

## **INTRODUCTION**

The group intends to become a leading value added provider of cement, concrete and related products and services to the building and construction industry in the major markets in Hong Kong and the PRC.

The company was incorporated for the purpose of becoming the listed holding company of the group. Presently, the group is engaged in the production, distribution and sale of concrete, mortars, shotcrete and precast concrete products mainly in Hong Kong. In order to expand into the PRC market, the company entered into a conditional agreement with China Resources Holdings on 26th March, 2003 to acquire its cement operations and PRC concrete operations, located in the Guangxi ZAR and Guangdong province in the PRC. After the completion of the acquisition, the enlarged group will be engaged in two lines of business: the concrete operations, being the production and sale of concrete products in Hong Kong and the PRC; and the cement operations, being the production of cement products in the PRC and sale of cement products in Hong Kong and the PRC. The enlarged group will operate four batching plants in Hong Kong, one batching plant in Shenzhen and one batching plant in Dongguan and three cement plants located respectively in the Guangxi ZAR and Guangdong province. The annual production capacity of the enlarged group's plants will be over 2,800,000 cubic metres of concrete and 2,400,000 tonnes of cement. The directors believe that the enlarged group's initial size will place it among the major independent cement and concrete producers in the PRC in terms of annual sales. It is the intention of the enlarged group to increase its production capacity in the PRC through internal expansion and further acquisitions in the future.

Following the completion of the group reorganisation and the acquisition, as described under the "Group reorganisation" section and the "Acquisition" section in this prospectus, China Resources Holdings and its associates will hold approximately 74.5% of the issued share capital of the company and the remaining shareholding interest will be held by China Resources Enterprise independent shareholders.

## **KEY STRENGTHS OF THE ENLARGED GROUP**

The directors believe that the group has maintained for many years a leading position in the ready mixed concrete market under the group in Hong Kong. The group will benefit from the acquisition of the cement operations and the concrete operations in the PRC which have developed substantially in the PRC in recent years. The directors consider that the combined management expertise in both the cement and concrete industries should enable the enlarged group to expand its cement and concrete manufacturing operations in the PRC successfully and to maintain the enlarged group's leading position in the concrete industry in Hong Kong. They consider the principal reasons for their belief are:

### **A strong management team with substantial experience in the industry**

The enlarged group has a strong and motivated management team with substantial experience in the production, sales, marketing and distribution of cement, concrete and related products. The senior management of the group and the cement operations have respectively, 10 to 20 years of experience in their respective fields.

### **A well established customer base**

The enlarged group has a broad and well established customer base in the Hong Kong and the PRC markets. The group's customer base includes public property developers, quasi government organisations and other large private sector property developers. The Redland group has undertaken a number of large scale projects in Hong Kong which include the MTRC Central station, Tin Kau Bridge, Kwai Chung Viaduct, MTRC Tseung Kwan O extension, KCRC West Rail, Sheung Shui Slaughter House, MTRC Airport Railway, Hong Kong Housing Authority's projects. The customers of the cement operations include companies engaged in construction of major highway, hydroelectric power plants and other infrastructure projects in the Guangxi ZAR and Guangdong province.

### **Strategic geographical location of the enlarged group's production plants**

The enlarged group's manufacturing plants are located strategically in various sites throughout Hong Kong. The Redland group operates four batching sites including two with waterfront terminals located in Chai Wan on the Hong Kong island and in Yau Tong on the Kowloon peninsula. The other two plants are in Kwai Chung and Yuen Long. Its strategic locations serve to minimise costs incurred in transporting ready mixed concrete to construction sites. The cement operations in the PRC are located adjacent to railway and deep water berth facilities which enable them to transport raw materials, coal and cement products efficiently and cost effectively.

### **High standard of quality of its products**

The enlarged group's products are well known for their quality. "Redland", "Redland Precast", "Redland Mortars" and "Redland Shotcrete", and their products are well known for their quality within the building and construction industry in Hong Kong. The Redland group's computerised control concrete batching plants have ensured delivery of products with a consistent quality for many years which has enabled the group to successfully tender for large scale projects in Hong Kong. The cement products of the cement operations are mainly sold under the well established and recognised trademarks of "紅水河" (Hongshuihe), "東潤水泥" (Dongrun Shuini) and "華潤水泥" (CRC Cement). The cement operations have also recently started selling under the trademark "潤豐水泥" (Runfeng Shuini). The cement operations mainly produce high grade cement qualified for use in large scale building and infrastructure projects.

### **Strong capital base**

The cement industry is capital intensive, requiring substantial investment to maintain competitiveness including investment in machinery, technical innovation and the introduction of new processes. The directors consider that the enlarged group's financial structure and its ability to generate net discretionary cash flows provide the enlarged group with the financial resources necessary to remain competitive in the cement industry.

### **Active support from China Resources Holdings**

China Resources Holdings is committed to provide on going support to the development of the company as China Resources Holdings will hold approximately 74.5% in the company immediately following the completion of the group reorganisation and the acquisition. China Resources Holdings considers that the company will be its sole listed vehicle for its cement and concrete businesses. While the directors will continue to have autonomous management of the

enlarged group's operations and investments, China Resources Holdings will assist the enlarged group to identify acquisition opportunities and in providing financial resources, where appropriate.

## **HISTORY AND DEVELOPMENT OF THE GROUP**

The Redland group's operation started in 1986 when Redland Concrete was established by China Resources Holdings together with Mr. Howard Chan and other members of the management team. Even though Redland Concrete was then wholly owned by China Resources Holdings, the management of the Redland group enjoyed considerable autonomy which continued even after the acquisition of a controlling stake in Redland Concrete by China Resources Enterprise in 1997.

In 1986, Redland Concrete commenced its operation in the production and sale of ready mixed concrete when its first batching plant was built in Lam Tei, Hong Kong.

Between 1987 and 1997, Hong Kong's gross domestic product grew at a compound annual growth rate of approximately 13.3%, from approximately HK\$386 billion to approximately HK\$1,345 billion. This was reflected in the rapid growth in the property and infrastructure sectors, which also led to a significant growth in the group's concrete business. From initially operating only one batching plant, the Redland group gradually expanded its capacity from one to nine batching plants in Hong Kong by 1997, with an annual production capacity of over 3,000,000 cubic metres of ready mixed concrete. With the decrease in building and construction works in Hong Kong, there has been a contraction in the demand for, and production of, concrete and related products in the past five years. This has also led to intensified competition and consequently lower operating margins. In response to these difficult conditions, the Redland group implemented cost reduction measures and streamlined its operations since 2000 to improve its cost competitiveness. It also closed down those batching plants and sold such sites when the specific projects for which they were built had been completed. At present, the Redland group operates four batching plants in Hong Kong, which are located in Chai Wan, Yau Tong, Kwai Chung and Yuen Long, two of which have waterfront access.

