

JK LAKSHMI CEMENT LTD

Unit Profile :

M/s JK Lakshmi Cement Ltd (JKLC) is a member of well known JK Organisation which is one of the largest privately owned industry group in India. Today M/s JKLC is one of the leading cement companies in the country. The Company strongly believes that a company can grow only when it includes largest sections of the society in its development. Company offers a work culture where every individual gets an opportunity to grow with the company. M/s JKLC have well defined core values such as caring of people, integrity with intellectual honesty, openness, fairness & trust and commitment to excellence. Company have also business vision to become 12 Million Tones by 2012 (12 x 12) with a business mission to be recognized as an efficient, competitive and premium cement brand.

The company is confident that with the optimal use of resources and the latest technology, forthcoming years will take the company to even higher levels of glory and it will live up to the rising expectation of all the stake holders in its future journey.

The company bagged a number of awards highlighting the commitment and technical expertise of its people. "The Energy Efficient Unit 2007" awarded by Confederation of Indian Industry (CII), Best Improvement in Thermal Energy Performance 2005 – 2006 and Second Best Environmental Excellence in Plant Operation – 2005 – 2006 awarded by National Council for Cement & Building Materials (NCCBM) in the International Conference on Cement. The Golden Peacock Award for Corporate Social Responsibility for the year 2007 was given by Former Prime Minister of Sweden on 16th February, 2007 in the 3rd Global Conference on Social Responsibility by World Council for Corporate Governance (WCFCG) in Vilamoura, Portugal. The Company was awarded 2nd Prize in the National Award for Excellence in Cost Management – 2007 in the category of private manufacturing organizations – turnover less than Rs. 1000 Crores by the Institute of Cost and Works Accountants of India (ICWAI).





CSE Green Rating Award



National Award for "Excellence in Energy Management 2007"



