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COMMERCE COMMISSION

Decision No. 355

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

Waste Management NZ Limited

and

Waste Care Limited

The Commission:	M N Berry (Acting Chairman) Dr K M Brown E C A Harrison
Summary of Proposed Acquisition:	The acquisition by Waste Management NZ Limited of 100% of the shares and voting rights of Waste Care Limited and its subsidiaries from Sita New Zealand Limited.
Determination:	Pursuant to s 66(3)(b) of the Commerce Act, the Commission determines to decline to give clearance for the proposed acquisition.
Date of Determination:	14 May 1999

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THE PROPOSAL

1. On 13 April 1999 the Commission registered a notice from Waste Management NZ Limited (WMNZ) seeking clearance to acquire 100% of the shares and voting rights of Waste Care Limited (Waste Care) and its subsidiaries.

THE PROCEDURES

2. 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 the notice agree to a longer period. Two extensions, of ten working days and three working days respectively, were sought by the Commission and agreed to by WMNZ. Accordingly, a decision on the application is required by Friday 14 May 1999.

3. WMNZ sought confidentiality for certain information contained in the notice seeking clearance, and a confidentiality order was made in respect of that information for a period of 20 working days from the Commission's determination of the notice. When the confidentiality order expires, the provisions of the Official Information Act 1982 will apply to the information.

4. The Commission's determination is based on an investigation conducted by its staff and their subsequent advice to the Commission.

5. In investigating the acquisition, the Commission sought comments and information from a number of parties including waste industry participants, local and regional authorities, and customers. In addition, the Commission received a number of submissions regarding the proposed acquisition from interested parties.

THE PARTIES

Waste Management NZ Limited (WMNZ)

6. WMNZ and its subsidiaries operate in the waste industry providing a range of refuse collection, recycling, treatment and disposal services in a variety of localities around New Zealand.

7. WMNZ is engaged in solid waste operations in Auckland, Whangarei, Bay of Plenty, Rotorua, Gisborne, Whakatane, New Plymouth, Wanganui, Wellington, Christchurch, Timaru, and Dunedin.

8. WMNZ's disposal division operates the Redvale Landfill at Dairy Flat on Auckland's North Shore, and has an involvement as a joint venture partner in the Pikes Point transfer station at Onehunga, in Auckland. WMNZ operates refuse transfer stations situated at Hamilton City, Thames/Coromandel, Rotorua, Tauranga, Papakura, Whangarei, South Taranaki, and Rangiora. WMNZ also hauls waste from transfer stations that it owns or manages to landfills for final disposal.

9. WMNZ is a public company listed on the New Zealand Stock Exchange. As at 31 December 1998, it had revenues of $79 million and a market capitalisation of $305 million.

Waste Care Limited (Waste Care)

10. Waste Care and its subsidiaries also operate in the waste business providing a range of refuse collection, recycling, treatment and disposal services in a variety of localities around New Zealand.

11. Waste Care is involved in solid waste operations, and operates in Auckland, Whangarei, Hamilton, Napier/Hastings, Palmerston North, Wellington, Christchurch and Dunedin.

12. Waste Care's disposal division operates the Whitford landfill in South Auckland and a refuse transfer station in East Tamaki.

13. Waste Care is a public company listed on the New Zealand Stock Exchange.

OTHER MAJOR PARTIES

EnviroWaste Services Limited (EnviroWaste)

14. EnviroWaste is a participant in the waste industry, providing a range of services including waste collection, recycling, and disposal services in a number of regions throughout New Zealand.

15. EnviroWaste is a joint venture company owned 50/50 between Northern Disposals Limited (NDS) and Fulton Hogan Limited (Fulton Hogan). NDS is wholly owned by Infrastructure Auckland Limited (formerly the Auckland Regional Services Trust).

16. NDS, in addition to its ownership in EnviroWaste, owns the operating landfill licences for the Greenmount and Rosedale Road landfills. These landfills are operated under a management agreement by EnviroWaste. NDS also owns the Pikes Point refuse transfer station at Onehunga, in Auckland, which is operated as a joint venture between WMNZ and NDS.

Onyx Group Limited (Onyx)

17. Onyx operates in the waste industry, providing waste collection and recycling services throughout New Zealand. Onyx is ultimately owned by the French company, Compagne Generale de Eaux.

18. Onyx began operating in New Zealand in 1995. Currently, Onyx has collection and recycling operations in Whangarei, Auckland, New Plymouth, Wellington, Christchurch, and Dunedin.

Perry Waste Services Limited (Perry)

19. Perry is a subsidiary of the Hamilton based Perry Group of companies which has been involved in the waste industry since 1982.

20. Perry's principal business is landfill operation. Perry currently operates landfills at Horotiu, Taupo and Huntly. Perry is also involved in the operation of transfer stations, including the recently awarded contract to manage the Tauranga District Council's transfer station, and disposal of all the Council's municipal waste.

BACKGROUND

Waste

Non-Hazardous

21. Non-hazardous solid waste can be defined as all waste that is generated in a solid form or converted to a solid form for disposal. The New Zealand Waste Analysis Protocol (WAP) uses eight solid waste categories.[1] These are; paper, plastic, glass, metal, organic, construction and demolition (C&D), potentially hazardous waste,[2] and other waste (a wide range of materials present in relatively small quantities).

Hazardous

22. Currently, there is no definition of hazardous waste that is nationally accepted. The Basel Convention, developed by the United Nations Environment Programme and the OECD, defines hazardous waste as "waste that contains substances that are toxic to humans, plants or animals, are flammable, corrosive or explosive, or have high chemical reactivity". This definition excludes radioactive substances.

Collection

Municipal

23. Local authorities have an obligation under the Local Government Act No 4 1996 to carry out domestic or household waste collection. Municipal waste is mainly waste from residential households and litter bins. Waste from households is left on the curbside for collection on a regular basis. Litter bins are in fixed positions. The collection is done indirectly (by contractor), or by council collection. Municipal waste collection involves small individual pick-ups of waste over a relatively large geographical area.

24. Contracts for the disposal of municipal waste are managed by the local authority. The contracts for municipal waste collection are generally for a longer period than commercial contracts, usually 3-5 years, and are more restrictive. An important distinction between municipal and commercial waste collection is that the waste remains the property of the council and the site of disposal may be specified.

25. Household waste is placed in bags or mobile garbage bins (MGBs) and collected by an appropriate truck with a compactor of some kind. At present the use of bags far outweighs the use of MGBs across the country, although MGBs are used by Auckland City. WMNZ have told staff that a second-hand Japanese-made rear loading truck with a swinging arm for MGB collection can be purchased for approximately $30,000. The collected waste is deposited either at a transfer station for onward haulage to a landfill, or taken directly to a landfill for disposal.

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[1] WAP represents a set of guidelines on the gathering of waste data, administered by the Ministry for the Environment.

[2] This includes chemicals, household hazardous items, pesticides and waste requiring controlled disposal or co-disposal at landfills which is sometimes referred to as 'special waste'.

Commercial

26. Commercial waste is waste collected under contracts other than with municipal authorities. This segment includes business, industry and institutions, together with private residences where the householder contracts directly with the waste collector. A feature of much commercial waste collection is the large volumes of waste to be uplifted at individual locations. Most is collected in sacks, MGBs, and skips or bins of wide-ranging sizes and designs.

Do it Yourself (DIY)

27. Households and businesses have the option of collecting their own waste for disposal, usually by conveying it to a transfer station (see below). This can be done by using their own vehicles and trailers, or hired vehicles or trucks.

Construction and Demolition

28. Construction and demolition (C&D) waste is the waste generated on and around a building site. C&D consists of dirt, concrete and rubble, wood, and any other material generated on site. C&D that contains more than 5% organic matter must be disposed of at a landfill site. Otherwise, C&D waste is disposed of at a cleanfill where the cost is substantially less.

29. Waste contractors have the option of incurring the cost of separating out the organic matter and then disposing of the non-organic matter in a cleanfill at lower cost than in a landfill.

Excavated Earth

30. Excavated earth consists of clean soil and earth. This does not need to go to a landfill site, or even a cleanfill. This waste material is generally used for roading and for filling valleys for land development, which requires consent in terms of stormwater run off and drainage issues. Such disposal may be accepted free of charge.

Transfer Stations

31. Transfer stations are an intermediate step towards disposal. Householders or small businesses choosing to dispose of their garden or household waste themselves may take the waste by car, trailer, owned or hired truck to a transfer station. Commercial operators also use transfer stations, especially where a long haul to a landfill with a small collection truck is thereby avoided. The transfer station then aggregates the waste for onward haulage to a landfill. In some cases, transfer stations are located adjacent to landfills. Increasingly, because of OSH regulations, cars, trailers and small trucks are not permitted access to landfills, thus forcing them to use transfer stations.

32. With the trend towards larger, regionally-based, landfills, and the closure of small local rubbish dumps, the latter are often being replaced by transfer stations to provide the same degree of convenience of access for local users. This is the pattern of development likely in Auckland when some of the city landfills close and are replaced by new landfills, possibly in the upper Waikato region.