In expanding its concrete business, the board of Redland Concrete believed it was important to secure a stable and competitively priced supply of aggregate, a major raw material in the production of ready mixed concrete. In 1990, therefore, Redland Concrete acquired a 50% interest in Mah Wah for a consideration of HK\$45 million, with the remaining 50% interest being held by the original management of Mah Wah at that time. Mah Wah was initially engaged in quarrying work at Kau Hang quarry, Zhuhai and Shum Hong Quarry, Shenzhen. The Kau Hang quarry was closed in 1993 after it was reclaimed by the local authority for environmental reasons. The mining right of Mah Wah at Shum Hong Quarry expired in or about 1998. From then until it ceased operation in July 2002, Man Wah was involved only in the trading of aggregate.

In 1990's, there was a growing trend in the use of an increasing range of precast concrete products in public and private sector housing projects. In anticipation that the use of precast concrete would increase substantially over the next decade in light of the planned establishment of new towns and the Hong Kong new international airport in Lantau Island and the expected greater use of precast products by the private sector, the Redland group expanded into the precast concrete business. In late 1991, Redland Concrete entered into a joint venture agreement with V.S.L. Engineers (HK) Ltd., subsequently renamed as VSL Hong Kong Limited ("VSL") and Grand Max to establish Redland Precast, then known as VSL Redland Concrete Products Limited ("VSL Redland"), in which Redland Concrete had a 25% shareholding interest. Under the joint venture agreement, VSL Redland was established to produce a range of precast concrete products. In August 1994, Redland Concrete and Grand Max, each of which was holding 25% shareholding interest, acquired the remaining 50% interest in VSL Redland

from VSL. The name of VSL Redland was then changed to Redland Precast. Redland Concrete continues to hold a 50% shareholding interest in Redland Precast. Further details are set out under the paragraph headed “Products” in the section headed “Business” in this prospectus.

In April 1992, Redland Concrete was one of the first companies in the building and construction industry in Hong Kong to be awarded the ISO 9001 certification from the Hong Kong Quality Assurance Agency and one of the first ready mixed concrete companies to receive “Quality Scheme” accreditation for the production and supply of concrete. The ISO 9001 certification is now a common requirement to tender most of the government projects in Hong Kong.

In July 1992, Redland Mortars was established to engage in the production and sale of ready mixed mortars in response to the increasing demand for ready mixed mortars in the building industry in Hong Kong. Further details are set out under the paragraph headed “Products” in the “Business” section to this prospectus.

In March 1997, Redland Concrete acquired all the issued share capital of Quality Control Consultants, which is engaged in the testing of construction materials, building inspection and structural investigation in Hong Kong and the PRC. Further details of Quality Control Consultants are set out under the paragraph headed “Products” in the “Business” section of this prospectus.

In August 1997, China Resource Enterprise acquired an 80% shareholding interest in Redland Concrete from China Resources Holdings at a consideration of HK\$776.0 million. After Redland Concrete became a subsidiary of China Resources Enterprise, the Redland group has continued to be managed by the same senior management team comprising local and expatriate managers, some of whom have worked in the industry for over 20 years. In August 1999, Redland Concrete became the wholly owned subsidiary of China Resources Enterprise when China Resources Enterprise acquired the remaining 20% shareholding interest from China Resources Holdings at a consideration of HK\$168.0 million.

In October 1997, Redland Shotcrete was established to engage in the production and sale of ready mixed shotcrete in response to the increasing demand for ready mixed shotcrete in the construction industry in Hong Kong for slope stabilisation, excavation support or tunneling. Further details are set out under the paragraph headed “Products” in the section headed “Business” in this prospectus.

In 2002, Redland Concrete obtained ISO 14001 Environmental Management System Certification. The ISO 14001 certification is becoming a common qualification for concrete manufacturing company to tender large scale project in Hong Kong.

With the concentration of the China Resources Enterprise group focusing on the distribution and marketing and sale of consumer goods, the concrete operations increasingly fell outside the current focus of the business of China Resources Enterprise. Further it was considered that the PRC based cement and concrete operations of the China Resources Holdings group would complement the concrete operations, which already has an established market position in Hong Kong. A separate listing of the group, together with the acquired companies, will allow the enlarged group to focus its activities on the production and supply of cement, concrete and related products and services to the building and construction industry in the major markets in both Hong Kong and the PRC. This will also give the company a direct access to the equity capital market and a marketable security in its shares which the directors believe will assist in its objective to expand its operations in the PRC and to establish a leading position in that market.

China Resources Enterprise proposed a group reorganisation in March this year and the company was formed and incorporated in the Cayman Islands on 13th March, 2003. Following the completion of the group reorganisation, the company will become the holding company of the group. For details of the group reorganisation, please refer to the section headed “Group reorganisation” in this prospectus.

The company intends to acquire all of China Resources Holdings’ interests in Guangxi CR Cement Holding, Dongguan Cement Holding, Dongguan Concrete Holding and Shenzhen Concrete Holding and entered into an agreement on 26th March, 2003 with China Resources Holdings for this purpose. Guangxi CR Cement Holding is an investment holding company and its principal asset is a 70% interest in Guangxi CR Cement, the principal activity of which is the production of cement at a production plant in Guangxi ZAR with five wet process rotary kiln production lines. Dongguan Cement Holding is an investment holding company and its principal asset is a 70% interest in Dongguan Cement, the principal activity of which is the production of cement in Dongguan from a plant which consists of two grinding mills with an installed annual capacity of approximately 1,000,000 tonnes of cement. Dongguan Cement Holding also holds a 70% interest in CR Cement Company, the principal activity of which is the trading of cement. Dongguan Concrete Holding is an investment holding company and its principal assets is the 100% interest in Dongguan Concrete, the principal activity of which is the operation of a batching plant in Dongguan with an annual production capacity of approximately 300,000 cubic metres of concrete. Shenzhen Concrete Holding is an investment holding company and its principal asset is a 70% beneficial interest in Shenzhen Concrete, the principal activity of which is the operation of a batching plant in Shenzhen with an annual production capacity of approximately 500,000 cubic metres of concrete.

Upon completion of the acquisition and the introduction, the company will become the listed holding company of the enlarged group, which will be engaged in the operation of concrete production in Hong Kong and the PRC and cement production in the PRC.

For details of the acquired companies, please refer to the section headed “Acquisition” in this prospectus.

## **THE REDLAND GROUP**

### **OPERATIONS**

At present, the Redland group is principally engaged in the production and sale of ready mixed concrete, ready mixed mortars, ready mixed shotcrete and precast concrete products. It also provides quality control services to the Redland group’s own operations and other independent third parties. The following is a brief description of the products and services that are provided by the Redland group:

#### **Products**

##### *Ready mixed concrete*

Redland Concrete is principally engaged in the production and sale of ready mixed concrete in Hong Kong. Sales of the Redland group are derived primarily from the sale of ready mixed concrete which accounted for approximately 88.2%, 89.2% and 82.1% of the net turnover and approximately 84.0%, 86.1% and 76.4% of the gross profit of the Redland group for the three years ended 31st December, 2002, respectively.