**NCB National Award for Environment Excellence
in Plant Operation 2006-07**



**NCB National Award for Best Improvement
in Thermal Energy 2005-06**

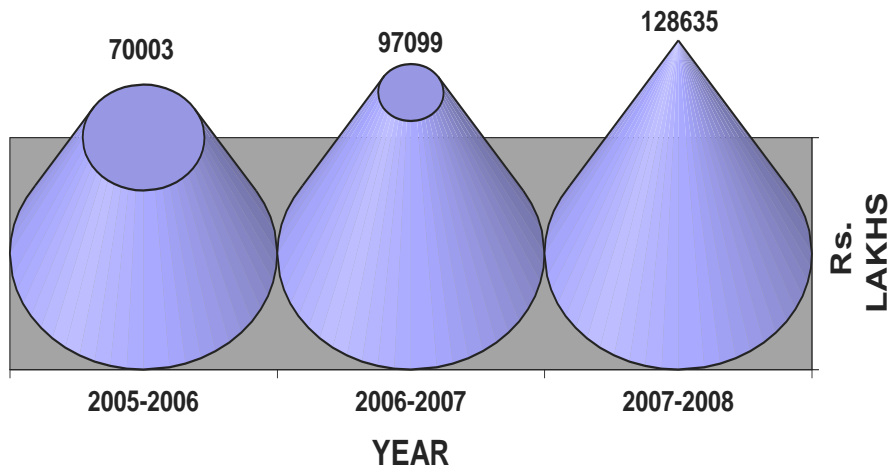


Golden Peacock National Award for Corporate Social Responsibility 2007

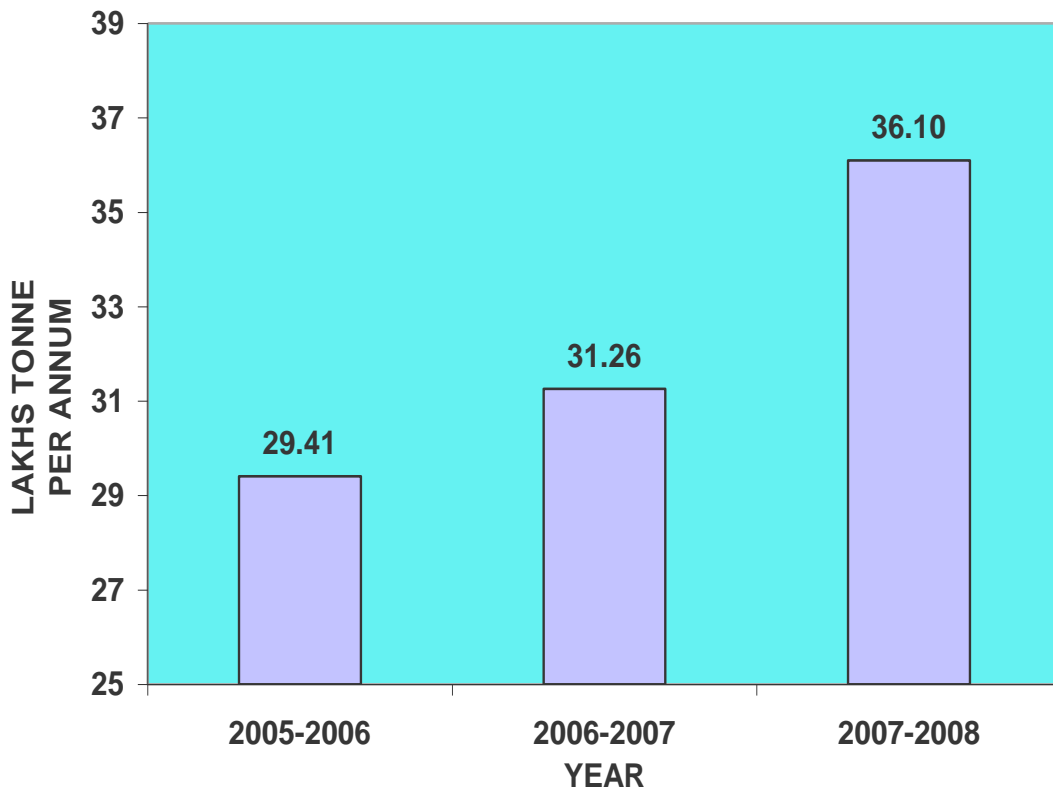
Energy Consumption

Description	Unit	2005-06	2006-07	2007-08
Installed capacity	LTPA	24.00	34.00	36.50
Actual production	LTPA	29.41	31.26	36.10
% utilization	%	122.54	91.94	98.89
Coal consumption	Tonnes	247193	271769	296329
Total cost of coal	Rs Lakhs	8177.37	10871.41	14172.42
Electricity consumption	Lakh kwh	2363.46	2592.92	2880.75
Total electricity cost	Rs.Lakhs	10469.13	11636.52	10545.18
Energy consumption in terms of % of mfg. cost (variable cost)	%	61.79 %	58.36 %	54.56 %
Specific electrical energy consumption (excluding crusher)	Kwh/Ton of cement	82.09	82.91	79.31
Specific thermal energy consumption	Kcal/kg clinker	733	768	746
Coal consumption	Kg/ton of cement	84	84	80

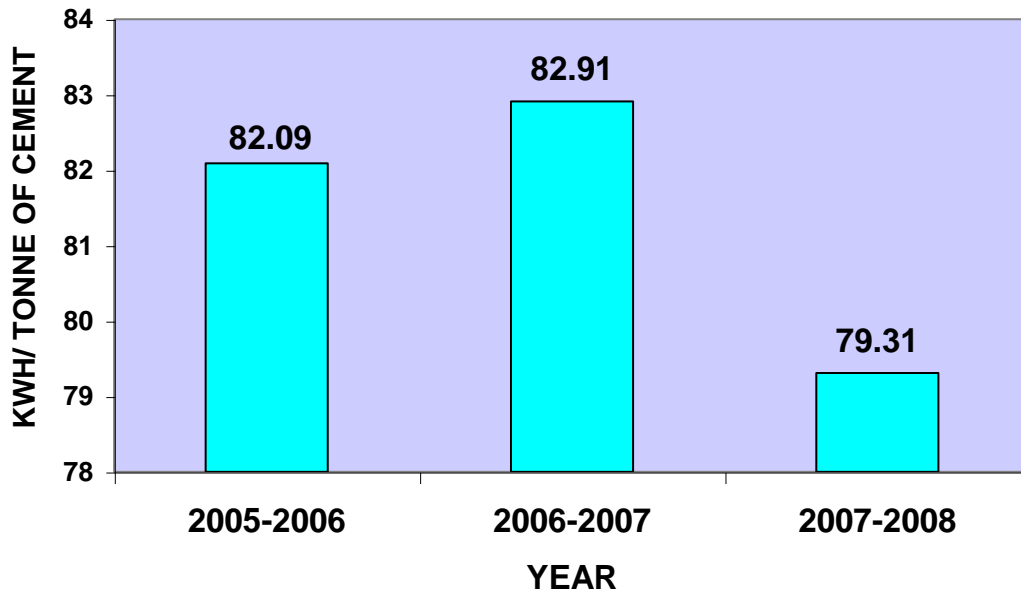
ANNUAL SALES TURN OVER (Rs. LAKHS)