Landfills

33. Landfills have traditionally been excavated holes (e.g., former quarry sites) or valleys which have been utilised for waste disposal. The Resource Management Act 1991 has had the effect of raising the standard of landfill management and operation. Modern waste disposal technology bears little resemblance to the localised open rubbish dumps which were operated in most parts of the country up to the early 1990s. The trend is now towards a small number of large, well-managed and efficient landfill operations which minimise the impact upon the environment, although this process is far from being complete, with many local landfills still operating. It has also been claimed that the Act leaves much discretion to local territorial authorities as to the standards required, although appeals on resource consents have led to two judgements by the Environment Court (on Redvale and Whitford in Auckland) which are likely to establish a benchmark for the rest of the industry.

34. Today's landfills are high technology disposal facilities with a lining such as clay designed to prevent groundwater and surface water contamination with the objective of protecting the surrounding environment. They are also located, with buffer zones, so as to minimise their impact on the surrounding local community. They operate under strict resource consent conditions.

35. Because of the difficulty of finding suitable sites for new landfills (typically, many sites are investigated and then rejected before one is found), the cost of developing the large sites required (both land purchase and construction costs), the elaborate consent procedures under the Resource Management Act, together with appeal rights to the Environment Court, the process is both lengthy and expensive. It has been suggested that a period of from three to five years may elapse before operations can begin. The cost may be in the range from $20 to $50 million, all of which are costs incurred before any revenues are earned, and hence are fixed in nature.

36. Thus, an important feature of the operation of landfills is that most of the costs are fixed costs to be recouped (along with the ultimate site closure costs) over the life of the facility. The marginal cost of operation over wide tranches of waste inflows is very low, perhaps in the region of $1-2 per tonne. This cost structure provides extreme opportunities to marginally cost price, especially where a base load from operator-owned transfer stations provides sufficient contribution to cover a substantial part of the fixed costs. Bulk business can then be tendered for with price discounts. More distantly located business may be tempted with greater discounts to off-set the larger haulage cost per tonne to the landfill. This raises the possibility that a new landfill may encroach on to the traditional catchment area of another landfill.

37. Where there is competition between adjacent landfills in the larger centres, such as Auckland, competition for the ownership of waste streams becomes important. Landfill operators are likely to become vertically integrated to ensure that their landfills maintain their share of the market, either by ownership or by contract, as rival operators will almost always take their waste to their own landfills. In this context, appropriately located transfer stations are crucial strategically in capturing a share of the waste stream.

38. The concentration of waste disposal in a smaller number of larger landfills, increasingly owned privately, rather than by local territorial authority, has raised fears

amongst some smaller, non-vertically integrated, operators than their access to disposal sites may become increasingly difficult, thereby jeopardising their continuing operation.

THE RELEVANT MARKETS

Introduction

39. The purpose of defining a market is to provide a framework within which the competition implications of a business acquisition can be analysed. The relevant markets are those in which competition may be affected by the acquisition being considered. Identification of the relevant markets enables the Commission to examine whether the acquisition would result, or would be likely to result, in the acquisition or strengthening of a dominant position in terms of s 47(1) of the Act in any market.

40. Section 3(1A) of the Act provides that:

> "the term 'market' is a reference to a market in New Zealand for goods and services as well as other goods and services that, as a matter of fact and commercial common sense, are substitutable for them."

41. Relevant principles relating to market definition are set out in *Telecom Corporation of New Zealand Ltd v Commerce Commission* [3], and in the Commission's *Business Acquisition Guidelines* ("the Guidelines").[4] A brief discussion of the methodology follows.

42. Markets are defined in relation to product type, geographical extent, and functional level. The boundaries of the product and geographic dimensions are determined by testing for substitutability, in terms of the response to a change in relative prices of the good or service in question and possible substitute goods or services. A properly defined market will include products which are regarded by buyers as being not too different ('product' dimension), and not too far away ('geographical' dimension), and are thus products to which they could switch if a *s*mall yet *s*ignificant and *n*on-transitory *i*ncrease in *p*rice (*ssnip*) of the product in question were to occur. It will also include those suppliers currently in production who are likely, in the event of such a *ssnip*, to shift promptly to offer a suitable alternative product even though they do not do so currently. These have been referred to by the Commission as "near entrants". The boundaries of the product market are therefore identified. The product market so arrived at should occupy the smallest range of products consistent with a hypothetical monopolist being able to exert market power, as defined by the *ssnip* test. Similarly, the geographical market for a product is the smallest geographical space in which a hypothetical monopolist could exert market power.

43. In practice, the process of defining markets is unlikely to be as precise and scientific as suggested by the *ssnip* test. However, in the Commission's view the *ssnip* approach provides a useful framework for assessing the question of what other products, or products from other areas, are substitutable for the product in the area in question as a matter of fact and commercial common sense. The test simply provides a means

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[3] (1991) 4 TCLR 473

[4] Commerce Commission, *Business Acquisition Guidelines*, 1999, 99. 11-16.

within which judgments on a case-by-case basis, using whatever information happens to be available or can readily be generated, have to be made. The issue remains one of substitutability in response to a price increase, and so evidence relating to the price elasticity of demand, the behaviour of buyers, the availability of technically suitable alternative products, transport and distribution costs, informed opinion from various sources, and overseas studies, will all provide useful clues. This has been the approach used with regard to the present application.

44. In addition, markets are also defined in relation to functional level. Typically, the production, distribution, and sale of products proceeds through a series of functional levels. For example, that between manufacturers and wholesalers might be called the "manufacturing market", while that between wholesalers and retailers is usually known as the "wholesaling market". The levels affected by the application have to be determined as part of the market assessment.

Markets for Solid Waste

45. The Commission has found it difficult to define precise boundaries for the markets for waste in this case, given the differentiation with respect to product, geographic and functional levels of the markets involved. Hence, it intends to adopt a pragmatic approach using the information it has collected from several industry participants, and largely restricting its analysis to those markets where the proposed business acquisition would lead to aggregations in market share for the combined entity.

46. Waste material arises as a by-product of the activities of production and consumption of goods and services in the economy. Waste is generated by households, businesses of all kinds, institutions and public litter bins, which results in a demand for its removal and disposal. The suppliers of removal services include private operators, councils (either directly, through their LATEs, or by using outside contractors), and the waste generators themselves (DIY). Hence, the relevant markets are those which broadly encompass the collection, transporting and disposal of waste (where collection and disposal may include sorting and recycling activities). In defining the relevant markets, the various dimensions of markets – product, function and geographic – have to be considered in turn.

Product Market

47. The applicant has argued that there are two product markets where there is an overlap between the services provided by WMNZ and Waste Care. The first, which will be dealt with separately below, relates to portable sanitation services. The second involves the collection and disposal of solid, non-hazardous waste.

48. Hazardous waste differs from non-hazardous waste in requiring treatment prior to disposal. The main categories appear to be industrial waste, contaminated soil (from site restorations) and waste water. Of these, the last is by far the largest component, and is transported by dedicated piped networks to treatment plants. The treatment of hazardous waste generally involves the use of specialised transportation and treatment facilities, although once treated the (solid) waste can be disposed of in general

landfills.[5] This suggests that from both demand-side and supply-side perspectives it is appropriate to treat the collection, treatment and transportation of hazardous waste as belonging to a separate product market. Those wishing to dispose of such waste would not see the services provided for non-hazardous waste as being a close substitute, nor would the transport and other facilities (except landfills) provided for non-hazardous waste be a close substitute for those used in handling hazardous waste. This has not been disputed by other industry participants. Moreover, neither WMNZ nor Waste Care have much involvement in hazardous waste, and the proposed business acquisition would not lead to aggregation in that area.

49. Hence, the Commission takes the view that the relevant market is for the collection, transportation and disposal of non-hazardous, solid waste, but notes that burial in landfills – by far the major form of disposal – may also be used for treated hazardous waste. This overlap is dealt with in the definition of the functional dimensions of the relevant markets.

50. The precise definition of what constitutes non-hazardous, solid waste is a matter of some dispute between the applicant and other parties. The applicant has argued that recycling, C&D and excavated earth should be included in the product market, whereas other parties have argued that one or more of those categories of waste should be excluded. Commission inquiries suggest that the following is appropriate.

51. Firstly, at least a substantial part of the recycling category should be included in the collection functional level of the market, but not in the disposal functional level. Following collection, recyclables often flow in a different stream from that which ends at landfills, because they are handled by commodity buyers and processors.

52. Secondly, C&D waste is more cheaply disposed of in cleanfills than in general landfills. Collection is typically by means of open-top (gantry and hook-load) bins, which are used interchangeably for the collection of general commercial waste. Hence, as with recyclables, this category should be included in the solid waste collection functional level, but not at the disposal functional level (cleanfill disposal not being an issue in this case).

53. Thirdly, excavated earth is used for site reclamations. This work generally involves specialised excavators and other heavy equipment and trucks, and hence tends to fall outside the range of activities of waste companies. Excavated earth should therefore be excluded from all functional levels of the market.

54. The applicant distinguishes three "segments" within the defined product market, as follows:

- municipal – mainly waste from households and public litter bins, collected directly or indirectly (i.e., by contractor) by LTAs;
- commercial – business and household waste by non-LTA collection, i.e., by contractor collection; and

[5] Unlike some other countries, New Zealand does not have special landfills for the disposal of untreated hazardous waste.

