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COMMERCE COMMISSION

# Commerce Commission

# Decision No. 513

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

**HOLCIM (NEW ZEALAND) LIMITED**

**and**

**ATLAS RESOURCES LIMITED**

**The Commission:** PR Rebstock
Donal Curtin
Denese Bates

**Summary of Application:** The acquisition by Holcim (New Zealand) Limited, (Holcim), to acquire a minority shareholding in Atlas Resources Limited (Atlas).

**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:** 20 November 2003

***This decision was amended on 10 February 2004 to correct paragraphs 70 and 199. The correction removed all references to warning letters issued to Holcim in relation to predatory pricing investigations into the cement and ready mixed concrete markets. This information was incorrect and included in the report in error.**

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## EXECUTIVE SUMMARY

### The Proposal

1. A notice pursuant to s 66(1) of the Commerce Act was received on 9 October 2003. The notice sought clearance for the acquisition by Holcim (New Zealand) Limited (Holcim) of a minority shareholding interest in Atlas Resources Limited (Atlas).

### Market Definition

2. The Commission concludes that, for the purpose of analysing this Application, the relevant markets are as follows:

   - the national market for the manufacture/import and wholesale supply of cement;
   - the Auckland market for the manufacture and wholesale/retail supply of ready-mixed concrete;
   - the Auckland market for the quarrying and wholesale supply of aggregate for making ready-mixed concrete; and
   - the Auckland market for the extraction and wholesale supply of sand used for making ready-mixed concrete.

### Counterfactual

3. The Commission considers the appropriate counterfactual to be the purchase of Atlas in its entirety by a company that is not otherwise involved in the domestic cement or concrete industry.

4. [ ]

### Holcim and Allied Interconnection

5. Holcim, Allied Concrete and AML are to be treated as one head within the market for the purpose of assessing the question of whether the proposed acquisition would result, or would be likely to result, in a substantial lessening of competition under s 47(1).

### Competition Analysis

*Existing Competition*

Cement Market

6. Despite the advent of imports in 1997, the cement market in New Zealand continues to operate as a domestic duopoly, with imports from Fern accounting for only [ ] of the market. Given that no market aggregation occurs, and any effect of market foreclosure on existing competition appears small, the Commission considers that existing competition in the cement market would not substantially change post-acquisition.

Ready-mixed Concrete Market

7. The Commission considers that the combined entity would continue to face competition for both commercial and residential ready-mixed jobs from the existing competitors within the market. The removal of Atlas would do little to limit the present state of competition. The Commission is, therefore, of the view that, despite the aggregation, the degree of existing competition would be sufficient to prevent a substantial lessening of competition in the Auckland market for ready-mixed concrete.

8. Despite the Commission's finding in respect to existing competition, potential competition in the ready-mixed concrete industry is considered in order to assess the constraint represented by smaller ready-mixed firms and the countervailing power of large concrete purchasers.

Aggregate Market

9. The Commission considers that the structural change in the market for aggregates would be unlikely to limit existing competition. There would exist sufficient competition from existing market participants in the factual to constrain the combined entity, such that the acquisition would not be likely to have the effect of substantially lessening competition in the Auckland market for aggregates.

Sand Market

10. The Commission considers that the significant level of existing competition that would exist post-acquisition, with the presence of several large competitors and a number of smaller firms in the market, would act as a significant constraint on the merged entity in the Auckland sand market.

11. Additionally, Holcim and Atlas produce sand almost exclusively for internal purposes, and source only a small amount of total usage from third parties. The combining of Holcim and Atlas would therefore be likely to have little effect on the rest of the sand market. Accordingly, the Commission concludes that in the sand market, the proposed acquisition is unlikely to lead to a substantial lessening of competition. The level of existing competition post-acquisition is likely to constrain the merged entity.

*Potential Competition*

Cement Market

12. The Commission considers that there would not be a substantial change in the barriers to entry or expansion in the cement market as a result of the Holcim acquisition of a minority shareholding in Atlas.

13. The Commission considers that the extent of the possible foreclosure of demand for cement due to the proposed transaction is unlikely to substantially affect the ability of a new entrant, or expanding supplier, to supply the New Zealand cement market.

Ready-mixed Concrete Market

14. The Commission is of the view that the barriers to entry in the ready-mixed concrete market are moderate and that whilst entry may occur it would likely be small in scale and thus insufficient to provide any great degree of competitive constraint on the combined entity in the factual.

Aggregate and Sand Markets

15. The Commission has not considered potential competition in the aggregate and sand markets as the level of existing competition is a sufficient constraint in itself on the Holcim/Atlas entity to prevent a substantial lessening of competition.

*Countervailing Power in the Ready-mixed Market*

16. There appears to be some degree of countervailing power in the hands of large purchasers of ready-mixed concrete, particularly with regard to high volume commercial jobs. These high volume jobs are tendered for and the purchasers are often more familiar with what constitutes a good price for the work to be done. As a result, ready-mixed concrete suppliers can be leveraged against each other in order to achieve a lower price, whilst the jobs still remain attractive to large suppliers due to the volumes involved.

17. The Commission is, therefore, of the view that the combined entity would continue to be subject to some constraint from the countervailing power held by larger purchasers of concrete.

**Overall Conclusion**

18. The Commission is therefore satisfied that the proposed acquisition would not have, nor would be likely to have, the effect of substantially lessening competition, in:

- the cement market, as the transaction does not substantially affect the level of existing competition via market foreclosure and would not substantially increase the barriers to entry or expansion;
- the ready-mixed market, as the Commission is of the view that, because of the existing competitors in the market, the likelihood of entry (on a small scale), and a degree of countervailing power held by purchasers, the increase is unlikely to be of an extent to constitute a substantial lessening of competition;
- the aggregate market, as the Commission is of the view there would exist sufficient competition from existing market participants to continue to constrain the combined entity;
- the sand market, as the Commission is of the view that the significant level of existing competition post-acquisition, with the presence of several large and a number of smaller firms in the market, would continue to act as a significant constraint on the merged entity.

19. Accordingly, pursuant to section 66(3) (a) of the Commerce Act 1986, the Commission determines to give clearance for the proposed acquisition by Holcim of a minority shareholding interest in Atlas.

## THE PROPOSAL

20. A notice pursuant to s 66(1) of the Commerce Act was received on 9 October 2003. The notice sought clearance for the acquisition by Holcim (New Zealand) Limited (Holcim) of a minority shareholding interest in Atlas Resources Limited (Atlas).

## THE PROCEDURES

21. Section 66(3) of the Act requires the Commission either to clear or to decline to clear a notice given under s 66(1) within 10 working days, unless the Commission and the person who gave notice agree to a longer period. Accordingly, an extension of time was sought and agreed to by the Applicant. A decision on the Application was required by 20 November 2003.

22. In its Application, Holcim sought confidentiality for certain aspects of the Application involving commercially sensitive and valuable information. A confidentiality order was made in respect of the information for up to 20 working days following the Commission's determination notice. When that order expires, the provisions of the Official Information Act 1982 will apply.

23. The Commission's approach is based on principles set out in the *Commission's Practice Note 4*.[1]

## THE PARTIES

### *Holcim*

24. Holcim is one of New Zealand's two cement manufacturers. It is a subsidiary of Holcim Limited, a Swiss company listed on the Swiss Stock Exchange, and on the virt-x Exchange in London. The parent company is a global producer of cement, ready-mixed concrete and aggregates, and has its headquarters in Switzerland.

25. Holcim is involved in the manufacture, sale and transportation of cement throughout New Zealand. It owns quarries and sells aggregates in the Auckland area, and has interests in lime production and related products. It also operates ready-mixed concrete plants through its subsidiary, Ready-mixed Concrete (RMC). RMC operates in Auckland, Whangarei and the Waikato. It also produces ready-mixed concrete throughout the rest of the country through a JV arrangement.

26. The JV arrangement is with Allied Concrete, a 100% owned subsidiary of H W Richardson Group, a privately-owned South Island company. Allied produces and distributes ready-mixed concrete in the South Island and Auckland, and trades as "Allied Concrete".

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[1] Commerce Commission, *Practice Note 4: The Commission's Approach to Adjudicating on Business Acquisitions Under the Changed Threshold in Section 47 – A Test of Substantially Lessening Competition*, May 2001.

27. Despite the fact that AML operates mainly in the North Island and Allied Concrete operates mainly in the South Island (and Auckland), the two companies are run as one. Their 37 sites are advertised as a nationwide network covering both islands. AML also trades under the "Allied Concrete" brand name in the North Island.

***Atlas***

28. Atlas is a producer of ready-mixed concrete, and of sands and gravels, in the Auckland region. It is a privately-owned company. Atlas operates ready-mixed concrete plants at five Auckland locations: Wiri, Silverdale, Panmure, Takapuna and Kumeu. A small concrete plant also operates from Atlas's Maungaturoto quarry site.

29. Through its subsidiary—Mt Rex Shipping—Atlas is also involved in the extraction and distribution of sand and aggregates to the Auckland and Northland regions. Most of the sand and all of the aggregates are supplied internally to Atlas for use in making its own ready-mixed concrete. Some of the sand is available for retail sale from its various depots, but there are not sufficient supplies available for wholesale supply.

30. Atlas, through its subsidiary Atlas Quarries Limited (AQL), operates a quarry situated at Maungaturoto in Northland at which it quarries rock, manufactures base coarse and roading materials, and also supplies aggregate to the Northland area. Because of the distance and cost of cartage very little of the aggregates from this source are supplied to Auckland.

31. Atlas, through its subsidiary Quarry Point Limited (QPL) operates a quarry situated at Hukatere, in north Auckland, from which it quarries rock and manufactures base coarse and roading materials.

32. The aggregates and base coarse metal produced by AQL and QPL are mainly sold north of Auckland in the Wellsford, Maungaturoto, Tinopai and Brynderwyn areas. Base metal is barged from Hukatere to Helensville where it is processed into concrete aggregate for the manufacture of Atlas's own ready-mixed concrete. Some aggregate from Atlas's quarries is trucked to Auckland for the manufacture of ready-mixed concrete.

33. Atlas also operates a small concrete tilt slab manufacturing business from the North Shore through its subsidiary Atlas Tilt Slab Limited.

**Other Relevant Parties**

*Cement*

34. Golden Bay Cement Company Limited (Golden Bay) is the second of New Zealand's two cement manufacturers. It is a wholly-owned subsidiary of Fletcher Building. Golden Bay provides cement to the Fletcher subsidiary—Firth—and to external customers.

35. Fern Cement Group Ltd NZ (Fern) is a cement importer who is currently importing cement primarily to the Hawkes Bay region. Fern has four depots in New Zealand at Papakura, Te Poi, Napier and Timaru.

*Ready-mixed Concrete*

36. Firth Industries Limited (Firth), a division of Fletcher Building Limited, produces and distributes ready-mixed concrete from 52 fixed sites throughout New Zealand. On 15 August 2000, Fletcher Building internally restructured and Firth was amalgamated with The Golden Bay Cement Company.

37. Stevenson & Sons (Stevenson) provide a multitude of building industry-related services, including ready-mixed concrete, aggregate, equipment hire and precast concrete in Auckland.

38. Wilsons Ready-mix Concrete Ltd (WRC) is a recent entrant providing ready-mixed concrete in the Auckland region. WRC was previously involved in precast concrete production.