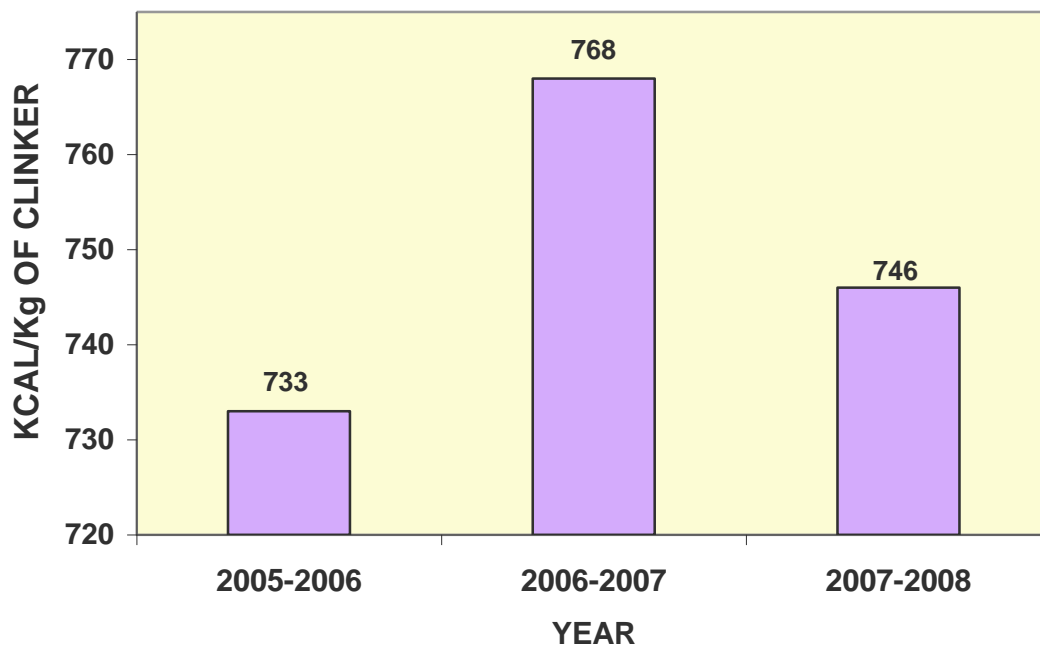
ANNUAL CEMENT PROD. (INCL. CLINKER SALES)



