



Vedanta Resources plc Sustainable Development Report

Diversified metals and mining

Delivery and Growth

Sustainable Development Report

Our Approach to Sustainable Development

Vedanta aims to develop and manage a diverse portfolio of mining and metals businesses to provide attractive returns to our shareholders whilst carrying out our activities in a socially and environmentally responsible manner and creating value for the communities where we operate. Sustainable development principles are fundamental to our approach. These principles require us to monitor and reduce social and environmental risks, to improve efficiencies in the use of resources, to minimise pollution and to create partnerships with our local communities.

Governance Structure and Management Systems

The Group is committed to ensuring that the health, safety, environmental and social commitments of its Businesses are managed appropriately and to a high standard. To oversee this, an HSE Committee (the "Committee") was established in June 2004 comprising the Chief Executive of the Group, Mr KK Kaura, and the chief executives of the Zinc, Copper and Aluminum Businesses. A Non-executive Director, Dr SK Tamotia, is the Chairman of the Committee. The Committee monitors HSE performance of the Group's Businesses and provides advice and guidance to the Board and management in achieving continuous improvements in HSE. The Committee met three times during the year ended 31 March 2005.

A Group HSE manager was appointed during the year, reporting to the Chief Executive of Vedanta. The manager is responsible for convening the meetings of the Committee and providing a flow of information between the Board, the Committee and the operations, as well as ensuring the implementation of policy and the transfer of best practice across the Group.

The majority of the Group's operations have their own HSE policies appropriate to the characteristics of their business. However, the broad principles upon which Vedanta engages in HSE activities across units are similar. The Board has recently adopted the HSE Policy, as recommended by the Committee and shown on page 32, to provide a uniform basis for implementation of HSE policies across Group operations in the future. It is the responsibility of operational managers throughout the Group to ensure implementation of the HSE policies and systems, and to monitor operational performance against these policies. All individual units have qualified and experienced HSE specialists to assist management in implementing HSE policies and management systems. They undertake compliance management, impact assessment, measurement and monitoring, and continuous improvement programmes. The operations are also guided by the regulatory framework in terms of HSE matters prevalent in that country and work closely with the authorities to identify and resolve any problems.

All significant Indian operations have their Environmental and Occupational Health & Safety Management Systems certified in accordance with the international standards ISO:14001 and OHSAS:18001, respectively (see table on page 33). The Korba complex at BALCO obtained its certification in accordance with ISO:14001 and OHSAS:18001 during the year, and the Visakhapatnam zinc smelter at HZL was also certified to OHSAS:18001. Regular surveillance audits are carried out and management plans are prepared and implemented to facilitate continuous improvement.

KCM plans to have all its operations certified in accordance with ISO:14001 and OHSAS:18001 by 31 March 2006. HZL, Sterlite and BALCO will also modify their systems appropriately to incorporate the changes and expansions. Certification for TCM and CMT will not be achieved given the short remaining life span of their mines. Certifications for the Mainpat mine of BALCO are expected to be received by the end of June 2005, and the Yercaud mine of MALCO is expected to obtain certification by 31 March 2006. Plans for certification of the Bodai-Daldali deposit of BALCO and the Kolli Hills mine of MALCO are under review and could be progressed next year.

HSE management performance and systems compliance throughout the Group is internally and externally audited, including periodic reviews by regulatory authorities.

A glossary of terms used in this report is found on page 44



HEALTH, SAFETY AND ENVIRONMENT POLICY

At Vedanta Resources plc, we believe in sustainable development and are committed to effective management of health, safety, environment and community development as an integral part of our business. Accordingly, we will strive to:

- develop, implement and maintain Health, Safety and Environment ("HSE") management systems aligned with our commitments and beliefs and consistent with world-class standards;
- comply with applicable HSE regulations in all our activities, thereby providing a safe and healthy work environment;
- seek continual improvements through setting and reviewing targets, assessing and reporting HSE performance, using appropriate best available practices and providing all employees with HSE training;
- implement regular health surveillance and risk-based monitoring of employees;
- conserve natural resources, raw materials, water and energy by process improvements, recycling and reducing waste including waste utilisation;
- work with communities to contribute to their development;
- encourage contractors and suppliers to adopt principles and practices adopted by us; and
- communicate with all our stakeholders on the progress and performance of HSE management.

This Health, Safety and Environment Policy was approved by the Board of Directors on 1 June 2005.