39. Bridgeman Concrete (Bridgeman) produces ready-mixed concrete in the Auckland region and in the Hawkes Bay.

40. Counties Ready Mix Ltd (Counties) provides ready-mixed concrete in the Auckland region.

*Aggregates and Sand*

41. Fulton Hogan Limited (Fulton) is a national operator, with headquarters in Dunedin, involved in quarrying and supplying aggregates into the Auckland region, and has a quarry situated in Penrose.

42. I.H. Wedding & Sons (I.H. Wedding) quarries and distributes aggregate and sand. The firm owns several quarries and aggregate processing plants.

43. Winstone Aggregates (Winstone) is a large extractor and distributor of aggregates nationally and in the Auckland regional market. It has Auckland region-based quarries at Three Kings, Wellsford, Puketutu in Mangere, Pukekawa, Hunua, Papakura, and Top Flat at Kaukapakapa. From these quarries Winstone extracts and distributes aggregate for roading, concrete making, drainage, fill and other uses. Winstone also has sand plants in Helensville, Puni in Pukekohe and Tuakau.

*Large Purchasers of Ready-mixed Concrete*

44. Excell Corporation Limited (Excell) provides infrastructure management services. Services include open space, property and civil maintenance contracting and asset planning. Excell purchases concrete for use in a range of the sites it manages on contract. Excell operates a quarry in Woodford, South Auckland.

45. Hawkins Construction manages and constructs projects throughout New Zealand, Australia and the Asia Pacific region.

46. Dominion Constructors Ltd is a designer and builder located in the Auckland area.

47. Mainzeal Construction Ltd is a contractor and property development firm located throughout New Zealand.

*New Zealand Ready-Mixed Concrete Association*

48. The NZRMCA has self-imposed standards for ready-mixed concrete. Members of the NZRMCA have their plant processes regularly checked by engineers to ensure that their concrete meets these standards. Gaining NZRMCA certification is important for ready-mixed concrete firms wanting to provide concrete for large commercial projects.

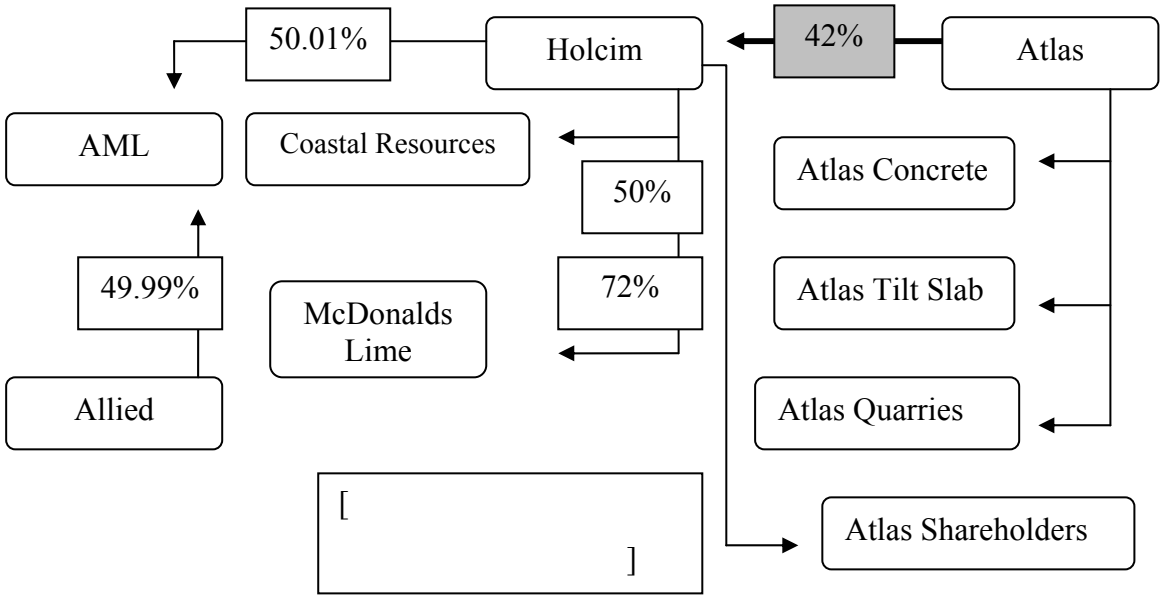
**THE TRANSACTION**

49. Holcim is proposing to purchase 42% of the shares in Atlas. Should this transaction be completed, [ ] interest in Atlas. [

].

50. [

]




**Result of the Transaction on the Holcim/Atlas Relationship**

51. Holcim's acquisition of a [ ] shareholding in Atlas would entitle Holcim to appoint [ ] directors to the Atlas board. The Atlas board would initially comprise [ ] directors. [

]

52. [

]

53. [ ] There would exist a commonality of interest between the two firms that could not exist without the Holcim shareholding in Atlas.

54. Because of this commonality of interest stemming from the shareholding, the Holcim presence on the Atlas board and the likely sharing of strategic information, the Commission will assess Holcim/Allied and Atlas as a single entity in the relevant markets.

**THE INTERCONNECTION OF HOLCIM, ALLIED AND AML**

55. A preliminary matter is to determine whether Holcim and Allied are deemed to be interconnected or associated for the purposes of s 47(1).

56. In Decisions 416[2] and 466,[3] the Commission determined that Holcim is interconnected with Allied Concrete (Allied) through the joint venture Allied Milburn Limited (AML), with Holcim owning 50.01% of the shares in this company. AML produces and distributes ready-mixed concrete mainly in the North Island, excluding Auckland. The remaining 49.99% of AML is owned by Allied, who also hold the casting vote on the AML board. Each shareholding company appoints two directors to the board of AML.

57. The Applicant maintained in its clearance application that Holcim is interconnected with Allied. Further, the Applicant submitted that despite the association between Holcim and Allied, they are separate entities that operate independently, with AML having no presence in the Auckland metropolitan area.

58. If Holcim and Allied were deemed to be interconnected or associated, then the competitive environment must be assessed, in terms of s 47, on the basis that they are acting as one head within the market. The issue was discussed in Decision 416, where the Commission concluded that Holcim and Allied were interconnected. The relevant question for this Application is whether the parties are still interconnected.

59. Section 2(7) of the Act provides for when bodies corporate are deemed to be interconnected and it states:

> (7) For the purposes of this Act, any 2 bodies corporate are to be treated as interconnected if—
>
> (a) one of them is a body corporate of which the other is a subsidiary (within the meaning of sections 158 and 158A of the Companies Act 1955 or sections 5 and 6 of the Companies Act 1993, as the case may be); or
>
> (b) both of them are subsidiaries (within the meaning of those sections) of the same body corporate; or
>
> (ba) both of them are entities referred to by any of the paragraphs (other than paragraph (e)) of the definition of "transferor" in section 2(1) of the Health Sector (Transfers) Act 1993; or
>
> (c) both of them are interconnected with bodies corporate that, in accordance with paragraph (a) or paragraph (b) of this subsection, are interconnected—
>
> and "interconnected bodies corporate" has a corresponding meaning.

[2] *Decision 416, Milburn NZ Ltd and Isaac Concrete Limited*, 26 Jan 2001
[3] *Decision 466, Firth Industries and Gill Construction Co Ltd*, 26 July 2002

60. Section 5 of the Companies Act 1993, as relevant, provides:

> 5. Meaning of "holding company" and "subsidiary"—
>
> (1) For the purposes of this Act, a company is a subsidiary of another company if, but only if,
>
> (a) that other company
>
> (i) is in a position to exercise, or control the exercise of, more than one-half the maximum number of votes that can be exercised at a meeting of the company; or
>
> (ii) holds more than one-half of the issued shares of the company, other than shares that carry no right to participate beyond a specified amount in a distribution of either profits or capital;

61. AML is considered to be a subsidiary of Holcim through the effect of s 5(1)a(ii) of the Companies Act 1993, as Holcim own 50.01% of the shares in AML. These two bodies, by way of s 2(7)(a) of the Act 1986, are deemed to be interconnected.

62. Allied Concrete has the casting vote on the AML board by way of the AML constitution. As Allied Concrete is in a position to control the voting on the AML Board, AML is also a subsidiary of Allied under s 5(1)a(iii) of the Companies Act 1993. Therefore, these two bodies are also interconnected, by way of s 2(7)(a) of the Act 1986.

63. As Holcim and Allied are both interconnected with AML, Holcim and Allied are treated as interconnected bodies by way of section 2(7)(c).

64. This approach was adopted in Decision 416, and the analysis there is equally applicable for the purposes of assessing this s 66 clearance Application, the facts in question being materially the same.

65. The finding that Holcim and Allied are interconnected in these circumstances renders unnecessary an analysis of whether they are associated.

**Conclusion on Allied / Holcim Association**

66. Holcim, Allied and AML are to be treated as one head within the market for the purpose of assessing the question of whether the proposed acquisition would result, or would be likely to result, in a substantial lessening of competition under s 47(1).

## PREVIOUS INVESTIGATIONS

67. The Commission has previously considered the ready-mixed concrete industry in *Decision 466 Firth Industries & Gill Construction Co Limited,* 26 July 2002, and *Decision 416 Milburn New Zealand Limited & Isaac Concrete Limited.*

68. In Decision 466, the Commission cleared Firth's application on the basis that a new entrant could quickly replicate the scale of the limited constraint provided by Gill in the Marlborough market for ready-mixed concrete.

69. In Decision 416, the Commission determined the merged entity was not likely to acquire or strengthen a dominant position due to the constraint exercised by Firth, the major competitor in the ready-mixed market assessed.

70. The Commission investigated allegations of predatory pricing for ready-mixed concrete for the purposes of substantially lessening competition in the national cement market. The investigation involved Firth and was concluded in 2002. As a result of the investigation the Commission sent a warning letter to Firth.

71. The Commission investigated a plant sharing arrangement by Firth and Stevenson in 2000. As a result of the investigation warning letters were sent to both Firth and Stevenson.

## INDUSTRY BACKGROUND

### Structure

*Cement*

72. Ordinary Portland or grey cement is manufactured by heating a mixture of finely ground raw materials—mainly limestone, together with silica, alumina and iron oxide—to a very high temperature in a rotary kiln, where it partially fuses into a material called "clinker". The clinker is then cooled and ground (together with a small proportion of added gypsum) into a fine powder. The great bulk of cement used in New Zealand is of the ordinary Portland type. Demand for cement is significantly greater in the North Island than the South Island due to a bigger population and a larger urban/industrial.

73. Cement is used primarily in construction, and hence its demand is very sensitive to the level of construction activity, which itself is influenced by interest rates and economic growth. Factors that enhance growth in the construction sector—low interest rates, economic growth in the economy as a whole, high immigration and large public sector works—also tend to generate increased demand for cement and concrete, and vice versa. Construction activity, because it is linked to investment spending in the economy at large, tends to fluctuate more than national output as a whole, and hence so does the demand for cement. The product is, at least between New Zealand manufacturers, essentially undifferentiated.

74. A cement producing plant has a number of important economic characteristics: it is highly capital-intensive, durable (economic life of at least 20 years), mostly specialised (having no alternative uses), and often located in remote areas where alternative uses are limited. Consequently, cement plants have high sunk costs and a low residual value. Significant annual expenditure is required to maintain technical life and efficiency. Capacity has to be large enough to meet demand at peak, which can vary substantially, unless there is recourse to international trade (to import production shortfalls or to export surpluses). Total production costs are claimed to be 30%-40% fixed, so that unit cost and profitability are strongly influenced by capacity utilisation (which fluctuates strongly with economic activity).

