



COMMERCE COMMISSION

Decision No. 616

Determination pursuant to the Commerce Act 1986 in the matter of an application for clearance of a business acquisition involving

TRANSPACIFIC TECHNICAL SERVICES (NZ) LIMITED

and

MEDI-CHEM WASTE SERVICES LIMITED

- The Commission:** Paula Rebstock
David Caygill
Peter J M Taylor
Denese Bates QC
- Summary of Application:** Transpacific Technical Services (NZ) Limited has applied for clearance to acquire the assets and business of Medi-Chem Waste Services Limited (Medi-Chem) that relate to solvent treatment, recycling, and disposal.
- Determination:** Pursuant to section 66(3)(a) of the Commerce Act 1986, the Commission determines to give clearance to Transpacific Technical Services (NZ) Limited for the acquisition.
- Date of Determination:** 30 August 2007

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EXECUTIVE SUMMARY

Introduction

- E1. The Commerce Commission (Commission) received an Application from Transpacific Technical Services (NZ) Limited (TTS) seeking clearance to acquire the solvent treatment, recycling and disposal operations (the solvent business) of Medi-Chem Waste Services Limited (Medi-Chem). The issue that the Commission must consider is whether it can be satisfied that the proposed acquisition will not have, or would not be likely to have, the effect of substantially lessening competition in any market.
- E2. To aid its analysis, the Commission compares two situations: one in which the acquisition proceeds (the factual), and one in which the acquisition does not proceed (the counterfactual). The impact of the acquisition on competition in a market is then viewed as the prospective difference in the extent of competition between these two situations. The Commission must assess whether there is a real and substantial risk that there will be more than a minimal lessening of competition.

Background

- E3. TTS is involved in the collection, treatment and disposal of a range of different types of hazardous waste, including bulk wastes such as heavy metals and organics, and other waste such as solvents, miscellaneous chemical waste, and hydrocarbons. It has treatment facilities in Auckland and Wellington. In December 2005 TTS became part of the Transpacific Group of companies, which is the largest waste management provider in Australasia.
- E4. Medi-Chem provides waste collection, treatment and disposal services for solvents, hydrocarbons, and miscellaneous chemical waste. Its treatment facilities are located in Auckland. Medi-Chem also specialises in handling, packaging and transporting intractable wastes for disposal overseas.

The Relevant Markets

- E5. For its analysis the Commission first must define the relevant markets affected by the proposed acquisition in order to assess the likely competition effects.
- E6. The Commission has found that the relevant markets for the consideration of this acquisition are:
- the upper North Island market for the provision of waste solvent treatment/disposal services (*the waste solvent treatment market*); and
 - the North Island market for the supply of third-party recycled solvent (*the recycled solvent market*).

Factual and Counterfactual

- E7. The factual scenario (with the acquisition) would remove the existing competition from Medi-Chem in the provision of waste solvent treatment/disposal services to tolling customers.ⁱ The factual may also remove potential competition from Medi-Chem in the provision of waste solvent treatment/disposal services to non-tolling customers, and in the sale of recycled solvent.

ⁱ Paragraphs 30 to 32 of the body of reasons define the terms tolling and non-tolling.

- E8. The Commission considers that the likely counterfactual (without the acquisition) would be that Medi-Chem's waste solvent treatment/disposal and recycling facilities would continue to be operated in competition with TTS, either under current or new ownership.

Competition Analysis

- E9. In the upper North Island market for waste solvent treatment, and the North Island market for the supply of third-party recycled solvent, the proposed acquisition would eliminate TTS's biggest competitor (Medi-Chem).
- E10. However, the removal of an existing competitor may not raise any competition concerns if the existing competitor is not exercising any effective constraint for most of the market, further entry is likely within a reasonable time frame and with sufficient scale, there is a considerable amount of self-supply existing in the market, or if the combined entity is likely to be sufficiently constrained by the countervailing power of purchasers.
- E11. The Commission considers that the combined entity would face a significant degree of constraint from potential competition in the factual scenario. Entry would be likely if there was an incentive to enter the market because of a decline in the combined entity's service or quality, or an increase in its price. This potential for entry would act to significantly constrain the combined entity from materially raising prices or reducing quality.
- E12. Also, the combined entity is likely to be constrained by large tolling customers, who could switch or threaten to switch to self-supply. The market already is characterised by a significant amount of self-supply and some large tolling customers have considered or are considering self-supply. Accordingly, the potential for the combined entity to exercise market power (e.g., through increasing prices) will be to a significant degree constrained by the countervailing power of these customers.
- E13. The proposed acquisition removes only limited constraint from existing competition in respect of non-tolling customers and in the North Island market for the supply of third-party recycled solvent (where Medi-Chem is only a near competitor). However, it removes all existing competition in respect of tolling customers. Taking all the factors together, the Commission considers that the combined entity is likely to continue to be subject to constraint from potential competition and the countervailing power of tolling customers.
- E14. Therefore, the Commission is satisfied that the proposed acquisition would not be likely to substantially lessen competition in either of the relevant markets.

Conclusions

- E15. The Commission concludes that the proposed acquisition will not have, nor would be likely to have, the effect of substantially lessening competition either in the upper North Island market for waste solvent treatment, or in the North Island market for the supply of third-party recycled solvent.

THE PROPOSAL

1. A notice¹ pursuant to s 66(1) of the Commerce Act 1986 (the Act) was registered with the Commerce Commission (the Commission) on 14 August 2007 seeking clearance for Transpacific Technical Services (NZ) Limited (TTS), or a wholly-owned subsidiary of TTS, to acquire the assets and business of Medi-Chem Waste Services Limited (Medi-Chem) that relate to solvent treatment, recycling, and disposal.
2. Previously, on 19 February 2007, the Commerce Commission had received an application from TTS seeking clearance to acquire the assets and businesses of Medi-Chem that related to (a) the treatment, recycling, and disposal of solvents; and (b) the collection, treatment and disposal of other hazardous wastes (but not including the business relating to medical, quarantine and infectious waste, or the business of collecting and recycling lamps, amalgam and x-ray film and fluids). On 14 August 2007 TTS withdrew that application, and in its place, submitted two clearance applications that in essence split the original clearance application, one of which is the application pertaining to this decision.

PROCEDURE

3. Section 66(3) of the Act requires the Commission either to clear or to decline to clear the acquisition referred to in a s 66(1) notice within 10 working days, unless the Commission and the person who gave notice agree to a longer period.
4. TTS's application for clearance in respect of solvents was investigated, and parties were consulted, over the period since the Commission received TTS's original clearance application in February 2007.
5. The Applicant sought confidentiality for specific aspects of the original application.
6. The Commission's approach to analysing the proposed acquisition is based on principles set out in the Commission's *Mergers and Acquisitions Guidelines*.²

STATUTORY FRAMEWORK

7. Under s 66 of the Act, the Commission is required to consider whether the proposal will have, or would be likely to have, the effect of substantially lessening competition in a market. If the Commission is satisfied that the proposal would not be likely to substantially lessen competition, then it is required to grant clearance to the application. Conversely, if the Commission is not satisfied it must decline the application. The standard of proof that the Commission must apply in making its determination is the civil standard of the balance of probabilities.³
8. The substantial lessening of competition test was considered in *Air New Zealand & Qantas v Commerce Commission*, where the Court held:

¹ In this Decision, the notice is termed the "Application."

² Commerce Commission, *Mergers and Acquisitions Guidelines*, January 2004.

³ *Foodstuffs (Wellington) Cooperative Society Limited v Commerce Commission* (1992) 4 TCLR 713, 721.

We accept that an absence of market power would suggest there had been no substantial lessening of competition in a market but do not see this as a reason to forsake an analysis of the counterfactual as well as the factual. A comparative judgement is implied by the statutory test which now focuses on a possible change along the spectrum of market power rather than on whether or not a particular position on that spectrum, i.e. dominance has been attained. We consider, therefore, that a study of likely outcomes, with and without the proposed Alliance, provides a more rigorous framework for the comparative analysis required and is likely to lead to a more informed assessment of competitive conditions than would be permitted if the inquiry were limited to the existence or otherwise of market power in the factual.⁴

9. In determining whether there is a change along the spectrum that is significant the Commission must identify a real lessening of competition that is more than nominal and not minimal.⁵ Competition must be lessened in a considerable and sustainable way. For the purposes of its analysis the Commission is of the view that a lessening of competition and a creation, enhancement or facilitation of the exercise of market power may be taken as being equivalent.
10. When the impact of market power is expected to be predominantly upon price, for the lessening, or likely lessening, of competition to be regarded as substantial, the anticipated price increase relative to what would otherwise have occurred in the market has to be both material, and ordinarily able to be sustained for a period of at least two years, or such other time frame as may be appropriate in any give case.
11. Similarly, when the impact of market power is felt in terms of the non-price dimensions of competition, such as reduced services, quality or innovation, for there to be a substantial lessening, or likely substantial lessening of competition, these also have to be both material and ordinarily sustainable for at least two years, or such other time frame as may be appropriate.