- DIY – conveyance to transfer point by the rubbish generators (both households and businesses).

55. These distinctions raise the question as to whether there might, in fact, be two or more product markets present in the collection functional level. From a demand-side perspective, separate household and commercial markets might be distinguishable. The two can easily be differentiated, and it appears likely that the nature of the services are such that in many cases the services for one would not be regarded as close substitutes for the services for the other. Households provide waste for collection in bags or MGBs, with the cost of collection being paid by the householder through local council rates, or by pre-paid stickers affixed to rubbish bags, or by rentals for MGBs. This rubbish is collected by specialised trucks with a compactor of some kind. Commercial waste is generally aggregated at the point of generation in a skip or bin which, depending upon its size, may be carried away for disposal or emptied into a truck which compacts it before moving on to another collection. The collection bins used for commercial collections are typically much larger than those used for household rubbish.

56. Nonetheless, there appears to be a substantial degree of overlap in the supply characteristics of the two areas. For example, in Auckland WMNZ has four MGB vehicles on LTA contract collections which are also used for commercial collections; skips are commonly used both for commercial and household collections; and some commercial waste is collected in bag form as for most household waste. Rear-loading trucks can also easily be modified to undertake front-end loading. This degree of supply-side substitutability suggests that the two areas constitute one market.

Function Markets

57. Between the point of generation and the point of disposal, waste passes through a number of 'processing' stages, or functional levels, conceptually viewed as being arranged in a vertical sequence. The applicant has put forward as the relevant functional levels of the product market the following: collection, transfer station, and disposal. This delineation of functional levels seems to be widely accepted in the industry. The Commission has therefore delineated the functional levels of the market as follows:

- Waste collection and delivery: the collection of non-hazardous, solid waste at the point of generation and its delivery to a transfer station, or direct to a landfill. Collection may include sorting for subsequent recycling. Large commercial waste generators may set up their own recycling schemes, with waste products being returned to them for recycling.[6]
- Waste transfer stations: for some waste, mainly household and small business waste delivered by the generators themselves, or commercial collections in small trucks, there is an intermediate point at which small lots of waste are aggregated into large lots for onward haulage (often after being compacted) to a landfill. Such users are often denied access to landfills (as in Auckland), and so have to deposit waste at transfer stations if they wish to dispose of waste themselves. In some cases, a transfer station may be located adjacent to a landfill, in which case the waste is not compacted prior to burial. Much waste by-passes transfer stations by

[6] For example, [ ]

being hauled directly to the point of disposal from the collection point. Hence, transfer stations compete to some extent with this by-pass traffic.

- Waste disposal: disposal of waste by burial in a landfill. Most non-hazardous, and also some treated (i.e., formerly) hazardous, waste is treated in this way. Alternatives such as cleanfills and incineration are not viable (or are not used) for the bulk of such waste.

58. As both WMNZ and Waste Care are vertically integrated across all of the above functional levels in some geographic markets, there is a possibility that some (or all) of the functional levels could be integrated to such a degree - because of possible economies of scope - that they should be treated as one. However, many smaller operators are not vertically integrated, and there appear to be many non-integrated operators in all of the functional levels apart from disposal, suggesting that vertical integration is not so all-pervasive as to require an integrated market or markets to be defined.

Geographic Markets

59. The applicant argues that the waste collection and transfer station markets are city-based in geographic extent, and that the disposal market is regional. However, the applicant alleges that there will be a trend – just beginning to develop - towards inter-regional movements of waste for disposal, which might extend the sizes of the regions appropriate for the disposal market.

60. The Commission accepts broadly that the geographic extents of the markets in question are likely to be either local (town- and city-based) or regional, given certain characteristics of the industry: that waste has to be collected from individual businesses and households; that the transport costs involved in collection are likely to be significant (the 'product' is relatively bulky to transport) in relation to landfill fees (which are relatively 'low'); and that the transfer and disposal points are in consequence located in or close to population centres.

61. To minimise transport costs, landfills have, historically, been located close to population centres where waste is generated, albeit subject to there being suitable sites and not so close as to generate environmental nuisances. Because of more stringent environmental requirements introduced by the Resource Management Act 1991, and the consequent higher costs of establishing a landfill, there is a trend towards fewer, larger disposal points, located further from population centres, which can benefit from economies of scale from drawing on larger volumes of waste from across a region, albeit at the cost of higher average haulage charges. At the same time, local rubbish tips have been replaced by transfer stations in order to provide the same level of convenience to users, and as a strategic device to secure waste flows by the new private owners of some existing and newly developed landfills. In short, the geographic dimensions of the markets appear to reflect the interplay between environmental considerations (through regulation), the volume and density of waste generation, competition for waste, economies of scale in facilities operation, and convenience and transport costs of users in gaining access.

62. The geographic extent of the markets at each of the functional levels is now considered.

- Waste transfer station market: all small towns appear to have a waste transfer station, and large cities may have two or more. Where there is only one transfer station, and no geographically close alternatives, each is likely to operate within its own geographic market. In larger cities which may have two or more transfer stations, likely overlaps in the collection areas of adjacent stations mean that those would compete in the same geographic market. Here, the city area and its immediate environs is likely to constitute the geographic market. The relevant market therefore can loosely be characterised as local. As the present application involves an aggregation in Auckland only, the relevant market is that in Auckland.

- Disposal market: all larger towns and cities appear to have landfills. These typically service both the population centre and the outlying districts. There appear to be significant throughput economies in landfill operations because of the high proportion of fixed costs, especially for new ones because of the initial Resource Management Act compliance and construction costs. The difficulty of finding suitable sites also appears to contribute to the relatively small numbers of landfills. At the same time, the cost of hauling waste to landfills rises with increasing distance. Using heavy trucks carrying 22-24 tonne loads – the most efficient form of haulage – the cost per tonne rises (according to industry estimates) from around [ ] for 5 kms, to [ ] for 20 kms, and to around [ ] for 100 kms (very occasionally on long hauls the availability of a back-haul cargo may lower rates significantly). These rates make long distance haulage to a landfill unattractive when a closer landfill is available, unless the operator offers a discount on the landfill charge. This may happen for large deliveries. However, LTA-owned facilities seem to be less enterprising in this regard, with the focus being one of providing capacity for local ratepayers. Some landfills operate with artificially restricted catchment areas, sometimes to extend their limited lives and so to delay the expense of building a replacement landfill. The Commission has concluded that, broadly speaking, the geographic extent of the disposal market is regional. It is recognised that it is possible for there to be competition between landfills in some densely populated regions, such as greater Auckland. As the present application involves aggregation only in the Auckland region, the relevant market is that for the Auckland region.

63. Given the geographic dimensions of the transfer station and disposal markets above, the geographic dimensions of the remaining market would then be as follows:

- Waste collection and delivery: this function involves the collection of waste at the point of generation, and conveying it to the transfer station or point of disposal. This market is regarded as being local/regional in extent.

Conclusion on Markets for Solid Waste

64. The Commission concludes that for the purposes of the present application, the following are the relevant markets for solid waste:

- the local/regional market for the collection and delivery of solid, non-hazardous waste;

- the Auckland local market for waste transfer stations for solid, non-hazardous waste; and
- the Auckland regional market for the disposal of solid, non-hazardous waste.

65. Solid, non-hazardous waste has been defined to include recycled and C&D waste, but to exclude excavated earth, in the collection market. For the disposal market, recycled and C&D waste is also excluded.

Portable Sanitation Services

66. A further area of overlap in the activities of WMNZ and Waste Care is in the provision of portable sanitation services. These portable toilets are used primarily at outdoor events and sites where fixed location toilets are not provided or are insufficient. It has been submitted by the applicant that there are four functional levels in this product market: the hiring of the portable toilets; the collection and delivery of the toilets to and from the site; servicing (removal off waste and cleaning); and disposal of the waste. It appears that whereas Waste Care provides all four services, WMNZ's participation is confined to the hiring of portable toilets. Hence, the relevant product and function market is that for the hiring of portable toilets.

67. WMNZ provides its hiring service in several locations around the country, but Waste Care provides its services only in the Hawkes Bay area. Given the relative ease with which portable toilets can be transported, the market would appear to be at least regional in extent. Consequently, the relevant geographic market is taken to be the Hawkes Bay region.

Conclusion on Portable Sanitation Services

68. The Commission concludes that the relevant market is the hiring of portable toilets in the Hawkes Bay region.

Conclusion on Market Definition

69. The Commission concludes that the following are the relevant markets for the purposes of the present application:

- the local/regional market for the collection and delivery of solid, non-hazardous waste, where this waste excludes excavated earth;
- the Auckland local market for waste transfer stations for solid, non-hazardous waste;
- the Auckland regional market for the disposal of solid, non-hazardous waste, excluding excavated earth, recyclables and C&D waste; and
- the market for the hiring of portable toilets in the Hawkes Bay region.

ASSESSMENT OF DOMINANCE

Introduction

70. The assessment of dominance examines how competition in the relevant markets will be affected by the proposed business acquisition, in order to determine whether an acquisition or strengthening of dominance would, or would be likely, to result.

