

## **Commerce Commission**

### **Decision No. 424**

Determination pursuant to the Commerce Act 1986 in the matter of an application involving:

**CARTER HOLT HARVEY LIMITED**

**and**

**NORSKE SKOGINDUSTRIER ASA**

**The Commission:** M J Belgrave  
M N Berry

**Summary of Application:** The acquisition by Carter Holt Harvey Limited of those business assets of Norske Skogindustrier ASA relating to the kraft pulp processing assets of Norske's Tasman Mill.

**Determination:** Pursuant to section 66(3)(a) of the Commerce Act 1986, the Commission determines to give clearance for the proposed acquisition.

**Date of Determination:** 21 March 2001

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## **THE PROPOSAL**

1. In a notice to the Commission dated 30 January 2001, pursuant to section 66(1) of the Commerce Act 1986 (“the Act”), Carter Holt Harvey Limited (“CHH”) sought clearance to acquire those business assets of Norske Skogindustrier ASA (“Norske”) relating to the kraft pulp processing assets of Norske’s Tasman Mill.

## **THE PROCEDURES**

2. The application was received on 31 January 2001. Section 66(3) of the Act requires the Commission either to clear or to decline to clear a notice given under section 66(1) within 10 working days, unless the Commission and the person who gave the notice agree to a longer period.
3. The Applicant agreed to an extension to a decision date of 21 March 2001.
4. In the application, CHH requested confidentiality for specific information contained in or attached to the notice. It considers that disclosure of that information could result in “material financial loss and prejudice to the competitive nature of the parties”. A confidentiality order was subsequently made in respect of that information for a period of 20 working days from the Commission’s determination of the notice. When that order expires, the provisions of the Official Information Act 1982 will apply to the information.
5. The Commission’s decision was based on an investigation conducted by its staff, and their subsequent advice to the Commission. In the course of this investigation, the Commission discussed the application with a large number of parties including:
  - James Hardie Limited
  - Fletcher Challenge Forests Limited
  - Central North Island Forestry Partnership
  - Visy Industries
  - Orica Limited
  - Eka Chemicals Limited
  - Andrew Industrial
  - Fernz Chemicals
  - Rayonier New Zealand Limited
  - Södra
  - Pan Pac Forests Limited
  - Winstone Pulp International
  - Wood Exports Limited
  - Independent sawmills
  - Downstream users

## THE PARTIES

### **Carter Holt Harvey Limited**

6. CHH is New Zealand's largest forest products company and its largest pulp and paper producer. CHH is listed on both the New Zealand and Australian Stock Exchanges and has substantial interests in forests, wood products, pulp and paper, tissue, packaging and building products. Its business groups include CHH Forests, CHH Pulp & Paper, CHH Wood Products, CHH Panels, CHH packaging, and CHH Tissue.
7. CHH Pulp & Paper owns the Kinleith kraft pulp mill at Tokoroa. It also operates a paper mill at the Kinleith site, as well as a cartonboard plant at Whakatane and a paper recycling operation at Penrose.

### **Norske Skogindustrier ASA**

8. Norske is the second largest newsprint producer in the world. The company is based in Norway and is listed on the Oslo Stock Exchange. Norske operates 21 mills in Europe, Australasia, North America, South America, and Asia.
9. Norske purchased Fletcher Challenge Paper in July 2000, now making it the leading supplier of newsprint in Asia, South America and Australasia. In New Zealand, in addition to the Tasman kraft pulp mill, Norske operates a mechanical pulp plant as part of its paper mill, which satisfies the majority of its pulp requirements. The paper mill supplies all of New Zealand's newsprint.
10. It is the Tasman kraft pulp mill that is the subject of the proposed acquisition.

### **Other Parties**

#### *James Hardie Limited*

11. James Hardie is an international building products company and the largest manufacturer of fibre cement for building and construction applications in Australia, New Zealand, and the United States.
12. The company manufactures and markets fibre cement products for exterior siding, internal lining, roofing, fencing, bracing, decorative and other uses.

#### *Visy Industries*

13. Visy is a large, privately-owned Australian paper recycling and packaging company. Visy is currently constructing a kraft pulp and paper mill, at an estimated cost of [ ]. The new mill is located at the Tumut forestry site in southern New South Wales, Australia, and is due to commence production in mid-2001.

#### *Fletcher Challenge Forests (FCF)*

14. FCF is one of New Zealand's largest forestry companies, managing a forestry estate of around 300,000 hectares<sup>1</sup> in the central North Island region. It also operates a number of sawmilling and processing plants throughout the region. It is a partner in the Central North Island Forestry Partnership, which owns the Kaingaroa radiata forest.

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<sup>1</sup> Source: New Zealand Forestry Owners Association website.

*Central North Island Forestry Partnership (CNIFP)*

15. In August 1996, Fletcher Challenge forestry division, Brierley Investments and CITIC paid the New Zealand government just over \$2 billion for the CNIFP (the assets of which were formerly owned by the Forestry Corporation). CITIC NZ is an investment arm of the Chinese government.
16. The CNIFP has recently been placed in receivership.

*Orica Limited*

17. Orica, formerly ICI in Australasia, manufactures and supplies industrial and speciality chemicals, agricultural chemicals and fertilisers, commercial explosives and mining chemicals, paints and other consumer products sold under well known brands such as Dulux, Selleys and Cabot's.

*Eka Chemicals Limited*

18. Eka is a Business Unit of Akzo Nobel Group, which is based in the Netherlands. Akzo Nobel Group serves customers throughout the world, and supplies healthcare products, coatings and chemicals through the world.

*Rayonier New Zealand Limited*

19. Rayonier is the world's premier producer of high performance speciality cellulose and has 2.4 million acres of timber in the U.S. and New Zealand. About half of Rayonier's sales are to international customers in 60 countries.
20. In New Zealand Rayonier has 22,000 acres of forestland.

*Andrew Industrial*

21. Andrew Industrial is part of the Andrew Group and is mainly focused on manufacturing and distributing chemicals, cleaners and industrial consumables. Andrew Industrial purchases hydrochloric acid in bulk to manufacture various formulated products.

*Fernz Chemicals*

22. Fernz Chemicals is a part of the Nufarm Group, which manufactures and supplies industrial, performance and speciality chemicals. Nufarm also has manufacturing, marketing and trading operations in Australia (including a chlor-alkali plant), Asia, Europe, and North America and employs over 2,000 people globally.

*Södra*

23. Södra is an economic association owned by 34,000 forest farmers in Southern Sweden. Together, the members own 2 million hectares of forest land. Södra is the largest forest-owner association in Sweden.

*Pan Pac Forests Limited*

24. Pan Pac is a forestry and wood processing company based in the Hawkes Bay. Their wood processing interests include a thermo-mechanical pulp mill at Whirinaki. Pan Pac's majority shareholder is Oji, a Japanese newsprint manufacturer.

*Winstone Pulp International*

25. Winstone Pulp International operates a mechanical pulp mill at Karioi, near Ohakune.

*Wood Exports Limited (WEL)*

26. WEL is a partnership between FCF, CHH, and Itochu, specialising in the storage and loading of wood chips for export. Its operations are based at Mount Maunganui.

*Independent sawmillers*

27. A number of independent sawmillers were consulted as part of this investigation. These mills supply fibre to one or both of the kraft pulp mills.

*Downstream Users*

28. The Commission contacted a number of parties in markets that are positioned downstream from the kraft pulp market. These include the New Zealand Dairy Board and the Meat Industry Association of New Zealand, as well as packaging companies Chilltainers, Amcor Kiwi, and Australian Paper.

**BACKGROUND****World Pulp Market**

29. World market pulp capacity in 1999 was 42.6 million tonnes per annum. Market pulp is pulp that is traded in the world market, as opposed to being utilised within integrated pulp and paper mills. Market pulp is traded globally, and prices are determined by reference to a benchmark grade known as Northern Bleached Softwood Kraft (NBSK). NBSK is regarded as the premium quality grade, and it also represents a major share of world market pulp demand (approximately 28% of total demand in 2000).
30. The NBSK price is set by major Canadian and Scandinavian pulp manufacturers on a monthly basis. An average international freight component is built into the gross NBSK price, although a location adjustment may be made where freight distances are particularly significant (in which case the adjustment is a debit to the customer) or small (where the adjustment is a credit). Other discounts off the NBSK price are set in relation to the grade of pulp and the volume purchased.

**NZ Pulp Industry**

31. The Kinleith and Tasman kraft pulp mills are the two main suppliers of pulp, and the only suppliers of kraft pulp, in New Zealand. There are also a number of mechanical pulp mills, such as the Pan Pac pulp mill near Napier, the Winstone International pulp mill near Ohakune, and the CHH mechanical pulp mill at Kawerau (integrated with CHH Tissue). As noted above, Norske Skog also operates a mechanical pulp mill at Kawerau.

*Kinleith Mill*

32. The Kinleith mill principally sources its pulp fibre from CHH Forests.
33. The Kinleith mill produces approximately 270,000 to 280,000 tonnes per annum of market kraft pulp which subdivides into 230,000 tonnes of bleached kraft pulp and between 40,000 and 50,000 tonnes of unbleached kraft pulp. Of the bleached kraft pulp, approximately [ ] is supplied to CHH at its Whakatane board and Kawerau tissue mills and the balance is exported into the Asian market.
34. Of the 40,000 to 50,000 tonnes of unbleached kraft pulp, 28,000 tonnes is fibre cement pulp and the remainder is utilised at the Whakatane board mill or exported to the Asian

market. The fibre cement pulp produced at Kinleith is currently supplied to the following.

**Table 1: Supply of Fibre Cement Pulp from Kinleith (tonnes)**

James Hardie (Auckland)	[ ]
James Hardie (Australia)	[ ]
James Hardie (Philippines)	[ ]
CSR (Australia)	[ ]
[ ]	[ ]
[ ]	[ ]
[ ]	[ ]
Others	[ ]
<b>TOTAL</b>	[ ]

*Tasman Mill*

35. The Tasman mill derives its pulp fibre primarily from FCF/CNIFP.
36. The Tasman mill manufactures approximately 245,000 tonnes of kraft pulp per annum for the market, of which 120,000 tonnes is bleached softwood kraft pulp, 85,000 tonnes is unbleached kraft pulp and 40,000 tonnes is bleached eucalypti kraft pulp<sup>2</sup>.
37. Of the 120,000 tonnes of bleached softwood kraft pulp, approximately:
- [ ]
  - [ ]
  - [ ]
  - [ ]
38. Of the 85,000 tonnes of unbleached kraft pulp, approximately [ ]. The remainder is fibre cement pulp. Based on information received from the Applicant and other parties, it is estimated that Tasman's fibre cement pulp is supplied to the following.

**Table 2: Supply of Fibre Cement Pulp from Tasman (tonnes)**

James Hardie (Auckland)	[ ]
James Hardie (Australia)	[ ]
James Hardie (USA)	[ ]
BGC (Australia)	[ ]
[ ]	[ ]
[ ]	[ ]
Others	[ ]
<b>TOTAL</b>	[ ]

<sup>2</sup> These figures differ slightly from the application (which gives the total Tasman pulp production as 240,000 tonnes, and unbleached kraft pulp production as 80,000 tonnes). The 5,000 tonne upward adjustment is made to accommodate slightly higher levels of FCP exports to the USA than those given in the application.

