. Kelly Landrum further clarified that without the inclusion of cl 7.3, it would have required Semac and ENV to prohibit the collection of recyclable materials by the *karang gunis* and any other third party, and that would have been an impossible task.

20 Daron Liew said that he understood the issue relating to the *karang gunis*, as Transnational had encountered the same problem in one of their first projects. He was also fully cognisant of the social and political dimension to the issue of *karang gunis* – by reason of the implementation of the recycling programme, the *karang gunis*, who have traditionally been the collectors of recyclable items, were potentially being deprived of their regular source of livelihood.

21 Daron Liew and Kelly Landrum also talked about the categories of recyclable materials that were to be collected. At the outset, he told Kelly Landrum that he could not agree to having glass and bottles included in the list of recyclable materials. He told him that from his previous experience, there was little resale value for such material. He told Kelly Landrum further that Transnational would be agreeable to subsequently including glass and plastic as the recyclable materials to be collected, if suitable buyers were found for them in the course of carrying out the recycling programme. Kelly Landrum appreciated the difficulties and was agreeable to the proposed exclusion. According to him, Kelly Landrum reassured him that it was not the intention of Semac to have two recyclers collect different recyclable materials from the premises in the same sector since such a scenario did not make commercial sense.

22 On various dates ie, 17 November 2000, 14 December 2000, 9 January 2001, and 7 February 2001, Transnational was informed by Semac that the latter had been awarded the public waste collection licence by ENV for the Clementi, City, Hougang-Punggol and the Woodlands-Yishun sectors. Transnational was then asked by Semac to plan the recycling programmes for the said sectors and consequently Transnational made the preparations for the roll-out of the recycling programmes (see para 84 of Daron Liew's AEIC).

23 Semac provided Transnational with details of boundary, street names and household numbers in relation to the Existing sectors (Clementi and City) but details were not forthcoming from Semac in relation to the Remaining sectors. He said that the recycling programme for the Clementi sector commenced on 23 April 2001 for the landed properties and on 2 May 2001 HDB units, respectively.

24 On 5 May 2001, Irene Chan sent an e-mail requesting Semac to forward to Transnational, the details concerning Remaining sectors. But to Daron Liew's surprise, on 22 May 2001, Wong Kan Por of Semac wrote to Transnational stating, 'We have received some negative feedback on the recycling programme and would like to inform you that our senior management is reviewing our collaboration with your company'. Since the recycling programme for the City sector had yet to start, and as the programme had only been in effect in the Clementi sector for about a month, he was surprised by the contents of this letter. As such, he immediately asked his executives to look into this matter. No proper explanation was forthcoming from Semac. In the result on 11 June 2001, he and his team of executives had a meeting with the executives of Semac. He was much taken aback by the conduct of Semac's team at this meeting. They seemed to be looking for reasons to renege on their obligations under the agreements with Transnational.

25 On 13 June 2001, Transnational received two letters from Semac. The first dated 11 June 2001 read: "We write to inform you that we will be engaging another recycling company to carry out recycling activities in Hougang-Punggol, Ang Mo Kio-Toa Payoh and Woodlands-Yishun. We will let you have the demarcation of boundary shortly". The other letter dated 13 June 2001 said that Transnational had failed to comply with ENV's requirements and Semac's requests despite repeated reminders.

26 On 21 June 2001, an e-mail was sent by Semac to Transnational, enclosing a list of street names and the number of household units on each of the streets, for the latter to carry out the recycling programme in each of the Remaining sectors. Daron Liew noted that for each of the Remaining sectors, the number of units assigned to Transnational amounted to roughly 1% or less of all the household units within each of the said sectors. Subsequent developments confirmed to him that a subsidiary of SembWaste had started its recycling programmes in the Remaining sectors.

27 By its letter dated 25 July 2001, Semac enquired as to when Transnational would commence the recycling programme for the premises designated by them. The reply from Transnational was that

since Semac had, by way of their letter dated 11 June 2001, purported to terminate the agreements in relation to the Remaining sectors, a clarification was required as to how Semac actually intended to proceed.

28 Two meetings took place between the parties on 26 July and 23 August 2001 since then. According to Daron Liew, at the meeting of 26 July 2001, one Jack Chuang of Semac told them, amongst other things, that Semac was unable to work with the agreement as it was one that was unfair. At the meeting on 23 August 2001, Jack Chuang insisted that Semac would not work with Transnational.

29 Given what had transpired, Daron Liew did not see any point in continuing with the relationship under the agreements in respect of the Remaining sectors. As such, on 9 October 2001, Transnational wrote to Semac setting out the events which had transpired with regard to the Remaining sectors and intimated that Semac's conduct was clearly in repudiatory breach of the agreements and that Transnational accepted the repudiation and sought to claim damages as a result.

30 Daron Liew said that had Kelly Landrum confirmed or given him the understanding that Semac had a right to appoint other recyclers along with Transnational, he would never have executed the agreement in those terms, nor agreed to the said clause. He also said that the pricing formula proposed by him and agreed upon was made on the understanding that there was going to be an exclusive relationship between the parties; if not, he would have proposed a different pricing formula. He said that Semac should not be allowed to resile from the agreements. He added that as a consequence of Semac's breaches, Transnational had suffered damages. He said that the damages aspect and the computation in relation thereto would be dealt with by Ms Ng and Mr John Nolan.

31 Irene Chan, the operations manager of Transnational had affirmed two affidavits of evidence in-chief, one in respect of the 2001 action and the other in respect of the 2002 action. The main aspects of her evidence can be summarised as follows.

32 She essentially oversaw all operational aspects of the recycling programmes carried out by the plaintiffs. According to her, shortly after Transnational was informed that Semac had been awarded the ENV tender for public waste collection, licence for the Clementi sector planning on the operations aspects of the recycling programmes in relation to that sector commenced. The Clementi sector comprised approximately 55,000 HDB units and 10,000 landed units. She said that Transnational's practice in their earlier recycling programmes was to give each household a recycling bag with an instructional pamphlet and an introductory letter. However, on or around 16 March 2001, Semac requested the distribution of a mini-bin in a yellow plastic bag, along with an A4- sized envelope to contain the introductory letter and recycling bag to form a 'Recycling Kit'. No reason was given by Semac for that request. Yet Transnational, out of goodwill, agreed to the A4 envelope and absorbed the cost for it. However, they could not do the same for the mini-bin and yellow plastic bag as the cost factor was quite significant. Therefore, Transnational suggested that Semac provide them at their cost. However, these items were eventually abandoned since Semac was unwilling to provide the funds even though Semac was the party who had suggested it in the first place.

33 On 4 April 2001, there was a meeting between the parties and Irene Chan was present at that meeting. The most contentious issue was whether Semac should be billed for newspapers collected by Transnational. This appeared to be a major issue given the fact that Transnational was paid according to the tonnage of recyclable materials collected, and newspapers constituted a substantial part of the total weight of all recyclable materials collected. Semac's representatives contended that newspapers did not enter the waste stream and hence did not constitute waste. It

was Semac's opinion that residents preferred to sell their old newspapers to *karang gunis*.

34 Daron Liew, who happened to be in the adjoining room, came by and told Semac's representatives that the issue had already been agreed to by Semac in the agreements. This explanation was grudgingly accepted by Semac's representatives. In the event, the recycling programme for Clementi was eventually rolled out on 23 April 2001 for the landed units and on 2 May 2001 for the HDB units, as planned.

35 In connection with the planning of operations for the Remaining sectors, on 9 March 2001, Transnational sent a letter to Semac requesting the list of HDB units, landed units, condominiums, schools and the maps and boundaries of the sectors. Reminders were sent in April, May and June 2001. Semac did not respond.

36 In paras 33 to 99 of her principal affidavit of evidence-in-chief, Irene Chan purports to narrate how accommodating Transnational was in relation to its dealings with Semac. These are too long to be repeated here and it would suffice if I said that she claimed that Transnational was not the party in default. She further maintained that Semac's allegations that Transnational had failed to comply with their obligations under the agreements were ill-founded.

37 The evidence of Ng, the financial manager of Transnational, was in relation to the amount Transnational would have been entitled to claim had the five recycling agreements continued for their entire duration. A few aspects of her evidence require highlighting. According to her, the participation rates by the households in the recycling programme was 20% in five sectors but this would rise to 50% by January 2004. In relation to the collected bag weight of recyclable materials, the current weight of 4kg would rise to 5kg by July 2005. Also in relation to composite sales price of recyclable materials, she opined that the current price which is \$221.40 would rise to \$250 by July 2002 per metric tonne. A summary of her assumptions and the basis of her computation of Transnational's claim appears at page 24 of her affidavit of evidence-in-chief in respect of the 2001 action. Based on those assumptions, her views as expressed in paras 18 and 19 of her affidavit of evidence in chief in the 2001 action were as follows:

18. Had the Recycling Agreements been performed by the Plaintiffs for the Remaining Sectors, the Plaintiffs would be entitled to the following amounts:

Net profit from sales of materials:	S\$2,891,935
Contribution from avoided Disposal	S\$5,869,491
Total:	S\$8,761,426

19. Had the Recycling Agreements been performed by the Plaintiffs for the Other Sectors, the Plaintiffs would be entitled to the following amounts:

Net profit from sales of materials:	S\$1,221,116
Contribution from avoided Disposal:	S\$1,904,218
Total:	S\$3,125,334

38 Mr John Nolan's expert opinion based on the figures given in the affidavit of Ng, insofar as is material, is best stated in his own words. The relevant segments of his opinion as appears in paras 6

and 7 of his report are as follows:

6 Assessment of Assumptions

In the calculation of the claim as presented in Section 4, several assumptions have been used to model the expected material yields and values during the disputed period. These assumptions are as follows:

Participation Rate – increasing from 20% to 50% over the contract periods.