ANALYTICAL FRAMEWORK

12. The Commission applies a consistent analytical framework to all of its clearance decisions. The first step the Commission takes is to determine the relevant market or markets. As acquisitions considered under s 66 are prospective, the Commission uses a forward-looking type of analysis to assess whether a lessening of competition is likely in the defined market(s). Hence, an important subsequent step is to establish the appropriate hypothetical future with and without scenarios, defined as the situations expected:
 - with the acquisition in question (the factual); and
 - in the absence of the acquisition (the counterfactual).
13. The impact of the acquisition on competition is then viewed as the prospective difference in the extent of competition in the market between those two scenarios. The Commission analyses the extent of competition in each relevant market for both the factual and the counterfactual, in terms of:
 - existing competition;
 - potential competition; and
 - other competition factors, such as the countervailing market power of buyers or supplies.

⁴ *Air New Zealand & Qantas Airways Ltd v Commerce Commission* (No.6) (2004) 11 TCLR 347 at 366.

⁵ *Fisher & Paykel Limited v Commerce Commission* [1990] 2 NZLR 731, 758 and also *Port Nelson Limited v Commerce Commission* [1996] 3 NZLR 554.

THE PARTIES

Transpacific Technical Services (NZ) Limited (TTS)

14. TTS, formerly United Environmental Limited, was acquired by ERS New Zealand Limited (ERS) in December 2005.
15. TTS and its parent ERS are ultimately wholly-owned subsidiaries of the Transpacific Group of companies. The Transpacific Group is the largest waste management provider in Australasia, and is involved in the collection, treatment and disposal of solid, liquid and hazardous waste.
16. TTS is involved in the treatment of a range of different types of hazardous waste, including bulk wastes such as heavy metals and organics, and other waste, such as solvents, miscellaneous chemical waste and hydrocarbons. It has solvent treatment facilities in Auckland and Wellington [].
17. The Transpacific Group also operates hazardous waste collection, treatment and disposal services, mostly for bulk heavy metals and organic waste, in Rotorua, Whakatane and New Plymouth under Transpacific Industrial Solutions (NZ) Limited (TIS).
18. TTS's sister company, Medismart Limited (Medismart), formerly Nuplex Medismart Limited, primarily deals with medical and quarantine waste. Medismart's Wellington, Christchurch and Dunedin assets were sold to International Waste Limited in October 2006.

Medi-Chem Waste Services Limited (Medi-Chem)

19. Medi-Chem was acquired by private investors, Tennex Waste Services Limited, in late 2003. Medi-Chem in turn acquired assets relating to the disposal of intractable waste from Tredi New Zealand Limited in August 2005.
20. Medi-Chem has been involved in the collection, treatment and disposal of a range of different types of hazardous waste, including solvents, hydrocarbons, intractables and miscellaneous chemical waste. However, the Commission on the 15 August 2007 granted clearance for TTS to acquire the assets and businesses of Medi-Chem that relate to the collection, treatment and disposal of hydrocarbon, miscellaneous chemical and intractable wastes (the 'chemical smalls' business).
21. Medi-Chem, and its related company International Waste Limited (IWL), formerly Sterilisation Solutions Limited, are involved in medical, quarantine and infectious waste, and Medi-Chem also collects and recycles lamps, amalgam, x-ray film and fluids in conjunction with Universal Metals Pty Limited and Eco Cycle Industries. These activities are not included in the proposed transaction. IWL acquired the Wellington, Christchurch and Dunedin assets of Medismart from TTS in October 2006.

INDUSTRY BACKGROUND

Solvents

22. Solvents are liquids that have the ability to dissolve, suspend or extract other materials without chemical change to the material or solvent. Solvents are used in a number of industrial processes involving the application, cleaning, or

separation of materials. Industries that commonly use solvents include: food processing, pharmaceutical manufacture, printing, painting and heavy industry.

23. In the food industry, solvents are used in the extraction of required substances from natural products, for example in the extraction of enzymes, oils, or flavourings. Similarly, in the manufacture of pharmaceuticals, solvents separate the desired chemical products from unwanted ones, maximising the purity of the drug.
24. Solvents are used in paint manufacture to dissolve or disperse the different components (such as pigment and resin), and are also used to control the viscosity of paint. After paint has been applied, the solvent component evaporates, allowing the resin and pigment to produce a film of paint and to dry rapidly. In the printing industry, solvents are used to control viscosity and allow ink flow without damaging printing rollers. Solvents also ensure optimum drying of the ink, allowing presses to operate at higher speeds.
25. In addition, solvents are used to flush paint spray guns, wash down printing presses, and as a degreaser in the cleaning of automotive and industrial machinery parts. Once used, the contaminated or 'spent' solvents form part of a waste stream that may be recycled and used again in the same or other processes.
26. Aqueous- and caustic-based cleaners are a biodegradable alternative to solvents in some industrial processes, in particular parts degreasing. Parts degreasing has historically consisted of manually washing parts in a bath of solvent to rid them of grease. Advances in technology, together with a desire to have more environmentally friendly processes, have led some businesses to use aqueous- and caustic-based cleaners instead of solvents.

Solvent Recycling

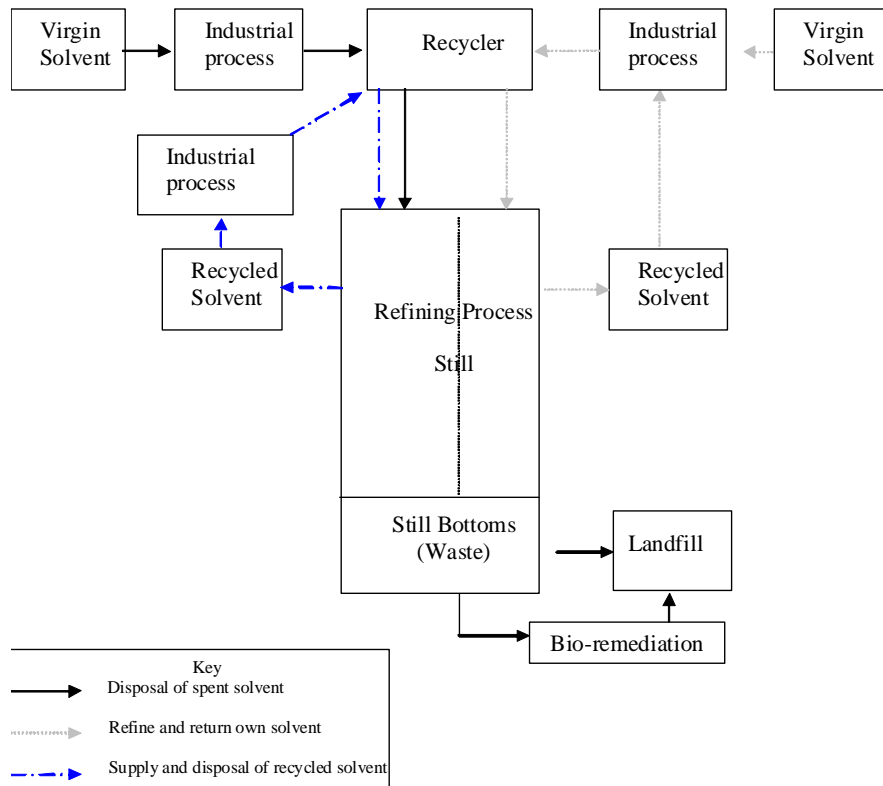
27. Solvent that has been used in a process is termed 'waste' (or 'spent'). It may include: substances such as paint thinners contaminated with paint sludge, degreasing solvent contaminated with oil, or printing solvent contaminated with ink. Often, the contaminants can be removed by a distillation process that, in some cases, returns the solvent to near its original purity.
28. During distillation, waste solvent is heated, driving off the solvent in vapour form. The vapour is converted back to liquid form in a condenser and is collected, and, the waste remaining in the bottom of the still (the 'still bottoms') is collected and disposed of.
29. Users of solvents choose to recycle waste solvent for three main reasons:
 - economic – it is more cost effective to recycle solvent than to use more expensive virgin solvent;
 - waste disposal – use of solvents in industrial processes creates a hazardous waste stream that must be disposed of; and
 - environmental – recycling reduces the amount of industrial waste to be disposed of and therefore reduces associated environmental liability.
30. The usage, recycling and disposal of solvents is illustrated in Figure 1. In some industries, such as food processing, recycled solvents cannot be used, as the solvent is not sufficiently pure to satisfy health standards. In these instances, the solvent user needs to dispose of the waste solvent rather than recycle it.