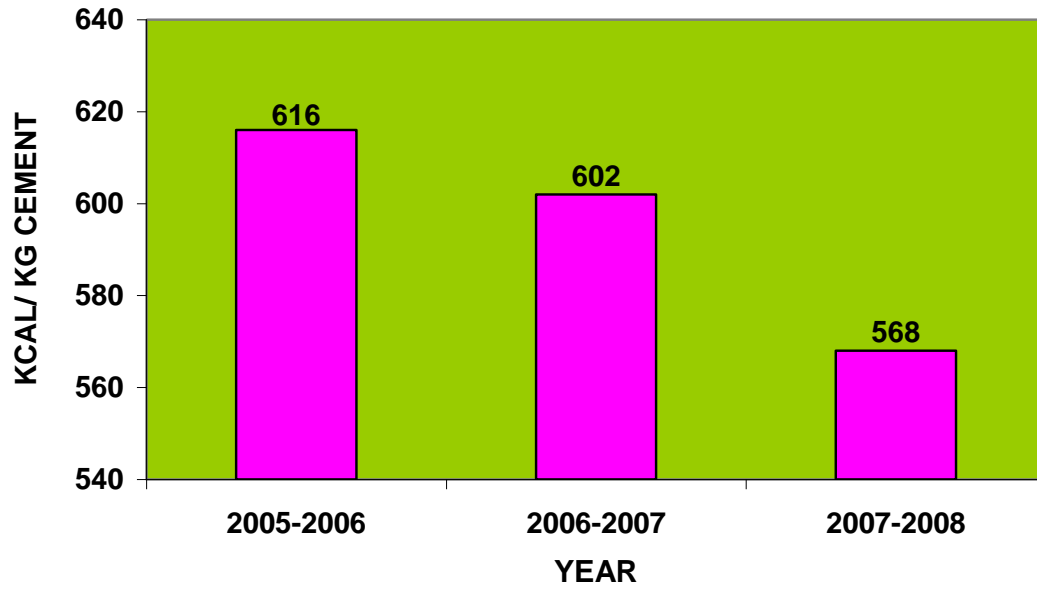
SP. ELECT. ENERGY CONSUMPTION



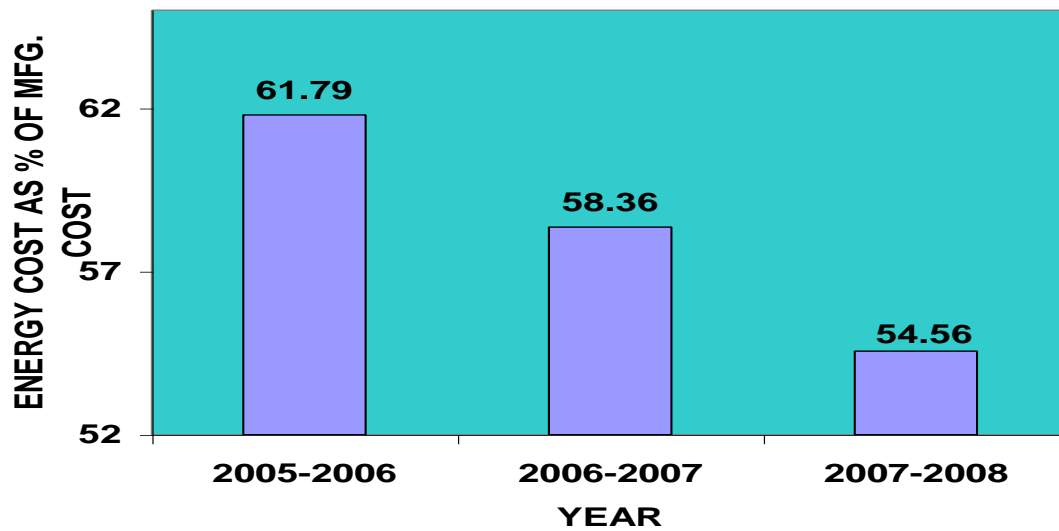
SPECIFIC HEAT CONSUMPTION (KCAL / Kg OF CLINKER)



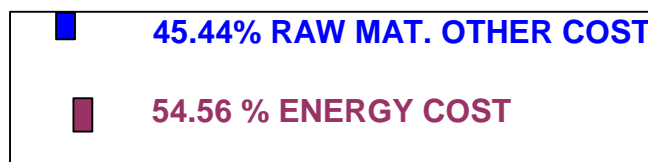
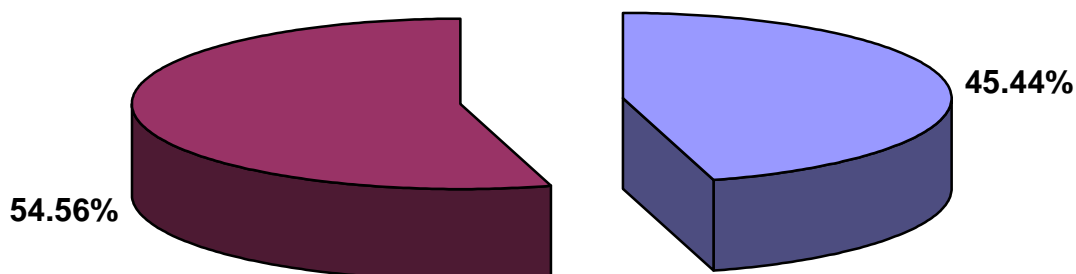
SP. THERMAL ENERGY CONSUMPTION (UNIT / TON CEMENT)