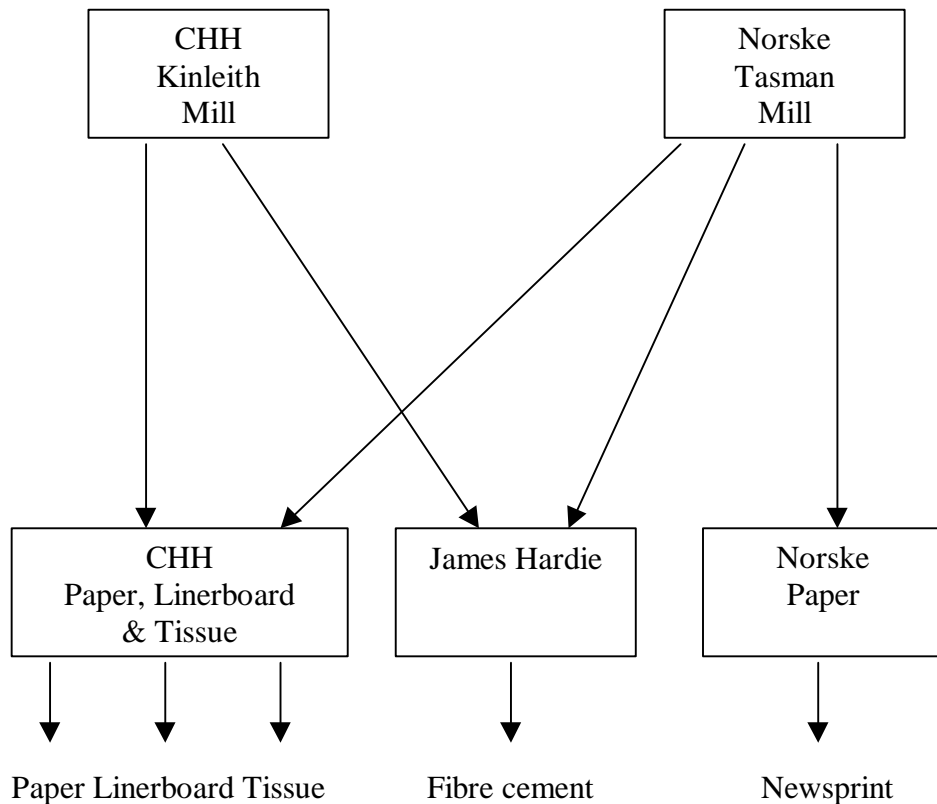


39. Of the 40,000 tonnes of bleached eucalypt kraft pulp, approximately:
- [ ]
  - [ ]
  - [ ]
  - [ ]
  - [ ]
40. In addition to the 245,000 tonnes of market kraft pulp produced by the Tasman mill, approximately [ ] of undried (slush) semi-bleached kraft pulp is piped directly to the Norske Paper plant at the Tasman site.
41. The Tasman mill's fibre cement pulp is utilised by James Hardie in New Zealand for producing fibre cement products [ ], and by producers of fibre cement products in Australia (James Hardie and BGC), the USA (James Hardie and Certain Teed), and Asia.

*Flow of Domestic Kraft Pulp*

42. The domestic flows of kraft pulp are summarised in the following diagram.

**Diagram 1: Flow of Domestic Kraft Pulp**



43. Of the downstream activities, the pulp sold to James Hardie and Norske Paper is considered in more detail later. As indicated in Diagram 1 above, a number of CHH business groups purchase kraft pulp from the Kinleith pulp mill and/or the Tasman pulp mill. The Commission has given some consideration to possible implications of the

proposed acquisition for these downstream markets, in particular the market for kraft linerboard (KLB) and packaging materials.

44. In a separate investigation during 1999 and 2000<sup>3</sup>, the Commission examined this packaging market in detail and found that there was significant competition in this market, in particular from imports. Inquiries made as part of the current investigation indicate that competition in the market for KLB and packaging materials in New Zealand remains intense. For example, the New Zealand Dairy Board noted that the main trend in this market since the Commission's earlier investigation was probably that it is increasingly contested on an Australasian basis. Large Australian packaging companies such as Amcor, Visy, and Australian Paper compete vigorously with domestic suppliers such as CHH.
45. The downstream users contacted by the Commission, including the New Zealand Dairy Board and the Meat Industry Association of New Zealand, did not view the proposed pulp acquisition as having any adverse impact upon the market for KLB based packaging materials.

## **Process of making pulp**

### *Chemical (Kraft) Pulp*

46. Kraft is a chemical process in which approximately half the wood substance, essentially the "glue" (known as lignin), is dissolved in an alkaline (caustic) solution to free the individual fibres (pulp). These fibres are mainly used to make paper or cardboard. Some of these fibres are also capable of providing sufficient reinforcing for fibre cement building products without using asbestos.
47. The chemicals used in the process of making kraft pulp are supplied through an on-site chlor-alkali and dioxide plant. The key chemicals produced include caustic soda, which is used to 'cook' the pulp fibres, and chlorine dioxide, used in the bleaching process. A number of by-products are also produced, and where these are surplus to the requirements of the pulp mill, they are sold to third parties.

### *Mechanical Pulp*

48. Mechanical pulp is produced by the grinding of wood to separate out the wood fibres. There are a number of different mechanical pulping processes, including stone and refiner groundwood pulping, and thermo-mechanical pulping. Mechanical pulps have a lower strength and durability than chemical pulps and are of correspondingly lower value. Mechanical pulp is used in the production of lower quality paper such as newsprint and advertising flyers.
49. The production of mechanical pulp involves lower capital and operating costs than kraft pulp. There are two main reasons for the lower costs associated with mechanical pulp: first, there are no chemical-related costs; and second, each tonne of wood processed by a mechanical pulp mill yields a considerably higher volume of pulp than is the case for a kraft mill (as much of the wood is dissolved in the kraft process).

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<sup>3</sup> Commerce Commission "*Termination Report: Holmes Packaging alleges Carter Holt Harvey refused to supply them kraft linerboard*", 31 March 2000.

*Fibre Cement Pulp*

50. Fibre cement pulp is a particular grade of unbleached kraft pulp and is used to reinforce fibre cement products. The best fibres for the fibre cement manufacturing process come from unbleached softwood kraft pulp. This fibre cement pulp is used principally in Australasia, North America, Europe and Asia.

**By Products of Kraft Pulp Production**

51. The chemical pulping process and bleaching process, by necessity, produce a number of chemical by-products that are surplus to the Kinleith and Tasman mills. These by-products must be either destroyed, stored or sold.

*Bulk Liquid Chlorine*

52. Chlorine surplus to the mill's bleaching requirements can be sold as bulk liquid chlorine. The Kinleith mill fills bulk liquid chlorine cylinders under an exclusive agreement for Orica, the sole distributor of bulk liquid chlorine in New Zealand. The Tasman mill does not currently compete in respect of the production and supply of bulk liquid chlorine as it does not have the necessary filling facilities at its chlor-alkali plant

*Hydrochloric Acid*

53. Hydrochloric acid is a derivative of chlorine, and is produced at the chlor-alkali plants at the Kinleith mill and the Tasman mill. The production of hydrochloric acid is a useful and simple alternative use for surplus chlorine because the chlor-alkali plants produce chlorine and hydrogen in the exact proportions necessary to produce hydrochloric acid.
54. Chlor-alkali producers are readily able to convert chlorine into hydrochloric acid to satisfy industry requirements. Hydrochloric acid has a range of end uses, with the bulk of it being consumed in steel production; chemical manufacture; water treatment; gold mining and dairy.

*Sodium Hypochlorite*

55. An alternative use for surplus chlorine, employed by both the Kinleith mill and the Tasman mill, is as an input in the production of sodium hypochlorite ("hypo"). Hypo is an attractive output because it is a convenient and cost effective chlorine-based product in demand in the domestic market. Its price is high because the production of hypo involves the opportunity cost of using up valuable supplies of caustic soda. Hypo is produced by absorbing chlorine in sodium hydroxide (caustic soda).

*CST and CTO*

56. The kraft pulping process at the Tasman mill and the Kinleith mill also produces the by-products crude sulphate turpentine ("CST") and crude tall oil ("CTO").

## MARKET DEFINITION

### Introduction

57. The purpose of defining a market is to provide a framework within which the competition implications of a business acquisition can be analysed. The relevant markets are those in which competition may be affected by the acquisition being considered. Identification of the relevant markets enables the Commission to examine whether the acquisition would result, or would be likely to result, in the acquisition or strengthening of a dominant position in any market in terms of section 47(1) of the Act.
58. Section 3(1A) of the Act provides that:
- “. . . the term ‘market’ is a reference to a market in New Zealand for goods and services as well as other goods and services that, as a matter of fact and commercial common sense, are substitutable for them.”
59. Relevant principles relating to market definition are set out in *Telecom Corporation of New Zealand Ltd v Commerce Commission*,<sup>4</sup> *Commerce Commission v Carter Holt Harvey Building Products Limited*,<sup>5</sup> and in the Commission’s *Business Acquisitions Guidelines* (“the Guidelines”).<sup>6</sup> A brief outline of the principles follow.
60. Markets are defined in relation to three dimensions, namely product type, geographical extent, and functional level. A market encompasses products that are close substitutes in the eyes of buyers, and excludes all other products. The boundaries of the product and geographical markets are identified by considering the extent to which buyers are able to substitute other products, or across geographical regions, when they are given the incentive to do so by a change in the relative prices of the products concerned. A market is the smallest area of product and geographic space in which all such substitution possibilities are encompassed. It is in this space that a hypothetical, profit maximising, monopoly supplier of the defined product could exert market power, because buyers, facing a rise in price, would have no close substitutes to which to turn.
61. A properly defined market includes products which are regarded by buyers or sellers as being not too different (‘product’ dimension), and not too far away (‘geographical’ dimension), and are therefore products over which the hypothetical monopolist would need to exercise control in order for it to be able to exert market power. A market defined in these terms is one within which a hypothetical monopolist would be in a position to impose, at the least, a “small yet significant and non-transitory increase in price” (the “*ssnip*” test), assuming that other terms of sale remain unchanged.
62. Markets are also defined in relation to functional level. Typically, the production, distribution, and sale of products takes place through a series of stages, which may be visualised as being arranged vertically, with markets intervening between suppliers at one vertical stage and buyers at the next. Hence, the functional market level affected by the application has to be determined as part of the market definition. For example, that between manufacturers and wholesalers might be called the “manufacturing market”, while that between wholesalers and retailers is usually known as the “wholesaling market”.

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<sup>4</sup> (1991) 4 TCLR 473.

<sup>5</sup> Williams J, 18 April 2000, HC, yet to be reported.

<sup>6</sup> Commerce Commission, *Business Acquisitions Guidelines*, 1999, pp. 11-16.

## Relevant Markets

63. The Commission seeks to define relevant markets in a way which best assists the analysis of the competitive impact of the acquisition under consideration. The current application involves the acquisition by CHH of Norske's kraft pulp mill at Kawerau, near Rotorua.
64. CHH is a vertically integrated forest products company with a number of core divisions, including Forests, Wood Products, Panels, Packaging, and Pulp & Paper. The group relevant to the proposed acquisition is the Pulp & Paper division, which processes logs, chips, and waste paper into softwood pulp, linerboard, cartonboard, and corrugating medium paper. In New Zealand, CHH Pulp & Paper operations are based on paper machines at Whakatane and Penrose, and a pulp and paper mill at Kinleith.
65. Norske's kraft pulp mill produces approximately 240,000 tonnes of market kraft pulp each year. The pulp is produced through the processing of pulp logs and chips supplied from a variety of sources predominantly around the central North Island. A number of unavoidable by-products of the kraft pulping process are also produced. These include chlorine-based by-products such as bulk chlorine, hydrochloric acid, and sodium hypochlorite, as well as CST and CTO.
66. The Applicant has proposed that the following markets are relevant in terms of horizontal aggregation as a result of the acquisition:
- i. the market for the production and supply of pulp in New Zealand;
  - ii. the market for the supply of wood in the Central North Island, or alternatively the market for the supply of wood in the North Island;
  - iii. the market for the production and supply of bulk liquid chlorine in New Zealand;
  - iv. the market for the production and supply of hydrochloric acid in New Zealand;
  - v. the market for the production and supply of hypo in New Zealand;
  - vi. the market for the production and supply of CST and CTO in New Zealand.