Average Bag Weights – increasing from 4kg to 5kg over the contract periods.

Composite Price of Materials (based on Average Mix of Materials) – increasing from a base of \$211.70/t in July 2001 through to a projected \$250/t.

These assumptions are outlined and assessed below. Factors considered to be constant include:

Household numbers in the designated areas; and

The 80% contribution rate of the avoided waste disposal costs per tonne of material collected.

6.1 Participation Rates

In the data projections, initial participation rates are based on the historical data of participation rates recorded for the Clementi and City Sectors. In the projections it has been assumed that householder participation would have continued to increase in these two sectors, and that the remaining three sectors would have shown very similar participation patterns.

In addition, if Transnational Recycling Industries were the sole collector in these areas under the amended legislation which comes into effect on 1 October 2002 (refer to Section 6.4, b), the recorded participation rates would increase, as householders would not be utilising other collection services in the designated areas.

A conservative estimate of the participation rates for fortnightly recycling collection systems in Australia is 80% (Nolan-ITU, 2000). With continued education and service provision, therefore, Nolan-ITU considers the projected participation rate upper limit of 50% to be achievable and conservative within the contract time periods.

6.2 Average Bag Weights

During the active contract period in the Clementi and City Sectors, average bag weights were recorded, and in both areas it has been demonstrated to Nolan-ITU that the bag weights have averaged between 4.88kg and 5.15kg per bag.

Studies carried out by Nolan-ITU in Victoria, Australia have demonstrated that weekly bag collection systems resulted in an average of 3.01kg per household per week (averaged across all participating and non-participating households) (Nolan-ITU, 1998). With a fortnightly system which also includes additional materials that are not collected in Australia, this yield would be expected to be higher. Therefore the initial projected mass of 4kg per bag utilised in the calculation of the claim is considered to be conservative. The subsequent increase from this conservative starting point up to 5kg per bag

at the end of the contract period is also therefore conservative.

From the historical data and the commitment of Transnational Recycling Industries to on-going education programs, it would be expected that the actual average bag weights may have exceeded these projected weights. In addition, it would be expected that with increasing waste generation rates (average of 3.03% per year, Ministry of Environment 2000) that the generation of recyclables would also increase, leading to a further increase in bag weights over the contract period.

6.3 Composite Price of Sorted Materials

Transnational Recycling have recorded data on the tonnes of materials collected during the active contract period and the sale price from these materials. Nolan-ITU has worked through in detail the modelling and projection of the composite price of materials. The Nolan-ITU calculated composite price based on historical material compositions and historical market prices for the period August 1999 to August 2002 for the respective materials is S\$258/t. No attempt has been made to index this figure according to CPI increases or other inflationary indicators. Therefore, the composite material price utilised in calculating the claim is considered to be conservative.

6. Other Factors Considered

Nolan-ITU have also considered the following factors in the assessment and verification of the claims.

a) Householder Education

In the projections of increasing participation rates and yields, an assumption has been made that on-going and effective education of householders as to materials designated for collection and collection dates would continue throughout the contract period. This would be backed by education and promotion from the Ministry of the Environment through the National Recycling Programme, the 'Clean and Green Week' program and environmental education programs as outlined in the Green Plan 2012.

This is considered a fair and reasonable assumption, as the commitment to education from Transnational Recycling Industries was carried out during the active life of the contracts in the Clementi and City sectors. The implementation of commitments of government as outlined in the Green Plan 2012 to broad education is also considered a fair and reasonable assumption.

It is the opinion of the independent consultants, that the education programs, bag labelling and promotion could be improved in Singapore, and would result in even higher participation and yields. The projections of increased participation and bag weights based on the above assumptions are therefore thought to be conservative compared to the potential if education methods were improved.

b) Effect of the Amended Legislation

It is understood by Nolan-ITU that currently several recycling collectors can be operating in one collection area, in addition to 'rag and bone' men who also collect materials from householders and in some cases from recycling bags which have been set out for collection. This situation would be expected to reduce the recorded participation rate by a single collector (as some householders may be utilising a different collection system) and reduce the average bag weight collected due to pilfering.

Nolan-ITU understands that on 1 October 2002, the *Environmental Public Health (General Waste Collection) (Amendment) Regulations 2002* will come into operation. Under this new legislation,

permits must be obtained to collect recyclables from any premises, and only one permit will be issued for each collection area. It would be expected that with the introduction and enforcement of this regulation the recorded participation rates would increase for the licensee, as residents would not be utilising other collection systems and bags in those areas.

The modelled projections of increased participation are therefore considered reasonable and conservative in the light of the potential effect of the implementation of the *Environmental Public Health (General Waste Collection) (Amendment) Regulations 2002*.

c) Direct Operational Costs

Nolan-ITU understands that Transnational Recycling Industries have actual operational costs incorporated into their claim. Nolan-ITU feels that it is not in a position to assess and verify Transnational Recycling Industries' operational cost structure, as it has no direct experience with their specific recycling collection, transport and sorting operations. Therefore, Nolan-ITU expresses no opinion in regard to the direct operational costs utilised in calculating the claim.

7 Conclusions

Nolan-ITU have independently checked, verified and assessed the assumptions made in the modelling and projections of the expected outcomes of the five terminated contracts if they had each been continued to the end of the contract period.

From this assessment and verification, the following conclusions have been reached by Nolan-ITU:

The projected participation rate utilised in the calculation of the claims are considered to be reasonable and conservative;

The projected average bag weights utilised in the calculation of the claim are considered to be achievable.

The projected composite price range of materials utilised in the calculation of the claim is considered to be reasonable and conservative.

39 So much for the evidence presented on behalf of Transnational. The aspects which emerged in cross-examination would be referred to if warranted at the appropriate stage.

Evidence – Semac

40 For Semac there were five witnesses. They were Ms Yee Pui Phing ('Ms Yee'), their in-house legal counsel, Mr Wong Kan Por ('Wong Kan Por') their general manager and executive vice president, Mr Toh Hean Siong ('Toh'), their former operations manager, Mr Jack Chuang ('Jack Chuang'), the chief operating officer of SembWaste and Mr Rick Reidinger ('Reidinger'), the deputy managing director of an environmental consulting firm in Singapore known as Environmental Resources Management (S) Pte Ltd, Semac's expert witness.

41 Ms Yee's evidence can be summarised as follows.

42 She was the person who drafted all the recycling agreements with input from Daron Liew and Kelly Landrum. She outlined how Semac came to be awarded the tenders for the Existing and Remaining sectors. She said that sometime in the year 2000, ENV introduced a recycling component and as a result the public waste collectors that included Semac were required to team up with a

registered recycler to provide recycling services to the residents in the relevant sectors. ENV's policy was to promote household recycling on a nation-wide basis. According to her, the co-operation between the public waste disposal company and the registered recycler was premised upon the following principle: the more recyclable materials removed from the waste stream, the less dumping/waste disposal fees incurred by the waste disposal companies. The waste disposal companies will thus be able to share their cost savings with the registered recycler. As such, it became a condition of public waste disposal tenders that the tenderer enter into a contract with a registered recycler.

43 Dealing with the Non-exclusivity clause (cl 7.3), she said that it was one of the standard clauses which ENV required the public waste collectors to incorporate into the contracts with the registered recyclers. This requirement was one of the tender conditions imposed by ENV. Consequently, when Daron Liew made a request to her sometime in August 2000 for a change to cl 7.3 and wanted Transnational to be appointed as the exclusive recycler, she did not agree to it. She explained to Daron Liew that it was not Semac's policy to grant exclusivity and that in any case, it was an ENV requirement and therefore non-negotiable. She also informed Daron Liew that as long as Transnational was rendering its services satisfactorily, there could be no reason for Semac to appoint another recycler. Daron Liew accepted her explanation. The agreements were then signed.

44 In this connection, she also referred to Kelly Landrum's e-mail dated 25 August 2000 addressed to Daron Liew which stated: "The contract states that the Recycler will not have exclusive right to collect recyclable materials, however, we currently have a strong preference towards not using more than one Recycler for the sector". Daron Liew neither challenged nor disputed what was stated in the said e-mail. Miss Yee added that Kelly Landrum resigned his consultancy with Semac on 23 July 2001 and left Singapore on 2 September 2001. He is now living in the United States of America.

45 According to Miss Yee, not long after Transnational commenced its recycling operations in the Clementi sector, Semac received negative feedbacks on Transnational's recycling programme. There were many complaints and Transnational's poor conduct of the recycling programme was hurting Semac's reputation. As a result, steps needed to be taken to resolve or mitigate the problem. Consequently, Semac's management discussed the matter internally and considered exercising its rights under cl 7.3 to appoint another company to work in the Remaining sectors. Semac took the decision to appoint an additional recycler in the Remaining sectors, but did not do the same for the Existing sectors where the recycling services had already commenced. The reason was that by 11 June 2001, Transnational had implemented its programme in the Existing sectors. Semac felt that the introduction of another recycler at short notice would have confused the residents in the sectors. Given that Transnational had just commenced its recycling services in the Existing sectors, Semac considered it was best not to disrupt the status quo for the time being.

46 On 11 June 2001, there was a meeting at Semac's premises between parties. The purpose of the meeting was to inform Transnational about its breaches and Semac's intention to appoint another recycler to work concurrently with Transnational. At the commencement of the meeting, Miss Yee and Wong Kan Por reiterated Semac's concern over the collection of old newspapers, in the context of recent publicity about how the recycling programme underway was depriving the *karang gunis* of their livelihood. Daron Liew remarked that *karang gunis* would go out of business very soon. Miss Yee expressed her concern that in that event, the newspapers would go into the waste stream collected by Semac.