This is done by a 'non-tolling' operator, and the recycled solvent typically is used for a different purpose.

31. For example, recycled solvents may be blended to produce lower grade solvent products, such as 'gun wash', which is typically used to flush painting spray guns, particularly in the automotive spray painting industry; and 'blanket wash', which is used to flush ink from printing press blankets.
32. For companies that wish (and are able) to use their own recycled solvent, it is essential that it is kept separate from that of others during the recycling process, in order to prevent contaminants entering their solvent, and consequently, their processes. In this instance, the solvent recycling company processes (batch distils) the solvent, disposes of any waste, and returns the recovered solvent to the customer, rather than supplying the company with recycled solvent from general stocks. This is referred to as a 'tolling operation'.

Figure 1

Usage, Recycling and Disposal of Solvents in the Solvent Recycling Industry



PREVIOUS COMMISSION DECISION

33. The Commission has previously considered solvent treatment, recycling, and disposal. In *Decision 442, United Environmental Limited / Solvent Services Limited* of 5 October 2001, the Commission considered that there were three separate solvent product markets: the provision of disposal services for waste solvent (non-tolling); the provision of recycling services for waste solvent (tolling and toll-refined solvent); and the supply of recycled solvent (third party recycled solvent). All three markets were considered to be national in terms of

geographic boundary. Accordingly, the Commission considered the relevant markets to be:

- the national market for the provision of solvent disposal services;
- the national market for the provision of solvent recycling services; and
- the national market for the supply of recycled solvent.

MARKET DEFINITION

34. The Act defines a market as:⁶

... a market in New Zealand for goods or services as well as other goods or services that, as a matter of fact and commercial common sense, are substitutable for them.

35. In *Telecom Corp of NZ Ltd v Commerce Commission* the High Court established the following principles in the approach to defining markets:⁷

First, and most generally, we seek to identify the area or areas of close competition of relevance for the application(s). In other words, we seek to identify the constraints upon the price and production policies of firms or divisions of firms whose conduct is of relevance for the matters litigated.

Secondly, competition may proceed both through substitution in demand and substitution in supply in response to changing prices or, more comprehensively, the changing price-product-service packages offered... The mental test that prompts a summary evaluation of the evidence is to ask how buyers and sellers would likely react to a notional small percentage increase in price of the products of interest.

Thirdly, the market is a multi-dimensional concept – with dimensions of product, space, functional level and time.

36. For the purpose of competition analysis, the internationally accepted approach is to assume the relevant market is the smallest space within which a hypothetical, profit-maximising, sole supplier of a good or service, not constrained by the threat of entry, would be able to impose at least a small yet significant and non-transitory increase in price, assuming all other terms of sale remain constant (the SSNIP test). The smallest space in which such market power may be exercised is defined in terms of the dimensions of the market specified below. The Commission generally considers a SSNIP to involve a five to ten percent increase in price that is sustained for a period of one year.

37. The Commission defines relevant markets in terms of up to five characteristics or dimensions, as follows:

- the goods or services supplied and purchased (the product dimension);
- the level in the production or distribution chain (the functional level);
- the geographic area from which the goods or services are obtained, or within which the goods or services are supplied (the geographic extent);
- the temporal dimension of the market, if relevant (the timeframe); and
- the customer dimension of the market.

38. Market boundaries should be drawn by reference to the conduct at issue. The process of defining markets is inevitably an imprecise one, since transactions in the economy do not fall neatly into a series of discrete and easily observable markets. In any case, it may not often be necessary—or practical—to identify

⁶ Commerce Act 1986, s 3(1).

⁷ *Telecom Corporation of New Zealand Ltd v Commerce Commission* (1991) 4 TCLR 473, 501-502.

the precise boundaries of the activities included in the market. As has already been noted, market definition is a tool for competition analysis rather than an end in itself, and a decision to define a market in a particular way does not mean that a potential substitute or constraint from outside that market is ignored.⁸

39. The Commission seeks to define markets in a way that best assists the analysis of the competitive impact of the acquisition under consideration. The starting point is the common activities of the two parties, because this is where aggregation may occur. In the present case, the common activities occur in the treatment, recycling and disposal of waste solvent.
40. The Applicant submitted that the relevant market in respect of the proposed acquisition is the solvent segment of the national market for the treatment (including, where appropriate, treatment for re-use) and, where required, disposal, of hazardous wastes (both liquid and solid).
41. For the reasons explained below, the Commission considers that the relevant markets are:
 - the provision of waste solvent treatment/disposal services in the upper North Island; and
 - the supply of third party recycled solvent in the North Island.

Functional Markets

42. In Decision 442, the Commission considered that delineating functional levels of the relevant markets was not necessary for the purposes of the competition analysis.
43. The Commission has considered whether it would be appropriate in this case to delineate separate functional levels for waste solvent markets. The Commission has considered whether supply-side substitution could occur between functional levels, such that if suppliers at one level were easily able to switch to supplying at another level in response to a small change in relative prices, and vice versa, then the presence of these 'near competitors' would suggest that the two functional levels would effectively be part of a single market.

Collection and Treatment

44. None of the waste generators spoken to by the Commission said that they could engage a collection operator to treat their waste solvent in the event that the price of treatment increased, apart from situations where a treatment operator was already vertically-integrated with a collection service. They explained that a hazardous waste collector would not have the expertise, facilities, supporting infrastructure or consents to treat waste solvent in a manner that would be compliant with the Resource Management Act (RMA).
45. Likewise, waste generators said that they could not engage a specialist waste solvent treatment operator to provide a collection service. The collection service involves identifying, labelling and packaging its hazardous waste,

⁸ *Brambles New Zealand v Commerce Commission* (2003) 10 TCLR 868, 892-893.

identifying a suitable treatment facility,⁹ and arranging for the hazardous waste to be transported to that facility. Industry participants explained that although treatment operators may, through their employment of chemists and technicians, have the experience and skills to identify, label and package hazardous waste, and identify a suitable treatment facility, they would not have the ability to remove the hazardous waste from their site, nor to transport it.

46. Consequently, the Commission considers that there is limited supply-side substitutability between the provision of waste solvent collection services and the provision of waste solvent treatment services, and hence that the two services should be viewed as separate functional levels of the market.
47. TTS and Medi-Chem provide some collection services with respect to waste solvent. However, their core business is the treatment, recycling and disposal of waste solvent, not waste collection services. Other companies specialise in offering hazardous waste collection services (for a range of hazardous wastes, including waste solvent). Accordingly, the Commission considers it does not need to separately analyse the competition impact of the proposed acquisition in respect of the provision of waste solvent collection services.

Treatment and Disposal

48. Industry participants advised that waste solvent generators normally engage a waste solvent treatment operator to provide both treatment and disposal services for their waste solvent. Disposal services are provided merely as an extension of the treatment services offered by waste solvent treatment operators. As noted above, much spent solvent is recycled in some way rather than being disposed of. For example, waste solvent (tolling) customers use waste solvent treatment operators to treat and return their recycled solvent.

Conclusion on Functional Markets

49. Accordingly, the Commission considers that the relevant functional level of the markets is the provision of waste solvent treatment services.

Product Markets

50. The greater the extent to which one good or service is substitutable for another, on either the demand side or supply side, the greater the likelihood that they are bought and supplied in the same market.
51. Close substitute products on the demand-side are those between which at least a significant proportion of buyers would switch when given an incentive to do so by a small change in their relative prices.
52. Close substitute products on the supply side are those between which suppliers can easily shift production, using largely unchanged production facilities and little or no additional investment in sunk costs, when they are given a profit incentive to do so by a small change in their relative prices.

Wider Hazardous Waste Market?

53. In Decision 442, the Commission noted that there might be a wider market for the treatment of hazardous waste, but did not analyse this possibility in any

⁹ Based on the type of hazardous waste plus any other criteria set by the customer, including service quality and price. Some customers, such as regional councils, may dictate their choice of treatment operator to the collector.

detail as the area of aggregation was limited to the provision of waste solvent services.

