Lafarge is one of the leading building materials suppliers in South Africa. In 2006, the company demonstrated its confidence in the country’s economy by announcing a R1.2 billion project to increase its cement capacity by one million tons per year. The Project was the largest investment the South African cement industry had seen for over two decades.

The investment had two components: a new kiln and clinker line at Lafarge Cement’s flagship cement works at Lichtenburg, in the North West Province, and a one million tons of cement per year grinding station on a greenfield site at Randfontein.

A FOCUS ON CUSTOMER SERVICE
The Randfontein portion of Project Rainbow represented an investment of R450 million. The decision to develop a greenfield site was based on the aim to be closer to the company’s prime Gauteng market and to contain the rapid escalation in transportation costs.

Lafarge’s investment in South Africa is a long term strategic one and lays a platform for building lasting relationships with our customers.
THE GRINDING STATION

The Lafarge Randfontein Grinding Station has been designed and built with a strong focus on efficiency in all key performance areas of the cement production process, health, safety and the environment.

Being a greenfield site, all infrastructure and services had to be provided. A major area of activity was the construction of a dedicated rail siding and exchange yard designed to handle block train loads of clinker from Lafarge Lichtenburg Cement Works.

Designed to meet Lafarge's stringent environmental control standards, the clinker mill is operated in closed circuit with a state-of-the-art dust separator. Bagged cement customers are serviced from a high capacity packing plant. Bulk and bagged cement is distributed by road transport.

INNOVATIVE PRODUCT RANGE

PRODUCTS OF RANDFONTEIN

Randfontein Grinding Station is currently producing a Road Binder, a General Purpose Cement and a Premium Technical Cement for specialist applications:

SOIL STABILISERS CEMENTS

These are innovative products designed to provide optimal solutions for improving the engineering properties of soil, which is an essential phase of road construction. Two products are available:

- Roadcem CEM II/B-M (V-S) 32,5N
  Roadcem is a slower strength-gaining cementitious binder produced from Portland cement, siliceous fly ash (fly ash) and blast furnace slag (slag). Roadcem is delivered by bulk tanker with the option of a spreading service, or in palletised loads of 50kg bags.

- Buildcrete CEM IV/B-V 32,5R
  Lafarge's well-known Buildcrete general purpose cement has been used successfully on a wide range of soil stabilisation projects. Produced from Portland cement and fly ash, this versatile ‘R’ class cement has a relatively slower strength gain compared with traditional CEM I cements for soil stabilisation purposes. Buildcrete is delivered in palletised loads of 50kg bags. (Under the brand name Civilcrete, Buildcrete is also delivered by bulk tanker with the option of a spreading service.)

PREMIUM TECHNICAL CEMENT

A premium technical product that combines excellent strength performance at all ages with versatility and enhanced durability benefits:

- Powercrete Plus CEM IIA-V 42,5N
  Formulated from Portland cement clinker and 15% siliceous fly ash together with a strength enhancer, Powercrete Plus is classified as a Portland-fly ash cement.

ACTIVELY BELIEVING IN THE NEED FOR SUSTAINABILITY

DEVELOPING HUMAN RESOURCES

We worked closely with the Randfontein Municipality to maximise the potential beneficial impact of our project, not only on the provision of job opportunities but also on the skills level of the local labour force.

The construction activity provided approximately 200 direct jobs with the emphasis on training people from the local community in marketable construction skills. Supplying goods and services to the project site produced a further estimated 200 indirect jobs, many of which have become established as viable ongoing businesses. The completed grinding station provides permanent employment for over thirty people from the Randfontein community.

BEING A GOOD NEIGHBOUR

- Upgrading of local road intersection
  While involved with the development of a world-class production facility, Lafarge Cement also demonstrated its caring attitude towards neighbouring communities. Over R3 million was contributed to the upgrading of the intersection and robots on the road leading to the factory, in order to make it easier and safer for local road users. In addition, a new bus shelter was constructed.

- Electricity for surrounding communities
  In keeping with its policy of assisting the development of communities in which it operates, Lafarge helped finance a new electrical power transition yard, which not only supplies power to the grinding station but also creates a better life for the company's neighbours: communities surrounding the site are enjoying having an electricity supply for the first time.
CARING FOR THE ENVIRONMENT

For many years, Lafarge has been a building materials industry leader in sustainable development, continually searching for ways to allow people to enjoy the benefits of economic growth, while minimising the damaging impact of the manufacture and use of building materials on the earth.

Innovation has always been central to Lafarge and, as new challenges are identified in relation to global warming and dwindling fossil fuels, it is being used to tackle the challenge of sustainability. Given Lafarge's presence in many different areas of the world, our Group is in a position to make a significant positive contribution.

In keeping with the Group's stance, we believe that in South Africa we have a responsibility to use resources wisely and in the most environmentally-friendly manner possible in order to operate sustainably.

Lafarge Cement was the first manufacturer in South Africa to offer a complete range of cements with lower CO2 footprints, in a market that is increasingly aware of environmental issues.

HEALTH & SAFETY

The Project Rainbow team at Randfontein completed the project with an excellent safety performance of 1,52 million direct manhours with Zero Lost Time Injuries (LTIs). This was especially commendable considering there were no existing physical or administrative infrastructures on the site and the workforce had little, if any, prior experience of safe working practices.

LAFARGE IN SOUTH AFRICA

Lafarge South Africa Holdings is a wholly owned subsidiary of Lafarge, the world leader building materials and No 1 in cement. In South Africa, the company employs 2 740 people and operates through four main business units: Lafarge Cement, Lafarge Aggregates, Lafarge Concrete and Lafarge Gypsum.

The Cement Business Unit is one of the major cement producers in Southern Africa. Its Lichtenburg Cement Works is the largest and one of the most technically advanced cement production facilities in the country. The company has an established cement clinker grinding station and cement distribution depot at Richards Bay on the north coast of KwaZulu-Natal province. In addition, major cement distribution depots are located at Kaalfontein on the north-east side of Johannesburg and at Polokwane in the Limpopo Province.

With the commissioning in 2009 of Randfontein Grinding Station and the new kiln at Lichtenburg Works, the Cement Business Unit has a production capacity of over 3million tons of cement per year.

What is ‘environmentally-friendly’ cement?

Lafarge Cement’s innovative products have formulations that replace a proportion of the traditional cement content with a cementitious (behaves like cement) extender such as siliceous fly ash and/or slag. These are processed by-products of the power and steel industries.

Using them in our cement:

- Uses less non-renewable materials
- Creates less greenhouse gas in the manufacture of cement
- Reduces landfill sites
- Enhances many properties of concrete

Lafarge Cement was the first member of the building materials industry to join the Green Building Council of South Africa (GBCSA). It is a commitment to assist the Council in leading the transformation of the South African property industry to ensure that all buildings are designed, built and operated in an environmentally sustainable way. The aim is to allow all people in our country to work and live in healthy, efficient and productive environments.

ABOUT LAFARGE

Lafarge is the world leader in building materials, with top-ranking positions in all of its businesses: Cement, Aggregates & Concrete and Gypsum. With 78 000 employees in 78 countries, Lafarge posted sales of Euros 15,8 billion in 2009.

In 2010 and for the sixth consecutive year, Lafarge was listed in the “Global 100 Most Sustainable Corporations in the World”. With the world's leading materials research facility, Lafarge places innovation at the heart of its priorities, working for sustainable construction and architectural creativity.