75. The cement industry in New Zealand is a long-established duopoly, which was completely deregulated in 1986. The Golden Bay Cement Company Limited (Golden Bay) produces cement at its Portland plant near Whangarei, and also from July 1996 has operated a very small plant in the Lee Valley in Nelson (Lee Cement). Holcim operates a single cement plant at Cape Foulwind, near Westport. Together, the two companies produced and imported [ ] tonnes of cement in 2002, all of which was sold domestically, due to strong demand in the New Zealand building industry. Production capacity of the

combined plants is about one million tonnes per year. The two main plants are of only moderate size by modern world standards. [ ] In the past the companies typically exported surplus production.

76. Fern, is a small importer currently not supplying any cement into the Auckland region. Fern's estimated level of imported cement is [ ] tonnes annually.

77. Holcim and Golden Bay supply cement to the whole country in bulk by coastal shipping to storage silos in a number of ports, and then by truck in bulk and bagged form to customers. Cement is a bulky product, and distribution costs are high. Golden Bay operates one ship out of Whangarei, and Holcim operates two ships out of Westport. In 1993, the two companies introduced some co-operative arrangements for the coastal shipping of cement, whereby only Holcim discharges cement into the Port of Taranaki and only Golden Bay discharges cement into Tauranga. In New Plymouth, Holcim then sells some of this cement to Golden Bay, and in a similar way Golden Bay on-sells cement to Holcim in Tauranga.

78. The national cement market is split almost equally between the two companies, and these even shares have been relatively stable for some years.[4] Holcim estimates that about [ ] of its cement sales are in the South Island, and [ ] in the North Island.

79. About 70% of domestically manufactured cement is used in the production of ready-mixed concrete, with the balance being used in precast and prestressed concrete products, concrete pipes, blocks, paving, masonry and road stabilisation.

80. A feature of the cement industry, which has developed only in about the last 12 years, is the strong vertical integration with cement users. For example, Golden Bay sells about [ ] of its cement to Firth Industries Limited (Firth). There is similarly a strong supply link between Holcim cement and the Allied group of companies (with the exception of Auckland where Allied buys Golden Bay cement due to a historical relationship). Industry participants have suggested that this is a logical move on behalf of the cement manufacturers in order to secure supply lines for the cement that they produce, and to reduce the countervailing power held by the downstream customer. Prior to the mid-1980s there was no such vertical integration.

81. Independent cement users, including ready-mixed concrete companies, have always had to purchase their cement requirements from either Golden Bay or Holcim in the course of competing with those two companies' downstream affiliates. The advent of imported cement in 1998 and 1999 resulted in a number of ready-mixed concrete companies and other cement users purchasing this cement. However, the quantities being imported have remained small, as the importer has only imported the quantities required to meet the limited demand for a third source of cement supply. Demand for imported cement is limited by factors such as quality differences and uncertainty over continuity of supply.

82. Cement is the most expensive ingredient used to produce concrete. The price of cement ranges from about $190 to $240 per tonne for domestic cement, depending upon the volume purchased. About 250 kilograms, or one-quarter of a tonne, of cement is required

[4] In 2002, the (rounded) shares for cement were Golden Bay [ ], Holcim [ ]. Volumes of imports against both total domestic consumption and production were estimated at [ ] for the 2002 year by the MED in its Dumping Investigation report dated October 2003.

to produce one cubic metre of 17.5 MPa strength concrete. The cost of the cement input into one cubic metre of concrete is thus about $50-$60 per cubic metre. The cost of all the raw materials, including cement, required to make one cubic metre of concrete is about $65-$85 per cubic metre. The average total cost to produce and deliver a cubic metre of concrete, allowing for plant and truck inputs, brings the total cost to $110–$130 per cubic metre. Therefore, the cement input is the single largest component of total costs, accounting for a little under one-half of the total cost.

*Ready-Mixed Concrete*

83. Ready-mixed concrete is a building product used for both commercial and residential purposes. It is made from mixing cement, water, sand, and coarse aggregates (of gravel or crushed stone). The role of each component is best described in terms of a simple three-part system:

- Cement + Water = Cement Paste;
- Cement paste + Sand = Mortar; and
- Mortar + Coarse aggregates = Concrete (additional water is also required at the second and third stage).

84. The cement paste component functions to coat and "lubricate" the individual grains of sand, thereby imparting "workability" to the mortar phase. In turn, the mortar serves to lubricate the coarse aggregate particles and so give workability to the fresh concrete. Contrary to popular belief, concrete does not set and harden through a physical drying-out process. Setting and hardening is due to a series of chemical reactions between the cement and water present in the mix.

85. Ready-mixed concrete is produced by the cubic metre in a batching plant, where the raw materials are measured and mixed. In the dry-mix process, the ingredients are added in sequence to the rotating drum of the delivery truck, where they are then mixed. In the central-mix process, the ingredients are mixed before being loaded into the truck. The ready-mixed concrete is then delivered to the site by truck, where it is placed and allowed to cure.

86. Ready-mixed concrete is a perishable product with a maximum life span of about 60-90 minutes from the time of adding water to placement. This can be extended with the use of additives, but these add to the cost. The strength of concrete is measured in MegaPascals or MPa, and is primarily determined by the proportion of cement per cubic metre. Concrete plants may produce concrete from strengths ranging from 10 MPa to 70 MPa, and even higher, but the bulk of sales appear to be made in the 17.5 MPa and 20 MPa grades.[5] "Household grade" concrete, used by homeowners and builders in the foundations and flooring of houses, paths and driveways, is 17.5 MPa.

87. Apart from ready-mixed concretes of varying strengths, plants also produce concretes using various additives and mixes with a range of other properties, such as waterproofing,

[5] [

]

strength, lightness, fast setting, plasticity (when wet) and size of aggregate used. Taking into account these various characteristics, a plant may produce well over a hundred product varieties. Often companies have their own "secret" mixes, which may vary depending upon the types of sands and aggregates available to them.

88. Ready-mixed concrete is priced by the cubic metre, delivery normally included, and the price varies widely according to the additives used, the size of an order, the amount purchased over a year. However, it is accepted industry practice to use the price of one cubic metre of 17.5 MPa concrete, delivered, and excluding GST, as the benchmark for describing pricing levels. The price of 20 MPa concrete is usually about $5 or $6 more per cubic metre than 17.5 MPa concrete, reflecting the extra cost of the slightly greater proportion of cement in the mix. The pricing for other higher grades of concrete usually follows on from the 17.5 and 20 MPa grades in pre-set, incremental steps.

89. Nearly all the country's 170 batching plants are graded under the New Zealand Standard (NZS) 3104:199, and most have received a "special grading". They are required to be tested annually, to ensure that they comply with this Standard, and this function is primarily undertaken by the New Zealand Ready Mix Concrete Association.

*Aggregates and Sand*

90. Aggregate is crushed or extracted rock, gravel and sand. Aggregate is one of the most widely used mineral products quarried in New Zealand. The rock which is the base input into aggregate production is extracted from quarries and sorted according to particle size or crushed to the required size. Aggregate is used in all aspects of road construction as well as in the production of concrete. There are no close substitutes for the function aggregates perform in many of its uses. Aggregate is sorted into different sizes to suit its proposed use.

91. The Applicant considers that there are three product levels in the aggregate market, which equate to the level of processing and consequently the cost. The highest product level and the highest price is for road sealing chip, the next level is for concrete aggregate and the lowest level is for roading base coarse. All three product levels are produced from the same base quarried product. The differentiation between the three levels is in the degree of processing. From a supply-side point of view, if a supplier were producing one size of aggregate, it could produce other sizes simply by changing its processing of the same base rock. Changing of processing may result in the requirement for additional processing machinery.

92. In some cases, the production of one type of aggregate results in the production of another aggregate as a by-product. A desire to use this by-product has sometimes led aggregate producers to start manufacturing ready-mixed concrete.

93. Distribution of aggregate in the Auckland region varies. Supplies of smaller volumes of up to approximately 500 tonnes are generally by way of the end-user purchasing those volumes through independent distributors, who in turn would tend to source aggregate from the nearest quarry. For larger volumes of supply, the end-user tends to source directly from the quarry producer, and in this case supply would typically result from a tender process.

94. Aggregate is a high volume, low value product that is expensive to transport. Hence, the distance from the market is an important competitive factor. However, there is a considerable amount of resource available, and quarries are situated near large

metropolitan areas where a large volume of the product is consumed. Nonetheless, given transport costs, the number of competing sources of supply can be limited.

95. Sand can be extracted either as a raw product from the seabed or riverbed, or alternatively it can be a manufactured by-product of the aggregate extraction process. The seabed and riverbed sand tends to be finer than the coarser grade sand that is a quarry by-product. The latter is more expensive than seabed or river sand as it typically requires more processing.

96. There is some variety in sand. For example, sand sourced from the Waikato tends to have a high alkaline content that can cause concrete to degrade more quickly.

97. Holcim produces some sand as a quarry by-product in the Auckland region, and also purchases sand from its associated company, Coastal Resources Limited. It also purchases some sand from Atlas. Coastal Resources Limited extracts sand from the seabed off the east coast north of Auckland City, which it supplies to the Auckland region.

98. Atlas extracts sand from the Kaipara Harbour, which it mainly uses internally to produce ready-mixed concrete. Some of the sand is used for sports field applications.

**Vertical Integration**

99. As already noted, the two national ready-mixed concrete firms, Firth and Allied, are vertically integrated with cement companies Golden Bay and Holcim respectively. These two firms account for about [ ] of national ready-mix concrete production, with Firth estimating its share as [ ], and Allied's share being estimated at [ ]. These figures do not include the share attributable to Holcim's own division, RMC, which has an estimated share of national production of around [ ]. This gives a total of [ ] to the Holcim/Allied/AML group of companies. The geographical dispersion and large numbers of plants operated by the two major, ready-mixed concrete companies reflects the local nature of the markets and of competition, caused by the perishability and bulkiness of the product and its high delivery cost.

100. Generally speaking, Firth and Allied compete against each other, and against a number of regional or relatively small local businesses operating one or a number of plants, in each of a large number of local geographic markets. In addition, and in spite of their relationship through AML, Holcim's RMC Division seems to compete against Allied in Hamilton and in Auckland. There are several large independent ready-mixed concrete companies operating regionally in Auckland (Atlas, Stevenson), Wellington (Higgins), Hawke's Bay (Bridgeman) and Christchurch (Christchurch Ready Mix Concrete).

101. Both the cement and ready-mixed concrete industries have a high proportion of fixed costs, and therefore have an incentive to expand market share in order to spread those fixed costs more thinly over a bigger output. However, previous Commission investigations indicate that, both in New Zealand and overseas, the battles for market shares in cement and aggregate occur mainly in ready-mixed concrete. As mentioned earlier, independent ready-mixed operators rely on their cement supply from their national competitors. As a result, there tend to be slim margins in concrete, with the profits being taken in cement.

102. Industry observers have commented that New Zealand has amongst the highest priced cement in the world, and that the cement industry duopoly enjoys very comfortable profits.