Ready mixed concrete is composed of cement, aggregate, admixture and water. It is mixed in bulk, either off or on site at a batching plant and in the case of concrete, mixed off site, and is then transported to the construction site by mixer trucks. Following its mixing, ready mixed concrete is usable within about two and a half hours so it is essential for the ready mixed concrete supplier to have batching plants which are reasonably close to the construction sites to which it supplies the concrete and to have an efficient transportation system so that deliveries can be scheduled on time for the concrete to be used as soon as practicable on arrival at sites. For very large scale projects, where physical space allows, it is usual for a temporary on site batching plant to be built to ensure concrete is produced as and when required. The selling price of ready mixed concrete is mainly dependent on the strength of the concrete required by its customers and currently the price for the Redland group's most commonly sold concrete ranges from approximately HK\$320 per cubic metre to approximately HK\$670 per cubic metre.

The actual mix of ready mixed concrete depends on how it is to be used and also on the requirements of the Redland group's customers. The permeability, the proportion of cement, aggregate, ash, silica furnace, other chemicals, minerals and fibres to be added to the concrete mix will then be determined. More advanced concrete uses steel, glass or synthetic fibre or carbon filaments to control shrinkage cracking, thereby reducing permeability and improving abrasion resistance. The more technically advanced ready mixed concrete generally commands higher prices and secures higher margins.

### *Mortars*

Redland Mortars was acquired in July 1992 and is engaged in the production and sale of ready mixed mortars in Hong Kong for the Redland group. It is a wholly owned subsidiary of the Redland group. Redland Mortars accounted for approximately 7.5%, 6.5% and 11.7% of the net turnover and approximately 9.1%, 8.4% and 17.4% of the gross profit of the Redland group for the three years ended 31st December, 2002 respectively.

There are two main types of mortars, being traditional on site produced mortars and ready mixed mortars which are produced off site. Redland Mortars produces principally ready mixed mortars which are commonly used in the construction industry in Hong Kong. The production of ready mixed mortars involves the blending and mixing of cement, specially selected sand, admixtures, such as pulverized fuel ash and chemicals, and water. Redland Mortars produces a wide variety of ready mixed mortars, which includes wall plaster mortars, screed mortars, cement sand grout mortar, cement grout mortar, light weight concrete and lightweight foam concrete. Currently, the selling price ranges from approximately HK\$282 per cubic metre to HK\$900 per cubic metre. Ready mixed mortars normally retain moisture longer than site mixed mortars. Ready mixed and site mixed mortars, which are principally used for wall plastering or floor screening. The working life of ready mixed mortars varies from about 2 hours to over 24 hours. Because of the relatively short working life of the product, the directors believe the customers will only purchase from those ready mixed mortar producers who have their own production facilities.

The principal users of ready mixed mortars and site mixed mortars are construction companies engaged in the construction of public and private housing and other projects. The directors estimate the current ratio of ready mixed mortars to site mixed mortars used in Hong Kong to be approximately 80:20.

### *Shotcrete*

Redland Shotcrete was established in October 1997 and is engaged in the production and sale of ready mixed shotcrete in Hong Kong. It is a wholly owned subsidiary of the Redland group. Redland Shotcrete accounted for approximately 2.2%, 1.7% and 0.8% of the net turnover and approximately 2.7%, 2.0% and 1.1% of the gross profit of the Redland group for the three years ended 31st December, 2002 respectively.

Shotcrete is a durable material with excellent adhesive qualities. There are two types of shotcrete commonly used in Hong Kong, being wet and dry shotcrete. Currently, the selling price is approximately HK\$350 per cubic metre for dry mixed shotcrete and approximately HK\$700 per cubic metre for wet mixed shotcrete. For larger projects and applications, the directors believe that customers generally prefer to purchase ready mixed shotcrete from established suppliers as consistency of quality is more likely to be maintained. Shotcrete is typically used for slope stabilisation and excavation support for tunnelling.

### *Precast concrete products*

In the construction industry in Hong Kong, precast concrete units have been commonly used in mass housing government projects, in addition to large infrastructural projects. As the residential property market becomes more competitive and with the availability of a broader range of structural and architectural designs for precast concrete products, there has been a growing acceptance from developers to using precast units in their residential property development projects, given the substantial cost advantages of precast units over traditional building techniques in Hong Kong. Redland Precast, an associated company of the Redland group, currently carries out the production of precast concrete.

Redland Precast is principally engaged in producing specially engineered structures custom signage and curb inlets and its main customers are civil engineering and building concerns, including the Hong Kong Government, quasi government organisations, property developers and construction contractors. Redland Precast produces mainly architectural precast products for civil engineering projects.

Redland Precast accounted for approximately 4.1%, 4.6% and 7.7% of profit after taxation of the Redland group for the three years ended 31st December, 2002 respectively.

### *Raw materials and production process*

The principal raw materials used by Redland Precast in manufacturing precast concrete are cement, coarse and fine aggregates, steel reinforcement, water and chemical admixtures. Although alternative sources are available, Redland Precast currently sources all of its cement from Dongguan Cement because of the high quality of its products and stable supply. Redland Precast also employs glass fibre reinforcement to manufacture structural and architectural concrete products and other products such as parapets, cable troughs and noise barriers.

Precast concrete units are manufactured in custom made moulds. These moulds may be made from timber, steel or plastic depending upon the nature of the finished product and the number of castings required. Moulds may be either static or mechanical.

Generally, static steel moulds are required for units to be produced with high degree of regularity and repetition in their structural form and shape and static wooden moulds are required to produce structural or architectural concrete products. Mechanical steel moulds are required for large scale civil engineering works and for industrialised housing projects. Steel moulds are mainly sourced in the PRC. However, some projects require higher tolerance specifications and thus require moulds to be purchased from specialist manufacturers overseas.

In order to manufacture precast concrete, reinforced bars form a basic structure of each precast concrete element, which is tested and checked against its required specifications. Concrete will then be mixed and tested at the factory site before pouring into the steel cage. The steel cage is then put into a steam curing pit, if required, where the contents are “cured” or hardened in a controlled environment. After the precast element has hardened, it is lifted out of the mould for surface finishing. For standard elements, the mould can be reused. For curtain wall elements, glass windows and other features such as tiling, colouring and tiles with colour grouting can then be installed on site.

### *Production facilities and capacity*

Redland Precast has established its own carpentry workshop located in Dongguan, the PRC, with production facilities on a site of over 250,000 sq.m., equivalent to approximately 2,690,977 sq.ft., and with a deep water berth, which allows for the efficient transportation of large precast structures. The Dongguan’s factory employed a total of approximately 400 full time staff and approximately 500 staff hired on a contract basis as at 31st May, 2003 and produces an average of approximately 10,000 tonnes of precast concrete products per month. The Dongguan’s factory currently runs two eight hour shifts and a third shift can be arranged within about one week’s notice. On the basis of two shifts only, the current maximum capacity of the Redland Precast’s factories at Dongguan is approximately 25,000 tonnes per month.

### *Sales and marketing*

Redland Precast is one of the major suppliers of precast concrete units in Hong Kong. Redland Precast closely monitors the Hong Kong government’s infrastructure and development plans and the demand of the local developers in order to tender projects.

All of Redland Precast’s sales are handled by its sales offices in Hong Kong.