47 In para 59 of her affidavit of evidence-in-chief, Ms Yee said:

59. Semac referred to the various breaches by TRI [Transnational] including:-

(a) TRI's persistent refusal/failure to place 2 recycling bags instead of one bag per household, and to replace the recycling bag immediately upon collection with a fresh bag, despite ENV's requirement and Semac's requests. TRI would insist on distributing only 1 bag per unit, and replacing the bag about ¾ days before the next collection date, rather than immediately upon collection of the old bag. TRI's excuse was that giving a replacement bag closer to the next collection date would serve as a reminder to residents. Semac did not agree. As the collection date was already printed on each bag, no further reminder should be necessary. Also, not replacing the bag immediately in fact meant a lesser amount of recyclable materials that could have left the waste stream. Unlike newspapers which could be neatly stacked in a corner, other recyclable materials (such as glass, plastic, metal containers, soft toys) would be more readily stored (and taken out of the waste stream) if deep recycling bags were made available to residents at all times. Hence, the requirement for 2 deep recycling bags to be immediately replaced upon collection;

(b) TRI's persistent refusal/failure to collect glass and plastic, despite ENV's requirement and Semac's requests. At the meeting on 11 June 2001, Mr Liew again told us that TRI would collect glass and plastic, but this was not borne out by subsequent conduct;

(c) TRI's persistent refusal/failure to submit its returns (together with supporting documents) on time, as well its refusal/failure to submit complete returns, despite ENV's requirement and Semac's requests. TRI was often late in submitting its daily reports/weekly returns to Semac, compiling its daily reports showing the collection data, and the breakdown of recyclable materials brought in by the collection trucks, and the net weight of the materials once sorted. The details were also not complete, and Semac had to constantly chase TRI for the missing information; and

(d) TRI's refusal/failure to provide a carton box, despite ENV's requirement and Semac's requests.

48 When Semac informed Transnational that another recycler would be appointed and it would let Transnational have the demarcation boundaries shortly, Daron Liew remarked that the recycling agreements were exclusive. Miss Yee disagreed at once and reminded him that cl 7.3 was a standard condition imposed by ENV. Daron Liew's response was that he would seek legal advice on it and in the meantime, he would reserve his rights. Commenting on an alleged notes of the said meeting produced by Transnational, Miss Yee said that those minutes were contrived. She then outlined how the rift widened between the parties and the exchange of letters in relation to the matter.

49 In the result, on 13 November 2001, in view of Transnational's persistently unsatisfactory performance as the appointed recycler, Semac sought consent from ENV – as required under cl 5.1 (a) of the agreement between the parties – to terminate the recycling agreement for the Existing sectors. By its letter dated 4 March 2002, ENV consented to the termination of the agreements for the Existing sectors. By its letter dated 12 March 2002, Semac terminated the agreements for the Existing sectors (see para 12 herein for Semac's letter dated 12 March 2002 and the reply dated 19 March 2002 from Transnational).

50 As regards the Remaining sectors, Ms Yee averred that about four months after Semac had sent its letter dated 11 June 2001 to Transnational, stating that Semac would be engaging another recycling company to carry out the recycling activities in the Remaining sectors, Transnational wrote to Semac on 9 October 2001, alleging that Semac had repudiated the recycling agreements for the Remaining sectors. The said letter purported to accept Semac's alleged repudiation, thereby terminating the recycling agreements for the Remaining sectors. According to Ms Yee, as far as she was aware, no consent from ENV was sought by Transnational for the purported termination. She

then dealt with the invoices rendered by Transnational for the Existing sectors. She said that Semac was not provided with satisfactory supporting documents for the said invoices. She denied that Semac was unreasonable in this regard. In any event, Semac had paid the full amount claimed by Transnational by 14 May 2002.

51 She maintained that Transnational's present claims were without basis. Touching upon the counterclaim of Semac, she said that Semac had been incurring huge losses as a result of Transnational's breaches which would be dealt with by her colleague Wong Kan Por.

52 Wong Kan Por's evidence was in many respects a repeat of what Ms Yee said in her testimony. After narrating the background of the tender exercise and the eventual signing of the agreements between Transnational and Semac, he also averred that shortly after Transnational commenced operations in the Clementi sector, Semac received negative feedback on Transnational's recycling programme. There were many complaints and instances of non-compliance as well as lack of co-operation on the part of Transnational in relation to ENV's requirements and Semac's requests. He said that these would be detailed by his colleague Toh. He felt that Transnational might have over-extended itself and lacked the resources to provide proper recycling services under the agreements.

53 Wong Kan Por further claimed that in or around April 2001, Semac voiced its concern that the bulk of the collections should not consist of old newspapers known to Transnational. If it was, then according to him, it would be contrary to the spirit of the recycling agreements. This was because *karang gunis* traditionally collected old newspapers from household for resale, which meant that these newspapers would not end up in the waste stream, for which Semac had to pay dumping fees. Thus, if the bulk of the recyclable materials collected by Transnational consisted of newspapers, Transnational would in effect be doing the same job as the *karang gunis* and this would not confer any added benefit to Semac in terms of the waste disposal fees Semac would have to incur. Transnational would also be charging Semac fees, based on actual tonnage of newspapers collected, without any corresponding real cost savings for Semac.

54 He then narrated what transpired at the meeting held on 11 June 2001. His recounting of the events at that meeting, particulars of breaches by Transnational, and the events which led up to the termination of the agreements were no different to that of Ms Yee.

55 Dealing with Semac's counterclaim, Wong declared that Semac had not made a single cent as a result of terminating Transnational contracts for the Existing sectors or by the appointment of an additional recycler in the Remaining sectors. According to him, Semac had been, and continued to be, worse off financially consequent to the breaches by Transnational. He then chronicled how Semac came to buy over a shelf company, renamed it Semac Recycling Pte Ltd ('Semac Recycling'), and later SembVisy Recycling Pte Ltd ('SembVisy').

56 Further, according to him, Semac had been incurring and would continue for the remainder of the 5-year term to incur losses. He then provided the details (paras 99 to 118 of his affidavit in chief) which need not be reproduced here. In essence, he asserted that Semac suffered loss as a consequence of breaches by Transnational and that the revenue generated from the sale of recyclables is far from sufficient to cover the operating recycling services in Singapore.

57 Jack Chuang's evidence, insofar as was material, could be recapitulated as follows.

58 He was present at a lunch meeting between the parties held on 26 July 2001. The purpose of the meeting was primarily for Wong Kan Por to introduce Daron Liew to him and for him to have a better understanding of Transnational's position and how both parties could work together amicably.

Having been briefed of the reported breaches by Transnational by his colleagues, he briefly spoke about Transnational's breaches in the Existing sectors, such as why Transnational refused to collect everything and why they did not cover all areas. He told Daron Liew that in view of the breaches by Transnational, Semac had appointed another recycler to cover part of the Remaining sectors. Daron Liew did not deny the breaches but maintained that the Recycling Agreements were exclusive. Jack Chuang and Wong Kan Por, who were present at the meeting, did not agree.

59 He averred that the purported notes of the meeting held on 26 July 2001, produced by Transnational during discovery, were contrived or fabricated. He claimed that he never said at that meeting that the recycling agreement was "an unfair agreement" or that Semac was unable to "work with the agreement". As far as he was concerned, the meeting was cordial and since no agreement or understanding could be reached between the parties, the meeting ended without any resolution as to how the parties could continue to work together for the Remaining sectors.

60 Toh's evidence, insofar as is material, is as follows.

61 Semac entered into five contracts with Transnational under which the latter was required to provide recycling services in five sectors. Around late April or early May 2001, Transnational commenced recycling services for the Clementi sector. In June 2001, they commenced recycling services for the City sector. It was also obliged to provide recycling services for the Remaining sectors, 1 July 2001 for one part and 1 August 2001 for the other. However, it failed to do so.

62 On 23 March 2001, he and one of his colleagues attended a meeting with ENV at their request. At that meeting, one of the items discussed concerned the recycling programme. ENV wanted certain features to be incorporated in the programme such as the distribution of a cardboard box to each household for the storage of newspapers. ENV also informed Semac at this meeting that some private estates in the Clementi sector already had ongoing recycling programmes run by the Association for Educationally Sub-normal Children ('ASPN') and in the execution of the recycling arrangements with Transnational, Semac should leave those areas alone so that the ASPN recycling programme would not be disrupted.

63 The requirement of ENV for the provision of a cardboard box was conveyed to Cheah of Transnational on 26 March 2001 but the reply from Cheah was that supply of such an item would add to the cost of the operations and expressed their unwillingness to accede to that requirement.

64 His first meeting with Transnational was sometime in early April 2001. Other very senior management personnel from Semac were also present at that meeting. At that meeting Transnational was told that the recycling bags to be distributed to the households were to be green in colour with Semac's logo on them. Transnational replied that it would not be able to comply with that requirement because it had ongoing recycling programmes with some community development councils ('CDCs') and they could not change the colours of the bags which the CDCs had already selected.

65 Transnational's performance for the Existing sectors was found to be unsatisfactory from the outset. There were several breaches of obligations of the recycling agreements by Transnational. Apart from negative feedback from members of the public, there was also a lack of co-operation by Transnational with Semac. Particulars of the breaches, instances of non co-operation and instances of negative feedback from members of the public were detailed by him in paras 46 to 135 of his affidavit in chief.