## MARKET DEFINITION

103. The Act defines a **market** as:

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

104. For the purpose of competition analysis, a relevant market is the smallest space within which a hypothetical, profit-maximising, sole supplier of a good or service, not constrained by the threat of entry, could impose at least a small yet significant and non-transitory increase in price, assuming all other terms of sale remain constant (the '*ssnip* test'). For the purpose of determining relevant markets, the Commission generally considers a *ssnip* to involve a five percent increase in price for a period of one year.

105. The Commission seeks to define relevant markets in terms of four characteristics or dimensions:

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

106. The Commission will seek to define relevant markets in a way that best assists the analysis of the competitive impact of the acquisition under consideration. A relevant market will ultimately be determined, in the words of the Act, as a matter of fact and commercial common sense.

### Product Dimension

107. The delineation of relevant markets as a basis for assessing the competitive effects of a business acquisition begins with an examination of the goods or services offered by each of the parties to the acquisition. Both demand-side and supply-side factors are generally considered in defining market boundaries. Broadly speaking, a market includes products that are close substitutes in buyers' eyes on the demand-side, and suppliers who produce, or are able easily to substitute to produce, those products on the supply-side.

108. The Commission takes the view that the appropriate time period for assessing substitution possibilities is the longer term, but within the foreseeable future.[6] The Commission considers this to be a period of one year, which is the period customarily used internationally in applying the 'ssnip' test (see below) to determine market boundaries.

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[6] In *Tru Tone Ltd v Festival Records Retail Marketing Ltd* [ ] 2 NZLR 351 Smellie J and the Court of Appeal on appeal approvingly quoted an earlier decision of the Commerce Commission in *Edmonds Food Ind Ltd v W F Tucker & Co Ltd* (Decision 21, June 1984) where the Commission had ruled: "A market has been defined as a field of actual or potential transactions between buyers and sellers amongst whom there can be strong substitution, at least in the long run, if given a sufficient price incentive".

The Commission takes into account recent, and likely future, changes in products, relative prices and production technology in the process of defining markets.

*Cement*

109. As indicated above, cement is a major ingredient in the production of ready-mixed concrete, and of other concrete products used in the building and construction sector. Such products might be expected to compete to some degree with other materials used in construction, such as steel, timber, asphalt and glass, at least at the margin.

110. In a 1998 survey of the Australian cement industry commissioned by the industry, the two forms of competition discussed are import competition and competition amongst the existing domestic firms. Competition from substitute products is not mentioned.[7]

111. The MED released a report at the end of October 2003 that investigated a cement dumping complaint brought by Holcim and Golden Bay against Fern Cement. In this report the MED concluded that the Portland cement supplied by importers is a substitute for the Portland cement manufactured in New Zealand.[8]

112. A further consideration in determining the appropriate product dimension is that the demand for cement is likely to be very price inelastic—indicating a relative inability of any substitutes to impose much pricing constraint—because the cost of cement typically makes up a very small proportion of the construction cost of a new building. The low price elasticity of cement implies a lack of close substitutes for cement.

113. The Commission has not found any significant evidence to indicate that previous product definitions were incorrect.

114. The Commission has concluded that the relevant product market is one for cement based on the following points:

- imported cement is equivalent to domestically manufactured cement;
- demand for cement appears relatively inelastic;
- industry participants did not indicate there were realistic substitutes for cement; and
- ACCC concluded cement was a distinct product market;

*Ready-mixed Concrete*

115. About 70% of the cement produced in New Zealand is used in ready-mixed concrete production. It is predominantly as ready-mixed concrete that cement emerges in its final product form, rather than as cement itself, which may be regarded as an intermediate product.

116. The bulk of ready-mixed concrete appears to be purchased by small and medium-sized users for laying floors in houses, industrial buildings, driveways and footpaths. There are some large projects involving office buildings and various kinds of infrastructure (e.g., bridges, tunnels, dams, cold stores, etc.) that use large quantities of concrete. Much of the concrete work in the Auckland region is for new housing and renovations. Ready-mixed

[7] Aquatech, *The Australian Cement Industry in 1998*, Canberra: Cement Industry Federation, 1998.
[8] MED, *Essential Facts and Conclusions Report,* October 2003, p.15.

operators, both large and small, indicated that residential projects are the major volume drivers.

117. In New Zealand, there appear to be few close demand-side substitutes for concrete. While in many countries, concrete is used for roading and demand-side substitution would be possible, this does not apply to New Zealand where generally asphalt is used on roads. While other products can be substituted for concrete in the building/construction sector, such as wooden flooring in houses, and timber or steel for building construction. There was no suggestion by interviewees that there were any realistic substitutes for concrete for the majority of residential and commercial applications.

118. There are no substitutes on the supply-side, since ready-mixed concrete plants are highly specialised, apart from hand-mixing on a very small scale by home owners and the like. The lack of supply-side substitutability indicates there are few, if any, near entrants that could easily enter to produce concrete with their existing equipment.

119. Only the larger ready-mixed concrete suppliers are usually able to compete for the large project work, which may involve hundreds or even thousands of cubic metres of concrete. The ability to compete for large projects is primarily driven by the batching plants proximity to the project site and the number of trucks the ready-mixed operator can utilise for rapid delivery of large volumes of concrete.

120. While the ability of small ready-mixed operators to compete for larger jobs is limited, defining separate markets for large commercial jobs, large residential jobs and small commercial and residential jobs is problematic as all ready-mixed operators compete for the small commercial and residential jobs. Given this crossover it is not practical to attempt to split the market on the basis of job size serviced. However, the differences between commercial and residential jobs will be taken into account in the competition analysis.

121. Virtually all plants, both large and small, are graded, and therefore able to supply a full range of concrete specifications and strengths.

122. The Commission concludes that for the purpose of assessing the competition implications of the proposed acquisition, the appropriate product market is that for ready-mixed concrete.

*Aggregates*

123. Aggregates are used in roading applications and for the manufacture of ready-mixed concrete. There are several types of aggregates with varying characteristics. Smooth or river bed aggregate results in a ready-mixed concrete that facilitates the creation of a smooth finish. Coarse aggregate, typically produced by quarries, results in a higher strength concrete as the mix can bond better to the rough edges found in this type of aggregate.

124. The Applicant noted that there are three product levels of aggregates based on the degree of processing. The highest product level and the highest price is for road sealing chip, the next level is for concrete aggregate and the lowest level is for roading base coarse. All three product levels can be produced from the same base quarried product.

125. From a supply-side point of view, if the supplier were producing one size of aggregate it could produce other sizes simply by changing its processing of the same base rock. Changing of processing may result in the requirement for additional processing machinery. While this processing change may require a capital investment the firm is likely to be considered a near entrant rather than a new one given that the operator is already producing at least one type of aggregate.

126. The Applicant noted that aggregate is manufactured from both basalt and greywacke. The majority of aggregate is produced from greywacke with basalt being considered a premium product. The Applicant did not consider that separate product markets were justified for aggregate produced from greywacke and basalt based on demand-and supply-side substitutability. Industry participants interviewed supported this view.

127. Given that all three types of aggregates can be produced from the same base quarry rock (basalt or greywacke), the Commission considers that the competition implications of the proposed transaction are suitably assessed using a product market for aggregate used in the manufacture of ready-mixed concrete.

*Sand*

128. Sand is used in ready-mixed concrete. The Applicant submitted that 33% of the sand used in concrete is sourced from river or ocean sources. The remaining 66% is sourced from quarries. Industry participants indicated a preference for ocean sand, as the sand is smoother/rounder, which aids in producing concrete with a smooth finish.

129. While there is a preference for ocean bed and riverbed sand, parties interviewed acknowledged that quarried sand was substitutable for use in concrete products. The Commission considers that sand in both its ocean and river forms are comparable with quarried sand. Sand is also used on golf courses, athletic fields and in the production of glass.

130. Given that the major driver for sand extraction is its use in ready-mixed concrete, the Commission considers the competition implications of the proposed transaction are suitably assessed using a product market for sand used in the manufacture of ready mixed concrete.

**Geographic Extent**

131. The Commission defines the geographical extent of a market to include all of the relevant, spatially dispersed, sources of supply to which buyers can turn should the prices of local sources of supply be raised. For each good or service combination, the overlapping geographic areas in which the parties operate are identified. These form initial markets to which a ssnip is applied. Adjacent geographic regions are added until the smallest area is determined within which the hypothetical monopolist could profitably impose a ssnip.

132. The Commerce Act defines a market to be a "market in New Zealand". However, in many markets New Zealand buyers purchase products from both domestic and from overseas suppliers. Where imported products are close substitutes for domestic products, the overseas suppliers will be part of the relevant market. In such circumstances the Commission, in order to comply with the wording of the Act, is likely to define a national

market and then, as discussed later in the competition analysis, to consider the extent to which overseas suppliers exercise a competitive constraint on the participants in the domestic market.

*Cement*

133. As described above, almost all cement used in New Zealand is manufactured at two major sites in the country—Whangarei (Golden Bay) and Westport (Holcim)—from where it is conveyed by specialised coastal shipping to silo depots at a number of ports around the country. From those depots it is distributed in bulk by special road tankers to users such as ready-mixed concrete makers, or bagged and distributed by ordinary trucks to retail outlets such as the various hardware chains.

134. Although both companies try to operate national distribution chains, the high distribution costs that Golden Bay incur from Whangarei to the South Island (especially the lower part of that Island), means that Holcim supplies almost all of the demand in that region. Golden Bay has a much stronger presence in the North Island.

135. Cement prices do vary significantly between users across the country, but this is likely to reflect the volume of purchases and the closeness of the association with the supplier at least as much as the customer's location. In addition, cement prices are said to vary according to delivery distances and costs, which is not surprising given the costs of delivering the bulky product.

136. A factor which indicates that the market is a national one is the ability of imports to enter the country through any of the country's ports. Shipments of Asian cement have been imported by Fern through Napier, New Plymouth and Tauranga in the North Island, and Lyttelton and Timaru in the South Island.

*Ready-mixed Concrete*

137. The Applicant argued for a geographic definition of the ready-mixed concrete market that included the Auckland metropolitan area extending from Pukekohe in the south, to Wellsford in the north, and including all areas in between.

138. Within that broad geographic market, Holcim considers there are three submarkets: the southern area of the region extending approximately from Pukekohe to Manukau; the central metropolitan area from Manukau to the harbour bridge; and the northern area north of the harbour bridge.

139. The relevant geographic market is difficult to define precisely as the ability for a ready-mixed firm to compete in an area is a function of time, distance and locality. For example, because of Auckland's traffic congestion, the ability to cover more than 20km-25km in less than 60-90 minutes during peak traffic hours is limited. In more rural areas, trucks travelling 60km to make a delivery is not unusual.

140. Several ready-mixed firms are located on the boundaries of the three geographic areas as submitted by the Applicant. Ready-mixed firms interviewed by the Commission indicated they do cross these boundaries to serve existing customers and in response to high levels of demand.

141. The Commission found in Decisions 416 and 466 that geographic markets for ready-mixed concrete were relatively limited. The Commission recognised that ready-mixed concrete is a very perishable product, and its bulk renders the trucking costs quite high in relation to its value. It therefore cannot be practicably or economically transported far from the site of the batching plant. The Commission also noted that the opportunity cost of trucks rose steeply as the job's distance from the batching plant rose.[9] For these reasons the Commission considered the geographic markets were likely to be local in extent. The Commission estimated a maximum distance of around 40km for ordinary concrete, and 60km for retarded concrete.[10] In cities, where traffic is likely to be more restricting, the maximum distance reduces to around 20-25km.