71. The concept of competition in a market is a broad one. It is defined in section 3(1) of the Commerce Act as meaning "workable or effective competition". In referring to this definition the Court of Appeal said:[7]

> That encompasses a market framework which participants may enter and in which they may engage in rivalrous behaviour with the expectation of deriving advantage from greater efficiency.

72. Section 3(9) of the Act states:

> For the purposes of sections 47 and 48 of this Act, a person has … a dominant position in a market if that person as a supplier … of goods and services, is or are in a position to exercise a dominant influence over the production, acquisition, supply, or price of goods or services in that market and for the purposes of determining whether a person is … in a position to exercise a dominant influence over the production, acquisition, supply, or price of goods or services in a market regard shall be had to-
>
> (a) The share of the market, the technical knowledge, the access to materials or capital of that person or those persons:
>
> (b) The extent to which that person is … constrained by the conduct of competitors or potential competitors in that market:
>
> (c) The extent to which that person is … constrained by the conduct of suppliers or acquirers of goods or services in that market.

73. The test for dominance has been considered by the High Court on several occasions. In *Port Nelson*, McGechan J stated:[8]

> Dominance includes a qualitative assessment of market power. It involves more than 'high' market power; more than mere ability to behave 'largely' independently of competitors; and more than power to effect 'appreciable' changes in terms of trading. It involves a *high degree of market control*. (emphasis in the original)

74. Both McGechan J and the Court of Appeal, which approved this test,[9] stated that a lower standard than "a high degree of market control" was unacceptable.[10] The Commission has acknowledged this test in its *Business Acquisitions Guidelines*, which state (p. 21):

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

75. The Commission has applied this standard of dominance in the following analysis.

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[7] *Port Nelson Limited v Commerce Commission* (1996) 3 NZLR 554, 564-565
[8] *Commerce Commission v Port Nelson Ltd* (1995) 5 NZBLC 103,762 103,787 (HC)
[9] *Commerce Commission v Port Nelson Ltd* (1996) 5 NZBLC 104,142 104,161 (CA).
[10] *Commerce Commission v Port Nelson Ltd* (1995) 5 NZBLC 103,762 103,787 (HC); *Commerce Commission v Port Nelson Ltd* (1996) 5 NZBLC 104,142 104,161 (CA).

The Local/Regional Market for the Collection and Delivery of Non-hazardous, Solid Waste

Introduction

76. There are seven local/regional markets for the collection and delivery of non-hazardous solid waste where the proposed business acquisition will result in the aggregation of market share. The markets are those in Whangarei, Auckland, Hamilton, Napier/Hastings, Wellington, Christchurch and Dunedin As these markets share similar characteristics, and as the combined market shares of the post-merger entity in all of them appear to be within the Commission's "safe harbours", the dominance analysis will treat them as a group and analyse them together.

Market Shares

77. Estimation of the market shares of waste collection operators in the various regions has proved difficult. It appears that this is, in part, due to the lack of a central reporting authority in the waste industry. Further, as the collection market is characterised by a large number of small operators, often operating to short-term or informal contracts, it is difficult to accurately assess both individual market shares, and the overall size of the collection market.

78. The Commission has received estimated market share information from a number of major operators, as well as estimations of the total available waste for collection. The Commission has included within the "collection" market, municipal and commercial waste, recycling, and C&D waste. Excavated earth has not been included in this assessment.

79. WMNZ submitted estimations based upon the total waste it believed was available for collection in the various regions. From this figure WMNZ advised of its own market share, and estimated the market share of the merged entity. The Commission has sought to verify the accuracy of those figures through contact with other operators, local authorities and other interested parties. On the basis of the information provided to the Commission, estimates of the market shares of the combined entity in the relevant local markets for the collection and delivery of solid, non-hazardous waste is shown in Table 1.

TABLE 1
Estimated Market Shares of the Combined Entity in Certain Local Collection and Delivery Markets

Market	Estimated Market Shares
Whangarei	[ ]
Auckland	[ ]
Hamilton	[ ]
Napier/Hastings	[ ]
Wellington	[ ]
Christchurch	[ ]
Dunedin	[ ]

80. In the Guidelines, the Commission stated (p. 17) that a dominant position was unlikely to be acquired or strengthened where the merged entity "has less than in the order of a 40% share of the relevant market", or where "it has less than in the order of a 60% share of the relevant market, and faces competition from at least one other market participant having no less than in the order of a 15% market share." The market share estimates in Table 1 reveal that the combined entity will in no case attain a market share which exceeds the Commission's safe harbours for dominance. This finding is in marked contrast to the views of many industry participants spoken to by Commission staff, who maintain that the combined entity would have very large market shares, falling well outside of the Commission's safe harbours. The Commission has concluded that this belief is mistaken, perhaps because of the diverse range of the activities of firms in the industry, and the lack of industry statistics to better inform industry participants.

Constraint by Existing Competitors

81. As the market share figures in Table 1 suggest, these markets are characterised by the presence of numerous competitors, many of them small or very small. The applicant argues that this illustrates the competitiveness of the market.

82. WMNZ has provided the Commission with listings from the Yellow Pages of what it calls "regional competitors" in various regions under the "recycling", "rubbish bin hire" and "waste disposal" headings. The numbers of businesses listed are as follows: Northland, 14; Auckland, 82; Waikato, 42; Napier/Hastings, 27; Wellington, 63; Christchurch, 94; and Dunedin, 21. However, the turnover among small players in the Auckland area has been very high. One industry party submitted a comparison of the listings for 1990 and 1999 shows that excluding WMNZ and Waste Care, only 9 of the 106 listed in 1999 were also listed in 1990, an attrition rate of 91.5% in 9 years. Even allowing for mergers between small operators, this suggests that while it is easy to enter the markets, it is more difficult to succeed.

83. WMNZ (and, to a lesser extent, Waste Care) has made numerous acquisitions of small players over recent years. In its application WMNZ lists ten acquisitions made in the space of the last three years. This has led others to suggest that when a small player gets large enough to offer competition it is taken over. WMNZ maintains that its acquisitions have been aimed mainly at extending the regional scope of its operations.

84. Opponents argue that inclusion of all known participants is artificial, as the majority are single-owner operators which do not have the necessary vehicles or volumes to be considered a true competitor of the merged entity. WMNZ has stated that the provision of a full service for a typical commercial premises, covering offices as well as different parts of a factory, would involve the collection of bags, MGB emptying, a skip service and an open gantry bin. The first two would involve the use of a rear loading vehicle, and the second two a lifting vehicle. It is doubtful that a very small operator could provide this range of services.

85. WMNZ points to the entry and expansion of operators such as EnviroWaste and Onyx as evidence of current competition. EnviroWaste and Onyx both entered the Auckland market in 1995. [

]

86. WMNZ also submits the relatively recent emergence of "facilities managers" within New Zealand has resulted in increased competition for waste collection. Facilities managers, such as Excell Corporation Limited and Serco Group NZ Limited, typically provide a range of maintenance services. Due to their ability to offer these various services, facilities management operators are able to offer "packages" of services to large institutional organisations, such as military camps, and municipal authorities. A component of these services will be waste collection. The Commission notes that parties such as Excell have been successful in acquiring municipal collection contracts.

Constraint by Potential Competitors

87. The applicant has argued that entry barriers are low. Substantial investment is not required to enter on a modest scale. There is a ready market for second-hand collection vehicles. Second-hand rear-loading trucks can be purchased for as little as $30,000. Industry knowledge appears to be readily available, especially for former employees of the larger operators. The apparent continual turnover of small businesses tends to suggest that entry is fairly easy, and that there is a ready supply of new entrants, even if many do ultimately fail.

88. Opponents argue that entry on a very minor basis is possible, but entry at a level sufficient to compete with the larger operators requires specialised vehicles and access to a sufficient guaranteed volume of waste. Where a collection truck has to make a number of pick-ups before it is full, there are likely to be economies of route density which will tend to favour larger operators. Their trucks will, on average, travel a shorter distance and spend less time to get a full load, thus incurring a lower cost per tonne for collection and delivery. On the other hand, small operators may succeed by concentrating on niche product or geographic segments of the market.

89. Critics of the application have argued that for commercial customers, WMNZ's contracts are typically for three years, and incorporate provisions for an automatic roll-over on the expiry date for another term unless the customer gives notice of withdrawal within a certain term of expiry. It has been argued that it is very difficult for aspiring competitors to gain business from those WMNZ customers unless they have precise "inside information" about the exact expiry dates on individual contracts. Competitors are said to be severely disadvantaged by lack of access to such knowledge.

90. Commission staff have inspected copies of WMNZ's contracts, and found that they leave the customer free to determine the length of the contract. [

]

Constraint by Possible Substitutes

91. An alternative potential constraint on the waste collection activities of a supplier may be through own-collection and delivery by both households and businesses. This DIY activity generates not insignificant tonnages of waste. However, the equivalent charges per tonne at transfer stations are relatively high compared to those for

commercial operators, suggesting that commercial operators are likely to be preferred for sizeable volumes.