54. The Applicant, in its original application, submitted that the extent of demand and supply side substitutability is such that there is a single market for the treatment and disposal of all hazardous wastes. As part of the Commission's investigation of that application (prior to it being withdrawn) and TTS's other application for clearance in respect of Medi-Chem's chemical smalls business, the Commission considered again whether there might be a wider market for the treatment of hazardous waste. However, for the reasons outlined in Decision 613¹⁰, the Commission considers that the markets are appropriately defined more narrowly.
55. In addition, as was the case in Decision 442, the area of aggregation in respect of this Application is limited to the provision of waste solvent treatment, recycling and disposal services.

The Provision of Waste Solvent Treatment/Disposal Services

Introduction

56. In Decision 442, the Commission considered that there were three separate solvent waste markets: those for the provision of disposal services for waste solvent (*non-tolling*); the provision of recycling services for waste solvent (*tolling* and *toll-refined solvent*); and the supply of recycled solvents (*third party recycled solvent*).
57. In contrast, the Applicant submitted that there is one market for the provision of solvent treatment services. TTS provides both tolling services and non-tolling services. It considers that there are limited barriers to switching between one of these services and the other.
58. Medi-Chem advised the Commission that it specialises in providing tolling services, and that it does not presently provide non-tolling services. It said that (contrary to TTS) it had encountered insurmountable barriers when it had attempted to do so.
59. TTS advised that there are two types of tolling customers: closed-tolling and open-tolling. The main type is closed-tolling. Here, a waste generator sends its waste solvent to Medi-Chem or TTS, where that solvent is refined and returned to the same generator as recycled solvent. This usually happens when the company's equipment requires that a particular blend of solvent is used. In contrast, with open-tolling, waste generators send their waste solvent to a middleman (such as ERS or Marketing Chemicals), who aggregates it, sends it to Medi-Chem or TTS for treatment, and then receives back the recycled solvent and sells it to its customers. With this service, a waste generator generally does not receive back its own solvent.
60. The non-tolling service is used by generators who wish to dispose of their waste solvent. The waste solvent is sent to TTS, who either refines it where feasible and then sells the recycled product, or sends it for disposal when it cannot be reused.

¹⁰ Decision in respect of TTS' application to acquire the chemical smalls business of Medi-Chem.

Tolling Versus Non-Tolling Services

61. The question of substitutability has both supply- and demand-side perspectives. On the supply-side, solvents are reclaimed using a distillation process involving a still. Batch-processing is used, with the still being cleaned between batches in order to avoid cross-contamination between different types of solvent (for example, to avoid ethanol being contaminated with acetone). This type of processing also means that it is technically feasible to process both tolling and non-tolling solvent in one still, and indeed, all but Medi-Chem switch between the provision of tolling and non-tolling services.
62. All solvent treatment operators spoken to, other than Medi-Chem, said that they consider the provision of tolling and non-tolling services to be fully substitutable, in the sense that they could use exactly the same still to process waste solvent for both tolling and non-tolling customers, and could switch readily between the two in the event of a SSNIP, within one year and without incurring additional costs. TTS advised that “the product...goes through pretty much the same treatment process, or some variation, but to put a dividing line where the treatment process should be for tolling customers or not is probably quite difficult.”
63. Medi-Chem told the Commission that it does not provide non-tolling services, because it encountered considerable difficulties when it tried to do so. This statement is inconsistent with those made by all other industry operators, including TTS. Medi-Chem reported that it does treat small volumes of non-tolling solvents where it can be blended with toll-refined solvent. It does not sell third party recycled solvents. It has run trials with selling recycled blanket wash in the past, but said it could not source a consistent supply, or find a consistent market. Medi-Chem advised that it has, for the most part, aggregated non-tolling waste solvent to await treatment, and that it has accumulated large volumes of historical stocks from which it cannot produce a saleable product. The only exception to this was acetone that was recycled and sold to a boat builder on a one-off basis.
64. There are two main impediments to switching between supplying tolling and non-tolling services: securing a consistent quality input, and securing an outlet for the sale of the refined product. Both TTS and Medi-Chem said that there is a level of certainty in the supply of tolling solvents that makes it by far the easier of the two to deal with. The volume and type of incoming waste is consistent and scheduled, and there is a guaranteed outlet. Medi-Chem said that this certainty also means that it can maximise its treatment capacity by clustering compatible batch-runs to minimise down-time.
65. On the other hand, for the non-tolling service, TTS advised that a solvent treatment operator would not be able to produce a saleable product if it were unable to obtain a consistent non-tolling waste. This appears often to be the problem: the waste solvent varies from customer to customer, often unpredictably; it may contain contaminants that are hard to extract; and it may comprise a mix of different types of solvents that can be hard to separate.
66. Overall, from a supply-side perspective, it seems feasible for solvent treatment operators to switch between supplying tolling and non-tolling services, and indeed, they generally do in the normal course of events, using their existing facilities, even without the inducement provided by a SSNIP on one of the services.

67. For reasons mentioned earlier, closed tolling customers said that they could not use a third-party recycled solvent blend in place of their own recycled solvents, because they have a calibrated solvent blend that is developed especially to meet their particular requirements. For example, [] advised that the equipment manufacturer's warranty states that the manufacturer's specified solvent blend must be used for maintaining that equipment. When a closed tolling customer sends its waste solvent for treatment, it requires that treated solvent blend to be returned to it. The importance of this requirement is shown by the case of [] In short, industry parties confirmed that the situation described in Decision 442 in 2001 had not changed since.
68. This means that tolling customers can only buy the tolling service, although they advised that they can (and do) switch readily between different operators who are able to provide this service. The Commission identified a number of tolling customers who had switched in this way. [] is one such customer. It has switched from Medi-Chem to TTS and found no real difference in the quality of the recycled solvent provided by the two parties.
69. Where waste solvent is aggregated and transported to TTS for recycling, the treated solvent is on-sold to third parties. This non-tolling service seems to be more expensive than the tolling. This probably reflects allowances for the inconsistent quality of the waste solvents, and that some of the solvents will not be suitable for recovery and so may require other disposal methods that might be more costly. However, the price charged to non-tolling customer also includes disposal costs. For example, TTS presently [] Previously, TTS used to send its unrecoverable waste solvent to Geocycle in Australia.

Conclusion on Waste Solvent Treatment

70. In summary, the Commission concludes (as it did in Decision 442) that the tolling and non-tolling services for waste solvent should be included in the one waste solvent treatment market, since the same treatment firms (apart from Medi-Chem) supply both services, even if particular customers demand one or the other. In order to be able to exert market power, a hypothetical monopolist would need to control all solvent treatment activities, not just nominally 'tolling' or 'non-tolling' services.

Nature of the Recycled Solvents Market

71. A further, related question is whether and to what extent there is a separate market for the sale of recycled solvents, as used in Decision 442.
72. As already mentioned, tolling customers use particular solvent blends that they have processed and want returned to them, forming a 'closed loop'. They pay one price for the treatment and return of their solvents. It follows that the demand for the recycling service and the demand for the recycled product are essentially one-and-the-same. As the two are inextricably linked, there is no need to define a separate product market for the supply of recycled solvent to tolling customers.

73. In contrast, the non-tolling treatment results in some recovery of solvents that are sold to third parties, who are often likely to be the original generators of the waste. These tend to be generic blends like gunwash. The originator of the waste solvent does not receive it back; it may use virgin solvent in its manufacturing process, and the waste it generates is simply sent for disposal. As the charge for this treatment service tends to be higher than that for tolling, there is an incentive to toll refine where feasible. Moreover, there are two prices paid: one for the treatment and disposal by the waste generator, and the other by a third-party for the recycled solvent. This might suggest that the two products fall in separate markets.
74. On the other hand, the two products are clearly linked economically, since the recycled solvent is a by-product of the treatment process. One would expect many of the costs to be joint costs, which could be allocated between the two products in arbitrary ways. For example, the price of the treatment process could be reduced to the extent that treatment costs are able to be recovered from the sale of what product is able to be recovered. The linkage between the prices for treatment and recycled solvent is evident in [
-]. Similarly, Medi-Chem, as noted above, does not generally undertake non-tolling work because of its inability to produce a saleable product, implying that without additional revenue from that source the treatment activity is not economic.
75. Nonetheless, to ensure that all potential competition effects of the proposed acquisition are examined, the Commission proposes to include a market for third-party recycled solvent.
76. In addition, as already indicated, there is a range of types of solvents, some with specific applications. For example, Decision 442 mentions that the dry cleaning industry mainly uses chlorinated solvents, whereas the food processing industry might use acetone. Also, the prices of these solvents vary. In short, the solvent product is differentiated. However, the focus here is on the treatment of waste solvents of various types, with the volumes of those types being determined by the waste generators. Consequently, for the purposes of this Application, and consistent with Decision 442, the Commission considers that it is not necessary to have separate treatment or product supply markets for particular types of solvents.

