

# Annual Review 2004

Holcim (New Zealand) Ltd





#### FRONT COVER:

Towards Zero Harm –

John Lindsay (Chairman) and  
Rex Williams (Managing Director)  
conducting a Tool Box meeting  
with staff at Lyttelton Depot.

A Tool Box meeting is a method used to  
communicate the Towards Zero Harm  
principles throughout the Company.  
Showing commitment from the top,  
John and Rex have conducted a number  
of these meetings around  
the country across all divisions.

Lyttelton Depot employees are, from  
left, Rachael Guthrie, receptionist,  
Ronald Burton, tanker driver, Jimmy  
Young, storeman, Stuart Lockie, depot  
co-ordinator, Manfred Grick, storeman  
and Lyndon Painter, depot supervisor.



#### RIGHT:

Ericsson Stadium –

Mike Turner, Mainzeal project manager  
(left) and Peter Murphy, Auckland  
account manager at the time, discuss  
plans for the new Ericsson Stadium  
stand, which contains 3000 cu.m. of  
Holcim concrete, much of it fair-faced  
and fully exposed. A number of very  
difficult technical requirements had to  
be met by Holcim New Zealand during  
the construction phase. For example,  
there are 11 post-tension raking beams  
holding up the bleachers (rows of  
seating) and all of these were fabricated  
on site by Highrise Construction Ltd.  
Because of the steepness of the raking  
beams, the concrete had to be setting  
as placed, with zero slump instead of  
in its usual fluid form. To achieve the  
right consistency, significant resources  
and technical know-how along with  
precision timing were required for  
the deliveries. Not only was the  
concrete required to be at the correct  
specifications, it also had to achieve a  
strict uniformity of appearance as most  
of the structure is exposed,  
and as such is a very public design  
feature of the building. To avoid traffic  
hold-ups, the concrete was poured at  
dawn with constant liaison between  
plant and site staff over each batch  
so that the mix could be fine-tuned  
according to the weather and any  
known delays in delivery.





## Customer Focus



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# Chairman's & Managing Director's Review

Comprehensive programme of safety behaviour change **Towards Zero Harm** initiated throughout the company and subsidiaries, with a **statement of absolute support** from Board and led by the Chairman and Managing Director.



 John Lindsay, Chairman



 Rex Williams, Managing Director

**Consolidated all divisions sales rose 14% to a record \$283m**, however EBITDA only increased by 2%. High production costs and imported cement have significantly reduced margins. NPAT was \$30.3m ..... 11

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#### ■ Outlook 2005

**Strong demand for cement likely to continue** into 2005 with an increase in infrastructure and commercial projects.



## Economic Performance



**Demand for cement was strong during the year, with industrial and commercial construction continuing at high levels, although residential activity fell slightly in the second half.**



The new Environment Canterbury building in Christchurch contains concrete from RMC Concrete, a 50% joint venture company with HW Richardson Group Limited. From left, Peter Jamieson, manager of Contract Holdings, who carried out the construction work, Gary Hanser, manager of RMC, and Murray Dickson, national sales manager for Holcim Cement. Originally known as Isaac Concrete, RMC Concrete's 22 staff, located at the McLeans Island plant just outside Christchurch, produce ready mixed concrete mainly for the commercial construction market.





## Economic Review

Total cement sales increased by 14.5%, which flowed into increased concrete and aggregate sales. The amount of cement imported from Holcim Ltd plants was 23% of total cement sales.

Although imported Holcim cement enabled us to meet the market demand, this cement is more expensive to buy and ship, and as a result cement margins overall were affected.

Lime sales were steady, reflecting increased competition for McDonald's Lime Ltd (72% owned by Holcim New Zealand). During the year, McDonald's Lime embarked on a five-year contract to supply Papua New Guinea's Lihir Gold Ltd.

Concrete sales increased 15%, and aggregate sales rose by 2% – a smaller increase because there were two fewer quarries in 2004.

A substantial part of the increase in concrete sales resulted from the contribution of our 50% joint venture, the ready mixed concrete operator AML. This joint venture is very well managed by H W Richardson Group Ltd and operates plants throughout New Zealand. In the South Island, H W Richardson Group Ltd's Allied Concrete is also a major customer of Holcim Cement.

The December 2003 purchase of a significant minority share in Atlas Concrete also benefited cement and aggregate sales. Atlas operates five ready-mixed concrete plants in Auckland and one in Northland, and is also involved in the extraction and distribution of sand and aggregates. In its first full year, Atlas performed in line with expectations.

In Fiji, the 24% owned cement company sold a steady 108,000 tonnes. By year's end its ageing kiln had closed, and clinker was instead being imported for processing into cement in a refurbished ball mill.

### Holcim Ltd

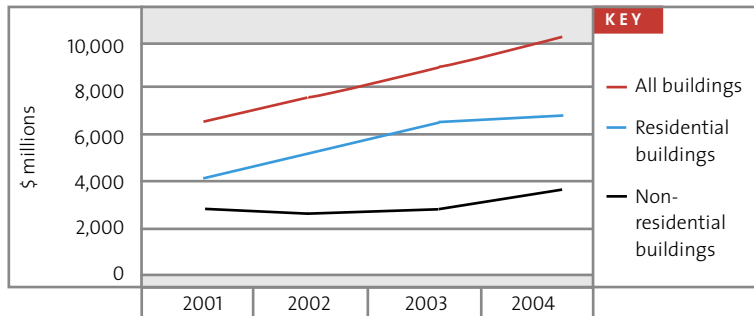
In the nine months to 30 September 2004 Holcim Ltd's worldwide net sales revenue rose by 6.6 percent to CHF 10,017 million, and the consolidated operating profit grew by 15.3 percent to CHF 1,787 million.

The Company's operating profit margin showed further improvement, widening to 17.8% (nine months 2003: 16.5), achieved with improved capacity utilisation and further cost-cutting measures in the areas of sales, administration and production.

Holcim Ltd ([www.holcim.com](http://www.holcim.com)) reports its annual results at the beginning of March each year.



### Building consents



Source: Department of Statistics.

### Building consents and Gross Domestic Product

The annual value of building consents, and the annual rate of increase in Gross Domestic Product (GDP) are two key barometers for cement, aggregates and concrete consumption.

The value of all building consents issued in the twelve months to 31 December 2004 was \$10.71 billion, an 18% increase over the previous period. Of this value, \$7.00 billion was derived from the residential building sector and \$3.70 billion from non-residential. As seen in the table above, both sectors have shown growth in the past four years, with non-residential showing 38% growth in 2004. In 2004, consents for 31,423 new dwellings were issued, the highest number since 1974.

In the year to 30 September 2004 the economy's GDP grew 4.6 percent, up from the 3.7 percent growth in the previous period.

### Rebranding

From the "tangible" perspective, with the exception of a few concrete trucks and the Avondale concrete plant, the group re-branding project is now complete.

Preliminary results of a recent internal audit (which will be completed early 2005), indicated that employees were very pleased with the new name and image. Comments such as: "We seem to have grown in size," "We're far more visible," and "We are now more professional," are very encouraging.

The audit showed that there was general acceptance and understanding of the visual branding, but that more work needs to be done on gaining understanding of the Company culture and how our values are an important part of the brand. With the recent introduction of the Brand Communication Guidelines, an educational programme is to be introduced to promote these in conjunction with the new brand values.



The Milburn Carrier II loading at Westport.



Erik Inkster, Senior Master on the Milburn Carrier II



# Governance

The Board of Directors of Holcim New Zealand is responsible for guiding the Company, upholding its reputation, and overseeing corporate responsibilities towards stakeholders.

## Board members

The Board comprises six directors (see page 42), of whom three (including the Chairman) are resident in New Zealand. During the year, John Ede retired after 16 years of outstanding service on the Board, and appointed in his place was Tom Clough of Switzerland. Jerry Maycock stepped down as Chairman as a result of his increasing business commitments in Australia, and John Lindsay – a director for 5 years – became Chairman.

## Audit and Compliance Committee

The Audit and Compliance Committee meets three times a year. As well as monitoring the internal audit function and reviewing the annual accounts and financial statements, the Committee reviews the Company's environmental and health and safety compliance. The Committee also reviews the Company's insurance risk, the appointments of its insurance broker, and internal and external auditors.

The internal audit function is accountable under an Internal Audit Charter. The Charter governs and monitors the conduct, activities and role of the internal audit function and ensures full access to Company records.

The head of Holcim Group Internal Audit, who reports to the Chairman of Holcim Ltd, routinely monitors and reports on Holcim New Zealand internal audit procedures.

## Code of conduct

High business ethics and personal integrity ensure our credibility and reputation as a company.


During the year, Holcim Ltd adopted a Code of Conduct, applicable worldwide as "the guide to the way we do business". For Holcim New Zealand, the guide reinforced the Board's existing governance principles that are based on those of the Institute of Directors.

The code covers corporate governance, corporate social responsibility, sustainable environmental performance, compliance, the use and protection of assets and information, conflict of interest, gifts and donations, records and accounting, communication, and individual responsibility. All employees are expected to adhere to this Code of Conduct in both the letter and the spirit.

## Safety

The Company's adoption of the Towards Zero Harm programme has the unqualified support of the Board, and during the year the Chairman and the Managing Director jointly announced the programme. Both then emphasised the Board's backing by presenting at initial grassroots "toolbox meetings" held at worksites around the country.



 Christina D'Aloisio, executive assistant to the Managing Director.

# Financial Result

The domestic market once again remained strong overall, supported by a high level of building consent applications. These conditions are expected to continue well into 2005.

Holcim New Zealand's total sales were \$283.2 million, which was 14% up on last year. Holcim Cement's total sales were 622,000 tonnes, of which 467,000 tonnes were produced by Westport Works, 145,000 tonnes (23%) imported, and 10,000 tonnes purchased domestically.

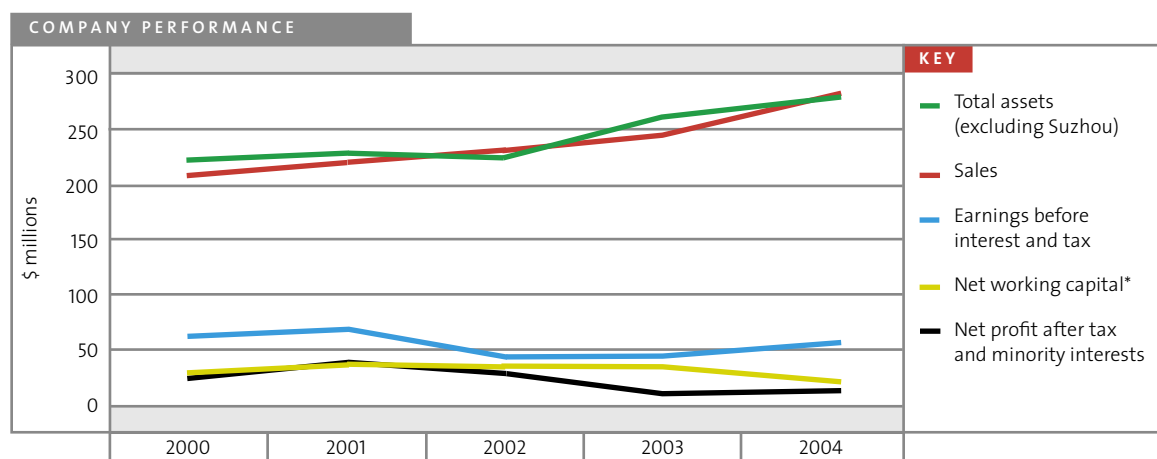
Although Holcim Cement's volumes increased, so did costs associated with weather-related coastal shipping delays, and with cement importing. As a result, Holcim Cement's profit contribution was not as great as the overall sales increase would indicate.

Holcim New Zealand's earnings before interest, taxes, depreciation and amortisation (EBITDA) were \$68.2 million compared with \$66.7 million in 2003.