142. The Commission considers that firms within the region from Albany in the north and extending to Papakura in the south are likely to provide the bulk of competition in the greater Auckland region. However, the Commission also recognises that firms farther to the north and south may provide a level of competition, particularly in the outlying areas of Auckland. Firms located in the CBD and southern Auckland said that they do not typically cross the harbour bridge to deliver ready-mixed. However, firms indicated they do cross the bridge in order to service long-term customers.

143. The network of plants that large ready-mixed firms like Firth, Stevenson and Holcim possess allows them to shift trucks from low demand areas to high demand areas when necessary. Because of this ability the extent of competition across the broad Auckland region varies—there is some geographical differentiation.

144. Given the evidence of ready-mixed firms servicing geographic areas larger than those submitted by the Applicant, the Commission concludes that the appropriate geographic market for ready-mixed concrete is the greater Auckland region, which extends approximately from Silverdale in the north to Pukekohe in the South.

*Aggregate*

145. Aggregate is a high volume, low value product that is expensive to transport. As with concrete, the distance of the aggregate source from the customer is an important competition factor. Therefore, the market is typically a regional one.

146. The Applicant submitted that the geographic extent of the aggregate market is likely to be the greater Auckland metropolitan region. The Applicant cited the ability of existing competitors to extend their geographical reach in the event of a price increase.

147. Aggregate suppliers interviewed by the Commission stated that competitors from outside the Auckland region can supply aggregate economically if they are able to obtain backhaul loads from Auckland. The companies from areas outside the greater Auckland region do not supply a large amount of aggregate to Auckland-based firms.

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[9] The full example given in Decision 416 is as follows: if the job is at a distance of (say) 60 kilometres, this will take one of its concrete trucks one hour to travel, half an hour to discharge its load, another hour to go back to the plant, and a further half an hour to reload, making a total 3 hour turnaround for each truck. If the client wants six loads of concrete, one every half hour, a firm would need to have six trucks available to service this job, and the whole fleet would be tied up for a good part of the day, limiting its ability to service its local market. It can be seen that even an out of town job requiring one or two pours could tie up one or two concrete trucks and drivers for at least three hours.

[10] Concrete suppliers can extend the life of concrete by adding certain chemicals, known as "retarders".

148. While aggregate suppliers from outside the Auckland region can economically transport aggregate, the Commission considers that the level of supply from these sources is insufficient to merit including them in the geographic market. However, the ability of firms to supply from outside the Auckland region indicates that the geographical boundaries have to at least include firms within the greater Auckland region in the geographic market.

149. Given the ability of aggregate suppliers from both the north and south of Auckland to supply ready-mixed concrete firms, the Commission considers an appropriate geographic boundary is the greater Auckland metropolitan region, extending from Pukekohe in the south to Silverdale in the north.

*Sand*

150. The Applicant submitted a geographic market for sand in the Auckland region extending from Pokeno in the south, to Dargaville in the north. This geographic boundary reflects the fact that sand from Kaipara Harbour is used in the Auckland ready-mixed market.

151. Industry participants interviewed supported the Applicant's suggested geographical boundaries. The Commission considers the appropriate area to assess the competitive impact of the transaction is from Pokeno to Dargaville.

**Functional Level**

152. The production, distribution and sale of a product typically occur through a series of functional levels – for example, the manufacturing/import level, the wholesale/ distribution level and the retail level. It is often useful to identify the relevant functional level in describing a market, as a proposed business acquisition may affect one horizontal level, but not others.[11] Alternatively, some acquisitions, such as those involving businesses at different vertical levels, may raise issues related to vertical integration. Generally, the Commission seeks to identify separate relevant markets at each functional level affected by an acquisition, and assesses the impact of the acquisition on each.

*Cement*

153. The Commission has previously found the relevant functional level of the market to be for the wholesale supply of cement to users and retailers. As there is no significant change in the functional circumstances of the market, the Commission considers the previous functional definition is applicable to this analysis.

*Ready-mixed Concrete*

154. Participants in the market manufacture ready-mixed concrete at their respective plants from the required raw materials. It is then supplied to the purchaser ready for use.

[11] *Telecom Corporation of New Zealand Ltd v Commerce Commission* (1991) 4 TCLR 473, 502 The High Court (Greig J, Shaw WJ, Prof M Brunt) noted: "If we ask what functional divisions are appropriate in any market definition exercise, the answer, …, must be whatever will best expose the play of market forces, actual and potential, upon buyers and sellers. Wherever successive stages of production and distribution can be co-ordinated by market transactions, there is no difficulty: there will be a series of markets linking actual and potential buyers and sellers at each stage. And again, where pronounced efficiencies of vertical integration dictate that successive stages of production and distribution must be co-ordinated by internal managerial processes, there can be no market."

Accordingly, the appropriate functional level for the proposed acquisition is the manufacture and wholesale/retail supply of ready-mix concrete.

*Aggregate*

155. Aggregate is sourced from a quarry, crushed, sorted and stockpiled for sale. Large quantities are used by ready-mixed concrete makers and for other purposes like road works on a regular basis. Aggregate is usually sold in bulk through a supply contract rather than by periodic sales. Accordingly, the relevant functional level of the market is that for the quarrying and wholesale supply of aggregate to ready-mixed users.

*Sand*

156. Sand is sourced in most instances from natural deposits in river beds or sea beds, from which it is extracted, transported, stored, to be on-sold at a later date. Large quantities are used by the ready-mixed concrete makers, to whom it is usually sold in bulk through a supply contract rather than by periodic sales. Accordingly, the relevant functional level of the market is that for the extraction and wholesale supply of sand to ready-mixed manufacturers.

**Conclusion on Market Definition**

157. The Commission concludes that the relevant markets are:

- the national market for the manufacture/import and wholesale supply of cement;
- the Auckland market for the manufacture and wholesale/retail supply of ready-mixed concrete;
- the Auckland market for the quarrying and wholesale supply of aggregate for making ready-mixed concrete; and
- the Auckland market for the extraction and wholesale supply of sand used for making ready-mixed concrete.

## COUNTERFACTUAL AND FACTUAL

### Factual

158. The Commission uses a forward-looking, counterfactual, type of analysis in its assessment of business acquisitions in which two future scenarios are postulated: that with the acquisition in question (the factual), and that in the absence of the acquisition (the counterfactual). The impact of the acquisition on competition can then be viewed as the difference between those two scenarios. It should be noted that the status quo cannot necessarily be assumed to continue in the absence of the acquisition, although that may often be the case. For example, in some instances a clearly developing trend may be evident in the market, in which case the appropriate counterfactual may be based on an extrapolation of that trend.

159. In the factual scenario, the Commission considers that Holcim and Atlas would act as a single commercial entity. The Holcim/Atlas entity would operate in the markets defined

by the Commission, apart from Atlas not being in the cement market. [
]

160. The Commission considers that Holcim, Atlas and Allied are associated post acquisition. The entities are therefore considered likely to act as one head in the market. The Commission considers the addition of Atlas into the joint entity and the affect of this addition on the market in the competition analysis.

161. Holcim advised the Commission that the acquisition of the shares in Atlas [
]

162. Industry participants interviewed considered that one of the primary reasons for the acquisition was Holcim's intention to ensure it had a "locked-in" customer for its cement production. The desire to lock-in Atlas as a customer reflects the importance of volume in cement manufacturing, and the high fixed costs associated with this production.

163. Atlas advised the Commission that it is [
]

**Counterfactual**

164. Atlas advised the Commission that [
]

165. [ ], the Commission considers the status quo is not appropriate as the counterfactual. As the Commission is not aware of any other large cement or concrete firms interested in purchasing Atlas, the Commission considers that the most likely scenario is the purchase of Atlas in its entirety by a firm that is not currently involved in the cement or concrete industry.

166. The Commission intends to use the counterfactual of a purchase of Atlas in its entirety by a company that is not otherwise involved in the domestic cement or concrete industry.

**COMPETITION ANALYSIS**

167. Having defined the counterfactual, the Commission assesses the following for each of the relevant markets:

- the probable nature and extent of competition that would exist in the market, but for the acquisition (the counterfactual);
- the nature and extent of the contemplated lessening in the factual by considering market concentration, existing competition and potential competition, and other competition factors such as countervailing power; and

- whether the contemplated lessening is substantial.[12]

168. The first step in assessing competition is to look at market shares. Market shares can be measured in terms of revenues, volumes of goods sold, production capacities or inputs (such as labour or capital) used. In determining market shares, the Commission will take into account the existing participants (including 'near entrants'), inter-firm relationships, and the level of imports. This is followed by an application of the Commission's 'safe harbours'.

169. A business acquisition is considered unlikely to substantially lessen competition in a market where, after the proposed acquisition, either of the following situations exist:

- where the three-firm concentration ratio (with individual firms' market shares including any interconnected or associated persons) in the relevant market is below 70%, the combined entity (including any interconnected or associated persons) has less than in the order of a 40% share; or
- where the three-firm concentration ratio (with individual firms' market shares including any interconnected or associated persons) in the relevant market is above 70%, the market share of the combined entity is less than in the order of 20%.

170. However, market shares are insufficient in themselves to establish whether competition in a market has been lessened. Additional factors must also be considered before a conclusion is reached. The Commission considers the affect on the level of competition in terms of:

- existing competitors;
- potential competitors; and
- other competition factors such as countervailing power.

171. These factors, along with market concentration, are considered in subsequent sections for each of the relevant markets.

172. After considering the additional factors outlined above, the Commission will assess whether the merger is likely to result in a substantial lessening of competition ("SLC").

173. Section 2(1A) of the Act provides that "substantial" means "real or of substance". Substantial was considered by McGechan J in Port Nelson Ltd.[13] He observed:

> *substantially lessening competition " is taken as meaning "lessening competition in a way which is more than insubstantial or nominal". The merely ephemeral and minimal will not suffice. Inevitably, that will involve some attention to relativity; and in the end be a question of judgment on a matter of degree.*

174. The Commission considers that it is necessary to identify a real lessening of competition that is not nominal, rather than a quantifiable measure of lessening. The lessening needs

[12] See *Dandy*, supra n 5, pp 43–887 to 43-888 and adopted in New Zealand: *ARA v Mutual Rental Cars* (1987) 2 NZLR 647; *Tru Tone Ltd v Festival Records Retail Marketing Ltd* (1988) 2 NZLR 352; *Fisher & Paykel Ltd v Commerce Commission* (1990) 2 NZLR 731; *Commerce Commission v Carter Holt Harvey*, unreported, High Court, Auckland, CL 27/95, 18/4/00.

[13] *Commerce Commission v Port Nelson Ltd* (1995) 6 TCLR 406, 434.

to be of such a size, character and importance that it is worthy of consideration.[14] Overall, the Commission considers that substantially lessening competition concerns a real or substantial impact on a market in a way of a lessening, hindering or preventing the process of workable and effective competition.

## THE MARKET FOR CEMENT

### Existing Competition

*Market Concentration*

175. The most appropriate measure of market share for cement is the amount of cement manufactured and/or imported. Production provides a sensible measure given that plant excess capacity is not an issue and imported cement is a feature of the market. The three existing suppliers are Golden Bay, Holcim and Fern.