Conclusion on Product Markets

77. Accordingly, Commission staff consider that the relevant product markets in respect of the proposed acquisition are:
- the provision of waste solvent treatment/disposal services (*the waste solvent treatment market*); and
 - the supply of third party recycled solvent (*the recycled solvent market*).

Geographic Dimension

78. The Commission defines the geographical extent of a market to include all of the relevant, spatially dispersed, sources of supply to which buyers can turn should the prices of local sources of supply be raised. For each good or service combination, the overlapping geographic areas in which the parties operate are identified. These form initial markets to which a SSNIP is applied. Additional

geographic regions are added until the smallest area is determined within which the hypothetical monopolist could profitably impose a SSNIP.

79. Generally, the higher the value of the product to be purchased, the more likely are buyers to travel and shop around for the best buy, and the wider the geographic extent of the market is likely to be.
80. On the other hand, the geographic extent of the market may be limited where transport costs are high relative to the final value of a product, or where product perishability and other similar practical considerations, such as the timeliness of delivery, limit the distance that a product may be transported.
81. Although buyers and sellers of a particular good or service may interact in markets that are apparently local or regional in extent, those markets may themselves overlap and interrelate so as to form a market covering a larger geographical area. In these situations, the larger market is likely to be the appropriate one for analysing the competitive effects of a business acquisition.

The Waste Solvent Treatment Market

82. The Applicant submitted that the waste solvent treatment market is a national one. This is consistent with Decision 442. In 2001, industry participants had advised the Commission that they transported spent and recycled solvents between the North and South Islands for both disposal and sale respectively. Also, they said that they would transport solvents between the North and South Islands if the situation arose where there was a decrease in the supply of recycled solvent in their region, or an increase in demand for the provision of solvent disposal and solvent recycling services in another region. The Commission therefore concluded that these markets were national markets.
83. With the current Application, industry participants other than TTS and Medi-Chem considered that the situation had changed since 2001. They reported that it is no longer economically viable to transport waste and recycled solvent between the North and South Islands, which suggested that there are separate North and South Island markets. Waste generators advised that this is mainly the result of an increase in transport charges brought about by an increase in fuel costs.¹¹ Consequently, the Commission has reconsidered the geographic extent of the solvent markets.
84. To help with the analysis, the Commission collected samples of 72 customer price quotations or invoices from a range of waste generators and solvent treatment operators (“the data sample”). A check of the data sample tended to confirm that waste solvent was generally transported only short distances, although the sample was taken in such a way that it is likely to be non-representative to some degree. Most of the waste was generated in one of Auckland, Wellington and Christchurch, and most of that was treated in its ‘home’ city. Of the 72 cases in the sample, no more than 12, and possibly as few as 9, involved transport distances in excess of 35kms (one way). Four of these were the ERS shipments from Christchurch to Auckland. Other long-haul shipments reflect the servicing of waste generators located at a distance from the main centre treatment facilities, where long-haul transportation is unavoidable.

¹¹ In the 05 June 2007 interview, TTS advised that whilst the cost for recycling and the price of recycled solvent has increased, the increase is not as large as that for transportation costs.

85. Solvent treatment operators spoken to by the Commission advised that customers that want to send waste to them outside of the immediate area pay for their own transport. Waste generators themselves said they would not want to incur the transport costs entailed in sending their waste solvent further afield, because they would be too high. All of this evidence suggested that it might be appropriate to separate further the North Island into upper and lower geographic markets.
86. In considering the geographic extent of the solvent treatment market, it is also helpful to consider how the treatment operators organise their businesses, as this provides insights into the geographic scope of the market. TTS is a large processor of solvent waste, and operates on a nation-wide basis.
87. TTS's upper North Island volumes (the bulk from within Auckland) are treated by its Auckland facility, and the lower North Island volumes are treated by its Wellington facility. An exception to this pattern is that [] litres of solvent waste is transported from the upper North Island for processing in Wellington, although the volume has declined sharply over the preceding three years. TTS presently has no facility in the South Island. Here, ERS, based in Christchurch, collects and aggregates non-tolling solvent, and ships it from Christchurch in bulk ([] litres at a time) for treatment at TTS's Auckland facility. ERS essentially acts as a middle-man between waste generators and the processor. The waste is treated in Auckland because of capacity constraints in TTS's Wellington facility.
88. The ERS operation might suggest that it is economic to transport waste solvent between the two Islands for treatment. It is also the case that the bulk transporting of such large quantities keeps unit costs as low as possible.
[

]
89. Another long-haul transport of waste solvent is also conducted by TTS.
[

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90. This discussion indicates the general principle that it is more efficient to treat waste solvent reasonably close to the source, for two reasons: the transport costs are relatively high, and 'double up' because recycled solvent is often returned; and shorter distances mean a quicker turn-around time for the return of recycled solvent, thereby reducing costs by allowing lower stocks to be held by both processor and generator.
91. Medi-Chem mostly services the upper North Island region from its Auckland treatment facility. At one time it also treated small volumes from a Wellington customer, but this ceased when the customer switched to self-supply.

92. In summary, apart from ERS's bulk shipments of waste solvent from Christchurch to Auckland and return, which is acknowledged by TTS to be very expensive, and [], little waste solvent or recycled waste is transported between the two Islands for treatment. Further, apart from TTS's shipments of some solvent waste from Auckland to Wellington for treatment and [], little waste solvent or recycled waste is transported between the upper and lower North Island regions.
93. The Commission concludes, on the basis of the preceding discussion and analysis, that, for the purpose of assessing the current Application, there are separate upper North Island, lower North Island and South Island geographic markets for waste solvent treatment.

Recycled Solvent Market

94. Commission staff have collected recycled solvent price quotations and invoices from a range of waste generators, and price information from suppliers of recycled solvent, in order to assist in the examination of the geographic extent of the market for the supply of recycled solvent. The picture is complicated because there are different recycled solvents of differing qualities, and hence a range of prices for recycled solvent.
95. For the purposes of examining the geographic variation in prices, the Commission compared prices throughout New Zealand for gunwash, one of the more common recycled solvents (by volume sold). Table 1 presents a sample of 2006 gunwash prices in the North and South Islands.

Table 1: Recycled Gunwash Prices for Various Customers, 2006

Customer	North Island Price (per litre)	South Island Price (per litre)
TTS Customers:		
▪ []	[]	
▪ []	[]	
▪ []	[]	
▪ []	[]	
All ERS Customers	[]	[]
All Solvent Recovery BOP Customers	[]	
All Solvent Refiners Customers		[]
All Solvent Rescue Customers		[]

Source: Industry Participants

96. The matching of the prices in the Table with customer size reveals that large volume customers are able to purchase recycled solvent from TTS in the North Island at prices that are [] than prices charged in the South Island. []].
97. Small volume customers []

].

98. In Decision 442, the Commission considered that there was a national market for the supply of recycled solvent. However, since 2001, transport costs have increased relative to the price recycled solvents. In response to a SSNIP, customers of TTS in the North Island are unlikely to look to purchase recycled solvent from suppliers in the South Island.
99. The Commission concludes, on the basis of the preceding discussion and analysis, that, for the purpose of assessing the current Application, there are separate North Island and South Island geographic markets for the supply of third-party recycled solvent.

Conclusion on Market Definition

100. The Commission's conclusions with respect to the solvent markets differ from the markets previously defined in Decision 442. The Commission no longer considers that there are separate solvent treatment and disposal markets, as disposal services are merely an extension of treatment services. Further, as a result of an increase in transport charges brought about by an increase in fuel costs, the Commission now considers that the geographic boundaries of the markets are narrower than those defined in Decision 442.
101. The Commission considers that the relevant markets are:
- the provision of waste solvent treatment/disposal services in the upper North Island; and
 - the supply of third party recycled solvent in the North Island.

FACTUAL AND COUNTERFACTUAL

102. In reaching a conclusion about whether an acquisition is likely to lead to a substantial lessening of competition, the Commission makes a comparative judgement considering the likely outcomes between two hypothetical situations: one with the acquisition (the factual) and one without (counterfactual).¹² The difference in competition between these two scenarios is then able to be attributed to the impact of the acquisition.