Redland Precast has produced precast products for a wide range of civil and building structures such as viaduct segments, bridge decks, roof decks, parapets, retaining structures, precast and prestressed railway sleepers, low vibration transmission blocks and floating slab tracks for railways, cable troughs, precast building structures such as beams, columns and floor slabs, prestressed double tee beams, culverts, tunnel linings, kerbs, external walls slabs and stairs. Architectural products include facade units, decorative elements, landscape and street furniture.



Listed below is a selection of the projects, being civil and architectural projects, each of which has a contract value totalling more than HK\$10 million, which Redland Precast has undertaken in the past three years.

<b>Year</b>	<b>Project</b>	<b>Type of work</b>
2000	KCRC West Rail Tuen Mun Centre Station Viaducts	Supply of precast concrete segments and parapets
2001	KCRC East Rail — Permanent Way	Supply of glass fibre reinforcement concrete cable troughs and precast concrete slabs
	West Kowloon Drainage improvement	Supply of precast concrete tunnel lining segments
2002	KCRC East Rail extensions — Tai Wai to Shek Mun and Shek Mun to Lee On	Supply of precast concrete segments
	Sai Wan Ho — Private development	Supply of facade and balcony

### **Testing services**

Quality Control Consultants was established in Hong Kong in 1986 and is engaged in the testing of construction materials, building inspection and structural investigation for the Redland group and third parties in Hong Kong and the PRC. Quality Control Consultants was one of the first commercial testing laboratories to be formally recognised in 1989 by Hong Kong Laboratories Accreditation Scheme (“HOKLAS”) as having the appropriate expertise for testing construction materials. Up to the latest practicable date, Quality Control Consultants has been accredited by HOKLAS to conduct over 250 tests on over 30 items within the field of “construction materials”. Construction materials tested include soil, concrete, aggregates, cement, steel, mortar, coatings, admixtures and other construction materials and calibration services. Building inspection and structural investigation work includes quality control and assurance, site monitoring, field survey, core drilling, site instrumentation and chemical analysis. As at 31st May, 2003, Quality Control Consultants had 51 employees.

Quality Control Consultants accounted for approximately 1.8%, 2.0% and 3.0% of the net turnover and approximately 0.7%, 0.6% and 2.0% of the gross profit of the Redland group for the three years ended 31st December, 2002 respectively.

### **Production process**

With the contraction of the market, the Redland group has reduced the number of batching plants that it operates. Presently it has four batching plants, out of which three are wet batching plants which are located respectively in Kwai Chung, Yau Tong and Yuen Long, and one is a dry batching plant which is located in Chai Wan. Except for Yau Tong’s batching plant which has four production lines, each of the other batching plants has two production lines. Given the comparatively short time that concrete remains usable after it has been first mixed, it is necessary to have batching plants strategically located in various places in Hong Kong so that the Redland group is in a position to tender for major construction projects, wherever they are located.

Generally wet batching plants have a relatively larger production capacity targeting high volume, commercial or public works projects, while dry batching plants have a comparatively lower production capacity targeting low volume, residential projects. Occasionally, the Redland group may also use portable batching plants, which include both wet and dry batching facilities, to service large, long term contracts, such as its contract to supply concrete for the Mass Transit Railway Central Station, and also for contracts in more remote locations.

In wet batching plants, the relevant ingredients to produce concrete are mixed thoroughly before the concrete is poured into mixer trucks. This allows greater control over the quality and consistency of the concrete produced. In a dry batching plant, the dry ingredients and water are poured into mixer trucks which then mix the concrete in its revolving mixer while the trucks proceed to the construction site.

All of the Redland group's wet batching plants have ice making facilities. For many construction projects in Hong Kong, customers specify a maximum temperature at which ready mixed concrete is delivered to the site. The strength of concrete is affected if it is poured at comparatively high temperatures. This is an important consideration during the summer months in Hong Kong and for this reason both ice and water are used to mix the concrete to keep it at the desired temperature before pouring.

The actual mix of concrete is determined by the respective customer in light of its own requirements. The Redland group's own technical sales staff can also assist customers in selecting the optimum concrete for their requirements.

After receiving the specifications for a particular contract, the Redland group utilises industry data and data from previous similar projects to formulate a variety of mixtures of cement, aggregates, water and admixtures which will meet or exceed the contractor's specifications. Testing is also performed to determine which mix design is most appropriate to meet the required specifications. The test results enable selection of the mixture that has the lowest cost and meets or exceeds the required specifications. A project file will be prepared detailing the mix proportion of the concrete. For quality control purposes, the testing centre is also responsible for collecting and testing batch samples of concrete that have been delivered to a construction site.

The central despatch system tracks the status of each mixer truck to check whether a particular truck is loading concrete; en route to a particular construction site; at a particular construction site; pouring concrete; being washed; or en route to a particular plant. The system is continuously updating the status through regular contact with individual mixer truck drivers. Through this system the despatch office is able to determine the optimal routing and timing of subsequent deliveries by each mixer truck and to monitor the performance of each mixer truck driver.

The Redland group generally operates on a single shift and at the special request of its customers, there are also some overtime operations during peak periods. Occasionally, batching plants are operated on a twenty four hours basis.

### **Sales and marketing**

The Redland group uses industry data to prepare tenders or quotations for particular projects based on the size of the project, location, desired margin, cost of raw materials and the design mixture identified in its preparation process. Several months may elapse from the time a

contract is awarded up to the time when delivery of the product is required. During this time, the Redland group will maintain regular communication with the contractor concerning the status of the project and any changes in the project's specifications in order to coordinate the purchases of cement and other materials which will be required to fulfil the order and meet delivery requirements. Shortly before the specified delivery date, the Redland group's despatch office will, upon further confirmation with its customer, coordinate the timing and delivery of the concrete to the specified construction site. On any given day, a particular batching plant may have production orders for dozens of customers at various locations throughout its area of operation.

The Redland group promotes itself through advertising in construction and building journals and magazines on a regular basis and through the publications of descriptive brochures of its products and services. For the three years ended 31st December, 2002, the Redland group incurred approximately HK\$381,000, HK\$54,000 and HK\$24,000, respectively in advertising expenses.

### **Pricing**

The Redland group's products are generally priced within specific parameters set by the management. The sales and marketing team is given reasonable discretion in conducting a sale provided the sales are not effected at below the minimum price specified by the Redland group's policy. Factors to be taken into account when determining sales prices include market prices, size of orders, the group's marketing strategy and the relationship with each customer.

### **Payment terms**

Sales managers recommend credit terms based on contract size and relationship with customers. Most of the large scale contracts with long time established customers of the Redland group require payment in stages over the duration of the contract. New small scale customers of the Redland Group may not be granted any credit limit and sales will be transacted on prepayment terms whereas larger scale new customers may be granted credit but will be required to pay deposit equivalent to approximately 50% of their respective credit limit. For other long time established customers of the Redland group, they are generally granted credit terms and may not be required to pay any deposit. The credit terms for each contract are required to be approved by senior sales manager, the financial controller and the general manager. The Redland group normally gives up to 60 days credit to customers with a high credit rating or to those who have well established relationship with the Redland group. With new customers, the Redland group usually conducts credit checks and obtains credit history references from other concrete producers before any credit terms are granted. The Redland group normally gives 30 days credit to new customers.