**Table 1: Annual Cement Production 2002**

| Firm | NZ Annual Cement Production/ Import | % of NZ Cement Market | Cement sold/used in Auckland |
|---|---|---|---|
| Holcim | [ ] | [ ] | [ ] |
| Golden Bay | [ ] | [ ] | [ ] |
| Fern | [ ] | [ ] | [ ] |
| **Total** | **[ ]** | **100%** | **[ ]** |

176. There is no aggregation per se as a result of the proposed transaction. Atlas does not currently manufacture or import cement. Atlas sources 100% of its cement requirements from Holcim. As noted above, the Commission has characterised the cement market as a duopoly. Fern Cement, the third competitor in the market, has attempted to introduce imported cement into the market from 1997 but has so far managed to secure only a minor share.

177. The key issue for consideration is whether the purchase by Holcim of a minority shareholding in Atlas would lead to a closer relationship between the two parties such that Atlas would be permanently foreclosed to other existing or potential suppliers of cement within the market.

178. Currently the only significant competition in the New Zealand market for cement is between Golden Bay and Holcim. Given that cement is a national market the amount of foreclosure is small, and Atlas is historically a Holcim customer anyway. The acquisition will not have a substantial affect on the level of existing competition in the market.

179. The Commission intends to assess the effect of the proposed acquisition on the cement market by examining whether barriers to entry or expansion are substantially raised for any market foreclosure resulting from Holcim's acquisition of a minority shareholding in Atlas.

[14] *Dandy Power Equipment Pty Ltd v Mercury Marina Pty Ltd* (1982) ATPR 40-315, 43-888.

*Conclusion on Existing Competition in the Cement Market*

180. Despite the advent of imports in 1997, the market share analysis above shows the cement market in New Zealand continues to operate as a duopoly, with imports from Fern accounting for only [ ] of the market. Given that no market aggregation occurs, and any effect of market foreclosure on existing competition appears small, the Commission considers that existing competition in the cement market would not substantially change post-acquisition.

**Potential Competition in the Cement Market**

*Barriers to Entry*

**Domestic Production**

181. The likely effectiveness of the threat of new entry in preventing a substantial lessening of competition in a market following an acquisition is determined by the nature and effect of the aggregate barriers to entry into that market.

182. The Commission is of the view that a barrier to entry is best defined as anything that amounts to a cost or disadvantage that a business has to face to enter, a market that an established incumbent does not face.[15]

183. The Commission assesses the specific nature of the barriers in the defined market based on the facts of each case. In evaluating the barriers to entry into a market, the Commission generally considers the broader entry conditions that apply, and evaluates which of those constitute entry barriers.

184. Entry barriers are often classified into three main types: natural (or structural), regulatory (or legal) and strategic.

185. Natural barriers arise from the nature of the technology, resources or inputs required to establish a business in a particular market. These barriers might include:

- substantial economies of scale or scope in production;
- sunk costs stemming from investing in tangible assets, such as plant and equipment, and intangible assets, such as advertising and research and development;
- the higher costs of capital associated with a new business lacking a history with funders;
- the presence of consumer switching costs;
- difficulties in accessing distribution channels, infrastructure, technology or raw materials; and

[15] *Commerce Commission v Southern Cross Medical Care Society* (2001) 10 TCLR 269, 293.

- the existence of any first mover advantage for the incumbent businesses which may make it difficult for new entrants to the market to gain market share.

186. Regulatory barriers arise from legislation or regulations that limit the number of market participants, or add to the costs of starting a business. These barriers include:

- entry licensing;
- quality standards imposed on entrants;
- environmental controls; and
- intellectual property rights.

187. Strategic barriers arise from the established positions of incumbent business, and their acting intentionally in such a way as to discourage prospective entrants. The incumbent business might:

- invest in excess capacity;
- advertise heavily which raises customer loyalty, brand reputation and sunk costs;
- raise switching costs by, for example, offering volume discounts or offering long-term contracts; or
- signal that entry would be responded to aggressively or in a predatory fashion.

188. Neither initial entry nor eventual established supply need be of the same scale as that of the merged entity. Larger businesses can be constrained by a collection of more specialised rivals. Businesses may enter at one scale or one product-range and grow to another. However, if the only viable entry occurs at the fringe of the market, and fails to attack the incumbent's core business, then entry cannot be seen as being an effective constraint.[16]

189. If the threat of entry is to act as a constraint on market participants following an acquisition that might otherwise lead to a substantial lessening of competition in a market, entry must be relatively easy. In other words, barriers to entry must be low.

**Imports**

190. In respect of potential import competition, the Commission takes into account the existence of any additional barriers to entry specific to imported products, including the:

[16] Maureen Brunt, "Australian and New Zealand Competition Law and Policy", *19th Fordham Conference on International Antitrust Law and Policy*, 1992, p 31.

- level of import tariffs or other barriers to supply, such as quotas or regulatory clearances;
- presence of any licensing arrangements and the control of distribution rights;
- impact of transport costs;
- importance to buyers of the availability of associated services;
- consistency and timeliness of supply;
- evidence of international price movements; and
- impact of likely fluctuations in foreign exchange rates.

191. As the transaction does not significantly affect the level of existing competition in the cement market, the Commission has gone on to consider potential competition as the transaction is more likely affect the level of potential competition due to possible market foreclosure.

192. A business acquisition is unlikely to result in a substantial lessening of competition in a market if behaviour in that market continues to be subject to real constraints from the threat of market entry or expansion

193. The threat of entry or expansion can act as a significant constraint on the merged entity. As noted in *Practice Note 4*:[17]

> The essential test for whether or not there is a significant barrier to entry can be expressed simply enough: it is whether the threat of entry of whatever kind will constrain incumbents to behave competitively. It follows that neither initial entry nor eventual established supply must necessarily be of the full-line variety. Leading firms can be constrained by a collection of more specialised rivals.

194. An entrant can enter the cement market via two methods: manufacturing cement in New Zealand, or importing cement at different levels of processing. Manufacturing requires very large capital investment that would be sunk, and exhibits significant economies of scale. It is unlikely that New Zealand demand for cement is currently sufficient to support three manufacturers. For these and other reasons the Commission considers that new entry via a cement manufacturing plant likely.

195. Fern Cement identified three key requirements for entry to the market by importing cement: the ability to source a quality supply of cement; the ability to acquire shipping for that cement; and the ability to store the cement once it arrived in New Zealand.

196. [

]

[17] Prof M Brunt, "Australian and New Zealand Competition Law and Policy", *19th Fordham Conference on International Antitrust Law and Policy*, 1992, 31.

197. Ready-mixed concrete operators interviewed by the Commission cited cement quality and certainty of supply as significant factors in selecting a supplier. [
]

198. [
]

199. Previously, the Commission investigated allegations by Fern that it was a victim of predatory pricing. The effect of the incumbent behaviour was to discourage at least some independent concrete makers from buying cement from Fern. The investigation by the Commission resulted in a warning letter to Firth.

200. Fern has four depots in New Zealand for cement storage at Papakura, Te Poi, Napier and Timaru. Fern did not cite storage difficulties as a constraint on its ability to import cement into the New Zealand market.

201. The limited extent of Fern's entry as an importer into the cement market indicates that entry is difficult. This, and Fern's statement that it is currently unlikely to expand its supply to a significant degree, indicates that new entry or expansion through imports is unlikely under the status quo.

202. However, in the current context, the Commission needs to ascertain how the proposed transaction might affect entry or expansion in the cement market. In particular, to what degree will potential new entry or future expansion by Fern be frustrated due to Atlas being foreclosed as a potential cement client by the structural link between Holcim and Atlas?

203. If the result is a substantial change in the ability of a new or existing competitor to secure customers then any present constraint from potential entry or expansion of imports may be weakened further.

204. The threat of imported cement does appear to provide a certain degree of constraint on the two major cement suppliers and this is increasing with the strength of the New Zealand dollar. Holcim suggested that the current strength of the currency has markedly improved the feasibility of importing cement. However, Holcim currently is an importer of cement and they have the infrastructure and market presence to do so successfully.

205. Atlas has a long-standing relationship with Holcim over the last 15 years regarding the supply of its cement. This suggests that there would likely be little change to the current supply arrangements given the proposed transaction. There is a possibility that, under the Commission's counterfactual, Atlas, under new ownership, might be more willing to consider the use of imported cement. However, given the small amount of cement that Atlas accounts for in the national cement market it is unlikely the factual scenario will substantially alter the level of competition in the market compared to the counterfactual.

206. Currently [ ] of the Auckland ready-mixed market is contestable for potential suppliers of cement which, under the factual, would reduce to [ ]. Atlas currently uses about [ ] tonnes of cement per annum. However, as discussed in the market definition section, the

market for cement is a national one, and accordingly Atlas's usage of cement as a proportion of the total cement market is not substantial. In the factual scenario the possible lock-in of Atlas as a Holcim cement user reduces the amount of contestable cement by about [ ] of the national market.

207. Given the small share of the cement market Atlas represents, the Commission considers that the extent of the possible foreclosure of demand for cement due to the proposed transaction is unlikely to substantially affect the ability of a new entrant, or expanding supplier, to supply the New Zealand cement market. Further, the constraint on the two existing competitors will not be substantially lessened as a result of this acquisition.

*Conclusion on Potential Competition in Cement*

208. The Commission therefore concludes that there would not be a substantial change in the barriers to entry or expansion in the cement market as a result of the Holcim acquisition of a minority shareholding in Atlas.

*Conclusion on SLC in Cement market*

209. The Commission concludes that in the cement market, the proposed acquisition would be unlikely to lead to a substantial lessening of competition. The transaction would not result in any aggregation in cement supply, would not substantially affect the level of existing competition via market foreclosure, and would not substantially increase the barriers to entry or expansion.

## THE MARKET FOR READY-MIXED CONCRETE

### Existing competition

*Market Concentration*

210. The Applicant provided market share information for the ready-mixed concrete market based both on productive capacity and sales volume, as presented in Table 2. The number of trucks and plants operated by each participant was also submitted, which provides further information on presence within the market. This is shown in Table 3.

**Table 2: Estimated Market Shares in Auckland Ready-mixed Concrete Market**

| Supplier | Owner of supplier | Estimated percentage of productive capacity | Estimated percentage of market sales |
|---|---|---|---|
| Allied | HW Richardson Group Limited (Richardson Family & Trusts) | [ ] | [ ] |
| Ready-Mixed Concrete | Holcim New Zealand | [ ] | [ ] |
| Atlas | The Collie Family | [ ] | [ ] |
| **Acquiring group** | | **[ ]** | **[ ]** |
| Firth | Fletcher Building Limited | [ ] | [ ] |
| Stevenson | The Stevenson Family | [ ] | [ ] |
| Other | Various | [ ] | [ ] |
| **Total** | | **100%** | **100%** |

**Table 3: Estimated Number of Trucks and Plants in Auckland Ready-Mixed Concrete Market**

| Supplier | Estimated Number of Trucks | Number of Plants |
|---|---|---|
| Allied | [ ] approx | 2 |
| Ready-Mixed Concrete | [ ] | 4 |
| Atlas | [ ] | 5 |
| **Acquiring Group** | **[ ]** | **11** |
| Firth | [ ] | 8 |
| Stevenson | [ ] approx | 4 |
| Other | [ ] | 8 |
| **Total** | **[ ]** | **31** |

211. Based on pre-acquisition productive capacity, Holcim, post-acquisition, would have around a [ ] share of the ready-mixed concrete market. The three-firm concentration ratio would be between [ ] and [ ] after the acquisition, which falls outside of the Commission's safe harbours.