The Factual

103. In the factual scenario, TTS would acquire Medi-Chem's solvent business. TTS has submitted that in the factual it would continue, at least in the short term, to operate Medi-Chem's solvent treatment facilities at Lorien Place, East Tamaki, in addition to the TTS site at Neales Road (and its other sites elsewhere around New Zealand). While it is uncertain what TTS will do in the long term, for the purposes of the competition analysis, the Commission considers that in the factual TTS would continue to undertake waste solvent treatment operations at Lorien Place.

The Counterfactual

104. In a letter of 22 June 2007, Medi-Chem set out its views on the likely counterfactual. Overall, it considered that
[]

¹² *Air New Zealand & Qantas Airways Ltd v Commerce Commission (No.6)* (2004) 11 TCLR 347, 365-366.

105. Subsequent to the sale of the chemical smalls business, Medi-Chem advised that it
[

]
106. Medi-Chem submitted that the solvents business is only “marginally profitable”, and made comments questioning the sustainability of the business. However, at no stage has it been argued, either by the Applicant or the Vendor, that the business is a failing firm. Analysis of TTS’s and Medi-Chem’s financial statements indicates that there are profits to be made in the treatment of waste solvent.
[

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107. Accordingly, the Commission considers the likely counterfactual would be that Medi-Chem would either continue to operate and develop the solvent business in preparation for future sale, or it would sell quite shortly to a third party, which would continue to operate the business. In either case, the Commission considers that Medi-Chem’s waste solvent treatment facilities would continue to be operated in competition with TTS.

Comparison of Competition in the Factual and Counterfactual

108. In order to assess the competition effects of the Acquisition, it is necessary to compare the extent of competition that would remain in the factual, to that in the counterfactual.
109. Medi-Chem currently competes (and in the counterfactual would continue to compete) with TTS in the provision of waste solvent treatment/disposal services in the upper North Island. However, the extent of existing competition between the two suppliers is limited to the provision of services to tolling customers, as Medi-Chem chooses not to compete for non-tolling customers.
110. The factual would see the removal of this competition. However, the tolling customers that would be affected are a comparatively small part of the waste solvent treatment market, accounting for []% of volumes. Consequently, the impact on the waste solvent treatment market as a whole would, on this measure, be diluted.
111. Medi-Chem is also a ‘near competitor’, in terms of its ability, using existing facilities, to provide both waste solvent treatment/disposal services to non-tolling customers, and to supply third party recycled solvent, even though currently it does not do so. However, given the extent of the price rises in non-tolling services and in the sale of recycled solvent in the last six years, Medi-Chem does not appear to be providing much competitive constraint for TTS in these areas. Nonetheless, there would appear to be the potential in the counterfactual (and especially under different ownership) for Medi-Chem to expand and provide competition for TTS in terms of non-tolling services and the sale of recycled solvent. This potential for competition would be eliminated in the factual.
112. In both the factual and counterfactual, Solvent Recovery BOP would remain as a competitor to TTS, but it has a very small market share.

113. The factual clearly would involve some lessening in competition relative to the counterfactual, although the extent on this brief review is uncertain. In the competition analysis below we consider whether or not the reduction amounts to a *substantial* lessening of competition.

COMPETITION ANALYSIS

Waste Solvent Treatment Market

Existing Competition

114. Existing competition occurs between those businesses in the market that already supply the product, and those that could readily do so by adjusting their product-mix (near competitors).
115. An examination of concentration in a market can provide a useful indication of the competitive constraints that market participants may place upon each other, providing that there is not significant product differentiation. Moreover, the increase in seller concentration caused by a reduction in the number of competitors in a market by an acquisition is an indicator of the extent to which competition in the market may be lessened.
116. A business acquisition is considered unlikely to substantially lessen competition in a market where, after the proposed acquisition, either of the following situations exist:
- the three-firm concentration ratio (with individual firms' market shares including any interconnected or associated persons) in the relevant market is below 70%, and the combined entity (including any interconnected persons or associated persons) has less than in order of 40% share; or
 - the three-firm concentration ratio (with individual firms' market shares including any interconnected or associated persons) in the relevant market is above 70%, and the market share of the combined entity is less than in the order of 20%.

Developments Since Decision 442

117. At the time of Decision 442 in 2001 there were six suppliers of solvent treatment services in the country: UEL, Solvent Services, Medi-Chem, Solvent Refiners, Solvent Rescue and Solvent Recovery BOP. UEL's acquisition of SSL reduced the number of suppliers of solvent treatment services from six to five. The merged entity had a []% share of the national solvent treatment market, based on volumes being treated. The three-firm concentration ratio increased, post-acquisition, from []% to []%.
118. One major reason why the Commission cleared UEL's acquisition of SSL was that Medi-Chem was in the process of expanding its solvent treatment capacity through the installation of a second, and considerably larger, still ([]). Medi-Chem had obtained resource consent for this still, and operations were to start in January 2002. Medi-Chem's new still was expected to be capable of processing [] litres of solvent per hour. As a result of this increase in capacity, it was anticipated in Decision 442 that Medi-Chem would be able to increase its market share to []% by the end of 2002.
119. []
-] However, in 2006, Medi-Chem on average treated

only [] litres of solvent per hour. While Medi-Chem's volumes have increased by []% since 2001, its volumes have not increased as much as was anticipated in Decision 442, and consequently it has not achieved the level of market share that was expected at the time of the commissioning of the second still.

120. The Commission understands that Medi-Chem initially sought both tolling and non-tolling business, but a few years ago made a business decision to focus on tolling rather than non-tolling business.
[

]

121. As a result of Medi-Chem's decision to focus on tolling, TTS has gained almost all of the upper North Island non-tolling waste solvent business.

Pricing

122. The Commission has examined the trend in prices in the Upper North Island since Decision 442. This analysis provides information relevant to assessing the constraint from existing competition, whether entry is likely, and whether customers have countervailing power.
123. Table 2 sets out average prices charged by the various suppliers of waste solvent treatment services in the Upper North Island, in 2001 and 2006, and separately for tolling and non-tolling customers.

Table 2: Waste Solvent Treatment Prices 2001 and 2006

(a) Non-Tolling

Treatment Operator	Location	2001 Prices	2006 Prices	% Change
TTS	NI	[]	[]	[]
Solvent Recovery BOP	NI	[]	[]	[]

(b) Tolling

Treatment Operator	Location	2001 Prices	2006 Prices	% Change
TTS	NI	[]	[]	[]
Medi-Chem	NI	[]	[]	[]

Source: Industry Participants

124. Table 2 shows that between 2001 and 2006, prices charged to tolling customers increased by []%, whereas prices charged to non-tolling customers increased by []%. TTS's increase in prices for non-tolling has []. Between June 2001 and June 2006, the Consumers Price Index increased by 16.4%, and the Producers Price Index increased by 12.8%. In contrast, TTS's price increase for tolling customers were [] CPI inflation and the increase in the PPI.
125. These price changes might reflect the increased demand from non-tolling customers, and the reduction in competition for the business of non-tolling customers. Since Decision 442, TTS has continued to face competition from Medi-Chem for tolling customers, but increasingly not for non-tolling customers.
[

] Solvent Recovery BOP, as a niche operator, does not appear to have constrained TTS.

Declining Market

126. In Decision 442, the Commission noted that the use of refined solvents was diminishing due to the move overseas of manufacturing companies, together with a desire on the part of solvent users to find alternative, (presumably more environmentally friendly) processes that would reduce their use of solvent.
127. The Applicant submitted that this trend has continued since, and that further decreases in solvent demand are likely in the future. However, industry participants canvassed by the Commission had mixed views in respect of the future use of recycled solvents.
128. While the demand from some customers has declined as a result of the factors identified in Decision 442, other factors have generated (and may continue to generate) demand for the treatment of waste solvent. These factors include:
- increasing pressure or incentives in some industries to recycle and/or treat more solvent rather than just letting it evaporate;¹³
 - technology limitations on the extent to which manufacturers can switch to using aqueous products (or the time it may take to switch); and
 - the cost of virgin solvents (which are linked to oil price increases) compared with recycled solvents.
129. Overall, industry participants considered that it is unlikely that the demand for solvent treatment services would cease within the next few years.
130. Although it may be the case that there is a trend of moving away from using solvents in some industries there is likely to be a continued demand for solvent treatment services in coming years. Accordingly, the Commission considers that even if there is a declining market, there is still sufficient demand in the market to make competition viable.

Impact of Proposed Acquisition and Existing Competition in the Factual

131. As discussed earlier, the Commission considers that a relevant solvent market in respect of the proposed acquisition is the upper North Island waste solvent treatment market. The aggregation only occurs in the upper North Island.
132. In the upper North Island, there are currently only three suppliers of solvent treatment services: TTS, Medi-Chem and Solvent Recovery BOP. Their market shares, based on the annual volumes of solvent treated in the 2006 financial year, are set out in Table 3. Market shares are similar whether measured in terms of revenues or capacity.