Holcim New Zealand pays about \$125 million annually to procure goods and services, and in the drive to reduce operating costs considerable scope exists for savings. These savings cannot however be simply "buying cheaper", which can put at risk quality and reliability. Our procurement policies therefore use a "whole of life" analysis, which ensures all goods and services provide cost savings throughout their use by the Company.



Group procurement manager Gordon O'Malley (left) with NZ Safety southern regional sales manager Mark O'Neill checking out new high visibility gear. NZ Safety supplies Holcim New Zealand with all its safety gear, signage and other safety-related equipment.

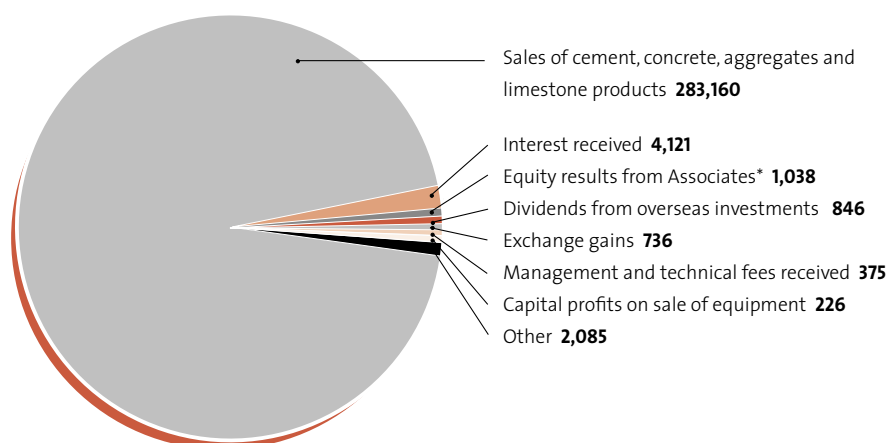


\* Net working capital = Debtors and Inventories less Creditors.

## 2004 REVENUE SOURCES

\$000

Total \$292,587

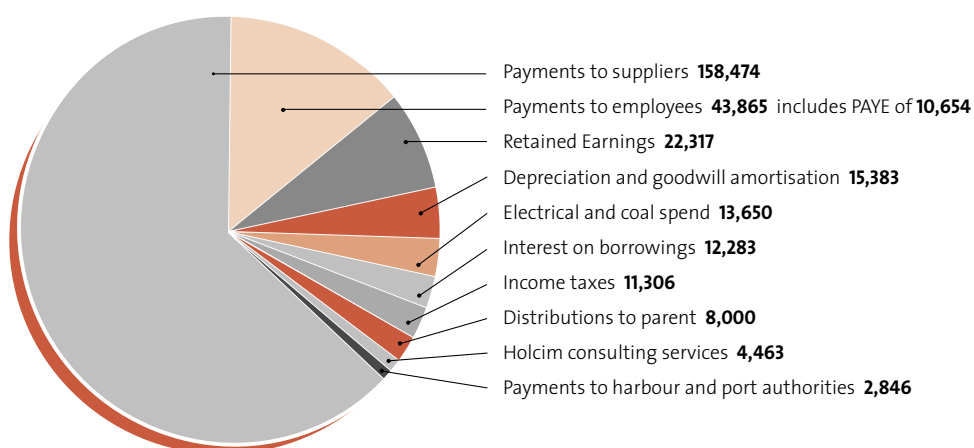


\* Up to the end of 2003, Holcim New Zealand has been the investment vehicle for Holcim Ltd's investment in China. The investment in Suzhou Golden Cat was sold during January 2004.

## 2004 ALLOCATION OF REVENUE

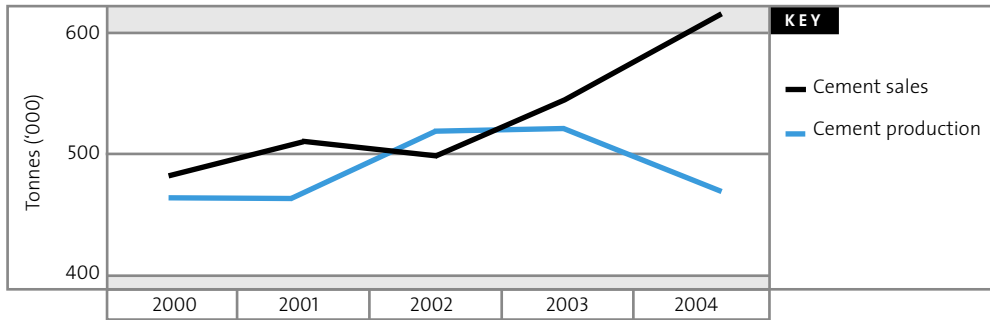
\$000

Total \$292,587

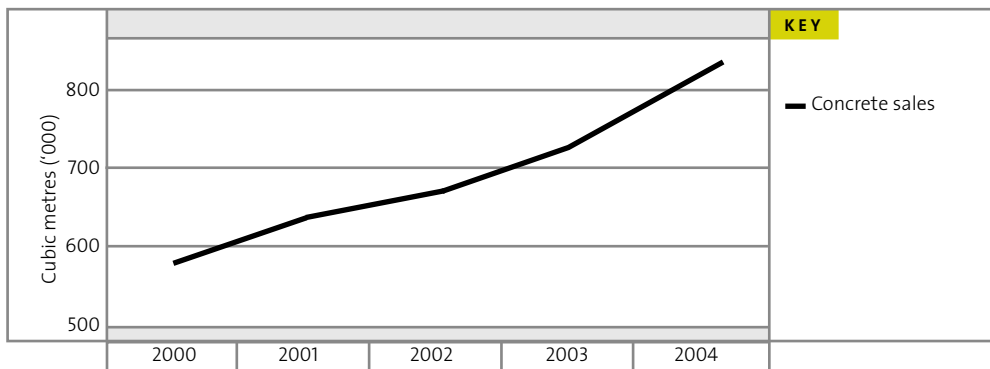




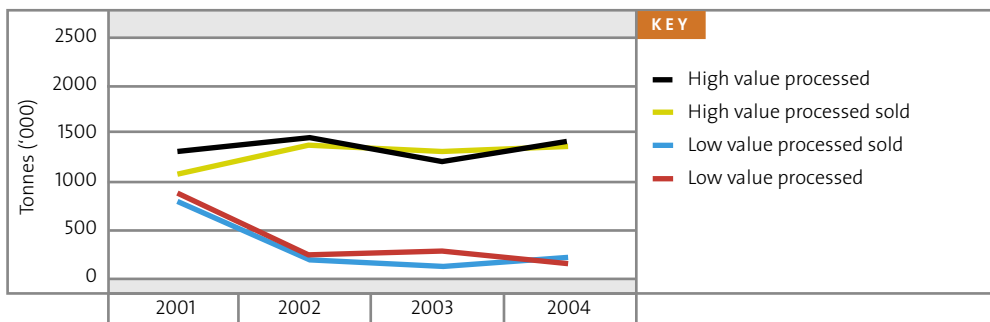
## Holcim Cement volumes



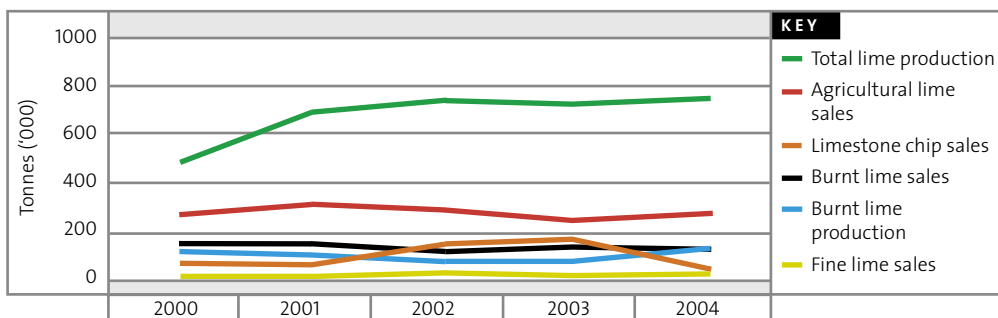
## Holcim Concrete volumes



## Holcim Aggregates volumes



## Lime volumes



# Operational Reviews

## Holcim Cement

From the Works in Westport, Holcim Cement produces high quality Portland cement and distributes it in its own ships throughout New Zealand. About 85% of this cement is delivered to end users in bulk (mainly for ready-mixed concrete production), with the remaining 15% going into bagged product (largely for the trade and DIY markets).

### Market Overview

In 2004 the market for cement remained very buoyant. Predictions of demand, based on the high 2003 uptake were exceeded as the construction industry in New Zealand continued to push down the accelerator. Growth occurred across the building spectrum – in residential, commercial, rural and in some infrastructure projects. This was not confined to the major cities but spread throughout the regions.

### Production

With such demand pressure, getting sufficient product to market was always going to be a challenge. Holcim Cement's response was to push the production rates at the Westport kilns as hard as safety would allow, and to supplement New Zealand production with imports of cement from sister Holcim plants off-shore. To allow necessary maintenance shut-downs at the plant, some additional importation occurred towards the end of the year. In total, Holcim New Zealand imported over 180,000 tonnes of cement in bulk bags and 12,000 tonnes of clinker.

### Sales

The combined total of locally produced and imported cement sold by Holcim Cement in New Zealand in 2004 was 622,000 tonnes. This was a 14% increase on the 545,000 tonnes sold in 2003.

### Distribution

Everyone concerned with logistics had an exceedingly busy year. This included organising the importation of cement from off-shore and the distribution of both imported and domestically-produced cement around New Zealand.

Cement imports, which began in 2003, were considerably streamlined in 2004 as Holcim Cement developed a strong working partnership with Indonesian sister company, PT Semen Cibinong Tbk. Fortunately, there were a number of New Zealanders in key positions in PT Semen Cibinong who understood the requirements and were able to assist and simplify the process. At a time when both cement and shipping were in very short supply internationally, we were indebted to PT Semen Cibinong and Holcim's trading operations in Singapore for their support, again highlighting the strength of the Group's international network. By year's end a total of 187,000 tonnes of cement had been brought in from Indonesia since importing began in November 2003.

While the specifications of the imported cement from Indonesia met NZS 3122 standards, the differing characteristics of the cement meant that some users would need to make

process adjustments. Unfortunately, these differences were exacerbated in colder weather, causing unintended difficulties in the market. Holcim New Zealand staff have continued working on this issue, including production changes at the cement mills at PT Semen Cibinong, in an attempt to resolve the problem. We regret the difficulties it has caused to our customers.

With so many clients committed to numerous construction projects, the first priority was to avoid stock-outs through ensuring continuity of supply. The cost of providing this continuity was in the considerably reduced profitability of some consignments and the many extra hours spent managing ever-changing logistics. This situation was often compounded by low stocks and weather-interrupted shipping on the West Coast.

### Internal Projects

The project to determine the economic life of the mv *Westport* was concluded in the first half of the year. A project team comprising officers and crew of the vessel, management and consultants undertook a methodical review of the ship. The outcome was that, with limited expenditure, the *Westport* would be capable of a further five years of economic service to Holcim New Zealand. The exercise proved the value of involving employees, who warmed to the task and came up with sensible, objective views about its future. A project to consider options for replacing the *Westport* will start in 2005.

In December, Westport Works proudly received certification for ISO 14001, the international environmental standard. This certification was granted after a significant amount of effort by the staff ensuring that the Works' environmental protocols met the very high ISO standards. It will require an ongoing commitment to continuous improvement.

A manufacturing performance review of Westport Works was carried out in December. Under this review, a consulting team from Holcim Group Support evaluated the plant's operations with a view to optimising the existing assets. Prioritising and actioning these projects will commence in 2005.