Conclusion on Dominance in Various Regional Waste Collection and Delivery Markets

92. The market share figures in the various regional markets where market share would be aggregated by the proposed acquisition all fall within the Commission's "safe harbours" for the acquisition of dominance. Further, competition from existing operators and from potential entry appears to be quite strong, with barriers to entry moderately low. Incumbents also face a measure of competition from the ability of some waste generators to collect and deliver their own waste. The Commission concludes, therefore, that the combined entity would not, or would not be likely to, acquire or strengthen a dominant position in any of the regional markets for the collection and delivery of solid, non-hazardous waste.

The Auckland Local Transfer Station and Haulage Market

Market Shares

93. There are currently seven transfer stations scattered across the Auckland region. The market shares of those stations are given in Table 2.

TABLE 2
Market Shares of the Transfer Stations
in the Auckland Region

Transfer Station	Owner/operator	Market Share
Papakura	Waste Management	[ ]
Pikes Point	WMNZ/EnviroWaste	[ ]
East Tamaki	Waste Care	[ ]
Waiuku	Franklin DC	[ ]
Waitakere	Waitakere CC	[ ]
Constellation Drive	EnviroWaste	[ ]
Pukekohe	Franklin DC	[ ]
Silverdale	Rodney Waste	[ ]
Total		**100%**

94. The proposed acquisition would bring within the combined entity the three transfer stations in Auckland south of the harbour bridge. The next station to the south of greater Auckland is at Waiuku, a long way to the south-west of the city. The next stations to the north are those at Waitakere and Constellation Drive (north of Glenfield).

95. However, of the three stations involved in the acquisition, the Pikes Point transfer station is a 50:50 joint venture between WMNZ and NDS, with the management of the facility being subcontracted to NDS, which in turn has subcontracted to EnviroWaste (in which NDS has a 50% interest). Waste is deposited at the station by WMNZ, Waste Care, EnviroWaste, third party collectors and the public. [

] The remainder of the waste is deposited at Greenmount and Rosedale. [ ]

96. The Commission has received tonnage figures for the Pikes Point transfer station. For the 12 month period to March 1999, the transfer station received approximately [ ] tonnes. Of that sum, WMNZ receives approximately [ ], Waste Care [ ], and EnviroWaste the balance of approximately [ ].

Constraint by Existing Competitors

97. The takeover would combine within the merged entity the transfer stations in Papakura (WMNZ), Pikes Point in Onehunga (part interest by WMNZ), and in East Tamaki (Waste Care). The other stations in the market would be those at Waiuku (Franklin District Council), Waitakere (Waitakere City Council), Constellation Drive on the North Shore (EnviroWaste), and Silverdale (Rodney Waste). The combined entity would have a market share of [ ], which would put it within the Commission's "safe harbours". Given the Waiuku station's rather remote location, it is doubtful whether it falls within the relevant market, but its throughput is, in any case, quite small.

Constraint by Potential Competitors

98. It is understood that EnviroWaste [ ] It already has the Constellation Drive station, the only transfer station on the North Shore apart from that at Silverdale some distance to the north, together with being a part-owner of Pikes Point, [ ]

99. Entry conditions do not appear to be difficult. A critical factor would be the choice of a location where the catchment area generates a substantial, relatively untapped, waste stream. Economies of scale suggest that the number of optimally-sized operations are likely to be limited even in large centres such as Auckland. A medium-sized station might cost $1-2 million to build. However, much smaller and less expensive stations are viable for smaller catchment areas. Resource consents appear not to be a major barrier as they are much less stringent than those required for landfills when located in industrial areas. Simultaneous entry into haulage of waste to landfills would not be essential as that part of the business can be tendered out to haulage contractors.

100. It would appear that entry into this market is not conditional upon the entrant being vertically integrated with a landfill disposal business. A well located transfer station which can command a large and stable volume of waste is likely to be able to negotiate favourable access prices to a landfill, providing that there are competing landfills to which its waste could be sent. However, private landfill operators often see a strategic advantage in being vertically integrated with transfer stations.

Constraint by Possible Substitutes

101. Transfer station by-pass is possible for commercial operators, who have direct access to landfills in Auckland. The scope for by-pass depends on the trade-off between, on the one hand, the cost of hauling to, and using the services of, the transfer station (the

latter being around $60-65 in Auckland), as against the cost and travel times to an Auckland landfill for own delivery (with a landfill charge of $40-45).

Conclusion on Dominance in the Transfer Station and Haulage Market in Auckland

102. The market share figures for the operation of transfer stations within the Auckland region fall within the Commission's "safe harbours". Further, competition from other transfer station operators appears to be reasonably strong. Barriers to entry into the transfer station market are reasonably low. Given these factors, the Commission is satisfied that the combined entity would not, or would not be likely to, acquire or strengthen a dominant position in the Auckland local market for waste transfer stations for solid, non-hazardous waste.

The Auckland Regional Market for the Disposal of Solid, Non-hazardous Waste

Introduction

103. Because of the unusually long time periods needed for new entry in this market, caused by difficulties in finding a suitable site, purchasing the land, gaining resource consents and construction of the facility, the constraints posed by both existing and potential new competitors have to be viewed in the context of a period of at least five years. In Auckland, within this time period, the EnviroWaste landfills will have used up their remaining capacity and be closed, leaving only two landfills – Redvale and Whitford – in operation. Thus, regardless of the proposed business acquisition, the amount of competition from existing players is likely to shrink dramatically within the relevant time period for analysis. The effect of the business acquisition – by bringing Redvale and Whitford under the one ownership - will be to eliminate completely all competition between players with existing landfills. The focus then turns to whether potential competition will provide an effective constraint on the combined entity.

Market Shares

104. Basic information about the landfills for solid, non-hazardous waste in the Auckland regional market is provided in Table 3.

TABLE 3
Landfills in the Auckland Regional Market

Landfill	Owner/manager	Remaining consent life	Remaining capacity (tonnes)	Annual tonnage received (tonnes)
Redvale	WMNZ	25 years	15.0 million	300,000
Rosedale	EnviroWaste	3.5 years	[ ]	[ ]
Greenmount	EnviroWaste	4 years	[ ]	[ ]
Whitford*	Waste Disposal Services/Waste Care	17 years	3.5 million	200,000

* Subject to an annual tonnage restriction of 200,000 tonnes. Air discharge consent outstanding.

105. Table 3 shows that the market share of the combined entity would comprise the totals for the Redvale and Whitford landfills. In annual tonnage terms that would amount to [ ] tonnes, or [ ]%. However, because of the limited remaining capacity of the two EnviroWaste landfills at Rosedale and Greenmount, the combined entity would have an [ ]% share of capacity.

106. Within the timeframe of our analysis, both figures will rise to 100% by mid-2003 in the event that there is no new entry. This raises the prospect that, absent entry, the combined entity would attain a monopoly position in the market.

Constraint by Existing Competitors

107. WMNZ has submitted that the merged entity will be effectively constrained by the existing spare capacity of the Greenmount and Rosedale landfills within the Auckland region, and also existing landfills in the Waikato region such as Horotiu.

108. Rosedale and Redvale are both located on the North Shore and therefore appear to compete for waste flows from their similar catchment areas. Likewise, Greenmount and Whitford are located quite close together in south-east Auckland and for that reason would be expected to compete. Although competition appears to be lessened by the fact that Whitford is capped at 200,000 tonnes of waste per year under the terms of its resource consent, and is already operating at that level, and because waste from the Manukau City area is given priority, currently there is a level of competition in Auckland which is absent in most other regional markets where there may be only one, LTA-run, landfill.

109. The Commission has concluded that the relevant timeframe is at least a five year period, and that within that period Rosedale and Greenmount will close. The only remaining competitor - Whitford - would at best provide only limited competition because it is producing at its capped capacity. It is unlikely to compete on price or otherwise behave competitively because it cannot accommodate any more waste. This is the counterfactual against which the effects of the proposed acquisition have to be assessed. The question is whether, in this context, the proposed acquisition would lead to an acquisition or strengthening of dominance in the relevant market. This turns upon whether the presence of the combined entity would have a greater deterring impact upon potential entry than in the counterfactual situation where there is no merger and Redvale and Whitford remain independently owned.

Constraint by Potential Competitors

110. WMNZ has submitted that there are a number of landfill sites which will compete with the merged entity and which are expected to come on stream within the next two to three years. However, inquiries reveal that many of these proposed landfills are not likely to have a significant impact upon the relevant market, the exception being Hampton Downs. Each of the various proposals are now briefly examined in turn.

Puwera

111. This is a landfill proposed by the Whangarei District Council, to be sited just south of the city. The Council has advised that it plans to be operational by 2002. WMNZ contends that the landfill at Puwera will compete with landfills in the Auckland area. WMNZ submits that a landfill the size of Puwera, with an approximate capacity of 6 million tonnes, requires an annual tonnage of 200,000 over a 35 year timeframe, in order to operate economically. WMNZ estimated that the waste generated in the Whangarei region accounts for approximately [ ] tonnes per annum, so WMNZ expects the owner/operator of Puwera to bid for contracts for the disposal of larger volumes of waste generated in the Auckland region.