### *The Market for the Production and Supply of Pulp in New Zealand*

#### Product and Functional Dimensions

67. The Applicant focuses on kraft pulp, rather than pulp produced by non-chemical means such as mechanical pulp. The Applicant notes that although there are a number of different grades of pulp – such as bleached, unbleached, hardwood, and softwood –
- “there is such substitutability and interchangeability in terms of supply that pulp should be considered a single product market. The process for manufacturing all grades of kraft pulp, the methods applicable to importing all grades of kraft pulp, and the market characteristics in respect of all grades of kraft pulp are so similar as to render them one market for the purposes of competition analysis.”<sup>7</sup>
68. In Decision 213, the Commerce concluded that mechanical pulps were not sufficiently close substitutes for kraft in terms of strength, for the two to be included in the same product market. In that case, the Commission accepted a market for kraft pulp.
69. In some instances, depending on the use to which the pulp is put, there may be some substitution between kraft and mechanical pulp. For example, the Norske newsprint mill at Kawerau recently introduced a new thermo-mechanical pulp plant, which involves the grinding of wood chips under pressure and heat. As a result, less kraft pulp now needs to be added to the pulp mixture which is used to produce newsprint.

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<sup>7</sup> Paragraph 9.84, page 26, Application.

However, the consistent view expressed to the Commission is that the characteristics of kraft pulp and mechanical pulp are quite distinct.

70. The other main use of kraft pulp in New Zealand is as an input into the production of fibre cement. James Hardie has informed the Commission that mechanical pulp could not be used as a substitute for kraft pulp in the production of fibre cement.
71. Therefore the first distinction made along product lines is between kraft and mechanical pulp. For the current application, the kraft product is relevant.
72. In terms of the other characteristics of pulp, there may be limited substitutability on the demand side. However, there appears to be considerable supply-side substitution. According to the application<sup>8</sup>,
 

“the process of manufacturing unbleached chemical market pulp is the same as for bleached chemical pulp except that the bleaching process is bypassed. Many market pulp mills specialising in the manufacture of bleached pulp therefore have the capability to produce significant volumes of unbleached pulp if margins are attractive. This applies to both the Kinleith and Tasman mills.”
73. The Applicant has advised the Commission that pulp prices are strongly cyclical, and that unbleached pulp tends to be priced at a margin of US\$100-120 below the price for bleached pulp. However, as this differential changes, pulp mills tend to switch production between bleached and unbleached pulp. This suggests that bleached and unbleached pulp may be in the same market.
74. There is some discussion in the application of market pulp, as opposed to integrated pulp. The Commission believes that it would be extremely unlikely that a *ssnip* applied to market pulp would induce integrated mills to switch some of their pulp production into market pulp. Integrated mills are set up to produce a value-added product such as packaging or printing paper, and the production of integrated pulp is closely tailored to the needs of the downstream paper operation. To release any pulp to the market would entail forgoing production of the very value-added output for which the mill was established. Given the significant capital investment required to set up an integrated mill, and the need to run such operations at full capacity, it is unlikely that a *ssnip* in market pulp would be attractive to integrated pulp producers.
75. The Commission has considered whether there is a distinct market for fibre cement pulp (FCP). As noted earlier, product boundaries will depend on the degree of substitutability in demand between various products, which in turn will be influenced by the characteristics of the product in question. James Hardie purchases a specific grade of unbleached kraft pulp from the Norske and CHH pulp mills which provides the requisite bonding strength for fibre cement products. The suitability of this grade of pulp is derived largely from the coarseness of the radiata fibre used by the two pulp mills. In addition, the nature of the kraft pulp-making process at the two New Zealand mills, which uses a continuous digester rather than a batch digester, adds to the pulp's attractiveness to fibre cement producers.
76. The Commission has therefore adopted a separate market for FCP. Although a supply-side analysis may suggest that FCP be considered in the same market as other grades of kraft pulp, this is unlikely to alter the conclusions of the competition analysis, as similar issues will arise under a single kraft pulp market as for a FCP market. For example, in its discussion of likely constraints on the merged entity in the kraft pulp market, the Applicant separately considers bleached pulp and FCP, as these are the two main

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<sup>8</sup> Paragraph 9.17, page 10, Application.

grades that are supplied to domestic pulp users, namely Norske Paper and James Hardie respectively.

77. The Commission accepts that the appropriate functional level is that of production and supply.

#### Geographic Dimension

78. The geographic extent of the kraft pulp market is taken to be national. The pulp produced at the Tasman and Kinleith mills is only transported relatively short distances, for example to the export ports or domestic customers (such as the CHH board mill at Whakatane, the CHH Tissue plant at Kawerau, and the James Hardie fibre cement plant in Auckland). However, pulp is easily transportable as evidenced by the fact that it is globally traded commodity. As noted earlier, the majority of New Zealand's pulp production is exported to Australia and Asia. This suggests that pulp could if necessary be shifted around New Zealand.
79. The Commission is therefore of the view that the appropriate product markets for the current application are those for market kraft pulp (excluding FCP) in New Zealand, and FCP in New Zealand.

#### *The Market for the Purchase of Pulp Fibre in the Central North Island*

#### Product Dimension

80. The proposed acquisition involves horizontal aggregation in terms of the procurement of wood. Both the kraft pulp mills compete, both with one another and with other users, for the purchase of pulp fibre. For the pulp mills, there is no close substitute for pulp fibre as it is an essential and fundamental input into the pulping process.

#### Geographic Dimension

81. In order to define the appropriate geographic extent of this market, it is necessary to consider whether a hypothetical monopsonist<sup>9</sup> in a particular region could successfully force down the price it pays for pulp fibre. If suppliers could switch to other purchasers outside the region in question, the geographic boundary needs to be expanded.
82. According to the Commission's *Business Acquisitions Guidelines*, the geographic extent of a market will be influenced by the practicality of transporting the product, and in particular, the costs of doing so relative to the value of the product:
- “Where transport costs are high relative to the final value of a product, the Commission will generally adopt a narrower geographic market.”<sup>10</sup>
83. In its discussion of market definition, the Applicant refers to a previous decision of the Commission (Decision 213), which concluded that the appropriate geographic market was the central North Island (CNI) forest region. According to that decision, this area was bounded by the Coromandel Peninsula in the north and Taumarunui/Turangi to the south, and extended across to the Hawkes Bay (although excluded the East Coast forests).
84. In the body of the application, a CNI market has been accepted, and this appears to correspond to the market used in Decision 213. However, in the current case, the Applicant notes that the CNI forest region:

<sup>9</sup> A monopsonist is the demand-side equivalent of a monopoly supplier.

<sup>10</sup> Page 13, *Business Acquisition Guidelines*, Commerce Commission (1999).

“is under pressure to supply sufficient pulp wood for the current utilisation. The Applicant wishes to discuss with the Commission the adoption of a wider geographic market, e.g. the North Island.”<sup>11</sup>

85. According to the application, this pressure has arisen as a result of improved forest management (which has led to a reduction in the availability of ‘thinnings’) and improved sawmilling methodologies (resulting in less chips). Consequently, both the pulp mills are beginning to source pulp fibre from Northland, although the Applicant admits these volumes are small compared to those from the CNI region.

86. [

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87. The New Zealand Forest Owners Association forecasts that the woodflow from the CNI plus Hawkes Bay region will increase by around 28.8% over the next thirty years<sup>12</sup>, from approximately 11.1 million cubic metres (m<sup>3</sup>) to 14.3 million m<sup>3</sup>. Although this increase is less in proportionate terms than that expected in regions such as Northland and the East Coast, it does suggest that moderate growth is expected throughout the CNI.

88. In addition, it appears that the costs associated with freighting pulp fibre are significant when compared to the value of the fibre. Mark Lloyd, Fibre Supply Manager at Norske, has noted that the freight costs involved in moving wood down from Kaitaia to Kawerau can double the delivered price of the wood.

89. This is demonstrated by material provided by Norske, which shows the cartage costs for chips sourced from various sawmills. [

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90. The Applicant has informed the Commission that road freight costs are approximately 13-14c per tonne per kilometre for logs, and slightly more for chips. In other words, for every 100 kilometres transported, freight costs for logs amount to \$13-\$14 per tonne. Current delivered prices for pulp logs are approximately \$40-\$50 per tonne.

91. In a submission by FCF, mention is made of the good rail infrastructure in the CNI region, and the relatively flat terrain, factors which suggest that the FCF/CNIFP forests in the region are relatively low-cost suppliers of fibre to the pulpmills. FCF notes that some marginal purchasing does take place from outlying areas – for example, northern and eastern North Island forests supply high-density fibre, and CHH owns forests in Northland.

92. A relatively narrow geographic market is supported by the observation that logs tend to be processed on a regional basis. Log and chip exports tend to pass through regional ports. [

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<sup>11</sup> Paragraph 9.88, page 27, Application.

<sup>12</sup> NZFOA website: <http://nzfoa.nzforestry.co.nz>



93. In light of these figures, the Commission is inclined to adopt the narrower market definition. The Commission has therefore adopted a market for the purchase of pulp fibre in the central North Island.

### *Chemical and Other By-products*

#### Product and Functional Dimensions

94. The Applicant has proposed a number of markets for various by-products of the pulping process. The individual product market definitions proposed by the Applicant appear to be quite narrow and are based around the specific chemical and other by-products. In some cases, there may be some potential substitution with other chemical products. However, the individual production and supply markets proposed by the Applicant are accepted by the Commission. These are:
- The market for bulk liquid chlorine;
  - The market for hydrochloric acid;
  - The market for hypo;
  - The market for crude sulphate turpentine (CST) and crude tall oil (CTO).
95. Chlorine is a key constituent in the pulp bleaching process. Chlorine can be produced in a gaseous or liquid form, although the latter is better suited to transportation. Chlorine that is surplus to mill requirements can therefore be liquefied and sold. The Norske pulp mill does not currently sell bulk chlorine, while the Kinleith mill does have a bottling facility through which it supplies bulk chlorine for distribution.
96. Although liquid chlorine has a variety of uses, it is mainly used for water treatment and purification. Orica, the sole distributor of Kinleith's surplus chlorine, has informed the Commission that while potential substitutes are slowly being developed, for example using ozone, it is appropriate to define a discrete market for chlorine.
97. Hydrochloric acid is a derivative of chlorine, and is produced by both pulp mills. Again there is a range of end-uses for hydrochloric acid, including industrial cleaning, chemical manufacture, and water treatment.
98. Hypo is also derived from chlorine, and is used as an industrial and household bleach and disinfectant.
99. CST and CTO are important raw materials used in a wide range of products. These include disinfectants, flavourings and fragrances, printing inks, resins, and soap.
100. The appropriate functional level again appears to be production and supply. The various products emerge as unavoidable by-products of the pulping process. In most cases, the pulp mills are not involved in the distribution of these products; rather, the by-products are sold to an independent distributor.

### **Conclusion on Markets**

101. The Commission has concluded that the markets relevant to the consideration of the application are:
- The market for the production and supply of market kraft pulp (excluding FCP) in New Zealand;
  - The market for the production and supply of market kraft FCP in New Zealand;
  - The market for the purchase of pulp fibre in the central North Island;
  - The market for the production and supply of bulk liquid chlorine in New Zealand;

- The market for the production and supply of hydrochloric acid in New Zealand;
- The market for the production and supply of hypo in New Zealand;
- The market for the production and supply of CST and CTO in New Zealand.

## COMPETITION ANALYSIS

### Introduction

102. The competition analysis assesses competition in the relevant markets in order to determine whether the proposed acquisition would not result, or would not be likely to result, in an acquisition or strengthening of **dominance**.