### The Road Ahead

There is every indication that the very strong demand for cement will continue into 2005. A probable reduction in residential construction, as supply meets and possibly exceeds demand, is likely to be offset by an expansion of concrete-intensive government and local body-funded infrastructure projects, together with other non-residential construction projects. Economic forecasters are predicting that many of these projects will get the green light in 2005.

A significant undertaking was commenced during the year to determine the best long-term supply options for the market. There is still a large amount of work to be done on this and a final decision is likely by the third quarter of 2005.

### Safety and Environment

The \$160,000 redesign of the plant frontage at Westport, which included a new lay-by and parking areas, removal of old structures and new information signage, will provide safer access and egress for the approximately 45,000 truck movements, and numerous staff and visitors, into and out of the Works each year.

Formed in May, the Westport Works Community Liaison Group, comprising Works management and community leaders, identified other safety and environmental issues and have made some progress towards resolving safety issues at the haul road crossing not far from the Works.

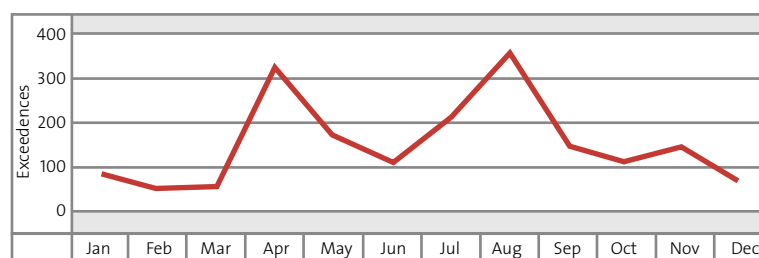
Health and Safety will continue to be a priority in 2005 as the requirements of the "Towards Zero Harm" project are put into practice.

The need to delay maintenance shuts in order to meet market demand resulted in increased environmental exceedences in 2004. Catch-up work to address this commenced in late 2004 and will continue in 2005.



A group of customers of Holcim Cement were taken to Indonesia to visit PT Semen Cibinong, where the company is sourcing its supply of imported cement. The photo was taken during a visit to a neighbouring village at which Semen Cibinong has supplied and placed concrete free of charge for a path through the village as a community project. Due to poor access the concrete was delivered to one point on the outskirts of the village and carried in buckets by the villagers along a path some 500 metres long. Inspecting the results are: back row from left, Neville Austin, Holcim Cement Southern Region sales representative; Don McDonald, Firth Industries southern regional manager; Eamon Ginley, PT Semen Cibinong Tbk production director, Narogong Plant Indonesia; Duncan McGregor, McGregor Concrete, Winton, Southland; Bob Officer, Allied Concrete regional manager Dunedin; Murray Dickson, Holcim Cement national sales manager; and Graham Dale, Fulton Hogan Balclutha plant manager.

### Westport Works environmental exceedences 2004



Exceedences are mostly recorded as 1 unit per hour a specific consent is exceeded, although other factors are also taken into account. An exceedence includes recorded non-operation of any monitoring equipment, even if the monitored operation is compliant.



## Holcim Concrete

Holcim Concrete is a fully owned subsidiary of Holcim (New Zealand) Ltd operating 10 ready mixed concrete batching plants in the upper half of the North Island.

### Production

The market for ready mixed concrete continued to be very buoyant in 2004, with strong demand experienced across all construction sectors in greater Auckland and the Waikato/King Country. All plants ran close to or at capacity, with the plants in greater Auckland under particular pressure to supply the raft of large structural projects underway throughout the region. Total production across the 10 Holcim Concrete plants rose 1% on 2003.

### Distribution

Holcim Concrete's ability to consistently deliver product to customers on time, and to receive supplies, continued to be hampered by traffic congestion. It is not unusual for an accident in Auckland to cause a two-hour delay. Truck utilisation was adversely affected with a consequent rise in operational costs. Extra new trucks were introduced this year to ensure that demand could be met.

### Costs

Increased business volumes normally have the effect of reducing costs. However, the buoyant market, coupled with a shortage of labour, had the inflationary effect of driving up labour costs. Obtaining skilled drivers was a challenge, further complicated by the stringent licensing requirements for new drivers. Record oil prices also flowed onto increased diesel costs. Inward transportation



Washing down the large concrete apron in front of a South Canterbury dairy shed, where 800 cows are milked twice daily for ten months of the year. A recent conversion, the shed floor and apron contains some 300cu.m of concrete and is one of 297 dairy conversions (from sheep and cropping farms) carried out in the region in the past five years.

costs increased by approximately 20% during the 2004 year.

### Projects

Some of the larger projects tackled during the year included the Waitakere Stadium, the impressive new stand at Ericsson Stadium, the Fale Pacifica Complex at Auckland University, the Scene 1 and 2 apartments, the Wiri prison, new sections of the Auckland to Waikato Expressway, and the Bridgewater office building on the banks of the Waikato River.

### Branding

The transition to the Holcim Concrete brand from late 2003 gained widespread acceptance by customers in 2004, many commenting that they liked the distinctive new trucks. A small number of our older trucks still carry the former Ready Mixed Concrete branding. These vehicles were due for retirement but the particularly high demand has necessitated keeping them operational in the meantime.

### Problem Resolution

In a project for RX Plastics we were reminded of how problems, provided they are speedily resolved, can still result in customer satisfaction. In this instance, a rare floor failure was

immediately recognised by Holcim Concrete and replaced. The speed at which the floor project was rectified resulted in a very complimentary response from the client.

### Environment

Apart from one incident when a driver was found to be washing out his truck in a non-designated area, which fortunately did not cause contamination, staff generally showed an increased awareness of their individual environmental responsibilities.

### Health and Safety

Attitudes and behaviours towards Health and Safety continued to improve in 2004, with no major safety incidents. Noticeable since the introduction of Towards Zero Harm has been more diligent reporting and more awareness of the need to change behaviours.

### Future

Sufficient commercial and infrastructural work projects have been approved and are under way to ensure that, at least for the coming year, there will be no let up in demand. The challenge will be in providing our services swiftly and efficiently enough to ensure optimum customer satisfaction.

## Holcim Aggregates

Holcim Aggregates operates large quarries in the greater Auckland area and Hawke's Bay, which supply a wide variety of premium aggregates primarily to the concrete and roading markets.


### Production

Demand for aggregates remained strong in 2004, both in greater Auckland and in Hawke's Bay. Most business growth in the two markets occurred in concrete aggregates, however, the uptake of base-course was also particularly strong in Auckland for roading projects over the late summer period. At Hastings Quarry minor modifications to the plant enabled it to lift the output of concrete aggregate by 20% to cater for the increased demand. Total production of aggregates in 2004 was 5.6% up on 2003. Following the costly fire at Manukau Quarry in 2003, Holcim Aggregates made a welcome return to profitability in 2004.

As operations at Manukau Quarry wound down, production of concrete aggregates ceased in October. Remaining production at Manukau will cease in June 2005 after which the site will be prepared for handing back to the lessor. Allied Concrete's requirements for aggregates are now handled from Bombay Quarry, under a long-term contract.

A new crusher was installed at Bombay Quarry in 2004, along with a number of other minor improvements to lift production and improve processes. Following a favourable hearings process, consent was granted for extensions to Bombay's operating hours. The extended crushing hours boosted the quarry's capacity, while the extended



 Manukau Quarry supervisor Andrew Dronjak with a handful of crushed aggregate in front of the quarry's crushing and screening plant.

sales hours allowed us to cater for the increasing traffic congestion around Greater Auckland and the heightened aggregate demand. Total production capacity from Bombay was effectively lifted by 55%.

In August Whatawhata Quarry was sold following a detailed evaluation that determined that the location and size of the quarry meant that it was no longer a good strategic fit for the company.

### Community Consultation

The Community Liaison Group for Bombay Quarry became operational in 2004 under a formal charter. Regular meetings proved useful in enabling the company, the local community and council representatives to discuss sensitive issues such as night-time crushing, to be a conduit to others in the community and to clarify any issues with them. This community consultation was most helpful in achieving an extension to the quarry's resource consent, allowing crushing to continue for an additional 4.5 hours to 10pm.

### Quarry Day

Building understanding of quarrying and the essential role it plays in the business and wider community prompted Holcim Aggregates to run a Quarry Day in November. A cross-section of invited customers, suppliers, local schoolchildren and the local community toured the Bombay operation, attended a brief presentation and witnessed a blast.

### Health and Safety

No major health and safety incidents occurred in 2004 as staff continued to roll out the initiatives recommended in the Towards Zero Harm programme.

### Future

It is anticipated that strong sustained demand in the concrete sector, coupled with large roading infrastructure work within the Auckland region, will result in a big call on aggregates supply and resource in 2005.

## Lime

McDonald's Lime Ltd 72% (with New Zealand Steel Limited 28%) Taylor's Lime 100%

From its extensive operations at Otorohanga and Te Kuiti, McDonald's Lime has produced quality lime products for markets in New Zealand and the Pacific Basin for nearly three decades. The company, which is 72% owned by Holcim (New Zealand) Ltd, is the country's largest manufacturer of burnt and hydrated lime products. It also produces sizeable quantities of agricultural lime and ground calcium carbonates.

Taylor's Lime is a fully-owned subsidiary of Holcim (New Zealand) Ltd. It operates a modern lime works at Makareao in Otago, where it produces high quality burnt and hydrated lime, agricultural lime, and a range of ground calcium carbonates.



**T** Taylor's Lime operations manager Kerry McDermott in front of the partially completed new bagging plant, which will eliminate the old plant's problem of bags bursting during filling, as well as minimising bending and twisting actions by operators. The new plant, similar to the one employed at McDonald's Lime, will cost around \$135,000.

### Production

Total production of Burnt Lime in 2004 was 142,000 tonnes, up 8% on the previous year. There was a 20% increase in Agricultural Lime, while production of Fine Lime and remaining products stayed at about the same level as 2003.

### Sales

This year's major consumers of bulk lime products were New Zealand Steel Limited (a 28% stakeholder in McDonald's Lime) and Lihir Gold Limited, one of the world's largest gold mining operations in Papua New Guinea. The ability to secure the latter business, on a longer term contract against strong international competition, is attributed to having a track record for consistent quality and delivery, and an innovative approach.

While the construction boom experienced in 2004 had significant impacts for both cement and con-

crete, there was only a minor direct impact on sales of lime products.

Mirroring the positive economic conditions, there was growth and competition in the road stabilisation market. Sales have steadily improved for lime required for both base course and road stability and there has been healthy interest in applying lime to areas such as sub-divisions to create workable surface areas on softer, wet soils. This trend in stabilisation products is likely to continue.

### Energy

Obtaining regular, cost-effective coal for lime production at McDonald's proved challenging again in 2004. The absence of reasonably priced coal from Huntly and, ultimately, any Huntly coal at all, necessitated us looking further afield and signing a new contract for South Island coal to ensure continuity of supply in the years ahead.

### Health and Safety

At both McDonald's Lime and Taylor's Lime health and safety was given a substantial boost in 2004. As a first step in the Towards Zero Harm initiatives, all senior staff undertook a comprehensive training course organised by international consultants DuPont. Since 4% of accidents result from conditions and a massive 96% from behaviours, the thrust of the training was on permanently changing all employees' mindsets towards health and safety.

### 2005 Prospects

Looking ahead to 2005, modest sales growth is predicted, with continuing gains particularly in the roading sector.



# Information Technology

Developing and maintaining Information Technology systems that provide timely and cost-effective business solutions for customers and for the Company is vital for communication, information and prompt service.

## IT Steering Committee

Early this year a committee was formed comprising Executive Committee members and IT staff. The main objective of the committee is to bring a closer alignment between IT and the business.