The management of the Redland group reviews the recoverability of accounts receivables on a regular basis based on the ageing reports. During the three years ended 31st December, 2002, the provision rates for trade receivables of less than 90 days were 15%, 17% and 17%, respectively. Trade receivables of over 90 days were fully provided for. The provision for bad debts of the group for the three years ended 31st December, 2002 were approximately HK\$1.1 million, HK\$nil and HK\$nil, respectively.

During the three years ended 31st December, 2002, all of the group's sales were made and settled in Hong Kong dollars.

## **Customers**

For each of the three years ended 31st December, 2002, the group's sales to its five largest customers accounted for approximately 29.9%, 40.9% and 30.8% of the group's total sales, respectively. For each of the three years ended 31st December, 2002, the group's sales to its largest customer accounted for approximately 8.3%, 13.4% and 8.2% of the group's total sales, respectively.

Assuming the distribution was completed as at the latest practicable date, none of the directors, their respective associates or any of the shareholders who owns more than 5% of the issued share capital, of the company, as at the latest practicable date, had any interest in any of the top five customers of the group. As at 31st December, 2002, the group has established business relationship with its top five customers for a period ranging from approximately 2 to 12 years.

## **Purchases**

The raw materials used by the group are primarily aggregates, sand, cement, admixture and water. A substantial amount of cement is sourced from two suppliers, being Dongguan Cement and Yu Feng Cement (HK) Co. Ltd., an independent third party. Although alternative sources are available, the group currently sources approximately 80% and 20% of its cement from these two suppliers as they can provide an adequate and steady supply. The group has entered into annual supply contracts with both of these cement producers, at prices determined with reference to prevailing market prices. This method of pricing is in line with industry practice. It is the group's policy to maintain several suppliers for other major raw materials.

The group's purchases are made entirely in Hong Kong dollars. Payment terms granted by the group's suppliers generally range from a credit period of approximately 15 to 45 days.

## **Suppliers**

Purchases from the five largest suppliers of the group for each of the three years ended 31st December, 2002 represented approximately 73.2%, 55.1% and 73.0% of the group's total purchases, respectively. Wygetta Quarry is one of the five largest suppliers of the group. For the three years ended 31st December, 2002, the amount of purchase from Wygetta Quarry amounted to approximately HK\$64.0 million, HK\$30.7 million and HK\$9.2 million, respectively, representing approximately 16.9%, 8.5% and 3.7% of the group's cost of sales, respectively.

Purchases from the group's largest supplier, Dongguan Cement, which will become a non wholly owned subsidiary of the company after the completion of the acquisition, amounted to approximately HK\$65.2 million, HK\$80.4 million and HK\$48.5 million, respectively, representing approximately 14.2%, 22.3% and 19.6% of the group's total cost of sales for each of the three years ended 31st December, 2002, respectively.

Assuming the distribution was completed as at the latest practicable date, save for China Resources Holdings which is interested in the Dongguan Cement Holding group through its shareholding in the company, none of the directors, their respective associates or any shareholder, who owns more than 5% of the issued share capital of the company, as at the latest practicable date, has any interest in any of the top five suppliers of the group.

As at 31st December, 2002, the group has established business relationship with its top five suppliers for a period ranging from approximately 2 to 10 years.

### **Stock control**

The Redland group generally obtains on a daily basis most of the raw materials necessary to manufacture ready mixed concrete at each of its facilities. These raw materials include cement, stone, gravel and sand. Each plant typically maintains an inventory level of these materials sufficient to satisfy its operating needs for approximately one day other than the Yau Tong plant which may maintain raw materials for production up to several days. However, each plant will have the capacity to store raw materials to satisfy approximately three days of production in case of a large order is being received. In addition, the Redland group has its own purchasing department to ensure that supplies are delivered on time. Cement represents the highest cost material used in manufacturing a cubic metre of ready mixed concrete, while the combined cost of the stone, gravel and sand used is slightly less than the cost of cement.

The Redland group maintains control over the purchase of raw materials in order to ensure that such raw materials comply with the group's required standards. Qualities of the raw materials purchased are closely monitored to ensure they comply with Redland group's required standards. There had not been any significant provision on inventory during the three years ended 31st December, 2002.

### **PRODUCTION FACILITIES**

The Redland group has four batching plants that are strategically located throughout Hong Kong, allowing for its concrete products to be delivered on a timely basis to its customers. Three batching plants are located on land owned by the Redland group and the other one plant is located on a land leased to the Redland group pursuant to an operating lease with a term of three years. Over the years, the Redland group has either acquired or leased properties to build batching plants to produce concrete for sale to its customers. The four batching plants have a total annual production capacity of approximately 2,000,000 cubic metres. For the year ended 31st December, 2002, the total production volume of these four batching plants was approximately 784,000 cubic metres, representing approximately 39.2% of the Redland group's annual production capacity of concrete. The directors believe that the low utilisation rate was mainly due to the massive slow down in the building and construction industry in Hong Kong in 2002. The utilisation rate for the two years ended 31st December, 2001 was approximately 50%. As understood by the directors, it is a general practice of the Redland group to reserve approximately 20% to approximately 30% of its production capacity for large projects. In addition, the rainy season in Hong Kong runs from June to August while spring and autumn are warm with occasional rain. It is also typhoon season from July to September. It is, therefore, normal in Hong Kong that the average annual utilisation rate is around 75% since less construction work is carried out during rainy days. In addition, as transportation time is critical for delivery of concrete, each batching plant can only serve certain areas, therefore, each plant will need to have excess capacity to meet with any demand in those areas and cannot rely on the excess capacity of batching plants located elsewhere. The directors believe that the Redland group has the single largest batching plant in terms of production capacity and the largest flake ice making capacity in the Hong Kong market, both such capacity being essential for producing high performance concrete.

***Kwai Chung***

The Kwai Chung plant is located at a parcel of land held under STT No. 3450 located at Area 30, Container Port Road South, Kwai Chung, the New Territories, Hong Kong and comprises an area of approximately 1,690.0 sq.m., equivalent to approximately 18,191 sq.ft.. This plant was first established in May 1998 and consists of two production lines which adopt the “wet process rotary kiln” method. It has a production capacity of approximately 200 cubic metres per hour with on site storage facilities for approximately 350 tonnes of aggregate, 360 tonnes of cement, 140 tonnes of ash and 160,000 litres of water. As at 31st May, 2003, the plant employs a total of 17 full time staff, of which 9 were plant staff and 8 were mixer truck drivers. The plant also employs 17 truck mixer haulage contractors as at 31st May, 2003. During each of the three years ended 31st December, 2002, the amount of concrete produced at the Kwai Chung plant accounted for approximately 14.8%, 16.0% and 20.2% respectively of the group’s total production volume of concrete.