#### *The Dominance Test*

103. Section 47(1) of the Commerce Act prohibits certain business acquisitions:

“No person shall acquire assets of a business or shares if, as a result of the acquisition, -

- That person or another person would be, or would be likely to be, in a dominant position in a market; or
- That person’s or another person’s dominant position in a market would be, or would be likely to be, strengthened.”

104. Section 3(9) of the Commerce Act states:

“For the purposes of sections 47 and 48 of this Act, a person has ... a dominant position in a market if that person as a supplier ... of goods and services, is or are in a position to exercise a dominant influence over the production, acquisition, supply, or price of goods or services in that market and for the purposes of determining whether a person is ... in a position to exercise a dominant influence over the production, acquisition, supply, or price of goods or services in a market regard shall be had to-

- The share of the market, the technical knowledge, the access to materials or capital of that person or those persons:
- The extent to which that person is ... constrained by the conduct of competitors or potential competitors in that market:
- The extent to which that person is ... constrained by the conduct of suppliers or acquirers of goods or services in that market.”

105. The test for dominance has been considered by the High Court. McGechan J stated:<sup>13</sup>

“The test for ‘dominance’ is not a matter of prevailing economic theory, to be identified outside the statute.”

...

“Dominance includes a qualitative assessment of market power. It involves more than ‘high’ market power; more than mere ability to behave ‘largely’ independently of competitors; and more than power to effect ‘appreciable’ changes in terms of trading. It involves a *high degree of market control*.”

106. Both McGechan J and the Court of Appeal, which approved this test,<sup>14</sup> stated that a lower standard than “a high degree of market control” was unacceptable.<sup>15</sup> The Commission has acknowledged this test:<sup>16</sup>

<sup>13</sup> *Commerce Commission v Port Nelson Ltd* (1995) 5 NZBLC 103,762 103,787 (HC).

<sup>14</sup> *Commerce Commission v Port Nelson Ltd* (1996) 5 NZBLC 104,142 104,161 (CA).

“A person is in a dominant position in a market when it is in a position to exercise a high degree of market control. A person in a dominant position will be able to set prices or conditions without significant constraint by competitor or customer reaction.

“A person in a dominant position will be able to initiate and maintain an appreciable increase in price or reduction in supply, quality or degree of innovation, without suffering an adverse impact on profitability in the short term or long term. The Commission notes that it is not necessary to believe that a person will act in such a manner to establish that it is in a dominant position, it is sufficient for it to have that ability.” (p21)

107. The role of the Commission in respect of an application for clearance of a business acquisition is prescribed by the Commerce Act. Where the Commission is satisfied that the proposed acquisition would not result, or would not be likely to result, in an acquisition or strengthening of a dominant position in a market, the Commission must give a clearance. Where the Commission is not so satisfied, clearance must be declined. The dominance test is applied in the following section.

#### *Market Concentration*

108. The level of concentration in a market is an indicator of whether a merged firm may or may not be constrained by others participating in the market, and thus the extent to which it may be able to exercise market power.
109. The *Business Acquisitions Guidelines* specify certain “safe harbours” which can be used to assess the likely impact of a merger in terms of s 47 of the Act -
- “In the Commission’s view, a dominant position in a market is generally unlikely to be created or strengthened where, after the proposed acquisition, either of the following situations exist:  
the merged entity (including any interconnected or associated persons) has less than in the order of a 40% share of the relevant market;  
the merged entity (including any interconnected or associated persons) has less than in the order of a 60% share of the relevant market and faces competition from at least one other market participant having no less than in the order of a 15% market share.” (p 17)
110. These safe harbours recognise that both absolute levels of market share and the distribution of market shares between the merged firm and its rivals are relevant in considering the extent to which the rivals are able to provide a constraint over the merged firm. The Commission went on to state that:
- “Except in unusual circumstances, the Commission will not seek to intervene in business acquisitions which, given appropriate delineation of the relevant market and measurement of shares, fall within these safe harbours.”
111. Although, in general, the higher the market share held by the merged firm, the greater the probability that dominance will be acquired or strengthened (as proscribed by s 47 of the Act), market share alone is not sufficient to establish a dominant position in a market. Other factors intrinsic to the market structure, such as the extent of rivalry within the market and constraints provided through possible market entry, also typically need to be considered and assessed.

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<sup>15</sup> *Commerce Commission v Port Nelson Ltd* (1995) 5 NZBLC 103,762 103,787 (HC).  
and *Commerce Commission v Port Nelson Ltd* (1996) 5 NZBLC 104,142 104,161 (CA).

<sup>16</sup> *Business Acquisitions Guidelines*, Section 7.

## The market for the production and supply of market kraft pulp (excluding FCP) in New Zealand

### Market Concentration

112. This market includes the production of all grades of bleached and unbleached kraft pulp, with the exception of FCP which is considered separately. This includes softwood and hardwood pulp, and all densities that do not relate to FCP.
113. The proposed acquisition will lead to the consolidation of all such kraft pulp production in New Zealand. The only existing kraft mills are those operated by CHH at Kinleith, and Norske at Kawerau.
114. The market shares of these two mills are set out in Table 3 below. The production figures relate to kraft pulp production, less FCP. The figures are taken from information contained in the application and subsequently received as part of the Commission's investigation from the Applicant and other parties.
115. For example, the application notes that the Kinleith kraft mill produces a total of between 270,000 and 280,000 tonnes of market kraft pulp each year. Of this production, 28,000 tonnes is FCP<sup>17</sup>. This leaves non-FCP production of between 242,000 and 252,000 tonnes at Kinleith. Table 3 takes the mid-point of this range.

**Table 3: Production of Market Kraft Pulp (ex FCP) in New Zealand**

	Annual Production (tonnes)	Share
Carter Holt Harvey	247,000	[ ]%
Tasman	[ ]	[ ]%
<b>Combined Total</b>	[ ]	<b>100%</b>
Imports	0*	0*
<b>TOTAL</b>	[ ]	<b>100%</b>

\* The level of kraft pulp imports into New Zealand is negligible (see below)

116. At the Tasman kraft mill, approximately 245,000 tonnes of market kraft pulp is manufactured each year. In addition, around [ ] tonnes of undried pulp (see below) is supplied to the neighbouring Norske paper mill. Of this total of [ ] tonnes, approximately [ ] tonnes is FCP<sup>18</sup>.
117. The only other avenue to source kraft pulp is through imports. There is very little pulp imported into New Zealand. The Norske paper operation at Kawerau recently imported a small volume of high quality dried kraft pulp from the Norske Crofton mill in Canada in order to trial its new repulper. These imports also enabled Norske to test the sensitivity of its kraft pulp requirement to the quality of the kraft used. These imports only amounted to approximately [ ] tonnes or [ ]% of total market kraft pulp (ex FCP) production in New Zealand.

<sup>17</sup> Paragraph 9.32, Page 14, Application.

<sup>18</sup> Paragraph 9.37 of the Application indicates that the Tasman pulp mill produces about [ ] tonnes of FCP. However, as noted in Table 5 below, it appears that FCP production at Tasman may be closer to [ ] tonnes.

118. Of the total kraft pulp (ex FCP) production of [ ] tonnes, only [ ]( [ ]% of total kraft pulp production) is sold domestically to third parties, with the remainder being exported or sold to CHH operations downstream, such as the CHH board plant at Whakatane, their tissue plant at Kawerau, and the linerboard plant at Kinleith.
119. There is also a very small amount of bleached pulp that is supplied to British American Tobacco (BAT) in New Zealand. The Commission has consulted with BAT over the proposed acquisition, and BAT has no concerns over the proposed acquisition. They infrequently purchase pulp in New Zealand – their last purchase was in mid 1999, and this transaction was only around US\$[ ] worth of bleached pulp. [ ]
120. The proposed acquisition will lead to a substantial aggregation of market share, to approximately 100%. However, as noted earlier, market share alone is not sufficient to show that dominance has been acquired or strengthened in a market. Other factors intrinsic to the market structure, such as the level of constraint represented by existing and potential competition, and any countervailing market power, also need to be considered.

#### *Constraint by Existing Competition*

121. There are no other producers of kraft pulp in New Zealand.
122. The Commission has considered whether there may be any constraint offered by imports. However, whereas the Tasman pulp supplied to the Norske paper plant is in an undried form, pulp sourced from elsewhere would have to be dried, wrapped, and baled prior to shipment. This will tend to raise the price paid for that pulp, in addition to the higher freight costs. The imported pulp would then have to be reconstituted into a slurry form at the Norske paper plant. The paper plant has some limited repulping capacity, although this would have to be expanded if larger volumes of dried pulp were to be used. Norske has advised that such expansion would involve a capital cost of around NZ\$6 million.
123. Norske Paper has provided the Commission with some pricing information relating to the small amount of pulp it imported from Canada during late 1999. The pricing information suggested that the domestic price could be raised by approximately [ ]% before import price parity is reached in relation to NBSK pulp.
124. However, the [ ]% differential is based on imports of a small volume of high quality (NBSK), bleached pulp. The Applicant has submitted that semi-bleached radiata pulp could be imported from Chile, and the price of this imported pulp would be discounted because of the lower grade and semi-bleached characteristics. Norske has confirmed that this is an option for the paper plant<sup>19</sup>. The Commission has estimated that the landed price per tonne of Chilean pulp would be about US\$[ ], which corresponds to a total price of US\$[ ] including current internal freight costs. This price is [ ]% above the domestic slush price of US\$[ ].

#### Conclusion on Constraint by Existing Competition

125. On the basis of the information available, the Commission is satisfied that the combined entity would be constrained by the ability to import dried kraft pulp.

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<sup>19</sup> In a letter to the Commission (from Mark Oughton, General Manager, Norske Skog Tasman, dated 14 March 2001), Norske noted that they could import dried pulp and that in doing so, they would forsake the 'never dried' discount. The other discounts off the NBSK price would continue to apply, including the volume discounts.

Although there is no evidence of significant volumes of imported kraft pulp into New Zealand, domestic prices appear to have been set at or close to import parity, and this is likely to act as a competitive constraint on the combined entity.

### *Constraint by Potential Competition*

126. According to the *Business Acquisitions Guidelines*, an integral part of any assessment of dominance arising from a business acquisition is an assessment of the constraint from the threat of market entry:

“In order for the threat of market entry to be such a constraint on the exercise of market power as to alleviate concerns of market dominance, entry of new participants in response to the exercise of market power must be likely, sufficient in extent, timely and sustainable.”<sup>20</sup>

127. The Commission uses this test, known as the *lets* test, to evaluate the constraint represented by new entry. This test is briefly applied below.

128. The Commission also considers the history of past entry into a market as an indicator of possible future entry. In New Zealand, there is no evidence of new entry into the kraft pulp production market in the last 40 years.

129. In a previous decision relating to the market for kraft pulp, the Commission looked at the question of potential competition. When considering the question of potential competition, the Commission noted that<sup>21</sup>

“when having regard to the extent to which the merged entity would be constrained by the conduct of potential competitors it is recognised by both FCL and NZFP that the likelihood of another company setting up a kraft pulp mill in New Zealand in the next ten years is extremely remote.”

130. The evidence supplied to the Commission in the current case suggests that this conclusion continues to hold.

### Likelihood of Entry

131. In order to be an effective constraint on incumbent market participants, entry into the relevant market must be considered likely on commercial grounds. The likelihood of new entry will be determined by the nature and height of barriers to entry in the relevant market.

132. The Commission has been advised that the development of a new kraft pulp mill involves very high capital costs, most of which are sunk in the sense that they could not be recovered upon exiting the industry. The Applicant has indicated that as a rule of thumb, capital costs amount to approximately US\$2,000 per annual tonne produced; a new kraft mill today could be expected to produce around 750,000 tonnes per annum, implying a capital cost of US\$1.5 billion. A new mill of the size of the Tasman kraft mill would, according to this rule, require capital investment of approximately US\$ 500 million.