Specific aims of the new committee are as follows:

- Look at projects of a reasonable size that have an IT component.
- Look at the business benefits of each project and prioritise each of them accordingly.
- Look at IT performance in terms of operational levels of service, both actual and perceived.
- Review preliminary IT budget and strategy plans to input into company financial and strategic plans.

## Business Continuity

Like all prudent companies, Holcim New Zealand is ensuring that it can continue to operate in the event of a disaster at or near its Christchurch headquarters by duplicating core operational information on a site in Auckland. This key information covers areas such as production data from the various divisions, email, intranet and other communication, and concrete orders. The information is gathered in Auckland in real time or, in some cases, one day later.

In an allied initiative, any major disruptions to the primary network linkages provided by Telecom are now countered by having a second, fall-back link with Telstra. The Telstra link provides not only an emergency safeguard for the company but also carries back-up data during normal operating conditions.

## 24/7 Weighbridge Data

The Weighbridge Automation Project, which enables clients to complete transactions at times when weighbridges are unmanned, allows the Company and clients to get accurate weighbridge data via the SAP system. This was rolled out successfully in 2004 in Holcim Cement, Holcim Aggregates and the two lime operations.

## SmartStock

The trials of silo reading devices at customer sites have proved successful and installation of these devices has been rolled out to further sites. These have been at both external customer sites and internal depots in order to improve bulk cement distribution. Further installations will be carried out over the next year. Measurements taken at these remote locations are fed back via the mobile network to our Vendor Managed Inventory application, Smartstock. This process is a valuable aid in the management of cement stock levels at our customer sites.

## Holcim Services Asia (HSEA)

Holcim (New Zealand) Ltd is part of a regional cluster known as HSEA, based in Bangkok. The aim of each

regional cluster is to manage the strategic and financial direction of group companies within the region and provide this information to Holcim Group Support (HGRS) in Switzerland.

HSEA is also the channel through which standards, project initiatives and other relevant information flows from HGRS down to the individual group companies such as Holcim New Zealand. Staff from Holcim New Zealand regularly attend meetings in the Asian region in order to ensure this information flow is 2-way, timely and relevant.

## Security

The IT section worked with Holcim Ltd companies worldwide in 2004 to raise internal awareness about security from an IT perspective. Training sessions covered such basics as choosing passwords, turning machines off during absences and correct use of laptops, right through to three-factor authentication. The latter is a three-step security system which requires a user ID and password, a PIN number and finally a secure ID tag known as a FOB which generates a new random number every minute.

## Buying Power

Recent purchases of IBM hardware and Microsoft applications within the company have reinforced the value of the Holcim Ltd's international buying power. Thanks to worldwide buying arrangements with these major providers, substantial discounts were achieved by the Company.





## Social Performance



### Corporate Social Responsibility:

“At Holcim, we recognise our social responsibility and aim to improve the quality of life for our workforce, their families and the communities around our operations.

“We pursue a clear policy dealing with employment practices, occupational health and safety, community involvement as well as customer and supplier relations.”

*Holcim Ltd Code of Conduct 2004*



Lime is delivered to the site for Transit New Zealand's Upper Harbour Corridor, Greenhithe. At the scene are, from left, John Boocock, general manager of Hiway Stabilizers, Peter Rolls, McDonald's Lime industrial lime sales, and Adam Akehurst, site engineer for Works Infrastructure Capital Projects, the main contractor for the project. Since the commencement of the 2004/2005 earthworks season, 1700 tonnes of burnt lime from McDonald's Otorohanga plant has been delivered to this project where the lime is spread on the excavated clays to allow accelerated drying before compaction. The Greenhithe section is part of the Upper Harbour Corridor, a new four-lane highway being constructed by Transit New Zealand to link North Shore and Waitakere cities.

Acknowledgements to Transit New Zealand for permission to film on the construction site.

# Safety Initiatives

## Towards Zero Harm

Throughout 2004, the primary focus at Holcim New Zealand, from the Board and management to all staff in our 30 sites throughout the country, has been achieving Zero Harm by 2009.

We injure ourselves far too often, risking serious harm to workmates and upsetting Holcim New Zealand families. No injury is acceptable and we are determined to achieve and maintain a zero injury rate in five years' time. Other companies have been able to achieve this; it is a realistic target.

Since the Holcim Safety Council was formed earlier in the year, it has focused on introducing a new company-wide, behaviour-changing safety initiative that has become known as Towards Zero Harm.

Led by the Managing Director and with the full support of the Chairman and the Board, the Safety Council has adopted ten principles to achieve Zero Harm:

1. All harm is preventable
2. Everyone is responsible for preventing harm
3. Employee involvement is essential
4. Managers and supervisory staff are accountable for preventing harm
5. Working safely is a condition of employment
6. All operating exposures can be safeguarded
7. Safety tours are a must
8. Training everyone to work safely is essential
9. All incidents, near-hits and hazards must be reported and acted upon
10. We will promote off-the-job health and safety.

Six sub-committees, each led by a Holcim Safety Council staff champion, have been formed to examine specific safety issues within Holcim New Zealand: confined space and lockout, contractor safety, safety tours, personal protection equipment and signage, people and performance, and incident investigation.

The framework and progress of Towards Zero Harm is being set up and monitored with the help of DuPont Safety Management which has, since April, led a series of three-day workshops for the executive managers and supervisors/team leaders and half day training for Board members. All frontline staff will participate in half-day workshops in 2005.

A key component of the three-day workshops was learning how to conduct an effective Safety Tour. Safety Tours concentrate on identifying and reducing the numbers of unsafe acts that studies show currently cause up to 96% of workplace accidents. Regular Safety Tours are carried out at all Holcim New Zealand sites. Safety Tours involve managers and others who have some training on what to look for, focusing on safety coaching when unsafe behaviours are observed, and the reinforcement of any safe behaviours observed.

Another important part of the Towards Zero Harm programme are Safety Moments – scheduled times at the beginning of all formal meetings, regardless of the topic, to discuss a safety issue relevant to the people in attendance.



With such a major focus on preventing workplace injuries, Holcim New Zealand has stepped up activity in all the following areas:

#### Hazard Identification and Control


**Asbestos** – An assessment of the amount and type of asbestos-containing materials at all Holcim New Zealand sites was carried out by external consultants earlier in the year. Audit findings have been listed in an asbestos register at each site, with a central register at Head Office. All asbestos found was of the lower-risk cladding type for which the recommended management is to leave it undisturbed, providing it has not deteriorated.

**Confined Spaces** – As part of the Towards Zero Harm site safety assessment, a review was conducted of the confined spaces entry permit procedures, ensuring these are the same at each site and are fully adopted by employees and contractors.

**Lockout and Isolation Procedures** – An assessment was also carried out at all sites of the procedures used to lockout and isolate machinery being worked on so that machines could not be started up during maintenance and repairs. Consistent procedures have now been introduced and are enforced at all sites.

**Hazardous Substances and New Organisms** – All sites must now, by law, have a register of all hazardous substances and new organisms and demonstrate how these are controlled. Specialised chemical safety consultants visited the sites and identified steps to be taken to



 Land distribution manager Sean Leahy, at the Onehunga depot.

comply, in particular with the storage and handling of dangerous goods such as fuel, solvents, gases, and oxyacetylene for welding. The safe storage and handling of alternative fuels such as waste oil also comes under the legislation, and we are continuing discussions with OSH about this.

#### Driver Training

Holcim Concrete drivers continue to participate in the Masterdrive programme and People and Quality Solutions (PAQS) driver safety assessment. A new practical training programme for all Company employees who are out on the road and who have already completed Defensive Driver and anti-skid training is being sought to ensure ongoing driver safety. As part of Towards Zero Harm, Holcim New Zealand will be focusing more intently on driver training in future to cut back on an unacceptably high on-site accident, injury and fatality rate, compared to other areas of operations.

➔ *Towards Zero Harm health and safety project leader Rienholt Rasch demonstrates a lockout procedure at the Bombay switchboard control panel. Double locking and prominent signage is now required to ensure electrical supply remains cut to areas being worked on.*



#### ACC Audit

The audit was completed in October and this year it covered the Greenlane office, the East Tamaki concrete plant and the Onehunga cement depot. Secondary level membership of the ACC Partnership Programme has, as a result, been maintained for a fourth year, meaning significant financial savings.

#### ACC Injury Claims

As a member of the ACC Partnership Programme, Holcim New Zealand manages all work-related injuries in-house. From January 1, 2004, Injury Management New Zealand took over the management of new and existing ACC claims for work-related injuries from WorkAon. IMNZ has assigned a specific case manager to Holcim New Zealand to facilitate employees' rehabilitation, assist with their return to work, and organise any financial entitlements.

#### OSH Monitoring

There were four interventions by OSH during the year as a result of minor incidents, but no further action was taken by OSH on any of them.

# Safety Performance

**Holcim New Zealand regrettably has to report two fatal accidents during the year.**

The first, in October, involved an AML (50% owned) truck from Palmerston North. The driver pulled to the side of a narrow road to allow an oncoming car to pass, the road gave way and the truck rolled down the bank, crushing the driver. EAP counselling and assistance has been provided for the driver's family.

The second fatality occurred in the same week and involved an Atlas (33% owned) contracting engineer, on site at a quarry north of Auckland. The portable disc grinder he was using shattered and entered his chest.

Both accidents are the subject of a full investigation and have been reported to Holcim Ltd. No known legal action is pending in relation to either incident.

International industry standard measures of lost time injuries (LTIs) and accident frequency rates (the number of injuries per million hours worked) dropped significantly in 2004. LTIs fell from 47 the previous year to 38, while the frequency rate fell from 28.3 in 2003 to 21.79, a 23% reduction.

However, the severity rate (days lost per million hours worked) dropped just 2.5% and the mean duration rates showed an increase. One employee was off work for a lengthy period after a back injury and this has skewed the results.

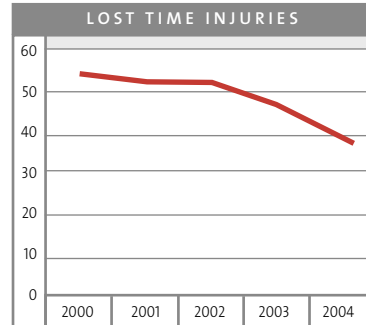
With guidance from Injury Management New Zealand, site managers have been working closely with employees who have been off work for some time and with their GPs to find alternative duties to facilitate an early return to work.

## Manual Handling

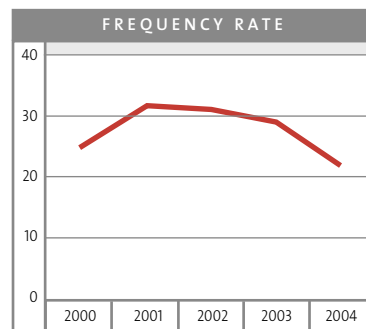
Identified as the cause of most injuries over the past two to three years, manual handling activities such as pushing, pulling and lifting have been the subject of a company-wide awareness programme. The most common injuries are sprains and strains to the back and legs/ankles. However, the awareness and education programme has not been as successful as expected, not achieving the expected reduction, and under the Towards Zero Harm initiative, preventing injuries from manual handling will be subjected to more intensive scrutiny.

## On-Line Incident Reporting

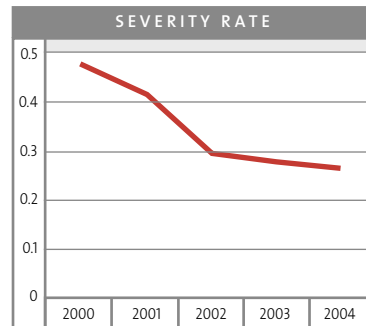
A significant improvement in identifying and managing incidents and an innovation for the worldwide Holcim Group, the Online Incident Reporting system replaces paper-based systems with timely and accurate logging of all incidents via the Holcim Intranet. Originally introduced to report and monitor safety-related incidents, it has been extended to cover any incident, from a customer complaint to an environmental incident or production problem. The system is now used company wide with the inclusion of Lime during 2004.