112. The Whangarei District Council advised that the Puwera landfill has been developed solely on the basis of taking Whangarei and regional waste. Whangarei city waste has been estimated at 40,000 tonnes per annum, and regional waste has been estimated at a maximum of 20,000 tonnes per annum.

113. The Puwera landfill is being developed in "stages" and has been designed on the basis of accomodating regional volumes only. The council advised that in developing the landfill in this way, it is able to control the capitalisation of the development. Any significant intake of "out of area" waste will result in the landfill requiring developmental work at an earlier stage than the forecast lifetime model. The Council has advised the Commission that it has no plans to source "out of area" waste for the planned Puwera landfill.

114. In addition, the Commission considers that the transport costs are likely to take the planned Puwera landfill out of consideration as a competitive constraint on the combined entity.

Horotiu

115. This is an existing landfill at Ngaruawahia, owned by the Hamilton City Council and operated by Perry Waste Services Limited (Perry). Horotiu has consents to operate until December 2006.

116. The Commission understands that, due to a restriction imposed by the Hamilton City Council, the Horotiu landfill can accept waste only from the immediate catchment areas of Hamilton City, Waikato District, and Waipa District. Therefore, Horotiu does not currently compete for waste from any other area, and will not compete for "out of area" waste for the remaining term of its consented life.

117. The Commission understands that Horotiu did compete for Auckland and Western Bay of Plenty waste prior to this restriction. The restriction therefore effectively eliminates Horotiu's presence as a competitor for Auckland, and other area, waste.

118. The Commission therefore considers that the Horotiu landfill is unlikely to be a competitive constraint on the merged entity.

Tirohia

119. This is a proposed landfill sited in the Hauraki district, owned and operated by HG Leech Limited (Leech). Leech has advised that they are planning to be operational by mid-2000.

120. The Commission understands that the Tirohia landfill is a relatively small-scale development, designed to receive waste from the surrounding districts. [
]

121. The Commission therefore considers that the Tirohia landfill is unlikely to effect a competitive constraint upon the merged entity.

Mathers Road, Tauranga

122. This is a site owned by the Tauranga District Council, and is currently the subject of an appeal to the Environment Court.

123. WMNZ contends that the Mathers Road landfill is a further possible entrant into the landfill operation market. WMNZ submits that appeals to the Envrionment Court regarding the consents for Mathers Road could be resolved during 1999. If the appeals were resolved and the decision were taken to proceed by the Tauranga District Council, WMNZ submits that construction could begin within one year, and that the landfill could be operational by 2003.

124. Tauranga District Council staff advised that the Council first considered owning its own landfill in the early 1990's, before there were private sector landfill operators in the waste disposal industry. The Council investigated a suitable site and purchased land for development into a landfill. Since that time however, the Council has been delayed by extensive RMA objections, WMNZ being one of the current appellants.

125. The Council has advised that Mathers Road was proposed as a "sub regional" landfill facility. On that basis, a land use designation was sought, and granted, based upon a limit of 80,000 tonnes per annum. This tonnage represents the estimated Western Bay of Plenty waste only. In the event that collected waste from the region did not reach this level, there is the opportunity to bring in "out of area" waste until the annual capacity is achieved. However, the Council advised that the proposal was developed on the basis that the landfill would serve the Western Bay of Plenty only, and it was not intended to source waste from out of the region. Therefore, any landfill at Mathers Road will not compete for "out of area" waste.

126. The Council has made the decision to proceed with the current appeal hearing, and expects that a decision could be made within 12 months. At that point, the Council has advised that it will revisit the issue of owning and operating its own landfill, given that a number of private operators are now offering alternatives. The Council cited both the Hampton Downs proposal and the Olivine proposal as possible alternatives to the Council operating its own landfill.

127. The Commssion concludes that given the restricted capacity of the landfill, and the uncertainty as to its development, the proposed Mathers Road facility is unlikely to act as a constraint on the combined entity.

Olivine

128. Olivine has plans to incinerate waste at the former Meremere power station in the north Waikato. Olivine has submitted a consent application to the regional authority, however no hearing date has yet been set.

129. The Olivine proposal is based upon "waste to energy" technology, as yet untested in New Zealand. Industry sources advised that any Olivine proposal is likely to be strongly challenged on both environmental and technical grounds. Further, many industry parties spoken to were dismissive of the Olivine technology, and doubted whether the project would ultimately receive the necessary consents to begin operating.

130. Given the opposition to the Olivine proposal, the Commission believes that it is reasonable to anticipate a lengthy consent process, with further appeals to the Environment Court also likely.

131. For both these reasons, the Commission concludes that it is unlikely that the Olivine proposal can be regarded as a likely entrant into the disposal market, particularly within the five year timeframe which the Commission has adopted in considering this proposal. [ ]

132. Given the uncertainty of the Olivine development, the Commission is not satisfied that it is likely to act as a constraint upon the merged entity.

Other Potential Entrants

133. In addition to these proposed landfills, WMNZ submits that existing landfill operators such as the Hamilton City Council and Perry are also seeking new sites. WMNZ also contends that Onyx is interested in developing a landfill.

Hamilton City Council

134. WMNZ submitted that the Hamilton City Council may be seeking a new site, with their existing landfill at Horotiu due to close in December 2006.

135. Hamilton City Council has advised that it has made no investigation into a new landfill. The Council advised that they are watching the industry, and considering the alternatives available to them. The Council views the alternatives as including: private landfill, a joint venture with private operator, or the Council developing its own site.

136. The Council has advised that it considers that a likely timeframe from the decision to investigate a landfill opportunity, to ultimate operation of the landfill, is approximately 10 years. The Council reiterated that it has not started investigations into a landfill, and has no immediate plans to do so.

137. Given the circumstances, the Commission does not consider the Hamilton City Council to be a likely entrant into landfill operation within the next 5 years.

Perry Waste Services (Perry)

138. WMNZ submits that Perry is well advanced in their search for a facility in the Waikato. A number of other industry sources identified Perry as likely to develop a new landfill.

139. [

]

140. [

]

141. The Commission is not satisfied that Perry is likely to act as a constraint upon the merged entity within the next five years.

Onyx

142. WMNZ submitted that Onyx is a potential entrant into the market for landfill disposal services. [

]

143. [

]

144. [

]

145. The Commission is not satisfied that Onyx is likely to act as a constraint upon the merged entity.

Hampton Downs

146. EnviroWaste has notified this proposed landfill, at a site in the north Waikato near Te Kauwhata. It is planned to be operational upon the closing of the EnviroWaste landfill at Rosedale Road in Auckland, in 2002. Subsequent analysis will focus upon the nature of the entry conditions facing a proposed landfill, including further analysis of the Hampton Downs proposal.

Conditions of Entry

147. Entry conditions, including the nature and height of any entry barriers, must be determined before the threat of new entry, which might constrain the conduct of the merged entity, can be properly evaluated.

148. WMNZ accepts that barriers to the development of new landfill sites are relatively high. Industry parties spoken to agree that barriers to entry are high, citing a number of issues which are discussed below. Notwithstanding high entry barriers, WMNZ

contends that a well-resourced party will be successful over a three to five year timeframe.

149. A review of the relevant entry conditions is provided below.

Suitable Site Location

150. The securing of a suitable, strategically placed site upon which to develop a landfill is a major entry component. As discussed earlier, the trend is towards larger, regional landfills, operating to high environmental standards, with the capacity to receive waste from extended geographical boundaries.

151. Before settling upon a site, extensive geological and technical assessments must be made of the disposal site and surrounding area. [

] All parties agreed that this initial geological testing was an expensive component of site location.

152. EnviroWaste's "Initial Neighbourhood Information" publication reports that the site at Hampton Downs was selected after a "detailed examination of more than 50 other options in the South Auckland/Waikato area".[11] [

] These examples support the generally held view in the industry that environmentally robust and suitably located sites are very scarce.

Regulatory Requirements

153. The operation of landfills is subject to the resource consent process under the Resource Management Act (RMA). There are a number of discharge consents required, which must be obtained prior to the operation of the landfill. Consents can be modified or cancelled as the operation of the landfill continues. The effect of these consents is that modern landfills operate to very high environmental standards.

154. The RMA also provides for the lodging of objections to any proposed development, or changes to or extensions of existing permissions for existing sites. Industry parties spoken to acknowledged that the use of objector rights under the RMA was "very active", and were likely to lead to delays for any party seeking to develop a landfill.

155. Industry sources advised that objection to landfill projects can be expected from local residents, farmers, tangata whenua, environmental groups, and operators of other landfills. Further, when consents are issued, parties advised that there is a "high" chance that the consents will be appealed to the Environment Court.

156. While industry parties accepted that delays and appeals were a likely factor in developing a landfill, there does not appear to be a recognised length of time as being the "usual" consent period. The consent process for a site will depend upon the particular circumstances of the application. [

[11] Hampton Downs Landfill, EnviroWaste Services Limited, August 1997.

]

157. The Commission considers that WMNZ is the most likely objector to any proposed landfill development, and that the EnviroWaste timetable is realistic.