The parcel of land held under STT No.3450 located at Area 30 Container Port Road South, Kwai Chung, the New Territories, Hong Kong is leased from the Hong Kong government for a term of three years expiring on 31st January, 2004 and thereafter automatically renewable on a quarterly basis. However, either the group or the government may at the expiration of the third year of the term, by giving at least three months’ notice in writing, terminate the lease. If no such notice is being given as aforesaid, the lease may be terminated by either party giving to the other at least three calendar months’ notice in writing to that effect. The government is also entitled to terminate the lease if the property shall be required for the improvement of Hong Kong or for other public purpose by giving one month’s notice in writing to that effect. The aforesaid terms are quite common for a short term tenancy granted by the government. The short term tenancy entered into by the group in respect of the Kwai Chung plant is no exception to that. In any event, it is government policy that government land held under short term tenancy will be offered for tender again upon expiration of term. The Redland group has been successful in obtaining short term tenancies of the site of the Kwai Chung plant by way of tender since 1998. If such site is to be offered for tender again on expiry of the current term of tenancy, the company is not aware of any difficulty in obtaining another short term tenancy of such site by way of tender.

***Yuen Long***

The Yuen Long plant is located at the Remaining Portion of Lot No. 1207, Section A of Lot No. 1208, the Remaining Portion of Lot No. 1265 and the Remaining Portion of Lot No. 1842 (the “Yuen Long Lots”) all in Demarcation District No. 121, Tong Yan San Tsuen Road, Tong Yan San Tsuen, Ping Shan, New Territories, Hong Kong and comprises a total area of approximately 4,365.4 sq.m., equivalent to approximately 46,989 sq.ft.. It has a production capacity of approximately 120 cubic metres per hour, with on site storage facilities for approximately 1,300 tonnes of aggregates, 600 tonnes of cement, 140 tonnes of ash and 200,000 litres of water. As at 31st May, 2003, the plant employs a total of 21 full time staff, of which 13 were plant staff and 8 were mixer truck drivers. The plant also employs 22 mixer truck haulage contractors as at 31st May, 2003. During each of the three years ended 31st December, 2002, the amount of concrete produced at the Yuen Long plant accounted for approximately 15.9%, 20.3% and 26.8%, respectively of the group’s total production volume of concrete.

The Yuen Long Lots are four agricultural lots which comprise, among others, the Remaining Portion of Lot No.1842 in Demarcation District No. 121 (“Lot no. 1842”) of approximately 1,348.1 sq.m., equivalent to approximately 14,511 sq.ft., being held under new grant no. 7575. The government lease (new grant no. 7575) as part of the document for proof of a good title to Lot no. 1842 was lost. Under the current Hong Kong property law, a purchaser of the property is entitled to

require Standard Wealth Investment Limited, a member of the Redland group and the registered owner of Lot No. 1842, to produce, amongst others, the original or a certified copy of the government lease as proof of title to the property. The Redland group will not be in the position to comply with any such requirement imposed by any prospective purchaser or mortgagee of the property in any future proposed sale or mortgage. However, this would not affect the right of Standard Wealth Investment Limited as the legal registered owner of the property because it is in possession of all other title deeds and documents for proof of title. Also, the loss of the new grant no. 7575 is not a ground on which the Government may re-enter the said property. The loss of the new grant would not affect the right of the Redland group to carry on its operations at the property.

According to a new Practice Note for Authorised Persons and Registered Structural Engineers (“RSE”) No. 255 issued by the Buildings Department in March 2002 in respect of batching plant, the structural safety of a batching plant erected prior to 1st May, 2002 has to be demonstrated through submission of satisfactory appraisal reports by a RSE by 30th October, 2002 and that such plant has to be properly maintained. An acknowledgement will be issued by the Buildings Department once it is satisfied that all requirements under the new practice note have been complied with (“acknowledgement”). The Yuen Long plant was erected prior to 1st May, 2002. Accordingly, the company has to submit an appraisal report of the Yuen Long plant to the Buildings Department and to obtain an acknowledgement. The Redland group has yet to receive an acknowledgement in respect of the Yuen Long plant as at the latest practicable date.

To comply with the new practice note requirements, the Redland group has retained a RSE, Chan & Wong Architects and Engineers Limited (the “architects”), to prepare and submit an appraisal report to the Buildings Department well before the deadline for submission of the appraisal report. As the architects have accumulated many other cases in progress, there was a delay in the time of their submission of the appraisal reports for the Redland group. Despite the fact that the Redland group was late in the submission of the appraisal report, the company is of the view that the delay would not affect the decision of the Buildings Department in the issuance of an acknowledgement. On 17th December, 2002, the architects submitted to the Buildings Department one set of duly signed design calculation and one set of duly signed design drawings (collectively “the Structural Calculation and Drawings of the Yuen Long plant”) in respect of the Yuen Long plant. In a letter dated 27th March, 2003 from the architects to the Redland group, the architects confirmed that (i) the design calculation and details for the Yuen Long plant had been prepared in accordance with the “Code of Practice for Structural Use of Steel — 1987”, “Code of Structural Use of Concrete — 1987” and “Code of Practice on Wind Effects in Hong Kong — 1983”; and (ii) the Yuen Long plant had been properly and safely designed and the design had been checked and found satisfactory. In another letter dated 10th May, 2003 from the architects to the Redland group, the architects confirmed that they had received comments from the Buildings Department to the Structural Calculation and Drawings of the Yuen Long plant and the said comments were being handled and replies would be made as soon as possible. The architects have confirmed to the Redland group that the said comments were requests from the Buildings Department for further justification or elaboration on the design calculations and the architects believe that only some minor adjustments of constructed details would be required. The company has confirmed that it will comply with all legitimate requests made by the Buildings Department. Based on the company’s experience in obtaining the acknowledgement for the Kwai Chung plant and in light of the architect’s opinion mentioned above, the company is of the view that there is no practical difficulty in obtaining an acknowledgement from the Buildings Department.

The Redland group has accepted a proposed short term waiver offered by the District Lands Office for the use of the property as a batching plant as against its original use as agricultural land. The waiver is for a term of six months from 20th June, 2001 and thereafter automatically renewed quarterly unless terminated in writing by either Standard Wealth Investment Limited (the owner of the property

and a member of the Redland group) or the District Lands Office, Yuen Long. The Redland group has not received and does not expect to receive any notice of termination of the waiver. Standard Wealth Investment Limited has through Albert So Surveyors Limited (the “surveyors”) submitted a formal appeal on 20th September, 2002 against the waiver fee offered by the government on the ground that the amount offered is too high. The District Lands Office, Yuen Long, has agreed to consider the appeal. As the Redland group is currently in the process of appealing against the waiver fee imposed, no waiver fee has yet to be paid. The company confirms that the Redland group will pay the fee once it has been finalised. The company was advised by the surveyors that no penalty or fine will be imposed on the group for the delay in payment caused by the appeal save and except for interests accrued on the amount of waiver fee finally agreed for the period from the date of the grant of waiver to the actual date of payment. The company does not expect to see any further material conditions imposed by the District Lands Office, Yuen Long once the waiver fee has been finally determined.