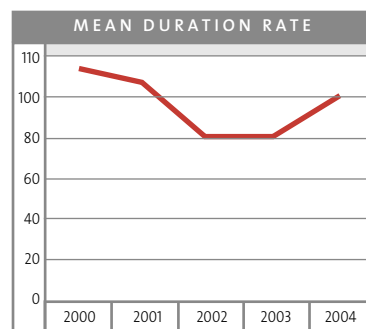
A Lost Time Injury (LTI) is one where the employee is unable to resume work for the next shift.



The Frequency Rate is the number of LTIs per million hours worked.



The Severity Rate of accidents is the number of days lost per 1000 hours worked.



The Mean Duration Rate is the average number of hours lost per injury.

# Employee Initiatives

The success and strength of Holcim New Zealand depends on the performance and passion of our 525 employees, which in turn depends on a positive, empowering, healthy and safe working environment, where initiative and involvement are encouraged.

## Staff retention and demographics

Holcim New Zealand has traditionally benefited from a stable workforce with good retention rates.

Turnover among drivers has resulted in a higher voluntary turnover than in 2003. However, while driver turnover has continued, towards the latter half of the year, we were able to recruit and retain more drivers, a marked improvement on the previous year when the building boom led to a significant shortage of drivers, particularly in the Auckland region.

The following tables are based on permanent employees and do not include those people working for AML Ltd.

TURNOVER			
	2002	2003	2004
Resignations	50	46	64
Retirements	8	4	6
Death in service	1	2	0
Redundancies	12	24	3
Dismissals	8	12	4
Average number of staff	536	518	525
Voluntary turnover	10.5%	10.0%	13.3%
Total turnover	10.5%	16.9%	14.7%

LENGTH OF SERVICE			
Service	2002	2003	2004
Less than 1 year	55	45	68
1 – 4 years	143	146	143
5 – 9 years	102	92	81
10 – 14 years	57	60	60
15 – 19 years	60	55	51
20 – 24 years	59	59	56
25 – 29 years	34	29	29
30 – 34 years	14	18	22
35 – 39 years	8	9	9
40 years plus	4	5	6
Total	536	518	525

GENDER			
ALL EMPLOYEES			
	2002	2003	2004
Female	10.0%	10.4%	10.3%
Male	90.0%	89.6%	89.7%
MANAGEMENT POSITIONS			
Female	8.0%	10.7%	13.5%
Male	92.0%	89.3%	86.5%

AGE OF EMPLOYEES			
Age band	2002	2003	2004
15 – 19 years	0.5%	1.5%	0.7%
20 – 29 years	6.3%	6.3%	7.2%
30 – 39 years	23.6%	22.1%	22.2%
40 – 49 years	31.4%	31.8%	29.0%
50 – 59 years	28.5%	27.7%	29.0%
60 years plus	8.7%	9.8%	11%
Age unknown	1.0%	0.8%	0.9%



### Training and Development

The introduction of the Towards Zero Harm safety initiative has resulted in an increase in Holcim New Zealand's investment in training and development this year – up 58% from just under \$570,000 to \$900,000.

By year's end, 135 management and supervisory staff had gone through the safety management and leadership training workshops. Other training and development ranged from negotiation skills and business writing through to environmental systems and standards, and first aid. This has included a major programme of kiln operator training at Westport Works, using a specialised Australian training company, to achieve agreed operational standards and processes and ensure these are formalised and documented.

Holcim Aggregates worked with the Extractive Industries Training Organisation (EXITO) to develop a training matrix – a unit standard summary of the different skills and training needed for staff at each level of the Company. The Lime work-teams' training initiative at both Oparure Quarry and Otorohanga has continued to run successfully during the year.

Forums and training programmes held by Holcim Ltd in other countries were attended by 30 staff. Topics included technical matters, Alternative Fuels and Raw Materials (AFR), communication, financial reporting systems, procurement, information technology and the environment, as well as development programmes for senior and middle



Staff stand well back during a special Fire Service fire safety demonstration during Holcim New Zealand's head office annual Safety Day in November. The Fire Service's travelling demonstration trailer unit allows people to try different methods of putting out a fire in a living room and in a kitchen, where a pot on the stove is filled with blazing oil. Various employees successfully showed how to extinguish the fire using a wet towel, a fire extinguisher, an oven tray and by putting a lid on the pot. However, when members of the Fire Service arranged to have a remote controlled arm tip a cup of water on the flaming oil, the results were an instantaneous explosion of flame.

managers. Sixteen supervisory and frontline staff visited Holcim Group companies overseas to gain an understanding of how similar companies operate and to share our knowledge with them.

A number of people from the parent company and other Holcim Ltd companies (e.g. Vietnam and New Caledonia) visited Holcim New Zealand in 2004, spending time within our operations learning from us and taking this knowledge back to their respective companies. In other cases, consultants from the parent company assessed parts of our business against best practice and identified opportunities for improvement.

During 2004, Holcim New Zealand supported 11 employees in management and leadership self development courses at universities and polytechnics around New Zealand.

### Tertiary Initiative

Once again, the Company sponsored a leadership development workshop for MBA and engineering students from Lincoln and Canterbury Universities. Three Holcim New Zealand employees also attended the session. The presenter was from the New Zealand Institute of Management's senior management programme.



**+** Coral Moir, the industrial nurse from Healthwatch, carries out a blood pressure test for Martin Jeffreys, from IT support, as part of his annual wellness check.

### School Career Choices

Holcim New Zealand participated in Workchoice Day, with 20 senior students visiting Head Office for a series of workshops, and to learn about how cement and concrete are made.

Westport Works continued to employ university students returning home for the summer holidays.

Holcim New Zealand continued to sponsor the EXITO school liaison officer to help raise awareness of our industry as a career path.

### Health and Wellness

283 employees took advantage of free annual health and wellness checks, provided by the Company at a cost of \$22,700.

### Employee Assistance Programme (EAP)

Holcim New Zealand offers free confidential counselling to assist employees and their families to work through personal problems or work-related issues. During 2004, 10 people used EAP services, attending 28 sessions. The programme has a self and manager referral-suggested process of which 4 employees were referred by management and 6 staff self-referred.

### Drug and Alcohol Policy

Introduced to Holcim New Zealand in 2003, the Policy provides for both pre-employment and just-cause or post

accident/incident drug and alcohol testing and this has continued throughout the year. In 2004, the first full year of testing, 142 pre-employment medicals were carried out and the 11 who returned a positive test were no longer considered for employment with the Company.

### Temporary Labour Supplier

In 2004 Holcim New Zealand entered into a preferred supplier arrangement with a prominent New Zealand national recruitment provider. The aim is to supply high quality temporary labour across all the Company's geographical locations. This will mean one supplier throughout the country, applying consistent recruitment practices, standard assessments, centralised reporting and invoicing, and a commitment to health and safety and corporate social responsibility.

### Superannuation and Employee Benefits

Holcim New Zealand is interested in ensuring that its approach to superannuation is valued by both employees and the Company. In August a project team was formed to conduct a formal review of Holcim New Zealand's superannuation policy. The project work included gathering information from employees, other employers and from superannuation specialists. The project team will make a recommendation to the Managing Director in early 2005.

DRUG & ALCOHOL TESTS				
	2003 NEGATIVE	2003 POSITIVE	2004 NEGATIVE	2004 POSITIVE
Pre-employment tests	101	8	131	11
Just-cause tests	0	0	1	0

### Communication

In September 2004, the Company appointed a part-time Communications Advisor with the aim of improving Holcim New Zealand's internal communication between divisions and co-ordinating external communication resources, including communication with Holcim Ltd. A thorough and systematic examination of our communication processes commenced in late 2004. The review will determine how well communication is working throughout the organization and is designed to "take a picture" of our communication needs, policies, practices and capabilities. Recommendations for improvement will be made to the executive in 2005.

### Site Induction

An evaluation of safety systems in April 2004 identified room for improvement in our site induction programme. The induction policy has been updated and a site induction checklist implemented. Site induction is also being considered through the Towards Zero Harm safety sub-committee.

#### BOMBAY QUARRY OPEN DAY



➔ Kirstie (8) and Brendon Clark (7) check out the cab of one of the quarry's two big quarry trucks, which is driven regularly by their father, Bombay Quarry operator Paul Clark. Paul's six children attended the quarry open day in November with their mother Tania.



➔ Visitors to the Bombay Quarry open day inspect the laser profiling equipment that is used on quarry faces to achieve safer, more effective blasting. They are from left: Bryan Claridge, Prime Explosives; Andris Ansari, Hawkins Construction airport site engineer; Glen Chepelsky, Sandvik New Zealand; and R K Sisam, one of the quarry's neighbours.

Over 100 people, including staff, suppliers, customers and neighbours, visited the Bombay Quarry on the Open Day for a tour, blasting demonstration, environmental briefing, and entertainment by guest speaker Raybon Kan.



## Community Initiatives

In 2004, Holcim continued sponsorship and donations to organisations throughout New Zealand, from schools and local rugby clubs to environmental projects and national industry conventions.



Areas of corporate sponsorship and support during the year included the second edition of the Cancer Kids calendar, the Cancer Society, the New Zealand Consulting Engineers' Conference, the New Zealand Concrete Industry Conference, Workchoice Day and the Order of St John.

Other corporate sponsorship supported the Ecologic Foundation – an environmental group that supports economic growth and aims for sustainable progress through a combination of ecology, economics and ethics. Holcim New Zealand's partnership with Ecologic and the Foundation for Science, Research and Technology primarily supports the triple bottom line research project "Business, Government and Society: Institutions for Sustainable Development."

Holcim New Zealand also continued to fund, during 2004, its three-year sponsorship commitment to a part-time teaching and research position in structural engineering at Canterbury University's highly regarded Department of Civil Engineering. This role, held by

Westport Works' 2004 scholarship winner Alana McCrossin, with a sample from the mini-furnace that tests the amount of sulphur in coal. Alana, who will commence studying for a Bachelor of Consumer and Applied Sciences at Otago University in 2005, is working in the Works laboratory over the summer holidays as part of her scholarship award.

Professor Des Bull, is expected to ensure teaching and research is informed by current practice. Professor Bull is working with the building industry on, among other projects, the development of a new building system using modern, high-performance concrete materials.

Major sponsorship by Westport Works during the year included the senior and intermediate prize-winners in the Best of the West Awards, the Holcim Cape Classic Surf competition, Buller Cricket Association, Buller High School, the Buller Marathon, and the Environmental Roadshow.

For the past 21 years, Westport Works has also provided an annual tertiary scholarship to a Buller school leaver. The scholarship pays a \$2000 study grant for each year of their study and gives them a holiday job at the cement plant. The 2004 Holcim

Westport Works Scholarship winner was Alana McCrossin, who is enrolled at Otago University in 2005 to begin a Bachelor of Consumer and Applied Sciences degree.

Holcim Concrete sponsorships in 2004 included the Concrete/Masonry Seminar, Counties Manukau rugby team, and the first year of a three-year category sponsorship of the New Zealand Institute of Building Awards for Excellence.

Taylor's Lime sponsored the East Otago Community Health Trust – a community health and medical centre designed to serve the region in which the Taylor's Lime quarry is based. The community has experienced difficulty attracting doctors to the area and the Trust has set a target of raising \$380,000 to provide a medical centre and satellite clinics. Taylor's Lime also provided several truck and trailer units full of agricultural lime for premium prizes at local A&P shows, the annual Speed Shears contest and for school and sports club fundraising.

#### **Holcim Foundation for Sustainable Construction**

One of society's greatest challenges is how to meet present-day needs for housing and infrastructure without compromising the ability of future generations to meet their own needs in times to come. With rapidly rising populations, mass migration, pressure on land resources, and Third World urbanisation, radically different approaches are demanded of the construction industry to ensure that we can live in a truly sustainable environment.