133. The new Visy mill in New South Wales has cost an estimated A\$400 million, although that is an integrated pulp and board mill. However, recent upgrades of the Kinleith pulp mill incurred costs of \$100 million (1991) and \$320 million (1998).

134. The other potentially significant barriers to entry include the need to gain the appropriate resource consents, and the need to secure access to sufficient volumes of fibre. A new pulp mill would have to receive a number of consents, relating to effluent

<sup>20</sup> *Business Acquisitions Guidelines*, Page 19.

<sup>21</sup> Decision 213, Paragraph 88, Page 24.

discharge on land, air, and water, as well as a consent covering water take. These consents are issued by regional authorities in accordance with the Resource Management Act. From discussions with Environment Waikato, the Commission believes that it would not be unreasonable to expect a new pulp mill to gain the various consents required, although possible appeals could delay the process.

135. In terms of access to fibre supplies, significant proportionate increases in wood yield are expected from Northland and East Coast forests over the next few years. However, the single largest concentration of fibre will continue to be in the central North Island. The Applicant has suggested that fibre supply from the CNI is beginning to tighten, although according to FCF, supply and demand in the region is currently balanced. In either case, the Commission has been informed that it is very unlikely that a new pulp mill could be established on the basis of fibre sourced from the CNI.
136. In light of the above barriers to entry, in particular those relating to capital costs and access to fibre, the Commission considers that new entry is not likely. Given the unlikelihood of entry, the Commission will not go on to consider the remaining elements of the *lets* test.

#### Conclusion on Constraint by Potential Competition

137. On the basis of information available, the Commission is not satisfied that the threat of new entry is likely to impose sufficient constraint on the merged entity to avoid dominance concerns.

#### *Countervailing Market Power*

138. In addition to examining existing and potential competition, it is also necessary to consider whether customers of or suppliers to the merged entity would be able to exert any countervailing market power. As noted in the *Business Acquisitions Guidelines*,
- “In some circumstances, this constraint may be sufficient to eliminate concerns that a dominant position may be created or strengthened by a business acquisition.”
139. The [ ] tonnes of kraft pulp sold domestically refers to the undried semi-bleached pulp (“the slush pulp”) supplied from the Norske pulp mill directly through to the Norske paper mill at Kawerau. The Norske paper mill mixes this slush pulp with the pulp produced by the Norske mechanical pulp plant, which is then used as an input into the production of newsprint. The Norske mechanical pulp plant is not part of the proposed acquisition, and will remain under the ownership of Norske.
140. Table 4 below sets out the approximate volumes of kraft slush and mechanical pulp produced for the Norske paper mill at Kawerau. The slush pulp currently represents [ ]% of total pulp used by the Norske paper plant.

**Table 4: Supply of Kraft and Mechanical Pulp to Norske Paper, Kawerau**

Source	Annual Supply (tonnes)
<b>Kraft:</b>	
- domestic slush (Norske kraft mill)	[ ]
<b>Mechanical* :</b>	
- Thermo-mechanical	[ ]
- Refiner mechanical	[ ]
- Groundwood mechanical	[ ]
<b>TOTAL</b>	[ ]

\* Based on daily production volumes provided by Norske of [ ] tonnes (TMP), [ ] tonnes (RMP), and [ ] tonnes (groundwood). Rounded to nearest 5,000 tonnes.

141. Given that Norske is both the purchaser of the slush pulp, as well as the intended seller of the kraft mill, it could reasonably be expected that they will only divest the kraft mill on terms that protect their interests.
142. The supply of the slush pulp to the Norske paper mill is currently governed by a contract between the pulp and paper divisions of Norske<sup>22</sup> (“the slush contract”). According to clause 2.4, the slush contract runs from [

] <sup>23</sup>

143. [

]. <sup>24</sup>

144. The slush contract also sets out the basis on which prices for the pulp are to be determined. The prices are expressed in United States dollars (USD). According to clause 6.1 of the contract,

[

]

<sup>22</sup> ‘Kraft Pulp Supply Agreement’ between Tasman Pulp Limited and Tasman Paper Limited (22 June 2000).

<sup>23</sup> Clause 9.5 deals with default by one of the parties.

<sup>24</sup> See letter from Bell Gully to the Commission dated 14 March 2001: “[

]”. Also see email from Cameron Fleming (Russell McVeagh) to Vittoria Lawford (CHH) dated 13 March 2001.



145. The pricing terms of the contract are therefore benchmarked off the monthly NBSK price, which is established by the major kraft producers in the northern hemisphere. Set discounts relating to grade and volumes are then applied to this price to arrive at a USD price for the slush pulp.
146. Each year, Norske Paper (referred to as Tasman Paper in the slush contract) is required to provide Norske Pulp (Tasman Pulp) with forecasts of its kraft pulp requirements for each of the following three years, including a margin which increases from year one ( $\pm 10\%$ ) to year two ( $\pm 20\%$ ). These forecasts provide the basis for the volumes to be supplied under the slush contract. The Applicant understands that these volumes are likely to continue to decline over the next ten years.
147. Norske Paper has indicated that it is their intention to further reduce their reliance on slush pulp. Annual volumes could be reduced to 15,000-20,000 tonnes without the need to invest in any upgrade of Norske's thermo-mechanical pulp facilities. Instead, Norske Paper expects to achieve this magnitude of reduction through efficiency gains in the production of lighter grades of paper.
148. In the longer term, Norske Paper intend to eliminate their kraft pulp requirements altogether. This could necessitate an expansion of the thermo-mechanical capacity (at an estimated capital cost of \$70-80 million), although it may also be achieved by a possible rationalisation of Norske's Australasian newsprint operations. [

]. This would reduce the Kawerau paper mill's demand for slush pulp.

149. The slush contract contains provisions for the resolution of disputes [

] Norske has advised the Commission that the slush contract will prevail after the disposal of the kraft pulp mill to a successful buyer.

150. In addition to the protection offered by the slush contract, the Applicant has put a further argument to the Commission in relation to the slush pulp. This is that

“by supplying slush pulp directly to Norske's newsprint mill the Tasman kraft pulp mill enjoys an increased margin consequent upon avoiding the drying process and transport costs in respect of the volume of slush pulp. Further, there is no other domestic market for semi-bleached pulp and it would be extremely difficult to sell it on the export market. Major capital investment would be required to upgrade the semi-bleaching plant to make it suitable for other uses (it would also require increased capacity in terms of the chlor-alkali plant and also a drying plant upgrade). For these reasons, refusal to supply this pulp to Norske or increasing the price of supply to Norske (neither of which, in any event, will be possible under the supply contract) would be financially detrimental to the operation of the Tasman kraft pulp mill.”<sup>25</sup>

151. Norske Paper has indicated that the semi-bleached pulp could be exported. However, fully bleached pulp is a more lucrative product, and so additional bleaching may be required in order to achieve greater returns. In any case, the pulp (semi- or fully-bleached) would have to be dried prior to shipment. Norske Paper has told the Commission that the pulp drying machine at the kraft mill currently operates at full capacity, and therefore to dry an additional 35,000-40,000 tonnes would require an upgrade of drier capacity. On top of that, freight costs associated with export would tend to reduce the return available to the kraft mill.

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<sup>25</sup> Submission to the Commerce Commission from Bell Gully (6 March 2001), Page 6.

152. Therefore, there appears to be a mutual benefit to both parties in maintaining the existing arrangement in relation to the slush pulp.

#### Conclusion on Countervailing Market Power

153. As a result of the slush contract, Norske appears to have considerable countervailing market power. The current contract secures the terms on which the slush pulp is supplied to the Norske paper mill for a minimum term of [ ] years, [ ]
154. It appears that slush volumes are likely to decline further over the minimum term of the contract, although the precise extent of this reduction is uncertain. In any case, Norske would appear to retain some countervailing power even in the absence of the slush contract, given the additional costs that the kraft pulp mill would have to incur in order to otherwise dispose of the slush pulp should the existing arrangement be terminated.

#### *Conclusion on the market for the production and supply of market kraft pulp (ex FCP) in New Zealand*

155. Although the proposed acquisition will result in a high market share, and despite the high barriers to entry, the countervailing power in the hands of Norske is likely to constrain the acquisition or strengthening of a dominant position by the merging parties, in accordance with section 3(9)(c) of the Act.
156. As a result of this countervailing market power, and the constraint represented by import parity pricing, the Commission is satisfied that the merged entity would not be likely to acquire or strengthen a dominant position in this market.

### **The market for the production and supply of market kraft fibre cement pulp in New Zealand**

#### *Market Concentration*

157. This market focuses on the production and supply of FCP in New Zealand. FCP is a particular grade of unbleached kraft pulp, and in New Zealand is supplied by both the kraft mills. Table 5 below summarises total FCP production in New Zealand.
158. The vast majority of FCP production at the two kraft mills is exported. According to the application, all FCP produced in New Zealand, with the exception of [ ] tonnes ([ ]% of the total), is exported, with the USA and Australia being the main markets. The single main customer is James Hardie, who purchases an estimated [ ] tonnes from the Tasman and Kinleith pulp mills. This includes the [ ] tonnes of FCP which is used by James Hardie's manufacturing plant at Penrose to produce fibre cement for domestic consumption.

**Table 5: Production of Fibre Cement Pulp in New Zealand**

	Annual Production (tonnes)	Share
Carter Holt Harvey	28,000	[ ]%
Tasman	[ ]	[ ]%
Other NZ	-	
<b>Combined Total</b>	[ ]	<b>100%</b>
Imports	-	-

<b>TOTAL</b>	[ ]	<b>100%</b>

159. James Hardie does not import any FCP into New Zealand and has never done so. If it were to import, possible sources include South Africa and Chile, although the quality of pulp from these regions is uncertain. While imports are unlikely to completely replace the FCP sourced from Kinleith and Tasman, some imported product could possibly be blended, reducing James Hardie's dependence on the New Zealand pulp mills.
160. The proposed acquisition would result in the merged entity having a 100% market share. There are no other producers of FCP in New Zealand, and there are no imports. The acquisition would therefore result in aggregation that lies outside the Commission's safe harbours. As mentioned above, however, market share is one indicator of a firm's market power and other factors must be considered before a conclusion on dominance can be drawn.

#### *Constraint from Existing Competition*

161. Given that the proposed acquisition involves aggregation of market share to approximately 100%, there will be no constraint exercised by existing competition. There are currently no FCP imports into New Zealand, although the development of the Visy mill in New South Wales may represent a new potential alternative source of FCP for James Hardie in New Zealand. The implications of the Visy mill are considered as part of the assessment of the constraint from potential competition in this market.
162. The Applicant argues that US-based pulp mills will constrain the behaviour of the New Zealand mills. The Applicant has submitted to the Commission figures which show that the import price of FCP in New Zealand is US\$[ ], which compares favourably with the equivalent price in the Asian market (US\$[ ]). However, the same material shows the import price in Australia at US\$[ ], which suggests that any FCP exported from the US to Australasia may end up in Australia rather than New Zealand. Given the small size of the New Zealand market, and the fact that the US currently imports FCP from New Zealand, the Commission is not satisfied that the US FCP producers will provide any significant constraint on the merged entity.

#### Conclusion on Constraint by Existing Competition

163. From the information available, the Commission is not satisfied that existing competition in the production and supply of FCP will constrain the merged entity.

#### *Constraint from Potential Competition*

164. The barriers to entering the market for production of FCP in New Zealand are essentially the same as those identified earlier in relation to the kraft pulp market (ex FCP). These include the very high capital costs involved in establishing a kraft pulp mill, and the need to secure access to sufficient volumes of fibre.
165. The one key difference is in the area of potential imports from the new Visy mill in Australia.