Table 3: Volume of Waste Solvent Treated in the Upper North Island, 2006

Treatment Operator	Actual Volumes Treated (Thousands of litres)	Market Share (%)
TTS	[]	[]
Medi-Chem	[]	[]
Solvent Recovery BOP	[]	[]

¹³ [

Treatment Operator	Actual Volumes Treated (Thousands of litres)	Market Share (%)
TOTAL	[]	100%

Source: Industry Participants.

133. In the factual, the second biggest competitor (Medi-Chem) would be eliminated. TTS's market share is already high, and would increase significantly to []% in the factual scenario. The three-firm concentration in the factual scenario would be unchanged, remaining at 100%, although this measure conceals the reduction in the number of firms from three to two. This is outside the Commission's safe harbour guidelines.
134. The Commission recognises that concentration is only one of a number of factors to be considered in the assessment of competition in a market. In order to understand the impact of the acquisition on competition, the Commission must also consider the behaviour of the businesses in the market.
135. Currently, tolling customers in the upper North Island are able to switch between Medi-Chem and TTS, and there is evidence of customers having done so in recent years. The fact that tolling customers have a choice between TTS or Medi-Chem means that they are likely to be able to get a better price for the treatment of waste solvent. In the factual, the existing competition for tolling customers in the upper North Island market would be eliminated.
136. The combined entity's only remaining existing competitor in the factual would be Solvent Recovery BOP, which provides waste treatment services to non-tolling customers. However, Solvent Recovery BOP collects solvent only from customers located in the Bay of Plenty and Waikato, such that it appears to compete with TTS only at the margins. This is evidenced by the fact that Solvent Recovery BOP appears not to have provided any constraint on TTS's pricing to date. In addition, Solvent Recovery BOP has [] It is unlikely to expand to such an extent that it would constrain the combined entity in the factual scenario.
137. Medi-Chem has been a near competitor in terms of non-tolling. However, as noted above, this appears to have provided little constraint on TTS's prices for non-tolling customers. Therefore, in the factual the loss of Medi-Chem would not remove a major constraint on TTS in the non-tolling area, which forms the bulk of the market.

Conclusion on Existing Competition

138. The Commission considers that presently there is little or no constraint from existing competitors on TTS's non-tolling operation, and this scenario would likely continue for the combined entity in the factual scenario. However, the competition that currently exists between Medi-Chem and TTS in terms of tolling customers would be removed in the factual scenario. Accordingly, the Commission considers that it is unlikely that the combined entity would face constraint from existing competitors in the Upper North Island waste solvent treatment market in the factual scenario, whereas TTS does face some competition now, and would continue to do so in the counterfactual.

Potential Competition

139. An acquisition is unlikely to result in a substantial lessening of competition in a market if the businesses in that market continue to be subject to real constraints from the threat of market entry. The Commission's focus is on whether businesses would be able to enter the market and thereafter expand should they be given an inducement to do so, and the extent of any barriers they might encounter should they try.
140. The Applicant submitted that there are low barriers to entry to the solvent treatment market.

Conditions of Entry

141. In Decision 442, the Commission considered that the necessary requirements for entry into the solvent treatment and disposal markets were:
- resource consents and licences from the relevant authorities to store and process waste solvent;
 - in most cases, a still to draw off solvent for reuse in an industrial process; and
 - in most cases, access to a landfill in which to dispose of the waste stream from the distillation process.
142. The Commission concluded in Decision 442 that the barriers to entry were not likely to deter expansion or new entry in the solvent markets.
143. In respect of the current investigation, industry participants advised the Commission that the entry requirements are somewhat similar to those described in Decision 442. Access to a landfill is no longer considered to be a barrier to entry. Instead, the requirements for entry have been identified as:
- access to appropriately zoned land;
 - availability of treatment infrastructure; and
 - having consents and certification.
144. Industry participants advised that neither the need to find appropriately zoned land nor source treatment infrastructure were a barrier to entry. In terms of land, the
- [
-] A 1,000 litre still would cost in the order of \$500,000, and can be sourced from a number of domestic and overseas manufacturers.
145. A number of consents and certifications are likely to be required in order to establish a waste solvent treatment facility. These are:
- a land use consent (depending on the local authority);
 - a trade waste consent (as there would likely be a need to capture all stormwater and run-off from the site, and treat it prior to disposal to trade waste);
 - a Hazardous Substances and New Organisms (HSNO) certification (in the form of Approved Handler Test Certificates and Location Test Certificates, the latter requiring that the site have segregation, bunding and a fireproof building); and

- an air discharge consent.
146. The first three are the least difficult to obtain, and are issued by the relevant city council. They relate largely to the land improvements that an entrant would need to make to a suitably zoned piece of land in order to set up operations. These may or may not be needed, depending on the specific site and the exact operations to be undertaken thereon.
 147. An air discharge consent issued by the relevant regional council is essential, and appears to be the hardest to obtain. Decision 442 noted that the Auckland Regional Council (ARC) appears to be more stringent in its application of the RMA than authorities in other areas, as Auckland has very high density industrial areas and has therefore historically had a greater number of environmental impact issues. However, according to the ARC, it was still possible to gain consents for the treatment of solvents. This is evidenced by the fact that, since Decision 442, Medi-Chem has managed to obtain consents for solvent operations on its site in East Tamaki.
 148. Based on information from industry participants and the ARC, the Commission estimates that it would take an entrant a minimum of nine months, and more likely as much as 18 months, to get an air discharge consent to establish a solvent refinery with capacity of 1,000 litres.
 149. Accordingly, the Commission is of the view that in aggregate the requirements for entry into the waste solvent treatment market are not likely to deter or impede new entry within the time frame normally used to judge entry.

The “LET” Test

150. In order for market entry to be a sufficient constraint, entry of new participants in response to a price increase or other manifestation of market power must be:
 - Likely in commercial terms;
 - Sufficient in Extent to cause market participants to react in a significant manner; and
 - Timely, i.e. feasible within two years from the point at which market power is first exercised.
151. The Applicant submitted that existing hazardous waste treatment operators, such as Chemwaste, are most likely to enter the waste solvent treatment market.¹⁴ Both Medi-Chem and TTS were treating other types of hazardous waste before entering the solvent treatment market.
152. TTS also submitted that a new entrant would most likely enter in Auckland as this is the location of the majority of waste solvent customers. Other industry participants agreed with TTS that entry would be most likely in the Auckland region for that reason.
153. In terms of the extent of entry, the Applicant submitted that stills are available in a range of sizes and costs. It further submitted that there are only limited economies of scale or scope in respect of around 10 large tolling customers. For these customers, who require large volumes to be refined within a short period, TTS considers this could not be done by a small operator with limited capacity.

¹⁴ In Decision 442, the Commission had identified Chemwaste as a likely entrant.

154. Industry participants advised the Commission that a potential entrant into the solvent treatment market would require a still of at least 1,000 litre capacity to make entry economically viable.
[] However, in order to capture a significant market share and be an effective competitor, an entrant might need considerably more capacity, particularly as TTS would have over [] litres in the factual. For entry to be *sufficient in extent* to constrain the combined entity in the factual, the Commission considers that an entrant would need to enter with a still in excess of 1,000 litre capacity.
155. On the *timeliness* aspect, getting a consent for the establishment of a solvent refinery with capacity of 1,000 litres would, as noted above, be likely to take up to 18 months.
156. With respect to *likelihood* of entry, the Commission has been unable to identify any specific, likely entrants into the upper North Island solvent treatment market. However, in general, entry could be expected to come from South Island waste solvent treatment companies, hazardous waste treatment operators, or by de novo entry.
157. []
158. The Commission considers that the combined entity would face a significant degree of constraint from potential competition in the factual scenario. Entry would be likely if there was an incentive to enter the market because of a decline in the combined entity's service or quality, or an increase in its price.

Conclusion on Potential Competition

159. The Commission is of the view that the requirements for entry into the waste solvent treatment market are not likely to deter new entry to a significant extent. The Commission considers the combined entity would face a significant degree of constraint from potential competition in the factual scenario.

Countervailing Power

160. In some circumstances the potential for the combined entity to exercise market power may be sufficiently constrained by a buyer or supplier to eliminate concerns that an acquisition may lead to a substantial lessening of competition.
161. The combined entity may be constrained if purchasers were able to exert a substantial influence on the price, quality or terms of supply of the good or service. A purchaser would be able credibly to exert such countervailing power if it were large in relation to suppliers, well informed about alternative sources of supply, readily able to switch from one supplier to another, and able to foster new supply (including own-supply).