Launched by parent company Holcim Ltd in late 2003, the Holcim Foundation for Sustainable Construction ([www.holcimfoundation.org](http://www.holcimfoundation.org)) is committed to reinforcing public awareness of the significant role in society that architecture, engineering, and construction have towards achieving a more sound and sustainable future.

The primary objective of the Foundation is the non-commercial promotion and development of sustainable construction, at a national, regional, and global level.

Supported by but independent of the commercial interests of Holcim Ltd, the Holcim Foundation's mission is to select and support initiatives that combine sustainable construction solutions with architectural excellence and enhanced quality of life beyond technical solutions.

The world-renowned members of the Advisory Board shape the Foundation's activities by identifying the architectural, scientific, cultural and policy concerns that should be integrated into its initiatives. One of these Advisory Board members is Simon Upton, former New Zealand MP and now Chairman of the OECD Round Table on Sustainable Development.

The Foundation's first public initiative was the Holcim Forum, held in Zurich, Switzerland in September. This gathering brought together more than 120 experts and students in sustainable construction from 34 countries. The message of the Forum was that sustainable construction is not a far-away idea, but an urgent necessity.

The Holcim Foundation is also promoting innovative approaches to sustainable construction through regional and international Awards competitions. The first round of the Holcim Awards for Sustainable Construction, closing on 31 March 2005, is prompting entries from around the world, and offers prize money for the five regional competitions (2005) and global awards (2006) totalling USD two million ([www.holcimawards.org](http://www.holcimawards.org)). In New Zealand, these awards have been promoted through trade publications and other media.



 Westport Works manager Chris Dempsey (left) congratulates Tony Schafer, open winner of the 14th annual Holcim Cape Classic Surf Competition at Tauranga Bay and Nine Mile Beach over Labour Weekend 2004. Regarded as a highlight of the South Island surfing calendar, the Cape Classic attracted 80 surfers and a constant stream of spectators.



## Environmental Performance

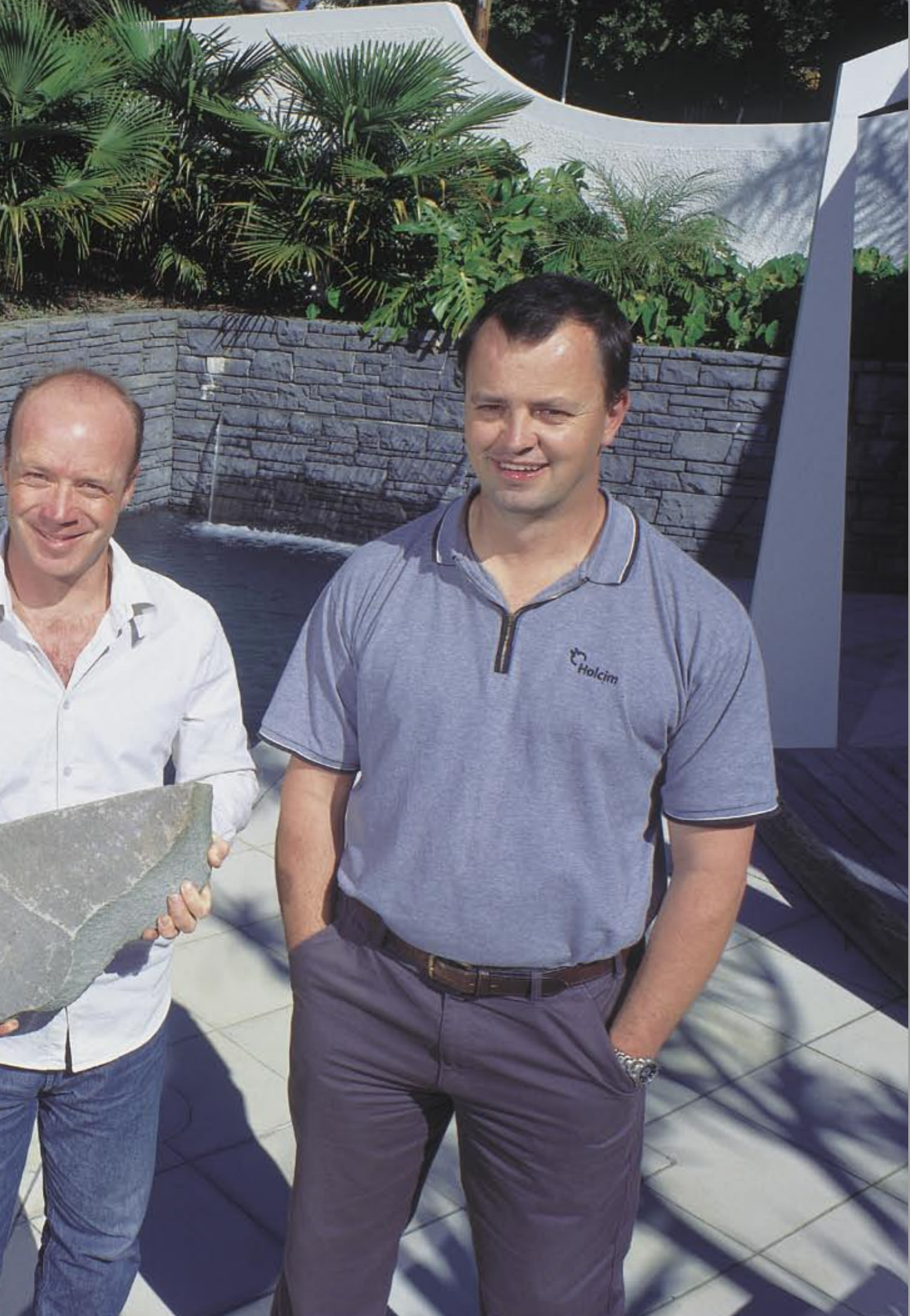


Neil Runciman, Frontier Pools contract manager (left) with aggregate sales representative at that time Rod Palmer, holding a piece of Bombay Quarry bluestone, which has been used to surround the Auckland pool. The distinctive Bombay Quarry bluestone is popular with landscape designers because of its ease of handling and splitting and its classic clean lines, compared to other stone and exposed aggregate surfaces. Increased demand in 2004 saw a 50% increase in bluestone sales.

Holcim New Zealand's quarry near Westport has provided the raw materials needed to make cement, for the last 46 years. The quarry's comprehensive rehabilitation programme shows our awareness in meeting the objective of our Environment Policy Statement – *“To provide positive contributions to our business by continuously improving our environmental performance”*.

On the following pages are examples of how we are meeting this objective – and with what success.





# Environmental Programme

HOLCIM NEW ZEALAND ENVIRONMENTAL GOALS	
AREA	GOALS
SYSTEMS	To have quality systems in place for each operation that ensure activities, products and services are complying with Holcim's corporate policies.
ENVIRONMENTAL EFFECTS	To minimise the adverse effects of activities, products and services. To encourage suppliers and customers to adopt sound environmental practices.
COMPLIANCE	To meet legislative requirements and internally set performance standards.
TRAINING	To educate employees to conduct their activities in an environmentally responsible manner and in accordance with Holcim policies.
ENVIRONMENTAL AUDITS	To carry out regular environmental audits to assess compliance with internal and external performance standards.
MANAGEMENT REVIEW	To regularly review environmental performance for each operation and review Holcim New Zealand's overall performance annually.
REPORTING	To measure and report on environmental performance and efforts to eliminate or minimise adverse effects on the environment.
RAW MATERIALS	To use raw materials effectively, minimising waste where possible.
WASTE	To minimise waste generation and to use environmentally appropriate waste treatment and disposal methods.
ENERGY	To conserve energy and improve process controls.
CARBON DIOXIDE	To reduce carbon dioxide emissions in accordance with the global commitment of Holcim Ltd.
SPECIAL CONTAMINANTS	To identify, mitigate and remove sources of special contaminants that are hazardous to human health, such as PCBs and asbestos.
DUST MITIGATION	To manage and reduce dust at all operations.
CHEMICAL, FUEL AND BULK PRODUCT MANAGEMENT	To safely use, handle and store chemicals, fuels and bulk products in a way that minimises adverse effects on people and the environment.
EMERGENCY RESPONSE	To put in place appropriate emergency response and recovery procedures that ensure employees are trained, properly equipped and have the resources to respond and recover from emergencies such as fire or spills.
INCIDENT REPORTING AND CORRECTIVE ACTION	To have in place an incident reporting and corrective action procedure for all operations, to ensure that environmental performance continuously improves, and that adverse effects on the environment are minimised.
COMMUNITY INVOLVEMENT	To work with our local community, building and maintaining mutual respect and trust.



### Environmental Policy Implementation

During 2004, all employees reviewed a draft of the Environment Policy, and their feedback was incorporated into a final version for Board approval in early 2005. This employee feedback was vital, because it is they who work on a day-to-day basis to ensure the policy's practical application.

Parent Company, Holcim Ltd, is a serving member of the World Business Council for Sustainable Development. Holcim New Zealand is a member of the New Zealand Business Council for Sustainable Development, a group of leading companies with a shared commitment to sustainable development through economic and environmental growth, environmental protection, and social progress.

Holcim Ltd is also a signatory to the UN Global Compact which is based on nine principles in the areas of human rights, labour standards and the protection of the environment.

### Quarry Management and Rehabilitation

#### Cape Foulwind Quarry Rehabilitation Project

The limestone quarry feeding raw material to our Westport Works cement plant is one of the largest in New Zealand. The quarry is also adjacent to a famous tourist attraction - the Department of Conservation's Cape Foulwind Seal Colony which attracts 100,000 visitors a year.

The high-quality limestone and marl from this quarry has been used to build about half the concrete buildings, bridges, dams, hospitals



Westport Works Community Liaison Committee visited the haul road crossing at Omau, which the committee has identified as needing safety improvements due to the confusing number of road signs and parallel roads. Alterations to the crossing have been through significant consultation during the year. Members of the group present at the site visit were (from left): Paul Martin (Omau Settlers Lodge), Works manager Chris Dempsey, Buller Community Development Company board member and Carters Beach motel owner Robin Leathley, then Works technical manager Paul Kidd, Bevan Palmer (Omau Domain Board and residents' group), Markham McMullan (principal, Westport North School), Dan Maloney (principal, St Canice's School), Deborah Carden (DOC), Human Resources manager Glenda Harvey, Helen Holmes (Charleston Waitekere Trust), Gary Murphy (chief executive, Buller District Council), and Works environmental advisor Allanagh Clarke.

and schools in the country in recent decades.

In the 1980s Holcim New Zealand (then Milburn New Zealand) did restoration work to reduce the visual effect of the quarrying operations, and began planting native species to restore the surrounds to native bush. In the 1990s, this work was given a more scientific basis as a result of a study and report by associate professor Dr David Norton from Canterbury University's School of Forestry.

The "Norton Report" was the foundation for the next phase of rehabilitation across four restoration zones, and this continues today. Dr Norton is still associated with the project and his students use it for studying native plant propagation.



Volunteers from the Westport Works braved wind and driving rain to take part in an annual clean-up of Tauranga Bay and the road between the cement works and the bay as part of Clean Up New Zealand Week in September. Works organisers Barry O'Dea and Allanagh Clarke praised the turnout of 29 people (from the Works as well as local residents and board riders) in such awful weather and look forward to doing it next year. Head office staff in Christchurch also took part and cleaned up two local parks.



Westport Works environmental advisor Allanagh Clarke checks the recent planting on the seaward side of the Works. Since May 2004, several thousand trees and shrubs – all sourced from the Works' own nursery – have been planted on the former wasteland, which is being converted into an artificial wetland area filled with native plants. Behind Allanagh is one of the area's four settling ponds, enabling waste water from the Works to be returned to the local catchment system.