### ***Yau Tong***

The Yau Tong plant is located at No. 6 Tung Yuen Street, Yau Tong, Kowloon, Hong Kong. It is the Redland group’s largest batching plant and comprises an area of approximately 2,293.8 sq.m., equivalent to approximately 24,690 sq.ft.. It has a production capacity of approximately 400 cubic metres per hour with on site storage facilities for approximately 4,800 tonnes of aggregates, 4,900 tonnes of cement, 1,600 tonnes of ash and 200,000 litres of water. The Yau Tong plant has its own berth where it receives and stores raw materials, being principally aggregates, ash and cement supplied from the PRC and transported in specialised barges. As at 31st May, 2003, the plant employs a total of 41 full time staff, of which 17 were plant staff and 24 were mixer truck drivers. The plant also employs 28 truck mixer haulage contractors as at 31st May, 2003. During each of the three years ended 31st December, 2002, the amount of concrete produced at the Yau Tong plant accounted for approximately 35.0%, 37.1% and 30.0% respectively of the Redland group’s total production volume of concrete.

The property on which the Yau Tong production facilities are erected (please refer to property numbered 3 in appendix VII to this prospectus) is adjoined to another property (please refer to property numbered 2 in appendix VII to this prospectus) which is being occupied by the group as a driveway to the Yau Tong production facilities and for ancillary office and storage uses. Special condition no. 13 of the Conditions of Sale no. 10873, as part of the title documents of property numbered 2, provides that the ingress and egress of vehicles to or from Yau Tong Marine Lot No. 70 (the “Lot”), should only be made between two specified points as shown on the plan annexed to the Conditions of Sale. As advised by the surveyors, there are additional vehicular access points found at the property which constitute a breach of special condition no. 13. Further, such additional vehicular access points are not shown on the approved building plans of the property and may be considered as unauthorised alterations under the Buildings Ordinance (Cap. 123 of the Laws of Hong Kong). Such additional vehicular access points were made for logistical reasons in order to streamline the operation process of the Yau Tong plant. Further, according to the surveyors, a cockloft with a window opening along the western facade of the building located at the north western corner of the said property numbered 2 has been constructed for ancillary office use. The cockloft and the window opening are not shown on the approved building plans of the said property and may be considered as unauthorized structures or alterations under the Buildings Ordinance and constitute a breach of the aforesaid Conditions of Sale.

As a result of the non compliance of the aforesaid Conditions of Sale and Buildings Ordinance, the government and the Buildings Department may by order in writing require part of the property to be reinstated in accordance with the approved building plans. In the event that the relevant government authorities or the Buildings Department order for cessation of use of the additional vehicular access



points and reinstatement of the relevant part of the property in accordance with the approved building plans, the company will comply with such order and will use another driveway within the Yau Tong plant and the group would have to relocate the office. The company confirms that the operation of the group will not be adversely affected and believes that relocation of such office will not have any adverse impact on the operations of the group. The company was advised by the surveyors that once the Lands Department becomes aware of any non compliance of any General or Special Condition of the aforesaid Conditions of Sale, they may serve written notices and warning letters on the owner requiring rectification of such breach within a prescribed period of time and the matter can be resolved by complying with such orders. Based on the knowledge and experience of the surveyors, the surveyors advised that the Buildings Department would not normally take any further action under the Buildings Ordinance if the owner complies with its order to reinstate the property in accordance with the approved building plans. The company confirms that the Redland group will comply with any such order as and when made by the Buildings Department. The reinstatement works would mainly include but not limited to (1) reconstruction of the external walls of the property at the additional vehicular access points; (2) removal of the ramp; (3) reinstatement of the ground levels; (4) closing of the said window opening and (5) removal of the said cockloft. The company estimates that such reinstatement cost shall not exceed HK\$100,000.

The Yau Tong plant was erected prior to 1st May, 2002. Accordingly, the new practice note mentioned above with respect to the Yuen Long plant also applies to the Yau Tong plant and an appraisal report has to be submitted to the Buildings Department for the issuance of an acknowledgement. As at the latest practicable date, the Redland group has yet to receive an acknowledgement. Like the Yuen Long plant, there was also a delay in the architects' submission of the appraisal report, but the company is of the view that the delay would not cause any adverse impact on the issuance of an acknowledgement by the Buildings Department.

To comply with the practice note requirement, by a letter dated 29th April, 2003, the architects submitted to the Buildings Department one set of duly signed design calculation and one set of duly signed design drawings (collectively "the Structural Calculation and Drawings of the Yau Tong plant") in respect of the Yau Tong plant. By a letter dated 9th May, 2003 from the architects to the Redland group, the architects confirmed that (i) the design calculation and details for the Yau Tong plant had been prepared in accordance with the "Code of Practice for Structural Use of Steel — 1987", "Code of Structural Use of Concrete — 1987" and "Code of Practice on Wind Effects in Hong Kong — 1983"; and (ii) the Yau Tong plant had been properly and safely designed and the design had been checked and found to be satisfactory. By another letter dated 26th May, 2003 from the architects to the Redland group, the architects confirmed that (i) they had not received any further comments from the Buildings Department; and (ii) they believed that the likely comments to be given by the Buildings Department would be requested for further justification or elaboration on the design calculations and the architects believe that the submission would not be adversely affected. The company has confirmed that the Redland group will comply with all legitimate requests, if any, of the Buildings Department. Based on the company's experience in obtaining the acknowledgement for the Kwai Chung plant and in light of the architect's opinion mentioned above, the company is of the view that there is no practical difficulty in obtaining an acknowledgement from the Buildings Department.

### ***Chai Wan***

The Chai Wan plant is housed inside a godown located at portions of the ground, first and second floors, Safety Godown Industrial Building, 56 Ka Yip Street, Chai Wan, Hong Kong and comprises an area of approximately 1,478.9 sq.m., equivalent to approximately 15,919 sq.ft.. The Chai Wan plant is housed inside the said godown of which an occupation permit has been issued by the Buildings Department and the architects have confirmed that the facilities of the Chai Wan plant have been

approved by the Buildings Department, therefore there is no need to obtain an acknowledgement from the Buildings Department as similar to those mentioned above. The Chai Wan plant is expected to be upgraded in order to improve the quality of its products and currently has a production capacity of approximately 100 cubic metres per hour, with on site storage facilities for approximately 2,800 tonnes of aggregates, 350 tonnes of cement, 260 tonnes of ash and 50,000 litres of water. As at 31st May, 2003, the plant employs a total of 14 full time staff, of which 8 were plant staff and 6 were mixer truck drivers. The plant also employs 9 truck mixer haulage contractors as at 31st May, 2003. During each of the three years ended 31st December, 2002, the amount of concrete produced at the Chai Wan plant accounted for approximately 8.2%, 7.2% and 10.2%, respectively of the group's total production volume of concrete.