66 The breaches highlighted were in relation to non-compliance with ENV code of practice (paras 48 to 53), non-collection of glass and plastic in breach of the provisions of the recycling agreements

(paras 54 to 66), failure to replace recycling bags on dates of collection (paras 67 to 71), failure to provide a carton to each household to hold two recycling bags (paras 72 to 75), failure to compile returns (paras 76 to 83), failure to collect recyclable materials from all public housing units within the respective sectors (paras 84 to 89), failure to ensure that all collected recycling bags were placed in metal cage trolleys before being loaded onto the collection trucks to be transported to the sorting and processing centre (paras 90 to 93), failure to ensure that all recyclable materials were collected in plastic bags of the colour and design assigned to each sector (paras 94 to 100), failure to prepare a daily report showing the total net weight of recyclable materials brought in by collection trucks and net weight of the different recyclable materials sorted for each respective program and produce such reports to Semac upon request (paras 101 to 105), negative feedback from the public about Transnational's omission (paras 106 to 122), and lack of co-operation with Semac (paras 123 to 135).

67 In the event, Toh provided Semac's management with information on Transnational's breaches and Semac decided to appoint an additional recycling company to handle recycling operations in the Remaining sectors concurrently with Transnational. Notification of Semac's intention to appoint an additional recycler was sent to Transnational on 11 June 2001.

68 The result was that Transnational refused to perform its obligations in the Remaining sectors. In those sectors, Transnational only carried out recycling operations for the CDCs. Semac thus had to appoint its contractor to provide recycling services in the affected Remaining sectors.

69 According to him, it was clear that in respect of Transnational's operation of the recycling programs in the Existing sectors, it had been uncooperative and had failed to comply with the terms of the recycling agreements. Further, Transnational refused to perform their obligations under the agreements for the Remaining sectors.

70 Reidinger, the expert witness for the defendants, said in his report (Contractual Disputes for Recycling Contracts: Independent Assessment of Claims) that many an assumption found in the report of the plaintiffs' expert had little basis. Reidinger affirmed two affidavits, one in respect of the 2001 action and the other in respect of the 2002 action. Insofar as is material, the following segments of Reidinger's views bear reproduction - the abbreviation "TRI" in his report stands for Transnational; "ERM" stands for Reidinger's company, Environmental Resources Management (S) Pte Ltd; and "PWC" stands for public waste collector.

3.1 Revenue And Profit Assumptions

ERM concludes that it is appropriate to make certain revisions to the assumptions used by TRI, based on the recycling situation in Singapore. As explained, TRI's analysis has not factored in the lack of government recycling regulations, nor has it accounted for several special factors unique to Singapore such as the Karang Guni men or the relatively low level of awareness and interest among the population, which would not increase significantly during the periods of the contract.

ERM also considers it unlikely that the TRI's recycling activities would be a profitable business based on sales of recyclable materials alone, contrary to what Ng's affidavit suggests. It is important to distinguish between informal recycling schemes and formal recycling schemes. Within an informal system, individuals (generally poor) move around and selectively collect high value materials using minimal equipment and entailing no cost overheads. Sale of recyclable materials provide them with a basic income. In contrast, formal recycling schemes are generally carried out by companies or the government (as under the National Recycling Program), a wide range of (often low value) materials are collected, and significant technology is employed to high standards.

World-wide, such formal domestic recycling systems are almost never profitable on the basis of materials sales revenue *alone*, which is why government intervention is required. This is also likely to be the reason why there was no significant formal domestic recycling in Singapore prior to the introduction of the ENV requirements within the PWC contracts. If it were profitable, the private sector would have already been doing it. Domestic recycling schemes are, however, often economically viable based on averted waste disposal cost, especially in areas with high disposal costs (such as via incineration).

Specific recommendations for revising the assumptions and TRI spreadsheet are presented in Table 3.1a.

In summary, ERM concludes that:

Overall maximum participation rates should be reduced to 35% (from TRI's projection of maximum participation at 50%);

Bag weights are more likely to remain constant (at 4 kg, which is the base bag weight utilised by TRI), but with a provision for wastage in recyclable materials per bag included, this weight drops down to an average of 3.4 kg; and

Composite prices may be overstated, but as stated in this report, the data provided does not allow a firm conclusion as to how much.

ERM's explanation of the rationale for revised assumptions is provided in Table 3.1a.

3.2 Cost Assumptions

ERM has also reviewed the cost data provided for the recycling service, which was not assessed by the Nolan ITU report. Nolan ITU qualifies this non-assessment on the basis that it has no direct experience on TRI's recycling operations.

However, without any input on TRI's operational cost structure, ERM views that TRI's claim cannot be completely justified. In this respect, based on ERM's opinion of recycling operations in Singapore, ERM is of the opinion that a number of costs necessary for the successful completion of a domestic recycling have been omitted (such as capital costs and overhead costs), while others have been understated. Therefore, ERM have suggested alternative cost assumptions, which are presented, along with justification, in Table 3.1a.

3.2 Implication For The Analysis

A copy of the TRI spreadsheet has been developed in order to assess the impact of the revised revenue and cost assumptions. This spreadsheet is attached in Annex A of this document.

Using ERM's revised assumptions, TRI's claim would be the following:

Remaining Sectors Claim

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<i>Remaining</i>		<i>TRI's Claim</i>	<i>ERM's Projections</i>
Sales of material		14,533,856	6,427,984
Total cost of operation		11,641,921*	9,046,250
Profit/(Loss)	(a)	2,891,935	(2,618,266)
Subsidy from SEMAC	(b)	5,869,491	2,866,430
Total Claim	(a) + (b)	8,761,426	248,164

Other Sectors Claim

<i>Others</i>		<i>TRI's Claim</i>	<i>ERM's Projections</i>
Sales of material		4,681,762	1,989,470
Total cost of operation		3,460,646*	2,691,812
Profit/(Loss)	(a)	1,221,116	(702,342)
Subsidy from SEMAC	(b)	1,904,218	907,921
Total Claim	(a) + (b)	3,125,334	205,579

* ERM noted errors in TRI's original cost calculations which resulted in TRI overstating their operational costs. This conversely resulted in a lower claim against SEMAC than should have been the case. These have been rectified in the spreadsheets in Annex A.

3.6 Final Conclusion

Applying costs and revenue assumptions that in ERM's expert judgement are more reasonable in the Singapore situation, it would appear that TRI would expect to make a substantially lower profit than as forecast in Ng's Affidavit.

According to this revised calculation, the total maximum potential liability to SEMAC for all five sectors combined is \$453,743.00, subject to the qualifications as stated below.

ERM notes the following qualifications to this report:

1. In arriving at his conclusion, ERM has also taken TRI's composite sales price at face value and, for the reasons stated at S/N.5 and 21 above, ERM has not been able to verify the same with independent data or otherwise. If such composite sales price is not justified, it would further reduce the total claim figure.
2. Education costs have not been factored into the cost assumptions, for arriving at \$400K.
3. It is noted that the cost of sorting is based on the capacity of the sorting system. However, as noted in Ng's affidavit, the system will never reach capacity. This being the case, it would also be more valid to base the cost of sorting on actual throughput, which would result in a higher cost of sorting per tonne. This has not been done in this case (i.e., capacity is still used as the basis); however, were actual throughput used as the basis, it would further reduce the claim.

ERM is of the view that such qualifications could reduce the overall claim of TRI into the negative, resulting in TRI making a loss in the provision of recycling services under the contracts, had TRI performed the contracts for the agreed period.

Issues, arguments and conclusions

71 Lengthy arguments were presented by counsel for the defendants and plaintiffs at the end of the case. In my view, the broad issues to be determined in the two actions before me are these:

- (a) Have the recycling agreements entered into between the parties been breached?
- (b) Have the said agreements been terminated properly?
- (c) Has damage been suffered by either party?

72 In this regard, there are, inevitably, several sub-issues and they will be dealt with by me as they arise.

73 Now dealing first with the 2002 action concerning the Existing sectors, the first question that requires addressing is whether Transnational did carry out recycling services in accordance with the agreements. The second question is whether Semac was in breach of the notice provisions of the said agreements.

74 In regard to the first question, Semac's averments concerning breaches on the part of Transnational (para 3 of the defence) appear to receive a somewhat indifferent response from Transnational. Apart from a general averment (para 8 of the statement of claim) that Transnational did carry out the recycling services in accordance with the agreements, there appears to be no specific denial of the said breaches. Even the evidence tendered on behalf of Transnational seemed to be ambivalent. The evidence of Irene Chan in her affidavit of evidence in-chief as well as in cross-

examination tended in some important respects to weaken the claims of Transnational that it abided by the terms of the agreements. For example, as respects glass and plastics, a matter of concern raised by Semac, she conceded that they were recyclable materials, yet they were admittedly not collected by Transnational (pages 98 to 99 of the NE). There was also a tacit admission that Transnational did not comply with the ENV requirements as conveyed to it by Semac.

75 Also, the evidence of Daron Liew (pages 54 to 56 of the NE) that Transnational was not obliged to meet Semac's request since Semac had reportedly decided not to proceed with the contract was not very helpful to Transnational. In this regard, Semac's letter dated 13 June 2001 (page 31 of Semac's core bundle) where Semac had put Transnational on notice that the latter had failed to comply with certain requirements from ENV and requesting Transnational to comply with a few other aspects did not seem to have stirred Transnational at all into action. Surprisingly, there was also no reply challenging the said letter from Semac. In my determination, the matters complained of by Semac, most of them, if not all, were material aspects which seem to fall within the scope of duties under the recycling agreements and Transnational's obvious indifference or inaction to address the said issues at the relevant time, rendered them open to a legitimate complaint that it was not intent on abiding by the terms of the recycling agreements in relation to the Existing Sectors. Take glass and plastics for example, if they are, as conceded by Irene Chan, recyclable materials, under the definition clause of the agreements, then failure to collect them constitutes a clear breach of the agreements. Moreover, Irene Chan also conceded during cross-examination that Transnational failed to comply with ENV directions which Semac had informed Transnational by its letter dated 25 June 2001. In my finding, Semac, on balance, has satisfied the court that the breaches listed by it were within the scope of the recycling agreements and that Transnational, by its inaction or unwillingness to perform then, was in clear breach of its obligations under the agreements.