The project has yielded valuable new information about native plant seeding, the range of disturbed soils in which native plants can thrive, survival rates and weed control.

In the past 20 years more than half a million natives have been planted, and already parts of the quarry surrounds comprise fully restored indigenous vegetation.

At a cost of over a million dollars and involving 150 hectares, the project is thought to be the country's largest limestone quarry rehabilitation project.

"A consequence of the planting is that walkers on the walking track to the seal colony do not see a wide, raw scar that could be the case if the quarry were not rehabilitated as

extraction progresses," said Phil Mohi, Buller/Kawatiri Area, Department of Conservation.

The project has been maintained over the past 20 years thanks to the dedication of a large number of Holcim New Zealand employees. During this time, employees have volunteered time and energy, and the necessary budget has always been available even when times were "tough".

#### ***Limestone Cave Rehabilitation***

Traditionally, limestone quarries and limestone caves don't mix – even if they are only a few kilometres from each other – but discovery of a closed caving treasure on the McDonald's Lime Oparure Quarry property led to a plan for co-existence.

Te Ana Oteatua, or Spirit Cave, has its entrance just 900 metres from Oparure. A partnership between cave owner McDonald's Lime, eco-tour operator Spellbound, and local Maori was formed, with commercial tours of the cave under way in October 2004.

Together, McDonald's Lime and Spellbound worked to return the cave, part of the nationally significant Maungawhikau cave system, to its natural state. Putting right the negative effects of over 150 years of unrestricted human visitation was a major task, as was building pathways, walkway structures and environmentally secure access.

Holcim New Zealand's share of the revenue gained by re-opening the cave is being used for native plantings, and for fencing the ground immediately above the cave, ensuring that stormwater draining into the cave system is kept clean.

#### **Environmental Handbook for Holcim Concrete Truck Drivers**

Concrete truck drivers not only carry a considerable load of concrete – they also carry an environmental responsibility to protect the environment.

Every year, Holcim Concrete truck drivers collectively travel hundreds of thousands of kilometres delivering concrete to thousands of sites. An awareness of the risk of spills is paramount.

Allowing wet concrete into stormwater drains which in turn feed into waterways is unacceptable because of the serious effect it can have on fish and ecosystems.



Holcim New Zealand's preventive response to this risk has been to work closely with its concrete drivers, ensuring they understand how to avoid spills and, if they do occur, how to safely deal with them.

This information is in the newly released Handbook for Concrete Truck Drivers.

Other key areas covered include emergency procedures, chemical hazards and precautions for use, cleaning concrete trucks and their chutes, and disposal of waste concrete.

The handbook also sets out the best management practices for concrete batchers and drivers. Practical training for drivers complements the handbook, which is designed as a reference and reminder guide.

### Emergency Spill Response

#### – all materials

Across 30 sites and plants, Holcim New Zealand's workforce and contractors handle and store dozens of potentially hazardous materials. Spills of some of these materials could potentially pose a serious risk to their health and safety, and to both the community and environment.

To further support the extensive safety and environmental management systems already in place, Holcim New Zealand has introduced a programme of emergency response training to the workforce at all sites and plants. An important part of this programme is a readily available step-by-step spill response checklist. Once again, the success is in the practical training and putting it into practice.



Group environmental coach Robyn Flynn (left) discusses the new Environmental Handbook for Concrete Truck Drivers with Auckland drivers Terry Bailey (centre) and Clint Gardiner (right).

### Westport Works air emission profile 2004

#### Three-kiln averages

##### Dust and oxides

(Kilograms per tonne of cement)

	2003	2004
Total solid particles (dust)	0.14	0.2
Nitrogen oxide	2.91	3.2
Sulphur dioxide	3.04	2.9

##### Heavy metals and compounds

(Micrograms per cubic metre of gas)

Arsenic	5.1	<2.0
Cadmium	3.1	<1.0
Lead	17.7	10.0
Mercury	5.7	2.0
Thallium	13.4	11.0

##### Organics

(Milligrams per cubic metre of gas)

HCl	15.0	3.0
Benzene	2.7	1.3

##### Dioxins

(Nanograms per dry cubic metre of gas at 10%, dry, at 0degC)

Dioxin	0.0042	0.002*
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\*All three kilns below MfE guideline of 0.1 nanogram

### Emission Monitoring and Reporting (EMR)

Holcim New Zealand's focus on continuous environmental improvement relies on accurate emission data.

All Holcim Ltd cement plants throughout the world have adopted the EMR scheme which requires plants to:

- install and operate continuous emission monitoring equipment for dust, sulphur dioxide, nitric oxide, particulates, volatile organic carbon, and oxygen.
- calibrate this monitoring equipment on a regular basis.
- measure hydrogen/chloride (HCl), ammonia (NH<sub>3</sub>), benzene (C<sub>6</sub>H<sub>6</sub>), dioxins and furans and heavy metal emissions at least once per year.
- ensure that those laboratories entrusted with any of the monitoring, are capable of delivering quality work.
- report in a standardised form once a year to the parent company. This gives accurate data of emissions from all Holcim plants throughout the world.

Westport Works has completed all testing and monitoring as required to meet Holcim Ltd standards, resource consent conditions and other requirements. They have also tested for other contaminants such as sulphur oxides, nitrogen oxides, fluorides, volatile organic compounds, hydrogen cyanide, and polyaromatic hydrocarbons.

ENVIRONMENTAL INCIDENTS 2004							
Holcim Cement		Holcim Aggregates		Holcim Concrete		Lime	
03	04	03	04	03	04	03	04
62	48	7	10	6	9	2	18

### AFR Programme

The Alternative Fuels and Raw Materials Programme (AFR) has operated successfully at Westport Works since 1996, and recovers energy and materials from selected wastes to conserve non-renewable natural resources.

The AFR Programme is a key part of Holcim New Zealand's commitment to promoting eco-efficiency, conserving non-renewable natural resources, recycling, and overall reduction of the output of CO<sub>2</sub> in cement-making.

The programme is also important in ensuring Westport Works' viability against newer cement plants in Asia-Pacific looking for export opportunities.

AFRs are usually wastes or by-products that are otherwise very difficult to dispose of, or to recycle, in an environmentally secure way.

The first AFR introduced at Westport Works was used oil. Its use came after extensive consultation with the workforce and the wider community.

Used oil, a hazardous waste, is collected around the country through the Government-approved Used Oil Recovery Programme, and transported securely to Westport Works, mainly by sea. In 2004 alone, in excess of 14 million litres was collected and used in the cement kilns.

- Includes near hits or potential incidents.
- Excludes Westport Works environmental exceedences shown in table on page 15.
- New incident reporting system introduced into Lime in 2004.

An AFR solid residue replaces some of the non-renewable raw materials used to make cement. Some AFRs can be a cheaper energy source than coal and therefore save on fuel costs.

Any AFR used at Westport Works must be safe for our employees to handle, store and use, and safe for our community. Worldwide, Holcim Ltd has identified a number of AFRs meeting these requirements, some of which are available for consideration by Holcim New Zealand.

From this list, and after considerable research, Holcim New Zealand has identified a small number of AFRs available in New Zealand that could be used at Westport Works. Most of these AFRs are already used by Holcim cement plants around the world, as well as by Cement Australia in Queensland.

In particular, spent cell liner (SCL) is a major by-product of the aluminium manufacturing process in New Zealand, and is currently handled and stored temporarily in large quantities. It comprises refractory and carbon materials from the pots used to make the aluminium metal.



SCL has some energy content and also some important raw materials for making cement, and its producers and regulatory authorities are anxious to see it disposed of in an environmentally secure way.

With plenty of overseas expertise in using AFRs to draw on, Holcim New Zealand is proposing a series of verification trials commencing in 2005. These trials are similar to those used in 1996 to ensure that used oil could be used as an AFR at Westport Works.

A significant difference this time however is the much higher level of environmental security being provided with the achievement of ISO 14001 registration of Westport Works. This is part of Holcim Ltd's determination to have all its cement plants and AFR platforms worldwide working under this ISO international standard for environmental management systems.

The West Coast Regional Council is currently considering an application by Westport Works to run verification trials for two alternative fuels, one of which is SCL.

Trials entail adding the AFR to the kilns in a highly-controlled manner, and ensuring the predictions for energy output, raw material contributions and air emissions are correct.

✚ AFR (Alternative Fuels and Raw Materials) business development manager Michael Rynne (left) watches Used Oil Recovery South Island driver Dan McLay link up the hose to extract used oil from a vehicle repair workshop collection tank. Each tanker holds up to 11,000 litres and collects on average 50,000 litres of used oil each week. The oil is reused to fire the Westport Works kilns.



Plant engineer Vaughan Chaffey looks at the plans he has drawn up for improvements to the Westport Works entrance in consultation with the local Community Liaison Group. The Works has committed \$160,000 to make it safer by opening up the area around the weighbridge and the entrance and adding extra lanes on the highway for Works traffic. Numerous trucks visit the Works daily, exiting onto a busy tourist route.

At the 2000 deg C temperatures of a cement kiln, the chemical constituents of the AFR are broken down completely and transformed into energy and into clinker, cement's raw material. All emissions must comply with Westport Works' current resource consent.

If the West Coast Regional Council approves the verification trials, these are expected to begin late 2005.

#### Holcim New Zealand's goals when considering the use of an AFR

- Act as a partner to society by offering waste management solutions
- Keep our environment safe
- Add value to our core business
- Ensure occupational health & safety
- Refuse the listed banned wastes
- Guarantee the quality of our products
- Comply with the relevant regulations and promote best practices
- Monitor and control the inputs, process, products and emissions
- Communicate transparently

#### Enviroschools

Based in the Waikato and now in over 180 schools, Enviroschools encourages environmental education by involving the whole school in planning, designing and taking action to create a sustainable school environment.

Holcim New Zealand is proud to be a part of this important initiative. By partnering with local schools, employees provide help to local students working on environmental projects. Support will be also given to Enviroschools to help promote and expand their work in this area.

This initiative has been very well received by Holcim New Zealand staff.



### Environmental Education

Our sponsorship of and partnership with Tanya Jenkins continues into its tenth year. Tanya is an environmental educator who has brought her programme to many schools in the South Island. Her focus is on endangered species in New Zealand and in 2004 her work has also included the development of an educational resource on the Hector's dolphin co-written by Jim Lilley.

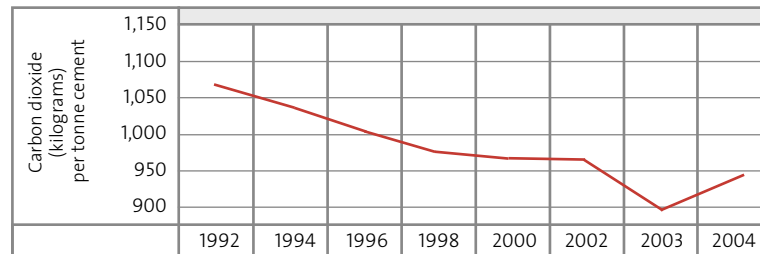
### Water

During the year, a new \$400,000 sewage treatment plant was commissioned at Westport Works. This plant replaced the 1950s system that had discharged mainly untreated effluent, and also replaces the septic tanks in employees' houses at the nearby settlement. These changes will ensure that the level of faecal coliform units (fcu) will be well below the accepted benchmark of 14 fcu per 100 mls.

### Carbon dioxide emissions, energy use, and climate change

Worldwide, the cement industry annually produces about 5% of man-made CO<sub>2</sub> emissions. Holcim Ltd has set a CO<sub>2</sub> reduction target of 20% by 2010. For Holcim New Zealand, managing and reducing emissions and reducing energy use are key priorities. In 1995, many years before the recent concerns about greenhouse gases like CO<sub>2</sub>, Holcim New Zealand signed a Voluntary Agreement (VA) to reduce CO<sub>2</sub> emissions from Westport Works.