## **TRANSPORTATION**

As at 31st May, 2003, the Redland group had seven payloaders, seven cement tractors, ten cement tankers, 65 concrete mixer trucks and 76 haulage contractors' concrete mixer trucks. Raw materials are distributed to the batching plants and are transported in the Redland group's own specialised tankers, in the case of cement and ash, and by third party haulers, in the case of sand and aggregates. The Redland group assists its haulage contractors to purchase their own concrete mixer trucks by providing financial guarantee to financial institutions financing such purchases. However, the mixer drums are owned by the Redland group for easy maintenance and replacement when necessary.

## **QUALITY CONTROL**

Quality control is considered as an integral part of the Redland group's production process. The directors believe that the Redland group's products are well regarded for their consistent quality.

The Redland group places considerable importance on quality control procedure at each stage of the purchasing and production process. Before selecting suppliers, the Redland group will test their products against the required specification at the group's own in house laboratory. Once suppliers have been selected, samples of all incoming raw materials are tested to ensure that they are acceptable for the manufacture of concrete products.

Before the concrete mixer trucks leave the batching plants, visual inspections are carried out and random samples of the concrete to be delivered are taken for testing against the customers' specifications. A variety of tests are also conducted as the concrete or shotcrete are delivered to the site. These include visual inspection, slump and flow tests, yield check, and strength and density tests which are prepared in a laboratory. It is essential that any possible performance deviation from specification is detected immediately so as to ensure quality of the products.

If one of the samples fails at any stage of the acceptance testing procedures, it is the Redland group's policy to investigate the problem and a strict corrective and preventive action procedure will be followed before production of that product is continued.

It is the Redland group's policy that internal audits are carried out on the operation of all aspects of the current quality control system which includes sales, distribution, production, transport, technical and materials and quality assurance. The objective is to determine whether or not the procedures, which are based on ISO 9001, are being followed, and if not, what action should be taken. The Redland group's quality manager is responsible for maintenance of the quality control audit programme.

During the three financial years ended 31st December, 2002, a limited number of claims have been made against the Redland group in relation to quality of its products. The directors consider that such claims do not and would not have any material adverse impact on the group.

## **RESEARCH AND DEVELOPMENT**

In order to maintain the Redland group's competitive advantages, the directors believe that it is essential for the Redland group to devote resources both to the continuing development of the manufacturing processes and to the research and development of new products. The Redland group maintains a close working relationship with a number of property developers and building and construction contractors and is periodically engaged by the government as a consultant with other participants in the construction industry so as to be able to anticipate demand for specialised products such as high strength concrete, precast concrete and shotcrete. The Redland group's research and development function is currently carried out by its wholly owned subsidiary, Quality Control Consultants, together with the Redland group's production department.

The directors believe that the Redland group has one of the largest private laboratories in the Hong Kong concrete industry. Quality Control Consultants has a main laboratory situated in Tai Po, New Territories and a number of on site laboratories for testing concrete, concrete constituents materials and steel.

As the group's research and development function is mainly carried out by Quality Control Consultants, therefore the group's direct research and development expenses for the three years ended 31st December, 2002 were only approximately HK\$0.1 million, HK\$0.1 million and HK\$0.1 million, respectively.

## **REPAIR AND MAINTENANCE**

Regular repair and maintenance programme for the Redland group's plant and equipment is carried out by the repair and maintenance department to maximize production efficiency, to avoid unexpected stoppages and to extend the useful life of its equipment. Maintenance of storage and handling equipment and calibration of batching and mixing equipment are carried out weekly. The Redland group's vehicle chassis are maintained in accordance with the relevant government regulations. In addition, the Redland group's environmental pollution prevention equipment and systems are inspected and monitored regularly to ensure due compliance with regulations. As at 31st May, 2003, the Redland group's repair and maintenance team had a total of seven staff. For each of the three years ended 31st December, 2002, the Redland group incurred approximately HK\$7.7 million, HK\$4.4 million and HK\$3.2 million, respectively in repair and maintenance expenses. A substantial decrease in repair and maintenance expenses was due to a reduction in batching plants from a total number of nine in 1997 to four in 2002. There had not been any major stoppages caused by equipment defect during the three years ended 31st December, 2002.

## **SAFETY PROCEDURES**

The Redland group places considerable importance on promoting high standards of health and safety for all operations at work. The Redland group implements a safety management system under which a safety committee chaired by the production manager and comprising the safety manager, the safety supervisor, department managers, area supervisors and officers of each division monitor the implementation of the Redland group's safety plan and safety of the group's production plants. The safety committee meets on a regular basis. The Redland group also imposes the same level of standards to works carried out by its subcontractors and owner drivers in respect of safety and health matters.

New employees are also trained to comply with the relevant safety procedures prior to their assumption of their respective job duties. The Redland group will, from time to time, identify jobs and procedures which are considered hazardous and implement arrangements to assess risk of these activities so as to determine the preventive or protective controls required to reduce the risk to an acceptable level. The Redland group also implements safety promotion activities including use of posters, distribution of newsletters and pamphlets and, from time to time, the organisation safety competitions and other activities to sustain the interest and awareness of its workforce in safety procedures.

#### **ENVIRONMENTAL AND POLLUTION CONTROL**

The Redland group has adopted an environmental protection policy which aims to identify and evaluate environmental aspects of its activities including maintenance of environmental controls in its production and transportation activities. In recognition of its commitment to implement environmental protection policies, the Redland group was accredited with the ISO 14001 Environmental Management System Certification in December 2001. ISO 14001 certifications are becoming a prerequisite for concrete manufacturing company to tender large scale projects in Hong Kong.

The main pollutants from the batching process is dust and waste water. In view of this, the Redland group has installed dust control equipment and water recycling systems at its four batching plants. The Redland group's production facilities in Hong Kong are all subject to the regulations of the Waste Disposal Ordinance, Water Pollution Control Ordinance and Air Pollution Control Ordinance. During the three years ended 31st December, 2002, complaints have been previously lodged against the Redland group in respect of noise pollution emitted from an old production plant in Yuen Long. Due to the complaints, the Redland group subsequently moved the plant to a nearby area farther away from the residential area. In addition, the Redland group has once been prosecuted by the Hong Kong government for illegal discharge of water from its Yau Tong plant. The related fines of HK\$25,000 have been paid and since then there have not been any other prosecutions. Save as aforementioned, the Redland group has not been held liable for any breach of environmental rules and regulations nor has it received any complaints from residents living in the vicinity of the relevant production facilities. The directors believe that the current measures adopted by the Redland group are sufficient to comply with existing regulations.

#### **COMPETITION**

Having enjoyed a period of high capacity utilisation and demand for ready mixed concrete in the years up to 1997, market conditions have deteriorated sharply since then. With the downward trend in the level of construction activities in Hong Kong, there has been excess capacity in the industry and the situation has been exacerbated by the arrival of new competitors into the market. The result has been a lowering of both production volume and prices.

Although there are a number of small operators in Hong Kong, the principal competitors of the Redland group are ten concrete manufacturers in Hong Kong, which are owned either by multinational companies or well known local conglomerates. Like its major competitors, the Redland group has the capacity and geographical spread to tender for most of the substantial contracts. The success in being awarded major development projects will depend principally on competitive pricing, timeliness of delivery and consistency of quality and service.