Self-Supply by Tolling Customers

162. In Decision 442, the Commission was of the view that acquirers of solvent treatment services would impose some degree of constraint on the merged entity through their ability, amongst other things, to self-supply. UEL (the applicant in Decision 442) had submitted that a number of parties had already

established their own recycling plants and begun self-supply. The Commission observed that [] had indeed been able to self-supply, and to do so in a relatively short time frame.

163. TTS submitted that waste solvent generators could exercise countervailing power in the factual scenario by switching to self-supply, and that for tolling customers the regulatory process to do so is likely to be straightforward, given that they are already using solvent in their industrial processes. Medi-Chem agreed with TTS.
164. During the course of investigating UEL's acquisition of SSL in 2001, UEL provided the Commission with information on parties who were at that time self-supplying. In the six years since Decision 442, other customers in the upper North Island have also installed stills, including []. The parties currently self-supplying are predominantly in the printing and packaging industry.
165. Moreover, there are currently no more than [] customers in total in the tolling segment of the market. As many of these customers generate large volumes of waste solvent, they could economically self-supply. In fact, the following upper North Island tolling customers have considered, or are currently considering, self-supply:
- [] advised the Commission that it had explored establishing its own solvent still a couple of years ago.
 - [], a small to medium sized customer with volumes of [] litres per annum, has considered self-supply in the past when the prices charged by solvent treatment companies increased.
 - []
-]
- [] is in the early stages of reviewing whether to put in a still in Auckland ([]). It considers that based on the likely cost-savings, the pay-back period on investment would be only two to three years.
166. Accordingly, the Commission considers that customers, through their ability to switch to self-supply, are likely to be able to exert substantial influence on the price, quality or terms of supply of waste solvent treatment services in the upper North Island in the factual.

Conclusion on Countervailing Power

167. In the face of significant price increases by the combined entity in the factual scenario, large tolling customers could switch or threaten to switch to self-supply. Accordingly, the potential for the combined entity to exercise market power (e.g., through increasing prices) will be to a significant degree constrained in the factual by the countervailing power of these customers.

Conclusion on Waste Solvent Treatment Market

168. The proposed acquisition would increase TTS's market share significantly to []%. The acquisition would not introduce any significant change for the non-tolling services as Medi-Chem is not providing any constraint in this part of the market (although it is a near competitor). Non-tolling services account for

[]% of the market. For tolling services, which comprise []% of the market, the acquisition would remove the existing competition provided by Medi-Chem. Taking all the factors together, the Commission considers that the combined entity is likely to continue to be subject to constraint from potential competition and from the countervailing power of tolling customers, who can readily switch to self-supply.

169. Accordingly, the Commission concludes that the proposed acquisition would not have, nor would be likely to have, the effect of substantially lessening competition in the market for the treatment of waste solvent in the upper North Island market.

Supply of Third-Party Recycled Solvent

Existing Competition

Changes in the Market Since Decision 442

170. At the time of Decision 442 in 2001 there were five waste solvent treatment companies supplying third party recycled solvent throughout the country: UEL, Solvent Services, Solvent Refiners, Solvent Rescue and Solvent Recovery BOP. UEL's acquisition of SSL reduced the number of suppliers from five to four. The merged entity had a []% share of the national recycled solvent market, based on volumes sold.
171. Since UEL's acquisition of SSL in 2001, there has nationally been no change in the number of parties producing and supplying recycled solvent. Although Medi-Chem has increased its solvent refining capacity, it has chosen to focus its efforts on recycling solvent for tolling customers, and has not actively sought to supply third-party recycled solvent.
172. As discussed earlier, the Commission considers that a relevant solvent market in respect of the proposed acquisition is the North Island market for the supply of third-party recycled solvent. Table 4 sets out average prices charged by the two North Island suppliers of recycled solvent, in 2001 and 2006.

Table 4: Recycled Solvent Prices, 2001 and 2006

Supplier	Location	2001 Prices	2006 Prices	% Change
TTS	NI	[]	[]	[]
Solvent Recovery BOP	NI	[]	[]	[]

Source: Industry Participants.

173. Table 4 shows that the prices of recycled solvent have increased substantially since Decision 442.

Impact of Proposed Acquisition and Existing Competition in the Factual

174. In the North Island, there are currently only two suppliers of recycled solvent: TTS and Solvent Recovery BOP. Their market shares, based on the annual volumes of solvent treated in the 2006 financial year, are set out in Table 5. Market shares are similar when measured in terms of revenues.

Table 5: Volume of Recycled Solvent Sold in the North Island, 2006

Supplier	Actual Volumes Sold (Thousands of litres)	Market Share (%)
TTS	[]	[]
Solvent Recovery BOP	[]	[]
TOTAL	[]	100%

Source: Industry Participants.

175. In the factual, there is no aggregation in terms of the current market shares of existing competitors. TTS's market share, based on actual volumes of solvent treated, remains unchanged at []%. The three-firm concentration is also unchanged in the factual scenario and remains at 100%.
176. However, existing competition occurs not only between those businesses in the market that already supply the product; it also includes those that could readily do so by adjusting their product-mix (near competitors).
177. Due to supply-side substitutability, Medi-Chem could tomorrow choose to treat solvent from non-tolling customers with a view to producing and selling recycled solvent. The Commission considers that Medi-Chem is a near competitor. Medi-Chem is in the recycled solvent market, despite it currently having a market share of zero. However, there is no evidence that the presence of Medi-Chem as a near competitor is having a noticeable constraining effect on TTS. Nonetheless, in the factual scenario, what little constraint or competition there is from Medi-Chem as a near competitor would be eliminated.
178. As noted above with respect to the waste solvent treatment market, the sole remaining existing competitor, Solvent Recovery BOP, is unlikely [] to expand to such an extent that it would constrain the combined entity in the factual scenario.

Conclusion on Existing Competition

179. The Commission considers that it is unlikely that existing competition would continue to constrain the combined entity in the factual scenario, or that existing competitors could expand by utilising existing capacity to constrain the combined entity in the factual scenario.
180. Accordingly, the Commission considers that it is unlikely that the combined entity would continue to face constraint from existing competitors in the factual scenario.

Potential Competition

181. The treatment of waste solvent and the supply of third-party recycled solvent, occurs through a market that is two-sided, in the following sense: that non-tolling waste solvent generators pay to have their waste taken away, but then the solvent treatment company is typically able to recycle much of the solvent for resale, rather than incur the cost of disposal.
182. This means that in the factual scenario, if TTS faces a constraint from the threat of entry in the waste solvent treatment market, then it follows that it will likewise be constrained in the recycled solvent market. As previously, discussed, in the upper North Island market, the Commission considers that, Entry would be likely if there was an incentive to enter the market, and that the

combined entity would be significantly constrained in the factual scenario. Accordingly, the Commission considers that the combined entity would likewise be constrained in the North Island third-party recycled solvent market.

Conclusion on Supply of Third-Party Recycled Solvent Market

183. The proposed acquisition would eliminate Medi-Chem as a near competitor albeit there is no evidence that it is providing any constraint. However, the Commission considers that the combined entity would be likely to continue to be subject to constraint from potential competition in the factual scenario.
184. Accordingly, the Commission concludes that the proposed acquisition would not have, nor would be likely to have, the effect of substantially lessening competition in the market for the supply of third-party recycled solvent in the North Island.

THE COMMISSION'S OVERALL CONCLUSIONS ON THE APPLICATION

185. Although the proposed acquisition would remove the constraint from existing competition, taking all the factors together, the Commission considers that the combined entity would be likely to continue to be subject to constraint from potential competition and from the countervailing power of tolling customers.
186. Accordingly, the Commission is satisfied that the proposed acquisition will not have, nor would be likely to have, the effect of substantially lessening competition either in the upper North Island market for waste solvent treatment, or in the North Island market for the supply of third-party recycled solvent.

DETERMINATION ON NOTICE OF CLEARANCE

187. Pursuant to section 66(3)(a) of the Commerce Act 1986, the Commission determines to give clearance for the proposed acquisition by Transpacific Technical Services (NZ) Limited (TTS) or a wholly-owned subsidiary of TTS, of the assets and business of Medi-Chem Waste Services Limited (Medi-Chem) that relate to solvent treatment, recycling, and disposal.

Dated this 30 August 2007

Paula Rebstock
Division Chair
Commerce Commission