### Carbon dioxide emissions at Westport Works



As independently audited, by 2000 the company had achieved a 12% reduction in CO<sub>2</sub> emissions, and a 16% reduction in energy use per tonne of cement between 1990 and 2000.

For example, electricity consumption at Westport Works is slowly falling. Currently, it takes 104.4 kilowatt hours of electricity to make one tonne of cement, compared with 109 kilowatt hours ten years ago.

Holcim New Zealand is committed to continuing its efforts to reduce its impact on the environment. The Company is seeking to enter a negotiated Greenhouse Agreement with Government that will see binding commitments to greenhouse gas reductions for many years to come.

### Advocacy

Holcim New Zealand believes it is important that any changes proposed to environmental legislation and policies should be informed by industry science and practical experience.

The Company regularly makes submissions on proposed environmental policies that affect the way we do business. In 2004, these policy issues included the proposed changes to the Resource Management Act and to the National Environmental Standards on Air Quality; Contaminated Land Management Guidelines; and policy related to used, waste and re-refined oil in Canterbury.

Because achieving environmental excellence requires a high level of investment, Holcim New Zealand believes environmental standards should be applied equally and consistently across all businesses.

# Directory

## Board of Directors



 **John Lindsay \***  
CHAIRMAN  
NON EXECUTIVE DIRECTOR  
Holcim (New Zealand) Ltd  
*Auckland, New Zealand*




 **Urs Bieri**  
DIRECTOR  
Holcim (New Zealand) Ltd  
DEPUTY CEO  
Holcim Ltd  
*Zurich, Switzerland*




 **Jerry Maycock**  
NON EXECUTIVE DIRECTOR  
Holcim (New Zealand) Ltd  
*Brisbane, Australia*




 **Tom Clough**  
DEPUTY CHAIRMAN  
DIRECTOR  
Holcim (New Zealand) Ltd  
EXCO MEMBER  
Holcim Ltd  
*Zurich, Switzerland*



 **Murray Valentine \***  
NON EXECUTIVE DIRECTOR  
Holcim (New Zealand) Ltd  
*Dunedin, New Zealand*



 **Rex Williams**  
MANAGING DIRECTOR  
Holcim (New Zealand) Ltd  
*Christchurch, New Zealand*

\* Members of the Board Audit & Compliance Committee

## Holcim New Zealand Executive Team



(Seated from left to right):

**Murray Mackenzie** GENERAL MANAGER - Lime

**Glenda Harvey** MANAGER  
- Human Resources

**Rex Williams** MANAGING DIRECTOR

**Paul Commons** GENERAL MANAGER  
- Strategy and Development

(Standing from left to right):

**Jeremy Smith** GENERAL MANAGER  
- Cement

**John Reeves** GENERAL MANAGER - Finance

**Bill Abbott** GENERAL MANAGER  
- Concrete and Aggregates

(Inset)

**Michael Batstone** COMPANY SECRETARY

## Operating Subsidiaries - Directors



➤ (Above): Holcim New Zealand directors with Bill Richardson, owner of HW Richardson Group Limited and managing partner of AML Limited, a significant contributor to the Concrete division of Holcim (New Zealand) Ltd. (Absent: Tom Clough.



➤ (Above right): An RMC Concrete truck delivering concrete to a construction site in Show Place, Christchurch. RMC Concrete (previously Isaac Concrete) operates in Christchurch and is a joint venture 50% owned by Holcim (New Zealand) Ltd and 50% by HW Richardson Group Limited.



➤ (Right): Westport Works manager Chris Dempsey beside the rotating kilns.

### AML LIMITED

**Rex Williams** - CHAIRMAN

**Paul Commons**

**Bill Richardson** - MANAGING DIRECTOR

**Peter Carnahan**

50% Holcim (New Zealand) Ltd owned  
Concrete company

### BULLER PORT SERVICES LIMITED

**Rex Williams**

**Jeremy Smith**

100% Holcim (New Zealand) Ltd owned  
Holds management contract  
for Port of Westport

### COASTAL RESOURCES LIMITED

**Rex Williams**

**Bill Abbott**

**Allan Drinkrow**

**Warren Silich**

50% Holcim (New Zealand) Ltd owned  
Marine sand recovery

### MCDONALD'S LIME LIMITED

**Rex Williams** - CHAIRMAN

**John Lindsay**

**John Reeves**

**Bill Jacob**

**Craig Richardson**

**Clive Eades**

72% owned by Holcim New Zealand  
Lime manufacturer

### HOLCIM

#### SUPERANNUATION LTD

**John Lindsay** - CHAIRMAN

**Murray Valentine**

100% Holcim (New Zealand) Ltd owned  
Trustee of Holcim (New Zealand) Ltd's  
Superannuation Scheme

### AUDITORS

**PriceWaterhouseCoopers**

### SOLICITORS

**Anthony Harper**

### BANKERS

**ANZ National Bank Limited**

**Bank of New Zealand**

**Westpac Banking Corporation**

### REGISTERED OFFICE

1/1 Show Place, Addington

PO Box 6040

Christchurch

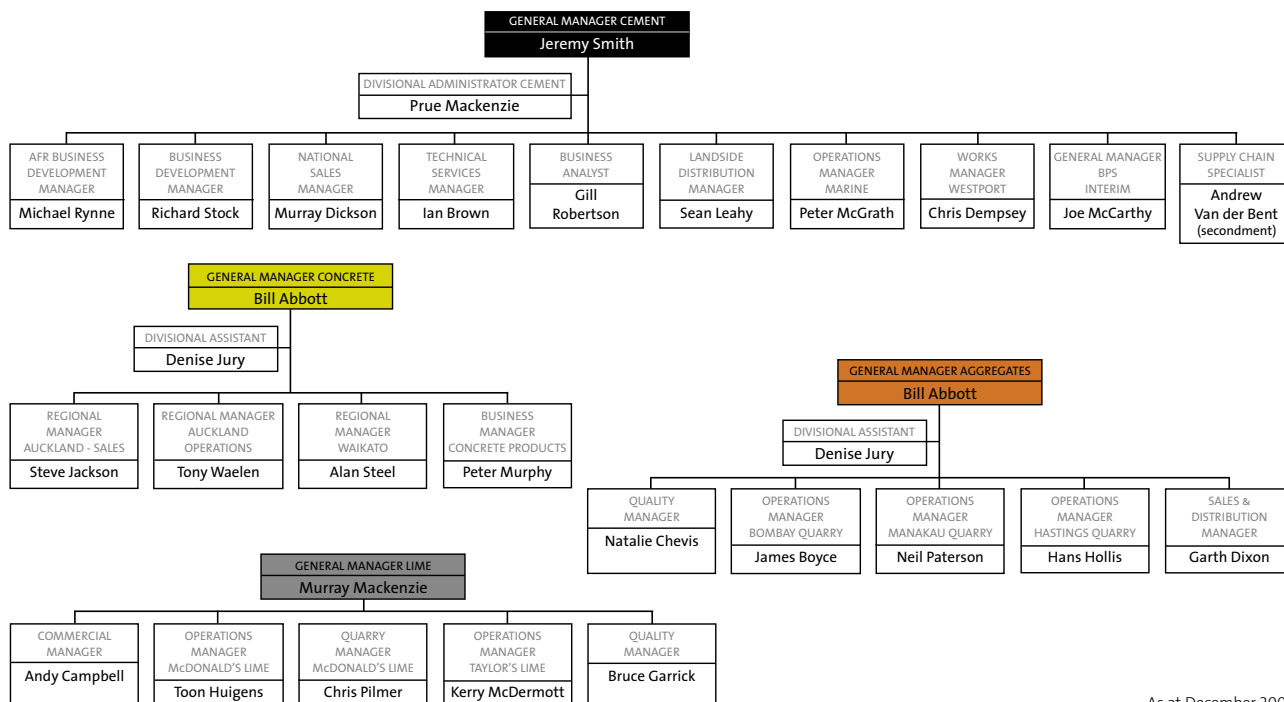
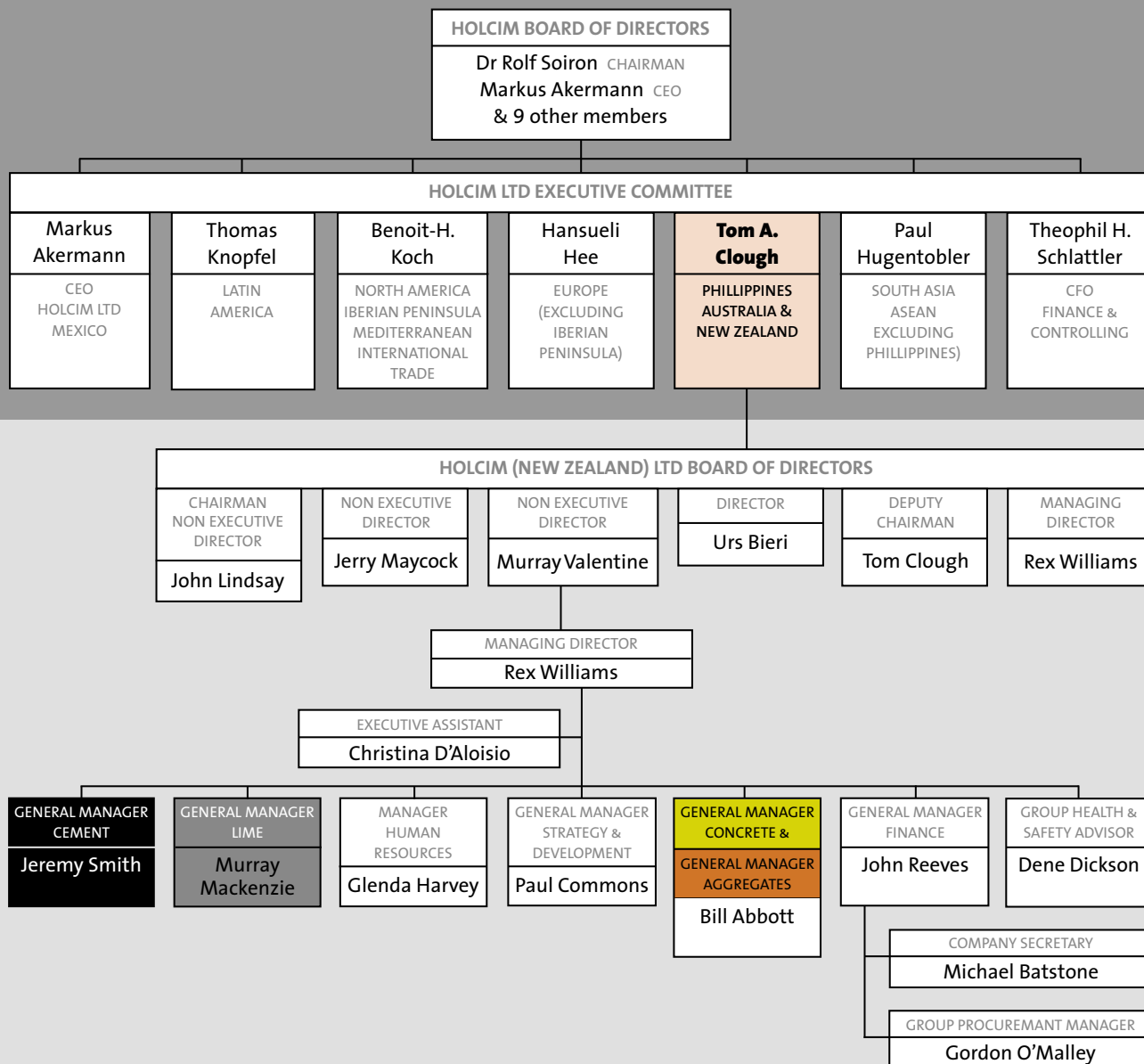
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As at December 2004