*Constraint represented by the Visy mill*

166. The Applicant claims that the merged entity will be significantly constrained in both New Zealand and Australia by the presence of a new kraft pulp and paper mill being developed in the Tumut forestry region in southern New South Wales.<sup>26</sup>
167. The Applicant argues that the Visy Mill will be using state-of-the-art pulping technology, and, as an efficient low-cost producer of kraft pulp, will be able to supply FCP into the New Zealand market at a constraining price.
168. Given the relative returns available to Visy from selling kraft pulp into various markets, the Applicant argues that the Visy mill, in terms of supplying fibre cement pulp into New Zealand, would have a  
[ ]<sup>27</sup>
169. The Commission has contacted Visy and has discussed the Tumut mill. According to Tony Grey (Public Affairs Manager, Visy), the Tumut mill is an integrated pulp and paper plant, producing mainly packaging paper. The A\$400 million mill is based on plantation pines, and will have an annual production of approximately [ ] tonnes. Grey indicated that the majority of production will be integrated with paper, probably in the vicinity of [ ] tonnes. The remainder will be unbleached kraft pulp available for the open market, and this is likely to be exported.
170. The mill is due to commence operations in July 2001. It has been designed in such a way that if market conditions prove favourable, production can be expanded to a maximum of [ ] tonnes per annum. [ ]
171. This suggests that, at least for the next couple of years, only around [ ] tonnes of market unbleached kraft pulp will be available from the Visy mill, considerably less than the [ ] tonnes suggested in the application<sup>28</sup>. James Hardie has told the Commission that until production is underway at the Visy mill, there will be some uncertainty over the price and quality of that pulp. When asked about the supply of fibre to the Visy mill, Grey explained that the fibre cement pulp is likely to be similar to that produced by the New Zealand kraft mills.
172. It therefore appears that the market pulp produced by the Visy mill could potentially be a suitable alternative for James Hardie's fibre cement operations in Australia and New Zealand.
173. However, if the Applicant's analysis is followed, the most lucrative option, according to the application, would be for Visy to sell FCP in Australia. This is largely due to the additional costs associated with freighting the pulp across the Tasman. Information

<sup>26</sup> According to the application,

“this kraft pulp mill has a capacity at Stage I (commencing production around June 2001) of [ ] of pulp per annum, at Stage II (production 2004-2006) of [ ] and at Stage III (production 2009-2011) of [ ]. To put these capacities into perspective, the Visy Mill (at Stage I) equates in size to the market kraft pulp production of the Kinleith Mill and at Stage III it equates in size to the total New Zealand market kraft pulp production.”

<sup>27</sup> Paragraph 15.19, Page 41, Application. Schedule 6, in fact, indicates that the actual advantage would be US\$[ ] per tonne. This figure was subsequently confirmed by the Applicant.

<sup>28</sup> In a subsequent submission to the Commission (6 March 2001), Bell Gully, representing the applicant, noted that “surplus pulp from Visy is expected to fall within the order of [ ] tonnes per annum.” Bell Gully further refined this estimate to [ ] in a letter to the Commission dated 9 March 2001.

provided to the Commission shows that James Hardie (Australia) purchases a total of about [ ] tonnes of FCP from the Tasman and Kinleith kraft mills, while other Australian-based fibre cement producers, such as CSR and BGC Building, also purchase FCP from the two New Zealand mills ([ ] tonnes and [ ] tonnes respectively). This suggests that Australian manufacturers import at least [ ] tonnes of FCP from New Zealand. According to the figures contained in the application, it is likely that this trade will be a natural target for the Visy mill in terms of disposing of its market kraft.

174. This suggests that a significant proportion of the market kraft pulp available from the Visy mill will likely end up in the domestic Australian market. The residual, approximately [ ] tonnes, could potentially be exported to New Zealand and other regional markets.
175. The Commission has examined the freight costs associated with importing FCP from Visy in Australia, as a proportion of the FCP price paid by James Hardie under its contracts with the two New Zealand pulp mills.
176. The Commission has estimated the TransTasman freight cost to be around NZ\$70 per tonne. This is based on quoted freight rates for a twenty-foot-equivalent container, adjusted for wharfage charges, and approximately corresponds to the freight cost of US\$[ ] contained in Schedule 6 of the application.
177. Furthermore, an additional onshore freight cost is incurred in moving the pulp from the mill to the export wharf. Information supplied by the Applicant indicates this to be around NZ\$23 per tonne. Total incremental freight costs are therefore estimated to be about NZ\$93 per tonne.
178. Information provided by the Applicant and James Hardie suggests that the domestic price of FCP is currently around NZ\$[ ] per tonne (based on unadjusted NBSK US\$680). FCP purchased from the Tasman mill is priced according to a slightly different formula to that purchased from the Kinleith mill; the Commission has estimated that the current Tasman price is about NZ\$[ ] per tonne while the Kinleith price is about NZ\$[ ] per tonne<sup>29</sup>.
179. The freight cost is therefore about [ ]% of the current Tasman price for FCP sold to James Hardie, and [ ]% of the Kinleith price. These proportions will tend to vary as the NBSK price and the exchange rate varies. For example, at the current exchange rate, but an NBSK price of US\$600 (which approximates the long-run average NBSK price), these proportions increase to [ ]% and [ ]% respectively.
180. In Decision 213, the Commission found that imported kraft pulp was considerably more expensive than the local product. The Commission noted that,
 

“even at relatively favourable times in the cycle, the landed price per tonne from Australia was considerably above the local price [ ]. When the cycle was unfavourable the price of imports was double that of the local product.”
181. As a result, the Commission placed little weight on imports as a constraint on the merged entity.
182. The Applicant has provided some comment on the Commission’s earlier observation regarding imports. In the late 1980’s, the only pulp plant in Australia that exported was the Amcor Maryvale mill in Victoria. This plant produced a “wet lap” pulp, which had

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<sup>29</sup> Based on an NBSK price of US\$680.

a high water content and was therefore relatively heavy. Consequently the freight costs associated with that pulp were quite high. This type of pulp is no longer exported from Australia.

183. In addition to the higher water content, it appears that TransTasman freight rates in 1988 were higher than in 2001. The Applicant has provided sea freight rates sourced from NZFP, which suggest that rates from the eastern seaboard of Australia in 1988 were about NZ\$120 per tonne. As noted above, current sea freight rates are about NZ\$70 per tonne.
184. These two factors indicate that the cost of importing pulp from Australia may have dropped significantly since 1988. At the time of Decision 213, relatively high freight costs contributed to an import price significantly higher than the domestic price of pulp. This margin appears to have narrowed considerably over the period since that decision, although the height of this margin will change as the NBSK price and exchange rate changes.
185. In the current case, the Commission has examined the possible constraint represented by the new Visy mill in Australia. As noted above, the additional freight costs associated with importing kraft pulp from Australia amount to around [ ]% of the current price paid for local FCP. However, the strong NBSK price and the low value of the New Zealand dollar tend to conspire to produce this low proportion. The Commission has therefore endeavoured to re-estimate this proportion at an “unfavourable” stage of the cycle. The latest trough in terms of the NBSK price was the period from October 1998 to March 1999, when the unadjusted price was around US\$450. Over this period, the US\$/NZ\$ exchange rate was around 0.55. Given these parameters, the additional freight costs are estimated to be about [ ]% of the local price (in NZ\$) prevailing at the time.
186. These import-adjusted prices (the domestic price plus TransTasman freight) are those that would be required to make exporting to New Zealand equally attractive to Visy as selling to Australian fibre cement companies. In terms of price, Visy would view the New Zealand and the Australian markets indifferently. However, if having satisfied the demand of Australian fibre cement producers, Visy is left with surplus FCP – which as indicated above could be in the vicinity of [ ] tonnes – it may accept a lower return by exporting this residual to New Zealand. For example, if, as argued implicitly by the Applicant, Visy’s net return from exporting to New Zealand is reduced by the full amount of the TransTasman freight costs, then the price paid by James Hardie for the imported FCP will be approximately equal to the domestic price. If these freight costs are shared between Visy and James Hardie, this will be reflected in a smaller margin between the import and the domestic prices than that referred to in the preceding paragraphs.

#### *Other Potential Import Competition*

187. The Commission has also considered the constraint arising from possible imports of FCP from sources other than the Visy mill in Australia. James Hardie has referred to South Africa as being one possible source of imported FCP. Notwithstanding the question-mark over the quality of such pulp, the Commission has estimated the freight costs involved in bringing pulp in from South Africa.
188. The South Africa-New Zealand freight cost is estimated to be about NZ\$165 per tonne. This is approximately [ ]% of the current domestic price paid by James Hardie. However, if the South African product proved to be of a lesser quality, this could be

reflected in a higher grade discount, which to some extent may offset the additional freight costs.

#### Conclusion on Constraint by Potential Competition

189. The new Visy pulp and paper mill in Australia may provide some constraint on the merged entity in New Zealand. The Visy mill is expected to be a significant producer of kraft pulp, although the majority of that pulp will be retained within the integrated operation. Although the extent of the constraint provided by Visy will become clearer once production starts, indications are that around [ ] tonnes of pulp will be released to the market.
190. The price at which James Hardie could source imports provides a ceiling for domestic prices. The Commission has estimated that freight costs from Australia amount to about [ ]% of the current domestic price of FCP, while freight costs from South Africa are about [ ]%. This provides an indication of the potential price increases that could be achieved by the merged entity before substitution towards imports becomes viable.
191. In light of these figures, the Commission considers that potential competition, in particular from the new Visy mill in New South Wales, may provide some constraint on the merged entity in the market for the production and supply of FCP in New Zealand.

#### *Countervailing Market Power*

192. James Hardie is a major international manufacturer of fibre cement products, with production plants in New Zealand, Australia, USA, and the Philippines. All of these plants purchase FCP from one or both of the two New Zealand kraft pulp mills. [ ]
193. The approximate volumes of FCP are set out in Table 6 below.

**Table 6: James Hardie Usage of New Zealand FCP  
(tonnes pa)**

	Kinleith	Tasman
James Hardie (NZ)	[ ]	[ ]
James Hardie (Australia)	[ ]	[ ]
James Hardie (Philippines)	[ ]	[ ]
James Hardie (US)	[ ]	[ ]

194. In terms of the FCP purchased from the Kinleith mill, James Hardie aggregates the quantities for its New Zealand, Australian and Philippine operations. James Hardie has a single contract with the Kinleith mill covering these three regions. The quantity-related discounts off the NBSK price are based on the total tonnage purchased from Kinleith for these three country operations which, according to Table 6, currently amounts to approximately [ ] tonnes pa.
195. James Hardie is currently renegotiating its contract with the Tasman pulp mill. This contract covers the FCP purchased by James Hardie for its Australian and New Zealand operations, which is around [ ] tonnes pa.
196. The combined volume of FCP purchased by James Hardie from the two New Zealand kraft mills is [ ] tonnes pa. This represents around [ ]% of the total FCP production of the two mills. Given the announced expansion in James Hardie's fibre cement

production capacity in the USA, this proportion may change over the next two years. The Applicant projects an increase in James Hardie's US demand for FCP from around [ ] tonnes to [ ] tonnes within two years<sup>30</sup>.