212. Holcim, after the acquisition, would also effectively control 11 out of the 31 ready-mixed concrete plants, and around half of the trucks currently operating, in the defined market. However, it is important to note that plants may vary greatly in size. It is also important to note that the smaller participants grouped together as 'other' have a productive capacity well in excess of their market sales. This suggests that they may not be a strong competitive force in the market.

213. Market shares are insufficient in themselves to establish whether competition in a market has been lessened though they can help to shed light on the current state of existing competition within the market. It is the interplay between a number of competition

factors, of which seller concentration is only one, that has to be assessed in determining the impact of a business acquisition on competition.

*Analysis of Existing Competitors*

214. Industry participants have informed the Commission that Allied and Holcim appear to be competing with each other in the Auckland market. However, the Commissions' finding that Holcim and Allied are interconnected through their respective relationships with AML raises the issue as to how the competitive environment should be viewed in assessing the proposed structural change.

215. As stated earlier, the Commission is of the view that in assessing the competitive environment it is appropriate to consider that Holcim and Allied Concrete act as one head in the market. This conclusion is not altered on consideration of the fact that AML has no presence in the Auckland region, as the interconnection between Allied and Holcim still applies.

216. Having established that Allied and Holcim cannot be assumed to compete with each other in the market for ready-mixed concrete, the competition that would exist after the acquisition would be between Holcim (and its interconnected and associated companies), Firth, Stevenson and a number of other smaller players such as Wilsons Ready-mixed Concrete, Bridgeman Concrete and Counties Concrete.

217. Demand in the ready-mixed concrete industry is generally either residential (covering smaller volume jobs in residential areas) on commercial (the higher volume jobs in the central city). Industry participants informed the Commission that with regard to commercial jobs a degree of countervailing power exists in the hands of purchasers discussed further in paragraph 245. Prices of commercial jobs were stated to be very competitive, with low margins reflecting the volumes involved and a competitive tender system.

218. The Commission has determined from discussions with the Applicant and industry participants that Atlas and Holcim undertake both residential and commercial work, but with a focus on residential work, as is common in the industry, reflecting, to an extent, the infrequency with which large jobs arise. The large volume commercial jobs are serviced by larger industry participants who also service smaller volume jobs facing competition from the smaller participants in regards to the later.

219. Graham Collie, Director of Atlas, informed the Commission that Firth is particularly strong in terms of commercial jobs as they have a plant in the central Auckland area. Further, he stated that similar resource consent would be very difficult to obtain these days. Given Auckland traffic congestion problems, he believed that this gives Firth a big advantage in terms of jobs in the inner city.

220. Graham Collie also noted that Atlas primarily focuses on the residential jobs, because the margins on the commercial jobs ultimately make them unattractive in many instances. Although a sale to a third party is assumed in the counterfactual, based on the location of the Atlas plants and their relative sizes, there is nothing to suggest that would change significantly post-acquisition.

221. Chris Badger, General Manager of Firth, stated that a reasonable scale is needed in order to be able to compete for the high volume commercial jobs on a consistent basis, but that

it was possible to set up a ready-mixed concrete batching plant on site to service the occasional one-off job.

222.[ ], informed the Commission that if an attempted price increase were to occur post-acquisition, [ ] would have the ability to increase its output in order to meet the excess demand through hiring a few additional trucks, and increasing the output of their plant. The Applicant also submitted that due to low levels of brand loyalty in the ready-mixed industry switching can and does occur relatively easily, and would ultimately constrain the combined entity from attempting to exercise any market power in the factual.

223.In terms of the larger commercial jobs, the combined entity would continue to face competition in the factual from Firth and Stevenson. Atlas, although it does undertake some commercial work, could not be viewed as currently providing a constraint in this area of the market, to a degree whereby its removal could be viewed as leading to a substantial increase in the market power of one or all of the others.

224.Similarly Holcim would continue to face competition in terms of the residential jobs from Firth and Stevenson, and also from the smaller firms in the industry such as Wilsons Ready-Mixed, Bridgeman Concrete and Counties Concrete. However, it is important to note that the Commission has been informed that smaller industry participants are primarily price followers, and as such do not exert a significant degree of competitive pressure on the larger participants.

*Conclusion on Existing Competition in the Ready-Mixed Market*

225.The Commission considers that the combined entity would continue to face competition for both commercial and residential ready-mixed jobs from the existing competitors within the market. The removal of Atlas would do little to affect the present level of competition. The Commission is, therefore, of the view that, despite the aggregation, the degree of existing competition would be sufficient to constrain any attempted exercise of unilateral market power by the combined entity in the factual.

226.Despite the Commission's finding in respect to existing competition, potential competition in the ready-mixed concrete industry will now be considered for completeness. The Commission considers that the consideration of potential competition is justified to fully evaluate the important role smaller competitors play in the market and the role countervailing power plays in constraining the large ready-mixed producers.

**Potential Competition in the Ready-mixed Market**

Barriers to entry

227.Industry participants have estimated the cost of establishing a new plant within the range of $250,000 to $3,000,000. This initial investment is likely to be largely a sunk cost, and thus to constitute an entry barrier.

228.Sunk costs are generally understood as being that portion of capital and other outlays (such as on advertising) that could not be recovered should the firm exit the market. Plant and equipment that is highly use specific, and which has little value in alternative uses,

are sunk assets.[18] A firm considering entry will weigh up the possible outcomes, ranging from 'success' to 'failure'. Where entry would involve investing in sunk assets, a potential entrant will factor into the possibility of 'failure' the consequences of exit and the loss of the sunk costs. Although the sunk assets might have value to another entrant, the fact that the assets are being sold by an exiting (and unsuccessful) firm is likely to lead to a substantially discounted price. Thus, by increasing the downside costs, entry overall is rendered less attractive.[19]

229. At the same time, incumbents, unlike the possible entrant, have already made their investments in sunk costs. They are thus in a different position to the entrant. They would have an incentive to 'fight' entry in order to avoid the costs of exit. The entrant can be presumed to know this, and is thus likely to be further discouraged from entering.[20]

230. Sunk costs are thus considered to be barriers to entry from the perspective of prospective entrants, even though they would by entering be incurring costs that the incumbents had already incurred. The Commission considers that the extent to which sunk costs constitute an entry barrier should include an assessment of the proportion of sunk costs to the overall investment that an entrant would need to make, the risk of failure, and the possible response of incumbents. In terms of establishing a ready-mixed concrete operation, an evaluation of these factors would suggest that sunk costs do represent a barrier to entry.

231. Resource consent would also be required in order to build a concrete batching plant. Industry participants have suggested that obtaining this can be a lengthy and costly process. Resource consents have also become considerably harder to obtain in the last decade, and carry an increasing number of conditions concerning noise, dust and roading. The Commission is of the view that resource consents represent a barrier to entry into the ready-mixed concrete market.

232. The Commission is also of the view that the cost involved in fighting off incumbent response to new entry also represents a significant entry barrier into the market. Large competitors within the industry operate at a scale big enough to potentially respond by offering large price discounts and thus deterring entry.

233. Trucks can be readily leased at short notice for relatively short periods of time. Grant Wilson informed the Commission that trucks can be easily sourced in the Auckland area. A leasing arrangement may possibly avoid concerns about investing too much capital in trucks before a possible downturn in the market (a concern expressed by Wilsons Ready-Mixed). The risk of a downturn in market activity would have to be born by the truck lessor, and thus hirage may attract a premium to reflect this however it is still likely that the flexibility it enables would make such an expense preferable to a large capital investment.

234. Industry participants suggested that labour was increasingly becoming an obstacle to expansion because driver licenses (for heavy vehicles) were becoming difficult to obtain. [ ] suggested that, as a result, there was increased pressure on wages due to the

[18] Jeffrey Church and Roger Ware, Industrial Organization: A Strategic Approach, Boston: Irwin, pp. 52, 119.
[19] Douglas F Greer, Industrial Organization and Public Policy (third edition), New York: Macmillan, 1992, p. 240.
[20] Dennis W Carlton and Jeffrey M Perloff, Modern Industrial Organization, Glenview, Ill.: Scott, Foresman, 1990, p. 173.

importance of retaining qualified drivers. The Commission recognises that although there is some difficulty in obtaining qualified drivers, this does not represent a material barrier to entry as the difficulty is faced by all businesses within the industry.

235. Any potential new entrant would also require a supply of aggregates and sand. Stevenson identified this as the biggest potential barrier to entry into the ready-mixed market. The most efficient way of sourcing these materials is to own a quarry, but due to changes in the granting of resource consents, this is becoming more difficult. It would also be entry at two levels of the production chain increasing the costs and the risks of entry. An alternative is to purchase aggregates, which suggests that a supply of aggregates is not sufficiently difficult to acquire such as to be considered a barrier to entry in this case.

236. The Commission is of the view that there are moderate barriers to entry into the ready-mixed concrete market, of both a structural and strategic nature.

## The LET Test

### Likelihood of Entry

237. The mere possibility of entry is, in the Commission's view, an insufficient constraint on the exercise of market power to alleviate concerns about a substantial lessening of competition. In order to be a constraint on market participants, entry must be likely in commercial terms. An economically rational firm will be unlikely to enter a market unless it has a reasonable prospect of achieving a satisfactory return on its investment, including allowance for any risks involved.

238. In recent years there have been several instances of entry into the ready-mixed concrete market, as indicated by the Applicant in its clearance application. These include Counties Concrete, which established itself in 1999, Bridgeman Concrete in 2000 and Wilsons Concrete in 2002. The recent occurrences of entry into the market may reflect the fast-growing nature of the Auckland suburban area. The size of the Auckland area also may allow for niche entry, such as supplying pre-cast operators.

239. Given the history of entry into the market an important question is whether conditions have changed, or circumstances have altered, in such a way as to make entry more difficult since the entry of the firms noted above. The only circumstance where this appears to be the case is in regards to resource consents.

240. Industry participants suggested that resource consents were becoming increasingly difficult to obtain, with more conditions and undertakings being placed on them. Graham Collie illustrated this by referring to Firth's inner city batching plant, which he suggested would be difficult to get consent for given today's approach to the granting of resource consents.

241. Therefore, although the establishment of a plant in the city centre may be unlikely, the establishment of a plant on the outskirts of the city is far more probable.

242. The Applicant submitted that pre-cast concrete manufacturers and larger construction companies were the most likely entrants into the ready-mixed market. Although the

Commissions' investigations revealed no-one currently on the verge of entering, the main disincentive appeared to be the highly competitive nature of the market at present. However, the Commission is of the view that, given the right financial incentives (an attempted rise in the price of ready-mixed concrete, for instance), there is nothing to suggest that entry would not occur eventually, as it has done in the past.

Extent of Entry

243. If entry is to constrain market participants, then the threat of entry must be at a level and spread of sales that is likely to cause market participants to react in a significant manner. The Commission does not consider entry that might occur only at relatively low volumes, or in localised areas, to represent a sufficient constraint to alleviate concerns about market power.