ENERGY COST AS % OF MFG. COST



**ENERGY COST AS % OF MFG. COST
FOR THE YEAR 2007 - 2008**



Year	Electrical Energy Consumption		Thermal Energy Consumption	
	Kwh/ton of Cement (excl. crusher)	% Reduction over 2004-2005	Kcal/Kg of Clinker	% Reduction over 2004-2005
2004-2005	83.72	-	746	-
2005-2006	82.09	1.95 %	733	1.74 %
2006-2007	82.91	0.97 %	768	(-) 2.95 %
2008-2008	79.31	5.27 %	746	0 %

Energy Conservation Commitment, Policy and Organizational Setup

The management of M/s.JK Lakshmi Cement Ltd. is committed to total energy management and prevention of energy wastage by:-

- Close monitoring, control and analyze the equipment and process performance for specific energy consumption.
- Explore the possibility of cheaper alternative fuel and waste products.
- Create awareness for energy conservation.
- Conduct training programs for energy consumption.
- Conduct energy audit to identify opportunities for improvement of overall energy efficiency of the plant.

The management considers energy efficiency of equipment on the basis of cost benefit analysis while purchasing the new equipments.

Energy Management cell headed by Energy Manager is functioning for regular monitoring and control of wastage of energy.

Company involves different cement process experts/consultants/energy audit-agencies to identify & suggest scope of improvement in energy efficiency.

Actively participate in cement sector task force meeting, organized by B.E.E. and exchange the views regarding energy consumption norms.

The energy management committee chaired by the Chief Executive (Works) meets every Monday at 4.00 PM to review the weekly energy performance, action plan and ENCON activities.

A copy of Energy Management policy is attached herewith.



LAKSHMI CEMENT
(A DIVISION OF JK CORP LTD.)
JAYKAYPURAM

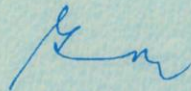


ENERGY MANAGEMENT POLICY

The management of M/s Lakshmi Cement stands committed to continual improvement in Energy Conservation in accordance with Energy Conservation Act-2001, by taking the following steps :-

- Closely monitor, control and analyze the equipment and process performance for specific Energy consumption through Energy Management Cell and take corrective action.
- Explore the possibility of the use of cheaper alternative fuel and waste products with a view to protect Environment and Natural Resources.
- Create awareness for energy conservation and disseminate information to the grass-root level by conducting training and motivational programs.
- Conduct Energy Audit through accredited auditor and prepare an annual activity plan to reduce energy consumption.

Date : 1st Jan. 2002
Place : Jaykaypuram


(GANPAT SINGH)
CHIEF EXECUTIVE (WORKS)

MAJOR ENERGY CONSERVATION PROJECTS IMPLEMENTED DURING THE YEAR 2007-2008

Up-Gradation of Kiln-2 & 3 Main Drives to Increase Kiln RPM from 4.2 to 4.6 (A Low Cost Technological Innovation)

Synopsis:

Over the last decade the cement industry has been on the throes of a severe recession rendering a number of plants unviable under the burden of large cumulative debts & loans. In order to sustain its operation in the market it was essential for us to cut down cost and at the same time increase in the capacity. Going for a new green-field plant being an expensive proposition, the only alternative left was to sweat out the assets by brown fielding in the existing plant and to utilize the available equipments to their full potential, adding equipments only wherever required for balancing the capacity. Thus optimum utilization of existing manpower resources and machinery, infrastructure and colony etc. has helped cut down the project cost considerably and minimize the capex.

The up-gradation of kiln-2 and kiln-3 main drive has helped the company to beat the inflation in the current market scenario by increasing kiln output and considerable reduction in power

Previous Status:

The plant was initially designed for 2800 TPD. Numbers of in house modification with practically no-capex and small capex were carried out to enhance the capacity to 4200 TPD. Above 4200 TPD, following problems were faced

1. Build-up at kiln inlet
2. Ring inside the kiln
3. kiln Back spillage
4. Once filled kiln is stopped, it used to take 1hr to come on main drive

In order to get rid off of the above-mentioned problems and to enhance capacity to 4500 tpd, it had been decided to upgrade main drive of both the kilns.

Energy Saving Project:

The kiln drive up-gradation of both kilns has enabled us to get consistent clinker production at 4500 TPD. Besides clinker production, it helped us to considerably reduce electrical energy consumption.