76 Little wonder, in my view, that ENV appeared to have given its 'go-ahead' for the termination of the agreements.

77 Counsel for Transnational contended that Semac had not made out its case that Transnational committed the breaches complained of in Semac's letter dated 25 June 2001 (page 33 of Semac's core bundle). However, in reviewing the evidence of both Ms Yee and Toh, I am not persuaded by the arguments advanced by Transnational's counsel. In my finding, there were several breaches by Transnational and Semac had indeed, on balance, established that Transnational had failed to abide by the terms of the agreements.

78 The court's consideration moves next to whether the breaches complained of are material breaches and whether Semac had fallen foul of cl 5.1 (a) of the agreement which provides that:

Breach

Subject to the consent of the Commissioner of Public Health, and without prejudice to any other rights or remedies which the Parties may have one against the other, this Agreement may be terminated by either Semac or the Registered Recycler for breach of any terms and conditions of this Agreement if the breach which is capable of remedy is not remedied within 30 days after service of a written notice thereof.

79 By its pleadings and arguments in court, Transnational maintained that the breaches ascribed to it were not material and, in any event, that written notice in compliance with cl 5.1 (a) of the agreements was never given to Transnational; the requirements under the said clause were conditions precedent; and that Semac had not fulfilled them.

80 In my analysis, the plain reading of the said clause imports the construction that, subject to the other conditions stipulated in the said section, either party could terminate the agreement for breach of any terms or conditions. The clause which is agreed to between the parties does not say that the breach has to be a material breach. Be that as it may, I am persuaded in the face of the evidence adduced at the trial that the breaches complained of are not only material but they could also be rightly classified as persistent breaches.

81 The next question: Had Semac fallen foul of the said clause by allegedly not giving Transnational the requisite notice contemplated in the clause referred to?

82 I take the view that the submission by the counsel for Transnational that Semac had not fulfilled the notice requirement under the clause adverted to is not well made out. The chronology submitted to the court and the exchange of correspondence referred to therein present a picture that Semac had been asking Transnational to carry out certain matters under the agreements over a period of time. But admittedly, the matters required were not done by Transnational for reasons they give presently. However, the fact remains that there were demands and repeat of the said demands, but these demands were not met and there was and is no indication that Transnational was in fact willing to or would have carried out those matters asked of them by Semac.

83 Another noticeable aspect in this case is that there is curiously no specific averment by Transnational that the matters complained of by Semac were or would have been carried out by them. Daron Liew himself agreed that the matters complained of were not remedied within 30 days of Semac's letter dated 25 June 2001. His position was that Transnational did not have to do that (page 77 of the NE). Given the background, the letters dated 13 June and 25 June by Semac addressed to Transnational, viewed objectively, create the impression that Transnational did not intend to or was not capable of putting things right. In the premises, Semac's communication to ENV on 13 November 2001 seeking ENV's consent for the termination of the agreements, the subsequent issuance of consent by ENV on 4 March 2002 and the letter of 12 March 2002 by Semac, giving notice to Transnational to terminate the recycling agreements with effect from 15 April 2002, do not fall foul of cl 5.1 (a) of the agreements, as has been contended by counsel for Transnational.

84 Counsel for Transnational placing reliance on **Mannai Investment Co Ltd v Eagle Star Life Assurance Co Ltd** [1997] AC 749, put forward a submission (see his opening statement as well as para 246 of his submission) that there was no notice from Semac which made it clear that if the breaches were not remedied within 30 days, Semac would terminate the recycling agreements.

85 In **Mannai Investments**, the House of Lords was concerned with the construction of a clause contained in a lease as regards notice of determination of the said lease. The clause concerned provided:

"The tenant may by serving not less than six months notice in writing on the landlord or its solicitors such notice to expire on the third anniversary of the term commencement date determine this lease and upon expiry of such notice this lease shall cease and determine and have no further effect ..."

86 The issue in that case was whether a notice served by the tenant was valid. In deciding in favour of the tenant, their lordships by a majority held that the construction of the notices had to be approached objectively, and the question was how a reasonable recipient would have understood them, bearing in mind their context. Lord Steyn in his speech (page 768 B-C, *supra*) observed that "the real question is what evidence of surrounding circumstances may ultimately be allowed to influence the question of interpretation". He commented further (p 768 G-H *supra*) that "[e]ven if such notices under contractual rights reserved contain errors they may be valid if they are

"sufficiently clear and unambiguous to leave a reasonable recipient in no reasonable doubt as to how and when they are intended to operate. ...That test postulates that the reasonable recipient is left in no doubt that the right reserved is being exercised."

87 In the case at the hand, the principles articulated by the majority in ***Mannai Investments*** do not seem to assist Transnational at all. On the contrary, in the absence of any plea that the notice was unclear or that Transnational would have carried out the matters complained of, if given a 30-day window period, the arguments advanced on behalf of Transnational appear to have hardly any merit. In the end, my conclusion in relation to this issue is that the argument by Transnational that the Semac is in breach of cl 5.1(a) of the agreement or in repudiatory breach of the agreements is entirely misconceived. It follows then, that the so-called acceptance of the perceived repudiation was an exercise in futility and merely illusory.

88 Having decided that the breaches complained of by Semac are, by all measures, material and that Semac is not in contravention of the provisions of cl 5.1 (a) of the agreement, the next issue in relation to the 2002 action concerns the counterclaim by Semac. Suffice it, in this regard, if I made reference to paras 57 and 58 of Semac's counsel's executive summary of Semac's submission claiming a total of \$1,609,508.11 in respect of both actions. In my view, I find little basis to award any damages to Semac in relation to the matters complained of. The counterclaim aspect did not seem to have featured in the correspondence between the parties and even as late as July 2002, when Semac filed its defence, no doubt with advice from some very able counsel, this aspect, to use an oxymoron, was glaringly absent. It appeared for the first time on 15 October 2002, just 13 days before the commencement of the hearing of the two actions. In any case, Semac's declared position at the trial had been that recycling was a losing proposition from the beginning and if this was correct, to award damages to them in the factual matrix of the dispute would not be right. I will deal more with the issue relating to damages after I have addressed with the main issues concerning the 2001 action.

89 Let me now deal with the 2001 action that concerns the Remaining sectors.

90 The principal question in relation to this case is whether Semac has a right to appoint other recyclers, as has been done by Semac, concurrently with Transnational. At the heart of the issue is the construction to be placed on cl 7.3 of the agreements which provides:

"Non-exclusivity: The Registered Recycler will not have exclusive rights to collect Recyclable Materials from the Designated Premises".

91 In relation to this issue, a segment of the submission by counsel for Transnational bears reproduction. He argues at paras 125 to 138 of his submission:

A. The 2001 Action

(1) The True Construction of Clause 7.3

125. It is trite law that in order to arrive at the true interpretation of a document, a clause must not be construed in isolation, but must be considered in the context of the document. In short, the document must be construed as a whole, and effect must be given to each part of the document.

[See: Lewison: The Interpretation of Contracts (1997 ed) at p 156]

126. Clause 7.3 must be construed in the light of this principle – the recycling agreement entered into between Semac and TRI has to be construed as a whole.

127. The starting point is Recital 3, which sets out the objective/purpose of the recycling agreement:

"Semac wishes to engage the Registered Recycler and the Registered Recycler wishes to provide Recycling Services (as hereinafter defined) if the Public Waste Collection Tender (as hereinafter defined) is accepted by ENV."

128. Under Clause 1.1, it is provided that:-

(1) The term "Recycling Services" shall mean the provision of regular Recyclable Materials collection services by the Registered Recycler to the Designated Premises;

(2) The term "Designated Premises" shall mean all premises within the Sector at the time of the issue of the Licence and such other premises designated by the Commissioner of Public Health during the period of the Licence.

129. Clauses 2.1, 2.2 and 4 of the recycling agreement are consistent with the objective/purpose of the recycling agreement as prescribed under Recital 3 – that TRI is to provide recycling services to all premises within the Sector; and that the recycling agreement is to last for 5 years, subject to Clause 5. For convenience, we set out these provisions in full:

"2. Provision of Recycling Services

2.1 Recycling Services

Subject to Clause 3 [grant of Licence a condition precedent], Semac agrees to engage and the Registered Recycler agrees to provide the Recycling Services subject to the terms and conditions of this Agreement.

2.2 Commencement Date

The Recycling Services will commence on the commencement date of the Licence.

4. Period of Agreement

Subject to Clause 5, this Agreement shall come into effect on the commencement date of the Licence and remain in force for the entire duration of the Licence until the Licence is terminated."

130. Clause 5 is the termination clause.

131. The methodology for collection of recyclable materials as provided under Clause 7.1 is also consistent with the understanding, as outlined in paragraphs 128 and 129 above. Clause 7.1(a) and Clause 7.1(b) provide:

"7.1 Methodology

The Registered Recycler shall be required to collect the Recyclable Materials in the following manner:

(a) The Registered Recycler will provide the Recycling Services to all public housing units, private condominium, private apartment and landed properties covered under the Licence for the Sector ("Recycling Location"). The Recycling Services will later be offered to include tertiary

institutions and commercial complexes over a period of twelve (12) months, commencing from the Commencement Date, unless otherwise directed by ENV.