244. Small-scale entry into a market, where the entrant supplies one significant customer, or a particular product or geographic niche, may not be difficult to accomplish. However, further expansion from that 'toe-hold' position may be difficult because of the presence of mobility barriers, which may hinder firm's efforts to expand from one part of the market to another. Where mobility barriers are present in a market, they may reduce the 'extent' of entry.

245. Industry participants have informed the Commission that entry is more likely on a smaller scale servicing small volume jobs in residential areas. Stevenson added that smaller participants have lower overheads than larger competitors, and thus can quickly establish small but efficient operations.

246. Grant Wilson (Wilsons Ready-Mixed) considered that a balance must be struck between the size of the operation and the volume of work anticipated. He added that whilst smaller operators may have lower overhead costs, they produce smaller volumes and thus pay higher rates for cement than larger users.

247. The Applicant submitted that there is no reason why a new entrant could not quickly achieve a 25% share of the market relatively quickly. However, it acknowledged that Counties and Bridgeman had so far achieved only approximately 5% of the market each.

248. The Commission is of the view that entry is more likely on a small scale servicing primarily residential demand and accordingly that the extent of new entry may not be sufficient to provide an effective competitive force in the market.

Timeliness of Entry

249. If it is effectively to constrain the exercise of market power to the extent necessary to alleviate concerns about a substantial lessening of competition, entry must be likely to occur before customers in the relevant market are detrimentally affected to a significant extent. Entry that constrains must be feasible within a reasonably short timeframe from the point at which market power is first exercised.

250. Industry participants reported that setting up a ready-mixed concrete plant may take anywhere from six months to five years depending on the location and the conditions on, and objections to the granting of, the resource consent.

251. Wilsons Ready-Mixed, who entered the market in 2002, said that the process took them nine months in total, and suggested that it could be pushed through even more quickly under certain circumstances.

252. Certification is also generally required in the concrete industry but does not appear to be an onerous requirement to meet. Grant Wilson informed the Commission that this can be done within a period of approximately five weeks. Although most ready-mixed concrete players saw certification as a good idea there is no legal requirement for it, and it is possible to operate without a certificate, as is the case with Bridgeman Concrete.

253. The Commission is of the view that the time required to obtain resource consent for the concrete plant is likely to be between six months to three years. Given the history of previous entry the Commission is of the view that, on the balance of probabilities, entry could occur within a two year time period.

*Conclusion on Potential Competition in the Ready-Mixed Concrete Market*

254. The Commission is of the view that the barriers to entry in the ready-mixed concrete market are moderate and that whilst entry may occur, it would likely be small in scale and thus insufficient to provide any great degree of competitive constraint on the combined entity in the factual.

*Constraint from Buyers of Ready-Mixed Concrete*

255. There appears to be some degree of countervailing power in the hands of purchasers of ready-mixed concrete, but only with regard to high volume commercial jobs. These high volume jobs are tendered for, and the purchasers are often more familiar with what constitutes a good price for the work to be done. As a result, ready-mixed concrete suppliers can be leveraged against each other in order to achieve a lower price, whilst the jobs still remain attractive to large suppliers due to the volumes involved.

256. The Commission is, therefore, of the view that the combined entity would continue to be subject to some constraint from the countervailing power held by larger purchasers of concrete.

*Conclusion on SLC in Ready-mixed Concrete Market*

257. The removal of Atlas as a competitor would not lead to an increase in the market power of Holcim. The Commission is of the view that the existing competitors in the market, the likelihood of entry (on a small scale) and a degree of countervailing power held by large purchasers, would prevent a substantial lessening of competition.

## THE MARKET FOR AGGREGATES

### Existing Competition

*Market Concentration*

258. Table 4 gives estimated market shares in the Auckland aggregates market measured in terms of market sales. The estimated reserves of each supplier are also given.

**Table 4: Estimated Market Shares in the Auckland Aggregates Market.**

| **Supplier** | **Owner of supplier** | **Estimated reserves** | **Estimated percentage of market sales** |
|---|---|---|---|
| Holcim Aggregates | Holcim NZ Ltd | [ ] $m^3$ | [ ]% |
| Atlas | The Collie Family | [ ] | [ ]% |
| **Combined entity** | | | **[ ]%** |
| Winstone | Fletcher Building Limited | [ ] | [ ]% |
| Fulton Hogan | Widely-held public unlisted company | [ ] | [ ]% |
| Stevenson | The Stevenson Family | [ ] | [ ]% |
| Others | Various | [ ] | [ ]% |
| **Total** | | | **100%** |

259. The proposed acquisition would result in only a small aggregation in this market of about [ ], and would result in a post-acquisition market share of around [ ] for the combined entity (becoming the third largest firm), with a three-firm concentration ratio of approximately [ ].

260. The Commission's safe harbours show that an acquisition is unlikely to substantially lessen competition in a market where, after the proposed acquisition, the market share of the combined entity is less than in the order of 20%, regardless of the three-firm concentration ratio.

261. The Commission's inquires suggest that the acquisition would raise few concerns in the market for aggregates. The nature of the product is such that it can be transported a much greater distance than ready-mixed concrete, and is not perishable. I.H. Wedding said that it can potentially carry aggregate as far south as Rotorua, although backhauling is essential in order to make such distances profitable.

262. Graham Collie, Director of Atlas, informed the Commission that Atlas currently only produces around [ ] of its own aggregate requirements, although there is the potential for this perhaps to increase to [ ] in the near future. The remaining aggregate it needs is sourced from Stevenson.

263. The acquisition is unlikely to substantially change the current market environment with regard to aggregates. Three other suppliers exist with the potential to service the greater Auckland area.

264. In light of the constraint provided by existing competitors it is not necessary to address potential entry into the aggregates market, nor is it necessary to assess the potential for the exercise of co-ordinated market power.

*Conclusion on SLC in the Auckland Market for Aggregates*

265. The Commission considers that the proposed structural change in the market for aggregates would be unlikely to raise any competition concerns in the factual vis-à-vis the counterfactual. There would exist sufficient competition from existing market participants to continue to constrain the combined entity. Accordingly the acquisition would not be likely to have the effect of substantially lessening competition in the Auckland market for aggregates.

## THE MARKET FOR SAND

### Existing Competition

*Market Concentration*

266. Table 5 shows the estimated market shares in the Auckland sand market, measured by market sales.

**Table 5: Sand Market Shares**

| Supplier | Estimated percentage of market sales |
|---|---|
| Atlas | [ ] |
| Coastal Resources Limited | [ ] |
| **Combined Entity** | **[ ]** |
| Sea-Tow Limited | [ ] |
| McCallum Brothers Limited | [ ] |
| Winstone Aggregates | [ ] |
| Others | [ ] |
| **Total** | **100%** |

267. The proposed acquisition would result in an aggregation in this market of about [ ], and would result in a post-acquisition market share of around [ ] for the combined entity with a three firm concentration ratio of approximately [ ].

268. The Commission's safe harbours show that an acquisition is unlikely to substantially lessen competition in a market where, after the proposed acquisition, the three firm concentration ratio of the market is less than 70% and the combined entity has a market share below 40%.

269. There are presently five major and several smaller producers of sand in the market. Post-acquisition the number of major players would reduce to four, as Atlas and Coastal Resources would be considered interconnected post-acquisition.

270. Winstone, Sea-Tow and McCallum each considered that the sand market is competitive, and that the Holcim/Atlas transaction would not alter the level of competition significantly. None of the major participants in the sand market expressed concern over the proposed transaction.

271. Chris Ellis, the General Manager of Winstone, said that there would unlikely be an effect on competition in the sand market post-acquisition as Holcim and Atlas currently use the majority of sand they produce for internal purposes (a small amount is sourced from other suppliers).

272. The General Manager of McCallum, Bill Bates, stated that it supplies [ ] with the majority of the sand it extracts. [

]

273. [ ] Mr. Coombridge did not consider the transaction would have any affect on the price of sand. He noted major players like Winstone have the ability to expand supply in the event of a price increase by Holcim and Atlas.

274. Industry participants also noted that any attempt to increase the price of sand would expand the existing geographical boundaries of the market so as to include a larger number of competitors.

275. The amount of sand extracted from sea and river sources is regulated by resource consents. Any attempt to increase the price of sand by reducing supply is likely to be met by quarry operators, who can increase the processing of sand, or by existing players seeking to increase the amount of sand extractable under existing resource consents.

*Conclusion on SLC in the Auckland Sand Market*

276. The Commission considers that the significant level of existing competition post-acquisition, with the presence of several large and a number of smaller firms in the market, would continue to act as a significant constraint on the merged entity. Additionally, Holcim and Atlas produce sand almost exclusively for internal purposes, and source only a small amount from third parties. The combining of the two parties is thus likely to have little actual affect on the rest of the sand market.

277. Accordingly, the Commission concludes that, based on the level of existing competition, the proposed acquisition is unlikely to lead to a substantial lessening of competition.

278. In light of the aggregation within this market falling within the Commission's safe harbours, the level of constraint provided by existing competitors, and the fact that very little of the sand produced by the combined entity is sold commercially, it is not necessary to address potential entry into the sand market, nor is it necessary to assess the potential for the exercise of co-ordinated market power.

**Overall Conclusion**

279. The Commission has considered the probable nature and extent of competition that would exist in the counterfactual in the following markets:

- the national market for the manufacture/import and wholesale supply of cement;
- the Auckland market for the manufacture and wholesale/retail supply of ready-mixed concrete;
- the Auckland market for the quarrying and wholesale supply of aggregate for making ready-mixed concrete; and
- the Auckland market for the extraction and wholesale supply of sand used for making ready-mixed concrete.

280. The Commission considers that the appropriate counterfactual is a company (not currently participating in any of the relevant markets) purchasing Atlas in its entirety.

281. The Commission has considered the nature and extent of the contemplated lessening in the relevant markets. The proposed acquisition would result in the merged entity obtaining a market share that falls within the Commission's safe harbour guidelines in both the market for aggregate and sand.

282. The Commission is satisfied that the proposed acquisition would not have, nor would be likely to have, the effect of substantially lessening competition, in:

- the cement market, as the transaction does not substantially affect the level of existing competition via market foreclosure and would not substantially increase the barriers to entry or expansion;
- the ready-mixed market, as the Commission is of the view that because of the existing competitors in the market, the likelihood of entry (on a small scale), a degree of countervailing power held by purchasers the increase is unlikely to be of an extent to constitute a substantial lessening of competition;
- the aggregate market, as the Commission is of the view there would exist sufficient competition from existing market participants to continue to constrain the combined entity;
- the sand market, as the Commission is of the view that the significant level of existing competition post-acquisition, with the presence of several large and a number of smaller firms in the market, would continue to act as a significant constraint on the merged entity.

283. Accordingly, pursuant to section 66(3) (a) of the Commerce Act 1986, the Commission determines to give clearance for the proposed acquisition by Holcim, of a minority shareholding interest in Atlas.

**DETERMINATION ON NOTICE OF CLEARANCE**

284. Accordingly, pursuant to section 66(3) (a) of the Commerce Act 1986, the Commission determines to give clearance for the proposed acquisition of Atlas Resources Limited by Holcim (New Zealand) Limited.

Dated this 20th day of November 2003

Paula Rebstock

Acting Chair