High Capital Cost

158. It is recognised by all parties that the development of a landfill requires substantial capital investment. In addition to the cost of geological and environmental testing, there is the purchase of the land, the consent and appeals process, and ongoing RMA compliance costs. [

]

159. Whangarei District Council has published plans for a new landfill, as outlined above. It has been reported that the initial stage of this development, expected to take three years, will cost $8.5 million.[12] [

]

160. The Commission concludes that establishment costs for a new landfill represent a significant cost to any potential entrant. Further, the bulk of these costs are sunk costs, with little prospect of recovery should entry be unsuccessful. This increases the downside risk from investment in a landfill, and thereby serves to discourage entry in the first place.

Economic Volumes

161. WMNZ submits that a further barrier to entry into the landfill disposal market is the "need for economic volumes" of waste. Sufficient throughput is required in order to allow the high fixed costs of modern (i.e., Resource Management Act-consented) landfill operation to be spread more thinly, so that unit cost is low enough to be covered at a price which is competitive with that for other avenues of disposal (predominantly, other landfills). Other parties have recognised that access to sufficient volumes of waste is needed to economically justify the establishment of a modern landfill, including EnviroWaste in respect of its proposed Hampton Downs landfill development.

162. In most regional markets the volumes of waste in combination with the throughput economies appear to be insufficient to justify more than one modern landfill. For example, a number of Councils in Canterbury, including the Christchurch City Council, have banded together to develop a new landfill for the Canterbury region. In such markets, modern landfills may have a natural monopoly characteristic. The market may not be large enough to sustain more than one, so that entry against an incumbent would be unlikely, and were it to be attempted, fraught with difficulty and therefore very risky.

163. [

[12] The Northern Advocate, 18 March 1999.

] On the information received, the Commission considers that there appears to be available waste that is contestable, but notes that to date, EnviroWaste have not been able to obtain a significant share of the collection market.

Vertical Integration

164. In pre-RMA days when landfills were owned by local territorial authorities, landfills would accept the appropriate waste regardless of who delivered it. With the trend in some parts of the country towards private ownership and operation of landfills, and with landfills being a potential natural monopoly facility, the possibility is raised for vertically integrated landfill operators to exert market power.

165. In the present application, a large number of parties have expressed concern that the combined entity – by virtue of the vertically integrated nature of the two constituent companies - would control a significant share of collected waste, which would then be directed to its landfills. Moreover, it has also been claimed that were such an entity to have market power, it would be able to price discriminate in favour of its collection operations and against those of rival operators. Some market power is likely, even where there are two competing – but spatially separated - landfills in a market, to the extent that for individual customers, transport costs will dictate that the closer landfill will be preferred. This could be used to further extend its control of the waste streams, adding to the difficulty of a potential entrant in the landfill market of securing sufficient volumes to make entry viable.

166. It has also been argued that simultaneous entry into the transfer station market is a strategic necessity in order to secure waste streams for the landfill. However, EnviroWaste already owns one transfer station in Auckland and operates another.

Incumbent Response

167. The threat of strategic behaviour by the incumbent appears to be a major factor which may influence new entry into the landfill market by another operator. An entrant faces the prospect of encountering an adverse response by an incumbent seeking to preserve its market share. Incumbent response could include the use of appeals under the RMA to thwart entrants; its ability to formulate a counter-strategy in the time allowed by the slow entry process; and the ability to selectively price at marginal cost to retain business. For example, the mid-point between Redvale and Hampton Downs lies just north of Manakau City, and both landfills would be expected to price competitively in that area to secure additional business from the other.

168. WMNZ has made it clear that it is ready to appeal against resource consent applications and decisions which it regards as imposing landfill consent conditions falling short of the high standards which are applied to Redvale. It has a number of such appeals outstanding. It argues that given the uneven standards applied by different regional councils, it would be unfair if one were to consent to a landfill at lower standards than apply to Redvale. Nonetheless, the effect of these appeals is to delay the entry of potential competitors to WMNZ.

Assessment of the Constraint by Potential Competition

169. The Commission recognises that potential competition can act as a constraint on the exercise of market power. Hence, the assessment of the nature and extent of that

constraint represents an important element in the evaluation of whether, in a business acquisition, the combined entity will acquire or strengthen a dominant position.[13]

170. In the present case the issue is whether WMNZ will acquire or strengthen its prospective dominant position in the Auckland regional market for the disposal of solid, non-hazardous waste through its acquisition of Waste Care. This depends upon whether the acquisition will have the effect of reducing the likelihood of entry, especially the planned entry of Hampton Downs into the market to compete with the combined entity's Redvale/Whitford landfills, which will, in the absence of such entry, gain a monopoly position in the market over the five year timeframe used. The analysis above has shown that of various potential entrants, EnviroWaste's proposed Hampton Downs landfill is the only one which is likely to offer a constraint within the relevant timeframe.

171. In order for the threat of market entry to be a sufficient constraint on the exercise of market power, the Commission's approach is based on the "lets" test. Under this test, to constitute a sufficient constraint, entry must satisfy all four of the following criteria: it must be *l*ikely, sufficient in *e*xtent, *t*imely and *s*ustainable.[14] This case is unusual in that the market circumstances are such that the test has to be applied to a single, identified potential entrant, rather than to entry in generic terms. Each of the "lets" test criteria are now assessed in turn in relation to the Hampton Downs proposal.

Likelihood of Entry

172. As indicated earlier, EnviroWaste has acquired the land for the Hampton Downs landfill, undertaken the necessary geological and related site assessments, and in April 1999 applied for the required resource consents with a very comprehensive submission. Expenditure to date has totalled [ ], of which [ ] has been spent on acquiring the land, and [ ] on investigating sites and preparing the submission. Only the latter is a sunk cost, as the land could be sold in the event that EnviroWaste elected not to proceed.

173. Although EnviroWaste does not have access to information on the costs incurred by WMNZ in building the Redvale landfill, it believes that the costs of building Hampton downs will be roughly comparable. Each site has certain advantages and disadvantages vis-à-vis the other, but these are thought likely roughly to balance out. However, a crucial factor for Hampton Downs will be to attract a sufficient waste stream over which to spread its fixed costs, and so to compete with Redvale. EnviroWaste has told the Commission that the minimum quantity needed for break-even operation is around [ ] tonnes, and that the figure originally anticipated was [ ] tonnes.

174. Transport costs are also a significant consideration in competition between the two landfills, but the half-way point between the two is north of Manukau City, indicating the potential for Hampton Downs to compete on a transport costs basis in South Auckland. This location also allows waste to be transported from other areas outside of the defined market, such as Hamilton and surrounding areas. However, large quantities of waste are unlikely to be sourced from these other markets.

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[13] Commerce Commission, *Business Acquisitions Guidelines, 1999*, Wellington, p. 19.
[14] *Ibid.*, pp. 19-20.

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175. While the reduction in the projected waste flows to Hampton Downs consequent upon the business acquisition appear to the Commission to be unduly pessimistic, and some of the factors behind that reduction could occur whether or not the acquisition goes ahead, a significant reduction in flows seems likely. Moreover, any such reduction to Hampton Downs will be mirrored by an increase to Redvale, such that the former's unit costs will rise while the latter's will simultaneously fall. A competitive imbalance could easily develop in which Hampton Downs could find itself increasingly unable to compete on price.

176. Two other potential entrants into landfill operation in the broader Auckland area, [

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177. As pointed out earlier, building a large, modern landfill is a highly risky investment. The sums required are large, and once spent they are mostly sunk, meaning that they cannot be recouped upon exit. This risk of loss can only be reduced if a large waste stream can be secured. However, EnviroWaste has operated as a collector in the Auckland area for only three years, and has experienced difficulties in building up its share of the collection market in competition with WMNZ, Waste Care and others, particularly in the commercial segment. Moreover, low marginal costs of landfill operation potentially exposes the entrant to selective price discounting by an incumbent, further jeopardising its waste flows.

178. To be an effective constraint on an incumbent, entry must be likely in commercial terms, for which there has to be a "reasonable prospect of achieving a satisfactory return on . . . investment".[15] In this context, it should be noted that a supply gap would not be opened should no entry occur; Redvale has sufficient capacity at current rates to take all of Auckland's waste for 15 years, and in addition, the combined entity would also control Whitford. Hence, entry has to take place through, in large part, a wrestling of market share away from a well-established incumbent with a substantial share of the collection market.

179. For these reasons, the Commission has concluded that the prospect of entry from Hampton Downs does not meet the "likely" criterion in the "lets" test.

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[15] *Ibid.*, p. 19.

Extent of Entry

180. If entry is to constrain an otherwise dominant firm, then entry must potentially be at a scale and spread of sales or operations as to impact significantly on its behaviour.

181. In the present case, the evaluation relates to the constraining influence of one, identified potential entrant. Hampton Downs would have a capacity almost identical to that of Redvale, and would fall within the delineated geographic market. As an entrant, Hampton Downs would therefore meet the "extent" criterion.

Timeliness of Entry

182. To constrain effectively the exercise of market power to the extent necessary to alleviate concerns about market dominance, entry must be likely to occur before consumers or users in the relevant market are detrimentally affected to a significant extent.[16] The Commission has said that the relevant time period has to be considered on a case-by-case basis. Given the nature of the entry conditions into landfill operations, as discussed earlier, the relevant time frame appears to be at least five years.