(b) The Recycling Location will be divided into twelve (12) segments.”

132. In turn, TRI is to be paid by Semac for the recyclable materials collected from all the premises within the Sector, in accordance with Clause 6 (computed on the basis of fee per ton, multiplied by the tonnage of recyclables collected by TRI).

133. It must be highlighted that the methodology of collection as set out under Clause 7.1 does not contemplate a situation whereby recycling services would be provided by TRI, to anything less than all the premises within the Sector.

134. It is also crucial to note that Clause 7.3 is preceded by Clause 7.2, which provides:

“7.2 Non-interruption of Recycling Services

Subject to Clause 5, the Recycling Services provided by the Registered Recycler must continue without lapse for the duration of the Licence.”

135. We would at this juncture, again highlight that the term “Recycling Services” bears the meaning as defined in Clause 1.1 (as set out in paragraph 128 above). It is therefore clear that TRI is obliged to provide recycling services (as defined in the recycling agreement) to all premises within the Sector without lapse; and conversely, Semac is obliged not to do anything that may interfere with TRI’s obligations.

136. It is expressly provided that the operation of Clause 7.2 is subject to Clause 5. Clause 7.2 is not subject to Clause 7.3 – Clause 7.3 is clearly not an exception to Clause 7.2. It must follow that Clause 7.3 must relate to something other than the interference of TRI’s rights to provide recycling services (which is the subject matter dealt with under Clause 7.2).

137. Clause 7.3 merely deals with the issue of exclusivity of right to the recyclables that may be generated by the households in the Sector. This construction becomes obvious, when viewed against the background that:-

(1) there were a number of existing arrangements between waste recycling contractors and CDCs and/or Charities, such as those described in Liew 1/16-20, which would co-exist with the arrangements introduced by the Recycling Agreements into which prospective Licensees were required to enter;

(2) there was no constraint on the traditional activities of the “karang gunis” [See Liew 1/54]. The minutes of meetings between Semac and ENV confirm this [See: B3/462C, 501D].

138. Semac’s witnesses were aware of the factual background.

92 The submission by counsel for Semac in this connection (paras 156 to 171) was:

TRI’s Claims in the Remaining Sectors (the 1st Suit)

a. Whether the Recycling Agreements have been breached?

156 TRI's claim against Semac in the 1st Suit is for "wrongful repudiation" of the Recycling Agreements for the Remaining Sectors.

157 Sometime in June 2001, as a result of TRI's persistent failure to co-operate with Semac and perform its obligations under the Recycling Agreements for the Existing Sectors, Semac decided to appoint another recycler, under clause 7.3 of the Recycling Agreements, to work concurrently with TRI in the Remaining Sectors. By way of letter on 11 June 2001, Semac informed TRI of this decision.

158 The reasons for Semac's decision were as follows:

(i) From the start of TRI's recycling services in the Existing Sectors, TRI had committed breaches under the Recycling Agreements. Many of these breaches have been spelt out in the preceding paragraphs above. In his testimony in court, Wong Kan Por summarised Semac's unhappiness with TRI. These were elaborated in Toh Hean Siong's AEIC;

(ii) As a result, Semac's standing with ENV and with the public was being undermined. TRI's unsatisfactory performance was not only hurting Semac's reputation, but was also jeopardising the smooth implementation of recycling services in the sectors. If Semac did not take any steps to resolve or mitigate the problem, Semac's interests would have been damaged;

(iii) However, TRI had just commenced recycling operations in the Existing Sectors. Hence, Semac felt that the introduction of another recycler at short notice in the Existing Sectors would confuse the residents;

(iv) But the situation was different for the Remaining Sectors, where TRI had not commenced its services. Semac felt it would be less problematic and more prudent to have a clean start by appointing an additional recycler in the Remaining Sectors where TRI had not commenced its services;

(v) Semac considered that by exercising its right under the Recycling Agreements to appoint another recycler in the Remaining Sectors, this would send a strong message to TRI to buck up. It became clear to Semac that TRI might have over-extended itself and lacked the resources to provide proper recycling services under the Recycling Agreements, as well as under its other arrangements with the Community Development Councils ("CDCs"). Semac thought that with the demarcation of areas between TRI and the new recycler, it would alleviate TRI's problems with resources.

159 TRI's case is that Semac was not entitled under the Recycling Agreements to appoint another recycler to work concurrently with TRI for the provision of recycling services in the Remaining Sectors under clause 7.3. Put another way, TRI asserts that it was entitled to exclusivity under the Recycling Agreements. By way of TRI's letter dated 9 October 2001, TRI claimed that Semac was in repudiatory breach, and terminated the agreements.

160 The sole question for this Honourable Court's determination is whether Semac was entitled under clause 7.3 to appoint another recycler to work concurrently with TRI in the Remaining Sectors. If the answer is yes, TRI's claim in the 1st Suit falls in its entirety

i. Clause 7.3 of the Recycling Agreements – Non-exclusivity

161 It is respectfully submitted that TRI has completely misunderstood the entire issue of exclusivity, as the following paragraphs will show. TRI was not entitled to exclusivity under the

Recycling Agreements, and TRI knew and knows of this. Both Kelly Landrum, Semac's consultant at the time the Recycling Agreements were negotiated, and Yee Pui Phing, Semac's Senior Legal Counsel, informed Daron Liew before the agreements were signed that TRI was not entitled to exclusivity. Further, ENV did not endorse exclusivity under the Recycling Agreements.

162 As TRI accepted in its evidence (below), there was no exclusivity to any party engaged in the recycling business, and neither ENV nor anyone else could not enforce this exclusivity. Exclusivity was simply impossible and commercially nonsensical.

aa. TRI has misunderstood the entire issue of exclusivity

163. Clause 7.3 of the Recycling Agreements states as follows:

Non-exclusivity

[TRI] will not have exclusive rights to collect Recyclable Materials from the Designated Premises.

164 Clause 7.3 is clear. It entitled Semac the right to appoint another recycler to work with TRI under the Recycling Agreements to collect recyclables in the Remaining Sectors. With this clause, TRI did not enjoy exclusivity in the Remaining Sectors, and this was not disputed by Daron Liew:

A If you look at the agreement, the agreement was a contract to provide recycling services in the total sector in the designated premises within the total sector. That was the basis upon which we had entered into the agreement. That was the basis on which we had negotiated with Kelly Landrum, and I felt that clause 7.3 was in conflict with the particular provision in the contract – in the agreement.

Mr Singh Thank you very much. Clause 7.3 conflicted with the understanding of exclusivity. Right? Whether that understanding came by way of an arrangement with Kelly Landrum or your reading of the document, in your mind it conflicted?

A It conflicted with the exclusivity of the relationship between the parties.

Q Thank you. So it follows logically that clause 7.3 allows non-exclusivity in that relationship?

A It allows non-exclusive rights, or it stipulates non-exclusive rights to collect recyclable materials.

165 TRI's case is that clause 7.3 was inserted into the Recycling Agreements on the understanding that *karang guni men* operating in the sectors were beyond the control of both parties.

166 With respect, TRI has completely misunderstood the issue of exclusivity. TRI's evidence on clause 7.3 is clearly untrue. In the course of cross-examination, Daron Liew conceded that whether or not clause 7.3 was present in the Recycling Agreements, TRI would have to contend with *karang guni men* and non-registered recyclers anyway. At paragraph 54 of his AEIC, he accepted that "there was no constraint on the 'karang gunis' operating in the sector by either the Government/ENV or the PWCs, or for that matter, any other party/person".

167 With the presence of clause 7.3, Daron Liew expressly admitted that TRI now had to contend with both *registered* and *unregistered* recyclers in any given sector that TRI operated:

Q If what you say is true, Kelly Landrum also told you that it was not only about *karang gunis* but about any other party or person doing recycling. Those are your words. Fourth line?

A That is right.

Q So, you knew therefore, according to you, that without clause 7.3 you still had to contend with *karang gunis* and any other person?

A That is correct.

Q Right? And that any other person or party can be a non-registered recycler?

A It could well be, yes.

Q And with clause 7.3 you now have to contend, in addition to the registered recyclers, if clause 7.3 remained?

A Yes.

168 There is only one reason for the presence of clause 7.3 in the agreements. And that was to allow Semac to appoint another recycler to work together with TRI.

bb. E-mail of 25 August 2000 – Non-exclusivity

169 The clearest evidence that clause 7.3 did not relate to *karang guni men*, but was a term that did not entitle TRI to exclusivity in the Remaining Sectors, is an e-mail of 25 August 2000 from Kelly Landrum to Daron Liew, where Kelly Landrum, Semac's consultant at the time the Recycling Agreements were concluded in late 2000, specifically informed Daron Liew:

The contract states that the Recycler will not have exclusive right to collect recyclable materials, however, *we currently have a strong preference towards not using more than one Recycler for the sector.* (emphasis added)

170 The contents of this e-mail is clear and unambiguous. TRI did not enjoy exclusivity under the Recycling Agreements, and Semac was entitled to appoint another recycler to work with TRI. Curiously, even though Daron Liew did not agree to this e-mail (and TRI's counsel vehemently argued that the truth of this e-mail could not be relied upon), he did not respond to it. With respect to his lack of a reply, he stated:

Q And you did not respond to it to say, this is not what we agreed, you have no right to appoint another – you did not respond to this e-mail to say you have no right to appoint another. Correct?