197. James Hardie has informed the Commission that it has no competition concerns with the proposed acquisition proceeding. An attempt by the merged entity to raise the price of FCP would carry the risk of jeopardising at least part of the substantial quantities purchased by James Hardie. James Hardie in the USA is likely to continue importing some FCP from New Zealand due to its quality. However, it could look at switching some of the [ ] tonnes it currently imports from New Zealand to alternative sources in North America, although it is likely to continue importing some FCP from New Zealand due to its quality. This could be blended with alternative pulp, thus reducing the reliance of James Hardie on the Tasman and Kinleith mills.
198. Similarly, a price increase targeted at the New Zealand/Australian/Philippine operations would risk a diversion away from the Tasman and Kinleith pulp. Again this diversion would be likely to be partial, with FCP sourced from the New Zealand mills being mixed with pulp sourced from elsewhere. Although James Hardie was not able to give an indication of the size of the price increase that would trigger such diversion, the earlier discussion of freight costs provides an approximation with respect to imports to New Zealand. James Hardie's Australian fibre cement plants may become more sensitive to any price increase, given the emergence of the Visy mill as a possible alternative source. [ ]
199. In 1987, at the time of the Commission's previous decision on kraft pulp (Decision 213), James Hardie had no demand for FCP in the USA. Since that decision, James Hardie has commenced and expanded production significantly in both the USA and Asia, with that expansion expected to continue. This suggests that at least some of the countervailing power now held by James Hardie may not have been present at the time of Decision 213.

#### Conclusion on Countervailing Market Power

200. The Commission is satisfied that James Hardie will have significant countervailing market power. Given the large volumes of FCP purchased from the two New Zealand kraft pulp mills by the James Hardie group as a whole, the Commission is satisfied that this countervailing power will act as an effective constraint on the merged entity in the FCP market in New Zealand.

#### *Conclusion on the market for the production and supply of market kraft FCP in New Zealand*

201. The proposed acquisition will lead to a significant aggregation of market share in this market. There are also high barriers to new entry into this market. However, with the countervailing power of James Hardie in particular, as well as the emergence of the new Visy pulp and paper mill in New South Wales, the Commission is satisfied that the merged entity will be constrained in the FCP market in New Zealand.

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<sup>30</sup> James Hardie has confirmed that these increases are expected.



## The market for the purchase of pulp fibre in the central North Island

### Market Concentration

202. As noted earlier, the market for the purchase of pulp fibre in the CNI is approximately bounded by the Coromandel Peninsula in the north, and Taumarunui/Turangi in the south. It extends across to the Hawkes Bay, but does not include the increasingly important East Coast forestry region. This geographic definition was set out in an earlier Commission decision<sup>31</sup>.
203. On page 31 of the application, figures are provided which show the amount of pulp fibre purchased by various operations in the CNI. These figures, and the corresponding market shares, are set out in the second and third columns of Table 7 below. They suggest that the merged entity would purchase approximately [ ] tonnes of wood each year, which is [ ]% of the total. The next biggest purchaser is the Norske mechanical pulp plant at Kawerau, which consumes [ ] tonnes per annum, equivalent to [ ]% of the total.
204. The Commission has been able to test the figures provided by the Applicant, and has concluded that they are generally accurate. For example, Winstone Pulp has informed the Commission that its mechanical pulp mill at Karioi, near Ohakune, uses between [ ] and [ ] tonnes of wood each year, while the Pan Pac mechanical mill near Napier uses [ ] to [ ] tonnes.
205. However, the Winstone Pulp mill lies outside the CNI region as defined above. Karioi is approximately 100 kilometres south of the Taumarunui/Turangi boundary, and Winstone informed the Commission that it sources its wood from the southern North Island as opposed to the central North Island. The Winstone mill should therefore be omitted from the analysis of market shares.
206. The Commission has estimated market shares based on the mid-point of the range provided by Pan Pac ([ ] tonnes), and removing Winstone Pulp as a user in the central North Island market.

**Table 7: Market for Pulp Fibre in the Central North Island**

	Wood Use (tonnes pa)	Wood Use (share)	Commission estimate of share*
Carter Holt Harvey	[ ]	[ ]%	[ ]%
Tasman Kraft Mill	[ ]	[ ]%	[ ]%
<b>Combined Total</b>	[ ]	[ ]%	[ ]%
Norske Paper Plant (Kawerau)	[ ]	[ ]%	[ ]%
Pan Pac Forests (Napier)	[ ]	[ ]%	[ ]%
Winstone Pulp (Karioi)	[ ]	[ ]%	-
Fletcher Wood Panels (Taupo)	[ ]	[ ]%	[ ]%
Exports: Pulp Logs	[ ]	[ ]%	[ ]%
Exports: Pulp Chips	[ ]	[ ]%	[ ]%
<b>TOTAL</b>	<b>5,810,000</b>	<b>100%</b>	<b>100%</b>

\* Based on information received from other parties; also excludes Winstone Pulp.

<sup>31</sup> See Paragraphs 11 and 12, Commerce Commission Decision 213 (5 November 1987).

207. On this basis, the merged entity’s market share rises from [ ]% to [ ]%, while the share of Norske’s mechanical mill increases from [ ]% to [ ]%. These market shares suggest that the level of aggregation would lie just outside the Commission’s safe harbours.

*Constraint from Existing Competition*

208. The Applicant argues that in respect of the constraint from existing competition, “the principal discipline on the merged entity in respect of wood supply derives from the existence of an active woodchip and pulp log export market. [ ] pricing of pulp logs and woodchips relates directly to the price for exports. That position will not change and therefore the export price will be a minimum price that will always constrain the merged entity.”

209. The Applicant therefore argues that suppliers of fibre, such as forest owners and sawmills, have the ability to switch their supply into exports if the pulp mills attempted to depress the price they pay for fibre. This provides a price floor below which the merged entity could not lower the price at which it acquires fibre.

210. The Commission has put this export price constraint argument to a number of parties who supply fibre to the pulp mills. [ ]

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211. A significant proportion of the wood supplied to the kraft pulp mills is covered under long-term contracts (see below). [ ]

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212. [ ]

] This is confirmed by material provided by Norske Skog, which shows how third party sawmill prices are derived. A couple of examples are reproduced in Table 8 below.

**Table 8: Third Party Sawmill Pricing (NZ\$/m<sup>3</sup>)  
Norske Skog**

	Bin Price*	Cartage Cost	FCF Margin	Norske Price
[ ]	[ ]	[ ]	[ ]	[ ]
[ ]	[ ]	[ ]	[ ]	[ ]
[ ]	[ ]	[ ]	[ ]	[ ]

\*[ ]

213. The above Table suggests that if the pulp mill tries to lower the price it pays for chip (which is represented in the right-hand column), the returns from exporting (represented by the bin price) become more attractive.

214. [

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215. The concerns regarding the logistical difficulties faced by smaller suppliers of chip were to some extent confirmed by Wood Exports Limited<sup>32</sup> (WEL). Based at the Port of Tauranga, WEL owns chip storage and loading facilities and accommodates an annual throughput of approximately [ ] tonnes of chips. WEL does not engage in the trading of chips, but simply provides storage and ship-loading services to CHH, FCF, and Tachikawa, a large Rotorua-based sawmill.

216. WEL explained that a typical shipment of woodchips from New Zealand is 40,000 tonnes. A small sawmill would take more than a year to build up this volume of chips. However, overseas purchasers tend not to be interested in chips that have been stored for over 6 months. This means that smaller consignments of chips have to be aggregated prior to shipment. This aggregation tends to be undertaken by either FCF or CHH, who can then arrange for a full shipment.

217. Therefore, while smaller sawmills may not be able to export directly, it appears that they can still access the export market through FCF or CHH. The Commission also understands that Tachikawa, a large sawmill near Rotorua, also exports chips through WEL. The presence of FCF and Tachikawa as competing channels through which chips can be aggregated for export suggests that CHH may face some constraint when considering the prices that it is prepared to offer for fibre.

218. [

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219. [

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220. [

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221. [

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<sup>32</sup> WEL is owned by CHH (39%), FCF (39%), and Itochu (22%).

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222. [

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Conclusion on Constraint from Existing Competition

223. On the basis of the information it has received, the Commission is satisfied that existing competition, in particular in the form of exports, is likely to act as a constraint on the merged entity in the market for the purchase of pulp fibre in the CNI region.

*Constraint from Potential Competition*

224. Existing consumption of pulp wood in the region is based on the two kraft pulp mills, the mechanical pulp mill at Napier, and the Norske paper mill. These users account for over 90% of pulp fibre in the region. A small amount is purchased by Fletcher Wood Panels in Taupo, with the remainder being exported.

225. Potential competition in this market would arise through the emergence of a new purchaser of pulp wood in the CNI. To exercise a constraint on the merged entity in terms of purchasing wood, such a new entrant would have to be of a similar scale to the existing processors, with a requirement for similar volumes of fibre. The earlier discussion of potential competition and new entry in the pulp production markets concluded that such entry was extremely unlikely and as a result, there was unlikely to be any constraint from potential competition in those markets. The same discussion applies to the market for pulp fibre.

Conclusion on Constraint from Potential Competition

226. On the basis of information available, the Commission is not satisfied that the threat of new entry is likely to impose sufficient constraint on the merged entity to avoid dominance concerns.

*Countervailing Market Power*

227. Apart from CHH's own forestry and wood products divisions, the main suppliers of pulp wood to the two kraft mills are FCF and the CNIFP, of which FCF is a partner. Each year, FCF/CNIFP supplies Norske's pulp and paper operations at Kawerau with about [ ] tonnes of pulp logs and chip. [

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228. [

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229. [

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230. The same pricing formulae are applied to FCF/CNIFP's supply of pulp wood to the Kinleith pulp mill, which currently stands at [ ] tonnes although the Commission understands that this may be increased to [ ] tonnes in the near future<sup>33</sup>.

231. [

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232. Contract prices for pulp chips tend to be set according to a different formula, although prices paid are again related to international prices.

233. [

]

234. From the above, it appears that the terms on which FCF supplies pulp wood to the Tasman pulp mill, both in its own right and as a partner in the CNIFP, are likely to be protected irrespective of whether or not the proposed acquisition proceeds. As noted earlier, the long-term contracts set out explicit pricing formulae for the supply of pulp fibre. According to these formulae, the domestic prices received by FCF are based on global prices and are reviewed on a quarterly basis. These reviews ensure that changes in international prices and exchange rates are reflected in the prices paid by the pulp mills.

235. These quarterly adjustments are unlikely to be influenced by the proposed acquisition. This is confirmed by the comment of FCF that "the pricing formula effectively protects the supplier from any manipulation by the buyer." Global wood prices and exchange rates are essentially independent variables in the pricing equations, and the acquisition by CHH of the Tasman kraft mill is unlikely to change this.

236. It therefore appears that the majority of the fibre supplied to the two pulp mills (excluding the fibre supplied by other CHH divisions) will be protected from any monopsonistic power conferred on CHH as a result of the proposed acquisition.

237. [

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238. However, if such negotiations were to break down, it is likely that CHH would be left with a significant shortage of pulp fibre. This volume of fibre represents around 25% of the fibre consumed by the two kraft pulp mills. In order to operate the pulp mills efficiently, which is usually at full capacity, CHH would have to replace that large

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<sup>33</sup> [

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volume of fibre. Possible alternative sources include CHH's own forests in areas such as Northland, from which significant increases in woodflows are expected over the next 5-10 years and beyond. However, as noted earlier, these regions lie outside the CNI, and there would be significant cartage costs incurred in bringing fibre from these regions to the pulp mills.

239. The Commission has considered whether CHH could supply this additional volume of fibre from its own forests within the CNI region. While there is considerable uncertainty looking 20 years into the future, it appears that there will be a shortfall in pulp fibre available from CHH forests in the CNI. The Applicant has informed the Commission that this shortfall is expected to emerge from 2003 on, and will be covered by a new supply contract with FCF/CNIFP. The Kinleith pulp mill already purchases 200,000 m<sup>3</sup> of pulp fibre from the CNIFP, and this is set to increase by another 200,000 m<sup>3</sup> from 1 June 2001. In the longer term, the Applicant expects supply and demand conditions in the CNI to return to a state of balance.
240. It therefore appears that the merged entity would continue for the foreseeable future to be reliant upon FCF/CNIFP for large volumes of pulp fibre sourced from within the CNI region.