183. As indicated earlier, both of EnviroWaste's two landfills in Auckland – Rosedale and Geenmount – are nearing the end of their lives. Rosedale is due to close in about three-and-a-half years at the end of 2002 (although it could be earlier if waste flows fill it sooner), and Greenmount in about four years in mid-2003. As the closure of Rosedale approaches, and certainly after it has closed, Redvale might – absent entry – be able to start exercising market power. That market power would be accentuated with the closure of Greenmount. At that point, with the acquisition, the combined entity would – again, absent entry – be the sole supplier of landfill disposal services in Auckland, and is likely therefore to gain market power. The issue then is whether the entry of Hampton Downs would be sufficiently timely to prevent such market power being exercised by the incumbent.

184. There are considerable uncertainties over how quickly the Hampton Downs facility could be brought into "production" should it go ahead, primarily because of the resource consent procedures under the RMA. Different parties have expressed different views on the time required, even though most accept that any decision by the Regional Council is likely to be appealed to the Environment Court. A period of two to three years is often mentioned, and EnviroWaste itself [

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However, the Commission is aware of other landfill consent applications having been held up for significantly longer periods.

185. The Commission concludes that there could be a period before Hampton Downs entered the market when the combined entity could exercise market power over and above what an independent Redvale could have exercised. This market power would most likely be exercised by the raising of landfill charges.

186. It has also been suggested by smaller independent waste collectors that the incumbent could price discriminate in favour of its own collection operation, thereby making it difficult or impossible for independents to compete in the collection market. This could make entry even more difficult in landfill operations. However, this would involve the combined entity foregoing monopoly profits on its own landfill deliveries

[16] *Ibid.*, p. 20.

in order to drive out competitors from the collection market, without any prospect of increasing profits at the collection level by raising prices there. As a general rule, monopoly profit earned at one vertical level in the production process usually cannot be increased by gaining control at another vertical level, although it is conceivable that the combined entity might favour such a strategy if it were significantly to impede entry.

187. The Commission concludes that even if the entrant were to overcome the "likely" aspect of the "lets" test discussed above (i.e., the aggregation of waste by the combined entity leaving less available for the entrant), the "timeliness" aspect would raise further difficulties. Uncertainties over the consent process, by delaying entry, might allow the incumbent to use its market power to behave strategically so as to make access to waste for its landfill through the collection market more difficult

Sustainability of Entry

188. Entry has to be sustainable in the sense that it is likely to be profitable in the long-term, otherwise there will not be a lasting economic incentive to enter the market.

189. In the present case involving Hampton Downs, entry is likely to be sustainable, if it were to occur, because of the large sunk costs of the facility, which once committed would serve to deter exit, and the long-term view of the entrant needed to undertake such an investment.

Conclusion on Constraints from Potential Competitors

190. The Commission concludes that while entry into the relevant market would be sufficient in extent and sustainable, it would be neither likely nor sufficiently timely to constrain the combined entity.

Constraint by Possible Substitutes

191. Recycling, incineration and cleanfills have been promoted by the applicant as an alternative to landfill. However, some parties have claimed that these options are expensive and/or have a minimal constraint upon landfill disposal. It is likely that these alternatives do not effect any significant constraint upon the merged entity with regard to its landfill disposal operations in the relevant market.

Conclusion on Dominance in the Auckland Regional Market for the Disposal of Solid, Non-hazardous Waste

192. Over the latter stages of the five year timeframe the combined entity would face no existing competition, compared to the counterfactual where Redvale would face some competition from Whitford. The acquisition would also raise the barriers to entry for Hampton Downs, the only landfill realistically able to be built within the timeframe and on a scale which would effectively constrain the combined entity, by reducing the waste flows available to it and by the potential for strategic behaviour which could reduce the viability of entry.

193. For the reasons given above, the Commission concludes that the acquisition is likely to lead to the combined entity acquiring or strengthening a dominant position in the market.

The Hiring of Portable Sanitation Services in the Hawke's Bay Area

Market Shares

194. WMNZ estimate that the size of the market for the hire of portable toilets in Hawke's Bay, in dollar terms, is between [ ]. Of this, WMNZ has revenues of approximately [ ], and estimates Waste Care to have revenues of around [ ]. WMNZ submits that, on these figures, the combined entity will have a market share of around [ ].

195. Other industry participants were unable to forecast the likely size of the overall market. However, they were able to estimate, with some accuracy, their own respective revenues. It is noted that the following table (at para 197) does not include a number of sizeable "out of region" operators.

196. Based upon discussions with market participants, the Commission estimates that relevant shares in the market for portable sanitation services in the Hawke's Bay area would be as follows:

Table 4
Estimates of Market Shares for the Hiring of Portable Sanitation Services in the Hawke's Bay Region

Participant	Estimated Annual Revenue ($)	Estimated Market Share
WMNZ	[ ]	[ ]
Waste Care	[ ]	[ ]
Merged Entity	**[ ]**	**[ ]**
Portable Sanitation Ltd	[ ]	[ ]
Hire Master	[ ]	[ ]
Rush Hire	[ ]	[ ]
Total	**[ ]**	**100%**

197. On the basis of the above figures, the combined entity's market share would fall within the Commission's "safe harbours" (refer para 80). The figures support the view of operators, that there is significant competition within the market.

Constraint by Existing Competitors

198. WMNZ submits that the combined entity will be constrained by the existing competitors in the market.

199. As evidenced by the estimated market share data, there appears to be significant competition at present in the Hawke's Bay market. In addition to those operators listed above, there is a number of general hire companies who offer portable sanitation hire, as well as several significant "out of region" operators.

Conclusion on the Constraint by Existing Competitors

200. The Commission is satsified that if the proposal were to proceed, there would be an effective constraint provided by existing competitors on the combined entity.

Constraint by Potential Competitors

201. WMNZ submits that the combined entity will be constrained by potential competition from market entry, either locally or from established "out of region" operators. WMNZ has argued that entry barriers are low, with portable toilets commonly costing approximately [ ]. Further, WMNZ submits that it is not necessary to have a presence in any particular region, in order to supply portable toilets into the area. It argues that delivery, servicing and disposal can be sub-contracted to other organisations.

202. WMNZ listed a number of competitors which it claimed could readily expand their business into Hawke's Bay, or that could supply the Hawke's Bay area from their existing business base.

203. Industry participants agreed that the average purchase price of a portable toilet was approximately $1,800 to $2,000. No party suggested a particular number of toilets required for entry into the market. It was commonly suggested that the number of toilets purchased would be determined by a number of factors, including the size of the proposed operation, and the geographic area likely to be served. A number of parties suggested that an operator could enter the market with 10-15 toilets. Industry sources all agreed that there were low barriers to entering the market.

204. Industry enquiries confirmed that a number of operators supply portable toilets into districts where they do not have a presence. It appears commonplace for events in the Waikato and Bay of Plenty areas to be serviced by both local and Auckland operators, while event organisers in the Hawke's Bay, in addition to using local operators, have contracted with operators in the Manawatu and Wellington areas.

Conclusion on the Constraint by Potential Competitors

205. Given the above factors, the Commission is satisfied that potential entry into the market by a new operator, or an existing "out of region" operator, would act as a constraint on the combined entity.

Conclusion on Dominance in the Market for Portable Sanitation Services in the Hawke's Bay Area

206. Having regard to the factors outlined above, the Commission is satisfied that the proposed acquisition would not result, or would not be likely to result, in WMNZ acquiring or strengthening a dominant position in the market for portable sanitation services in the Hawke's Bay area.

OVERALL CONCLUSION

207. The Commission has considered the likely impact of the proposal in the following markets:

- the local/regional market for the collection and delivery of solid, non-hazardous waste, where this waste excludes excavated earth;
- the Auckland local market for waste transfer stations for solid non-hazardous waste, excluding excavated earth;
- the Auckland regional market for the disposal of solid, non-hazardous waste, excluding recyclables, C&D waste and excavated earth; and

- the market for the hiring of portable sanitation services in the Hawke's Bay region.

208. Having regard to the various elements of s 3(9) of the Act, and all the other relevant factors, the Commission is satisfied that the proposal would not result, or would not be likely to result, in any person acquiring or strengthening a dominant position in the following markets:

- the local/regional market for the collection and delivery of solid, non-hazardous waste, where this waste excludes excavated earth;
- the Auckland local market for waste transfer stations for solid non-hazardous waste, excluding excavated earth; and
- the market for the hiring of portable sanitation services in the Hawke's Bay region.

209. Having regard to the various elements of s 3(9) of the Act, and all the other relevant factors, the Commission is not satisfied that the proposal would not result, or would not be likely to result, in any person acquiring or strengthening a dominant position in the Auckland regional market for the disposal of solid, non-hazardous waste (excluding recyclables, C&D waste and excavated earth).

DETERMINATION ON NOTICE OF CLEARANCE

210. Accordingly, pursuant to s 66(3) of the Act, the Commission declines to give clearance for the proposed acquisition by Waste Management NZ Limited of 100% of the shares and voting rights of Waste Care Limited and its subsidiaries from Sita New Zealand Limited.

Dated this 14th day of May 1999

M N Berry
Acting Chairman