A Yes, I did not respond to it.

171 It is submitted there is only one logical reason why he did not respond, and that was because he knew that TRI was not entitled to exclusivity under the Recycling Agreements, and accepted that position.

93 As stated in ***Chitty on Contracts*** (28th edition – para 12-042), the object of all construction of the terms of a written agreement is to discover therefrom the intention of the parties. The authors of ***Chitty on Contracts*** further comment (para 12-043 *supra*) that the cardinal presumption is that the parties have intended what they have in fact said, so that their words must

be construed as they stand. That is to say the meaning of the document or of a particular part of it is to be sought in the document itself. One must consider the meaning of the words used, not what one may guess to be the intention of the parties. However, this is not to say that the meaning of the words in a written document must be ascertained by reference to the words of the document alone. *In modern law, the court will, in principle, look at all the circumstances surrounding the making of the contract which would assist in determining how the language of the document would have been understood by a reasonable man* [Emphasis added].

94 The principles by which contractual documents are nowadays construed are summarised by Lord Hoffmann in ***Investors Compensation Scheme Ltd v West Bromwich Building Society*** [1998] 1 WLR 896 at pages 912 to 913; [1998] 1 All ER 98 at 114 to 115, (re-affirming what was said by Lord Wilberforce in ***Prenn v Simmonds*** [1971] 1 WLR 1381 to 1386; (1971) 1 All ER 237 at 240 to 242 and in ***Reardon Smith Line Ltd v Hansen-Tangen, Hansen-Tangen v Sanko Steamship Co*** [1976] 1 WLR 989; [1976] 3 All ER 570) as follows:

(1) Interpretation is the ascertainment of the meaning which the document would convey to a reasonable person having all the background knowledge which would reasonably have been available to the parties in the situation in which they were at the time of the contract.

(2) The background was famously referred to by Lord Wilberforce as the “matrix of fact,” but this phrase is, if anything, an understated description of what the background may include. Subject to the requirement that it should have been reasonably available to the parties and to the exception to be mentioned next, it includes absolutely anything which would have affected the way in which the language of the document would have been understood by a reasonable man.

(3) The law excludes from the admissible background the previous negotiations of the parties and their declarations of subjective intent. They are admissible only in an action for rectification. The law makes this distinction for reasons of practical policy and, in this respect only, legal interpretation differs from the way we would interpret utterances in ordinary life. The boundaries of this exception are in some respects unclear. But this is not the occasion on which to explore them.

(4) The meaning which a document (or any other utterance) would convey to a reasonable man is not the same thing as the meaning of its words. The meaning of words is a matter of dictionaries and grammars; the meaning of the document is what the parties using those words against the relevant background would reasonably have been understood to mean. The background may not merely enable the reasonable man to choose between the possible meanings of words which are ambiguous but even (as occasionally happens in ordinary life) to conclude that the parties must, for whatever reason, have used the wrong words or syntax: see *Mannai Investments Co. Ltd. v. Eagle Star Life Assurance Co. Ltd.* [1997] A.C. 749.

(5) The “rule” that words should be given their “natural and ordinary meaning” reflects the common sense proposition that we do not easily accept that people have made linguistic mistakes particularly in formal documents. On the other hand, if one would nevertheless conclude from the background that something must have gone wrong with the language, the law does not require judges to attribute to the parties an intention which they plainly could not have had. Lord Diplock made this point more vigorously when he said in *Antaios Compania Naviera S.A. v. Salen Rederierna A.B.* [1985] A.C. 191, 201:

“if detailed semantic and syntactical analysis of words in a commercial contract is going to lead to a conclusion that flouts business commonsense, it must be made to yield to business commonsense.”

95 From the evidence of Daron Liew, Ms Yee and others it was clear that there was a question raised by Daron Liew in relation to this particular clause. Daron Liew's evidence, in substance, was that when he expressed his unhappiness and protested over the inclusion of this non-exclusivity clause to Kelly Landrum, he was assured by the latter that this clause was inserted at the instance of ENV; it was intended to cover the contingency that *karang gunis* were not excluded from their traditional activities and that there was no question of Semac appointing any other recycler to provide recycling services in the said five sectors.

96 Ms Yee, however, in her testimony, contradicted Daron Liew. She said that when Daron Liew requested of her some time in August 2000 to change the said clause and wanted Transnational to be appointed as the exclusive recycler, she did not agree to it and explained to him that it was not Semac's policy to grant exclusivity and that, in any case, it was an ENV requirement and therefore non-negotiable. She also informed Daron Liew that as long as Transnational was rendering its services satisfactorily, there could be no reason for Semac to appoint another recycler. According to her, Daron Liew accepted the position. The question now is whose version is probable.

97 Kelly Landrum, the court is told, is no longer available in Singapore to throw any light on the actual conversation that took place between them. But there is a contemporaneous e-mail dated 25 August 2000 addressed to Daron Liew. The e-mail reads:

Daron Liew

Transnational Group of Companies

Daron,

You will shortly receive an email copy of the revised agreement for recycling from Yee Pui Phing. Please contact her if any concerns remain. Otherwise I look forward to seeing you tomorrow at 9.00 a.m. The contract states that the Recycler will not have exclusive right to collect recyclable materials, however, we currently have a strong preference towards not using more than one Recycler for the sector.

Best regards

Kelly Landrum

98 The phraseology of cl 7.3 is uncomplicated and unambiguous. Anyone reading it would immediately construe it as a contract which does not envisage or provide for any exclusive rights to the registered recycler. Transnational now urges the court to rule something quite against the plain and unambiguous phraseology of the clause. But does the natural and ordinary meaning of the clause flout business common sense? What is the background to this clause? Recalling the events, as he sees it, Daron Liew avers that he would not have signed the agreements but for the assurances forthcoming at the meetings by Semac's management. He relies especially on an alleged assurance by Kelly Landrum. But Kelly Landrum's e-mail does not seem to underpin Semac's present contentions. The last sentence in Kelly Landrum's e-mail says no more than this: 'The contract says that the Recycler will not have exclusive right to recyclable materials, however, *we currently have a strong preference towards not using more than one recycler for the sector*' [Emphasis added].

99 In my analysis, the foregoing letter does not augment the case advanced on behalf of Transnational. Apart from the express phraseology of cl 7.3 of the agreement, which, in my opinion, leaves scant room for any equivocation, the e-mail of Kelly Landrum, which is a contemporaneous document, supports the construction that Transnational has no exclusive rights under the

agreements. There was, of course, an expectation of exclusivity by Transnational but since it was not accompanied by an expression of an unconditional commitment by Semac, the present contention by Semac is misconceived.

100 I have already dealt with the issue relating to whether Transnational was in breach of the recycling agreements as regards the Existing sectors. It was Semac's position that these breaches led them to a commercial decision to have only a truncated arrangement with Transnational. In my view, Semac was entitled to take the course they adopted and the provision contained in cl 7.3 did not prohibit them to have other recyclers. Consequently, my finding is that Semac is not in breach of the agreements adverted to and it is not in repudiation of the agreements. In the circumstances, the letter dated 9 October 2001 by Transnational addressed to Semac, conveying its reported acceptance of what it perceived as repudiatory breaches by Semac, conveys nothing in fact.

101 To complete the sequence, there is one other argument by Semac which requires mention at this stage. Counsel for Semac contended that cl 5.1 (a) of the agreement made it obligatory for either party to obtain the consent of ENV before any notice of termination and inasmuch as Transnational did not seem to have obtained the said consent before it took steps to terminate the agreement, the said termination was by itself an act of repudiation. Although the issue posed is no longer a live issue, my view on this is that cl 5.1 (a) does not require the consent of ENV for a party to accept an act of repudiation, if there was one at all, on the part of the other.

102 On the question of Semac's counterclaim in relation to the 2001 action, I repeat what I have said earlier in relation to the 2002 action. I must add, however, that there appears to be no valid basis for Semac to mount its counterclaim. Based on its own argument that the recycling sector is a loss -making concern and given the open-ended non-exclusivity clause successfully invoked by Semac before me, I am driven to conclude that there was never any question of Transnational being required to underwrite any part of Semac's outgoings, in the event of Semac realigning itself with other concurrent recyclers. Furthermore, it was not and would not have been in Semac's contemplation that it would be looking to Transnational for any damages if a disengagement between them came about as a result of the appointment of other concurrent recyclers.

103 In the end, my conclusion is that Transnational fails in its claim against Semac and Semac fails in its counterclaim against Transnational.

104 The foregoing findings and rulings should effectively dispose of the issues to be determined by me in both actions. However, a few observations might perhaps be appropriate on the claim for damages by Transnational and the computation presented.

105 In relation to the quantum of damages, Transnational relied on the evidence of Ng as well as the opinion of John Nolan. For its part, Semac relied on the opinion of Reidinger as well as on answers obtained by its counsel in cross-examination. There were extensive submissions by both counsel – see paras 282 to 515 (pages 98 to 180) of Transnational's final submission; and paras 89 to 155 (pages 53 to 84) as well as paras 222 to 224 (pages 130 to 131) of Semac's final submissions. I do not propose to recapitulate them here, save for a few highlights, for they have to be read in their entirety in order to comprehend them.

106 As I mentioned earlier, Transnational's total claim is for a sum of \$11,886,760. Counsel for Semac submitted (see para 90 of his submission) that even if this court were to hold that the recycling agreements have not been validly terminated, Transnational would still not be entitled to any damages because it has not proved its loss. Counsel then criticised John Nolan's report on the ground that: it was incomplete and inadequate; John Nolan lacked the necessary expertise in the

Singapore recycling industry to produce the report; he made last minute changes to the report without providing any good reasons for doing so; and the report lacked a critical component, namely the costs Transnational would have incurred in providing recycling services in the sectors. In this connection, my attention was also invited to an admission by John Nolan (pages 123 and 125 of the NE) that he had not considered overheads in arriving at his opinion.