Benefits of the Project:

Now we are able to get consistent clinker production from both the kilns at 4500 TPD. Besides this, it has helped us in reducing electrical energy consumption and fugitive dust emission etc. A comparison of parameters before and after modification is given below

PARAMETER BEFORE IMPLEMENTATION AFTER IMPLEMENTATION

Kiln Production	4200 TPD	4500 TPD
Kiln rpm	4.2	4.5
Kiln (% Filling)	13.8%	13.8%
Kiln power (KW)	320	440

Benefits of this project:

1. Higher clinker production.
2. Reduction in specific power consumption

Cost benefit analysis: (For one kiln)

Annual savings (Electrical energy)	:	Rs. 124.70 Lakhs.
Annual saving due to increase in Clinker production	:	Rs. 2231.00 Lakhs.
Total saving	:	Rs. 2355.70 Lakhs
Investment	:	Rs. 450.00 Lakhs.
Simple payback	:	3 Months



(A VIEW OF UP-GRADED KILN – 3 MAIN DRIVE STATION)



**(OTHER SIDE VIEW OF UP-GRADED KILN – 3
MAIN DRIVE STATION)**

ENERGY CONSERVATION PLANS AND TARGETS

S. No.	Energy Conservation Measures (Planned)	Anticipated Savings (Rs. Lakhs)	Approx. Investment (Rs. Lakhs)	Project Commencement & Completion year
1	Up-gradation of Old Kiln (Unit-1) for production and energy efficiency improvement	}	20100.00	Mar - 09
2	Installation of one more cement mill to increase grinding capacity.	} 14391.00	2500.00	Jan - 09
3	Installation & commissioning of one cement mill with cement silo and packer machine at split location.	}	5000.00	Jan - 09
4	Installation of fly ash drier for cement mills Dec – 08	150.00	700.00	Dec - 08
5	Replacement of fossil fuel by biomass in pyro-processing.	75.00	330.00	Dec - 08
6	Retrofitting of C.A. Fan of Cement Mill – 2 with high efficiency Fan	10.00	15.00	Dec - 08
7	Power Generation from Waste Heat Recovery system	2275.00	9600.00	Jun - 2010

Environment and Safety

The unit has made sincere efforts since 1982 in the field of plantation. More than 1.5 lakhs plants are planted & the process is still going on.

M/s JK Lakshmi Cement Ltd. have a very strong feeling to keep close monitoring over the efficiency of pollution prevention measures. The Environment Management Cell (EMC) ensures the full efficient utilization of pollution control measures with the help of online emission monitoring.

The plant has installed bag house & ESP at its major production units. Bag house is fitted with Homo-polymer, PTFE laminated fiber glass & Polyester bags at various sections like Cement Mill, Reverse air bag house & Coal Mill.

There are zero discharge effluents from industry. Only domestic waste water (sewage) is being treated at sewage treatment plant (STP).

Major Environmental Projects taken during the year 2006- 07 & 2007-08 :-

Reduction in fugitive emission

- Cement flooring of truck parking area (14000 Sq feet)
- Cemented road inside the plant, colony & road to highway (5.0 Km)
- Installation of vacuum cleaner in packing plant
- Purchase of road sweeping machine

Reduction in GHG emission and greenery improvement

- Development of garden / parks in township (15.0 hectare area)
- Plantation of 5000 saplings JETRPHA in mines area
- Plantation of 10000 saplings in plant and township
- Plantation of 500 NEEM trees both sides of road to main highway

Water Conservation : -

- Rain water harvesting to recharge bore wells
- Check dams construction in mines area for water harvest
- Creation of three dams for rain water storage in township (45000 M³)

Safety :-

JK Lakshmi Cement Ltd. Is an OHSAS 18001:1999, certified cement plant. It continuously focus on improving it's Safety & Occupational Health standards and recent procurement of a Fire Tender in January '2008 bears testimony to this fact. Every employee at JK Lakshmi Cement Ltd. realizes the importance of safety for himself, his co-workers as well as the equipment.

JK Lakshmi Cement Ltd. is a Corporate Member of National Safety Council - Rajasthan State Chapter and takes active interest in promoting safety awareness in our region. Safety week is celebrated with a great enthusiasm every year. It also give great importance to safety training and organize in-house programs as well as employees are nominated to programs conducted by the Nation Safety council and leading safety organizations. Regular safety audits are also conducted and reports received from the audit are reviewed at corporate level.