#### Conclusion on Countervailing Market Power

241. The Commission is satisfied that there appears to be significant countervailing market power as a result of the long term fibre supply contracts and the volumes of fibre supplied from FCF/CNIFP forests in the CNI. This countervailing power lies in the hands of the major suppliers of fibre to the kraft pulp mills, and is likely to act as a constraint on the merged entity.

#### *Conclusion on the market for the purchase of pulp fibre in the central North Island*

242. The merged entity would utilise approximately [ ]% of the pulp wood produced in the CNI region. The next largest purchaser would account for just over [ ]%.
243. However, of the total fibre supplied to the two kraft pulp mills, a significant proportion is either self-supplied through other CHH divisions, or supplied under long term contracts with FCF and the CNIFP<sup>34</sup>. These contracts contain explicit pricing mechanisms which are likely to protect the supplier from any attempt by the combined entity to manipulate prices.
244. In addition, the major supplier of fibre to the pulp mills is FCF. The fibre is sourced from FCF forests in the CNI region, and as a result, FCF appears to have significant countervailing power in this market.
245. For smaller third party suppliers, it appears that the ability to divert supply into exports will also act as a constraint on the merged entity. Although such suppliers may not be able to export directly, they could do so through an established export operation such as that of FCF.
246. From the information available, the Commission is satisfied that these factors will act as a constraint on the merged entity in the market for pulp fibre in the CNI region.

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<sup>34</sup> Based on information in the application, which is largely consistent with information obtained from other parties, the Commission estimates that of the total fibre used by the two kraft pulp mills, approximately [ ]% would be supplied from other CHH divisions or through the long-term contracts with FCF/CNIFP. Independent sawmills supplying via FCF account for a further [ ]%.

## The market for the production and supply of bulk liquid chlorine in New Zealand

### Market Concentration

247. Domestic supply and import figures (in chlorine equivalent tonnes per annum (cetpa)) for 2000 are set out in Table 9.

**Table 9: Supply of bulk liquid chlorine (2000)**

Source	Volume (cetpa)	Market Share %
Kinleith Mill	[ ]	100%
Imports*	<1	-
<b>Total</b>	[ ]	<b>100%</b>

\*(Source: Statistics NZ)

### Constraint from Existing Competition

248. There are no competitors to the Kinleith mill in this market. The Tasman mill does not currently compete in respect of the production and supply of bulk liquid chlorine as it does not have the necessary filling facilities at its chlor-alkali plant. The capital involved in setting up a bottling facility would be several million dollars.
249. Although the product could be sold at close to marginal cost the initial capital involved, and the small size of the market, has deterred such an investment at the Tasman mill.
250. Accordingly, the acquisition will not result in aggregation of the production and supply of bulk liquid chlorine.

### Countervailing Power of Purchasers

251. Orica is the sole acquirer of bulk liquid chlorine in New Zealand. The Kinleith pulp mill produces chlorine and fills cylinders solely under contract for Orica. Orica has an established relationship with CHH. [ ]
252. Orica possesses the specialised skills relative to distribution of hazardous substances, and has the essential specialised cylinders and other equipment needed for the transportation of liquid chlorine. Orica is the sole supplier to the small ([ ]) and fragmented domestic market.
253. Orica considers that it possesses countervailing market power. Furthermore, Orica supply CHH with approximately [ ] worth of industrial resins for CHH board plants in Australia and New Zealand. Orica produces urea formaldehyde-based resins which are used as a 'glue' in the production of, for example, board at CHH's Whakatane board mill. CHH are aware that any attempt to raise prices in relation to the chemical products supplied to Orica is likely to have implications in terms of Orica's supply of these resins to CHH's downstream operations.

254. [

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255. Orica is also a leading supplier of industrial and speciality chemicals in Australia as well as in New Zealand. It presently has three chlor-alkali plants in Australia with a total estimated capacity of [

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256. Indications from Orica are that at present they import chlorine infrequently. The last shipment of chlorine from Orica's Australian facilities was at a price of [ ]. This figure is comparable to the price of [ ] it currently pays to the Kinleith mill.

257. Industry participants agree that the need to dispose of excess chlorine produced in the production of hypo will also constrain the ability of the merged entity to raise prices in the bulk liquid chlorine market.

*Conclusion on the market for the production and supply of bulk liquid chlorine in New Zealand*

258. The proposed acquisition will not result in any aggregation in the market. In any case, the merged entity will be constrained by the countervailing power of the sole purchaser in the market, the need to dispose of excess chlorine produced in hypo production, and the ability to import at comparable prices.

259. The Commission is therefore satisfied that the merged entity is unlikely to acquire or strengthen a dominant position in the market for the production and supply of bulk liquid chlorine in New Zealand.

**The market for the production and supply of hydrochloric acid in New Zealand**

*Market concentration*

**Table 10: Estimated Supply of hydrochloric acid (2000)**

Source	Volume (cetpa)	Market Share %
Kinleith Mill	[ ]	[ ]
Tasman Mill	[ ]	[ ]
<b>Combined</b>	[ ]	[ ]
Imports*	6	[ ]
<b>Total</b>	[ ]	<b>100%</b>

\*(Source: Statistics NZ)

*Countervailing Power of Purchasers*

260. Orica is the sole acquirer of hydrochloric acid from the Tasman mill and one of the main acquirers of hydrochloric acid from the Kinleith mill. As discussed above, the



countervailing power of Orica in the chlorine market also applies to this market after the acquisition.

261. The application claims that [ ]

262. All industry participants spoken to are aware of imports of hydrochloric acid into New Zealand and it appears that imports are viable option. [ ]

#### *Sulphuric acid*

263. In the application it is suggested that sulphuric acid can be used as a substitute for hydrochloric acid in some uses. While this may be so, there is a substantial price difference between the two products. [ ]

#### *Conclusion on the market for production and supply of Hydrochloric Acid in New Zealand*

264. The merged entity will acquire [ ] of the market for production and supply of hydrochloric acid in New Zealand. However, the merged entity will be constrained by Orica's countervailing power and the ability to import at comparable prices.

265. The Commission is therefore satisfied that the merged entity is unlikely to acquire or strengthen a dominant position in the market for production and supply of hydrochloric acid in New Zealand.

### **The market for the production and supply of Sodium Hypochlorite in New Zealand**

#### *Market concentration*

**Table 11: Estimated Supply of Hypo (2000)**

Source	Volume (cetpa)	Market share %
Kinleith Mill	[ ]	[ ]
Tasman Mill	[ ]	[ ]
<b>Combined</b>	[ ]	[ ]
Wilson's	[ ]	[ ]
Imports*	8	[ ]
<b>Total</b>	[ ]	<b>100%</b>

\*(Source: Statistics NZ)

#### *Constraint from Existing Competition*

266. Wilson's Chemicals, a Christchurch based company, is making hypo directly from chlorine and caustic soda on site.

267. Wilsons does not currently transport hypo to the North Island and lacks a distribution channel.
268. The ability of Wilsons being able to expand production depends on the availability of raw materials. [

]

*Constraint from potential competitors/Countervailing power of purchasers*

269. Industry parties have indicated to the Commission that the cost of setting up a hypo producing facility capable of competing with a pulp mill would be \$300,000-\$500,000. Once set up the major inhibitor to expanding production would be the price of chlorine and caustic soda. [
270. Also, one of hypo's major uses is in the treatment of water. It is used by regional councils and in the domestic swimming pool market. Users in these industries can set up small on site hypo production for their own use for a cost of approximately \$100,000.
271. Andrew Industrial purchases [

]

*Substitutes*

272. Calcium hypochlorite is recognised as being a viable substitute for purification purposes in the domestic swimming pool market. It is easily transported in solid form. This will act as a constraint on the price of hypo. Calcium hypochlorite is priced at [
- ]. Also, alternative technology such as ozone and UV light can be used in water treatment and will act as a constraint on the price of hypo.

*Conclusion on the market for the production and supply of Sodium Hypochlorite in New Zealand*

273. The proposed acquisition will result in the merged entity acquiring a [ ] market share. However, the merged entity will be constrained by the relatively low barriers to setting up hypo production, and the ability to import.
274. The Commission is therefore satisfied that the merged entity is unlikely to acquire or strengthen a dominant position in the market for production and supply of hypo in New Zealand.

## The market for the production and supply of CST and CTO in New Zealand

### Market concentration

**Table 12: Estimated Supply of CST (2000)**

Source	Volume (tonnes pa)	Market Share %
CHH	[ ]	[ ]
Tasman	[ ]	[ ]
<b>Combined</b>	[ ]	[ ]
Imports – Australia*	818	[ ]
Imports – Brazil*	230	[ ]
Imports – China*	3	[ ]
<b>Total</b>	[ ]	<b>100%</b>

\*(Imports: Statistics NZ)

Note: The figures for CHH are for the year to December 2000; for Tasman for the year to June 2000; and imports are for the period ending 30 September 2000. For that reason the percentages are approximate only.

**Table 13: Estimated Supply of CTO (2000)**

Source	Volume (tonnes pa)	Market Share %
CHH	[ ]	[ ]
Tasman	[ ]	[ ]
<b>Combined</b>	[ ]	[ ]
Imports – Brazil*	3,325	[ ]
Imports – Chile*	580	[ ]
<b>Total</b>	[ ]	<b>100</b>

\*(Imports: Statistics NZ)

### Countervailing Power of Purchasers

275. Eka chemicals is the sole purchaser of CST and CTO in the market. CST and CTO, effectively, are by products of the pulping process. Capacity is constrained by the limits to the total production outputs of the Kinleith mill and the Tasman mill. Eka acquires all of the output of both mills, but they are not able to satisfy the requirements of the Eka plant. Eka are forced to import additional CST and CTO at a significantly higher cost [ ] to satisfy the plant requirements.

276. Eka is currently protected by contractual arrangements with each mill. This reflects the historical involvement of the mills in a joint venture operating what is now the Eka plant. When these contracts expire, prices may rise, given the capacity constraints, towards import parity, but the rises would be likely to occur whether or not the acquisition takes place.

*Conclusion on the market for the production and supply of CST and CTO in New Zealand*

277. The merged entity will acquire market shares of [ ] for CST and [ ] for CTO. The merged entity will have no more ability to increase price than the separate mills would have, and like them, will be constrained by import price parity. The merged entity will also be constrained to some degree by the fact that it has to dispose of these by-products in an environmentally acceptable fashion.
278. The Commission is therefore satisfied that the merged entity is unlikely to acquire or strengthen a dominant position in the market for production and supply of CST and CTO in New Zealand.

**OVERALL CONCLUSION**

279. The Commission has considered the likely impact of the proposal in the following markets:
- the market for the production and supply of market kraft pulp (excluding FCP) in New Zealand;
  - the market for the production and supply of market kraft FCP in New Zealand;
  - the market for the purchase of pulp fibre in the central North Island;
  - the market for the production and supply of bulk liquid chlorine in New Zealand;
  - the market for the production and supply of hydrochloric acid in New Zealand;
  - the market for the production and supply of hypo in New Zealand;
  - the market for the production and supply of CST and CTO in New Zealand.
280. Having regard to the various elements of section 3(9) of the Act, and all the other relevant factors, the Commission is satisfied that implementation of the proposed acquisition, would not result or be likely to result in any person acquiring or strengthening a dominant position in any of the above mentioned markets.

**DETERMINATION ON NOTICE OF CLEARANCE**

281. Accordingly, pursuant to section 66(3)(a) of the Commerce Act 1986, the Commission determines to give clearance for the acquisition by Carter Holt Harvey Ltd of those business assets of Norske Skogindustrier ASA relating to the kraft pulp processing assets of Norske's Tasman mill.

Dated this 21<sup>st</sup> day of March 2001

M J Belgrave  
Chair