107 The salient issues and the treatment accorded to them by John Nolan as well as Reidinger are well captured in a schedule marked 'Annex C' to Semac's opening statement and it reads as follows:

S/No	Issue	TRI's expert report	Semac's expert report
1	Participation rate to recycling program – Ng's affidavit states that currently, 20% of households in five sectors contribute to recycling. This will rise to 50% by Jan 2004	Confirms Ng's affidavit. TRI's expert comments that 50% is a conservative figure (at p 15 of the report), and - there are consistent/regular collections; - the programme is convenient to all residents; - all recyclable materials are collected; - the recycling bags provided by TRI are sufficient to contain these materials; and - there is an effective and consistent householder education, the target of 50% would be reached	Semac's expert highlights factors which were not taken into account in TRI's expert report, including: - the lack of proper governmental regulation in the recycling programme; - the presence of karang guni men who compete with TRI for high-yield recyclables; - the failure of TRI to make provision for waste in the recyclable materials collected; - the fact that lower yield materials would be collected because there is a finite amount of high-yield collectables; - the failure of TRI to provide for education and its

(pp 4 to 6 of the costs; and report).

- the lack of provision for capital costs in TRI's calculations, and the understating of TRI's operating costs.

If the above were taken into consideration, TRI's targets would not be achievable. Semac has provided revisions to TRI's figures based on TRI's own financial model.

2	Collected bag weight of recyclable materials – Ng's affidavit states that the current weight is 4kg. This will rise to 5kg by July 2005.	Confirms Ng's affidavit. TRI's expert comments that 5 kg is a conservative figure (at pp 15 and 16 of the report), and if: - there are consistent/regular collections; - the programme is convenient to all residents; - all recyclable materials are collected; - the recycling bags provided by TRI are sufficient to contain these materials; and - there is effective and consistent householder education, the target of 5 kg would be reached (pp 4 to 6 of the report).	See above comments by Semac's expert.
3	Composite Sales Price of recyclable materials – Ng's affidavit states that the current amount is \$221.40. This will rise to \$250 by July 2002	Confirms Ng's affidavit (pp 12 to 14 of the report). TRI's report states that this figure is conservative (p 16 of the report)	Semac's expert notes that there is no evidence to support these figures, and more data is required before these figures can be verified.

4	Costs of TRI's Operations	TRI's expert makes no comment or opinion on this (p. 17 of the report)	Semac's expert states that the operation costs of TRI are grossly understated (pp 15 to 18 of the report). A number of necessary costs for the successful completion of a recycling programme has been omitted (p 11 of the report at para 3.2). This results in TRI's claims against Semac being overstated.
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108 Counsel for Semac also highlighted Reidinger's opinion (para 119 of his submission) that on the best scenario, Transnational could possibly make a small profit using a composite sale price of \$221 per ton. This opinion, according to counsel, was heavily qualified and based solely on Transnational's methodology for damages. However, Transnational had not provided any data to justify its assumptions, especially on the composite sales price and other additional costs.

109 Counsel for Semac also underscored an admission by Daron Liew (para 137 of his submission) (pages 131 to 133 of the NE) that Transnational lost money under the recycling agreements and would continue to do so unless the participation rate of recycling in Singapore increased to 35% and beyond. According to Daron Liew, this rate was merely a projection and would only occur at the earliest between 18 to 24 months after the recycling agreements had commenced. Counsel for Semac also referred me to the evidence of Ng (pages 12 and 20 of the NE) who seemed to have confirmed that, apart from the costs which she had stated in her affidavit of evidence in chief, there were other costs that she had not taken into account, most notably disposal costs and educational costs which included marketing and promotional costs of recycling (para 139 of his submission).

110 Relying on a number of reported and unreported decisions from Singapore and elsewhere, counsel for Semac submitted that the cumulative effect of all the decisions referred to was that Transnational, in order to succeed, must lead clear and credible evidence to substantiate its claim for damages. This, counsel submitted, had not been done in this case.

111 Counsel for Transnational, for his part, urged the court to view the expert opinion of Reidinger with caution as he had previously done some work for SembWaste (see para 348 of his submission). He argued that the recycling agreements essentially allowed Transnational to realise two revenue streams from the collection of recyclable materials: (a) payment based on 80% of Semac's savings on incineration fees (\$53.60 per tonne); and (b) sales of recyclable materials to various third party buyers. Counsel then dealt with an overview of revenue assumptions in relation to participation rate, average bag weights and composite value per ton. After listing the total costs as being \$15,247,994.97, he presently submitted that Transnational's loss of profits was \$5,577,492.30.

112 Counsel for Transnational concluded his arguments by submitting (para 530 of his submission)

that if the court does not accept Transnational's computation of damages in its totality, the court may wish to award a just sum to be determined by the court on the basis of the recent computation by Transnational. I will say at once that this statement is perhaps intended to salve what appears to be an extraordinary miscalculation by Transnational.

113 Having advanced and pressed for a stupendous figure of \$11,886,760 (para 282 – page 98 of Transnational's final submission), there seems to be a sudden drop to a suggested figure of \$5,577,492.30. What has led to this precipitous climb-down? Is it a tacit admission by Transnational that the figures and computation provided by Ng and John Nolan could no longer be supported and have to be read with many a qualification? Or is it because the claim figures by Transnational have been disabused by evidence presented on behalf of Semac and cross-examination by Semac's counsel? Whatever the case, my conclusion is that the evidence of Ng as well as the opinion of John Nolan seems to be dwelling more in the realm of speculation and deficient suppositions than hard facts. In addition, the admission by Daron Liew that he too could not see Semac's recycling operations to be in the black until after about 18 to 24 months from the commencement dates further leads me to deduce that the claim by Transnational had not really been thoroughly thought over. In my evaluation, the sudden and startling retreat to almost 50% in the claim figures indeed casts substantial misgivings over the facts, figures, premises and calculations presented earlier and presently by and on behalf of Transnational. In my determination, the evidence adduced by Transnational as to damages is wholly unsatisfactory and in this regard, I accept the criticism and qualifications against Transnational, as contained in the report of Reidinger and reiterated by counsel for Semac.

114 Damages, as observed by LP Thean JA in **Kassim Syed Ali & Ors v Grace Development Pte Ltd & Anor** [1998] 2 SLR 393 at 403-404, are compensatory and one cannot seek compensation *in vacuo*. Compensation must be measured against the loss suffered. In my view, aside from my finding that Semac has not been found to be in breach of the agreements, evidence attempted by Transnational in relation to the quantum of damages is woefully deficient and incomplete. Latham CJ observed in **Luna Park (NSW) Ltd v Tramways Advertising Pty Ltd** (1938) 61 CLR 286 (High Court of Australia) at 301:

It is true that there are many authorities which establish that substantial damages can be awarded where a breach of contract is established, even though the calculation of the damages is "not only difficult but incapable of being carried out with certainty or precision" (*Chaplin v. Hicks* (1)): See also other cases dealing with damages for loss of publicity, *Marbe v. George Edwardes (Daly's Theatre) Ltd.* (2); *Herbert Clayton and Jack Waller Ltd. v. Oliver* (3); *Withers v. General Theatre Corporation Ltd.* (4). In all these cases, however, the extent of the breach was established. There was a complete failure on one side to perform the contract. In the present case, however, there has not been a complete, but only a partial, failure to perform the contract. The extent of the failure is unascertained. *Thus the evidence which the defendant was content to put before the court does not make it possible to reach any estimate of damage suffered. I can see no reason why the defendant should be allowed to fight the matter over again. If a party chooses to go to trial with incomplete evidence he must abide the consequences. The fact that his evidence might have been strengthened affords no reason for ordering a new trial.* Thus the defendant must be content, so far as the first and second seasons are concerned, with nominal damages. [Emphasis added.]

115 In my view, litigants should be discouraged from demanding unreal figures and prosecuting outlandish claims for their perceived grievances. The figures demanded by Transnational, almost right up to the end, are neither proportionate nor substantiated by credible and acceptable evidence. They are Olympian in proportion, but sadly without support or justification. In my opinion, the claim for damages by Transnational is not proven by any standards. In any case, even if Transnational were to

succeed in these actions, having regard to the evidence before the court, the amount of damages they would have received would perhaps be \$450,000, the figure – subject to qualification – given by Reidinger. However, Transnational, as has been found by me earlier, has not, on balance of probabilities, established its claims in both actions.

116 Before concluding, I ought to deal with one other argument raised by counsel for Semac. He submitted that the court should draw an adverse inference under s 116 illustration (g) of the Evidence Act (Cap 97), against Transnational for not calling Cheah (Cheah Bin Thong) whose name features prominently in many of the affidavits filed on behalf of Transnational. In my evaluation, whilst Cheah's non-production tended to raise a question mark over the quality of the assertions by Transnational, I am not disposed to draw any adverse inference against Transnational, for in my view, the exchanges attributed to Cheah do not seem to add much to either side's cause.

117 In fine, for the reasons I have given, the claims by Transnational in both actions fail and are hereby dismissed. Similarly, for the reasons appearing herein, the counterclaims of Semac do also stand dismissed. Although both parties have failed in their respective claims and counterclaims, having considered the manner in which the claims were prosecuted and defended, I award two-thirds of the costs to be taxed, if not agreed upon, to Semac.

Order accordingly.

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