Status of certification of Vedanta operations to E & OHSAS Standards

Company	Unit	ISO14001: Certification	OHSAS18001: Certification
Sterlite	Tuticorin smelter	Certified	Certified
	Silvassa copper refining facility	Certified	Certified
	Mt Lyall mine	Not Intended	Not Intended
	Thalanga mine	Not Intended	Not Intended
HZL	Rampura Agucha mine	Certified	Certified
	Rajpura Dariba mine	Certified	Certified
	Zawar mining complex	Certified	Certified
	Chanderiya smelter	Certified	Certified
	Debari smelter	Certified	Certified
	Vizag smelter	Certified	Certified
BALCO	Mainpat mine	Target June 2005	Target June 2005
	Bodai-Daldali deposit	To be reviewed	To be reviewed
	Korba complex	Certified	Certified
MALCO	Yercaud mine	Target March 2006	Target June 2006
	Kolli Hills mine	To be reviewed	To be reviewed
	Mettur Dam complex	Certified	Certified
КСМ	Konkola mines	Target March 2006	Target March 2006
	Nchanga mines	Target March 2006	Target March 2006
	Nampundwe mines	Target March 2006	Target March 2006
	Nkana smelter	Target March 2006	Target March 2006

Awards and Recognitions

During the year, many of our operations received awards and commendations for their contribution to HSE management; these were received at local, regional and national levels. Some of the significant achievements include:

- safety awards by Greentech Foundation, India to the Chanderiya smelter and the Korba complex;
- award of the British Safety Council's national award to the Chanderiya smelter;
- environmental excellence award by Greentech Foundation to Zawar mines;
- best team and best member awards in recovery (metal sector) for Rajpura Dariba mines in the all-India mine rescue competition organised by the DGMS;
- awards in various categories at regional levels for Zawar, Rajpura Dariba, Rampura Agucha, Yercaud and Kolli mines in competition with other mines in the region;
- Rampura Agucha received the award for overall excellence in mine environment, awarded by the Indian Bureau of Mines;

- Rampura Agucha came first in the regional safety competition run by the DGMS, in addition to other prizes in various categories; and
- the Vizag zinc smelter received the State government's award for best management for its outstanding contribution in the maintenance of industrial relations, social welfare and productivity. The unit also received an award at the National Safety Day celebrations.

Health and Safety

Vedanta has a commitment to provide a safe and healthy workplace for its employees and contractors. We believe that we can minimise risks and train our employees and contractors to recognise this and act accordingly.

Vedanta's corporate safety and health initiatives focus on the following elements:

- leadership ensuring that senior management and operational heads provide leadership in, and are committed to, health and safety;
- management systems a majority of the Group's operations have adopted OHSAS:18001 certified management systems. Safety committees operate at various levels to ensure that employees are involved in decisions affecting their health and safety;

- training safety flows from safe behaviours and attitudes. Regular training is provided to all employees and contractors to increase their awareness and to improve their behaviours and attitudes towards safe working practices; and
- risk management risk assessments are carried out, particularly for hazardous operations, and significant risks are minimised by the application of engineering measures and the adoption of new technology and safe working practices.

Safety Committees

Safety committees are in place at various levels to review incidents, suggest improvements in safety systems, and to implement risk reduction and training to prevent recurrence. Safety committees have been strengthened in terms of representation, frequency of meetings and implementation of their suggestions.

HSE Steward System

An HSE Steward System was introduced at Tuticorin (see box below) on an experimental basis to improve standards. This has yielded excellent results and, importantly, is motivating individuals and teams to integrate HSE actions into their routine activities and thinking. Given this success, other operations are planning to replicate this approach.

Audits

Many internal and external audits were undertaken

through specialists, as well as relevant agencies, to look at the operations and identify risks and hazards, whilst also recommending preventive measures. These audits provide valuable input and feedback to the operating teams in reducing safety risks.

Training

Training operating personnel to adopt safe working practices is an important part of the Group's safety programme. It is a corporate policy to provide initial and periodic training to all employees and contractors. The training includes routine activities and safety precautions, and special focus is concentrated on identified risks and hazards in respect of operations and other employee activities. At some locations such as Korba, Tuticorin and Chanderiya, 5S training was provided to employees to integrate safety as a way of life, rather than as an add-on. The system and culture of recording all incidents, including first aid cases and near-misses, was strengthened during the year to improve understanding of incidents and provide opportunities for prevention.

Lost Time Injury Frequency Rate

LTIFR for the Group's operations marginally increased during the year ended 31 March 2005. There was, however, a trend of improvement in the latter half of the year. A target has been set of reducing the Group's LTIFR by 20% during the current financial year. It is intended to achieve this reduction through the sustained implementation of various elements of the Group's corporate safety initiatives.

Case Study

HSE Steward System at Tuticorin

The HSE Steward System, introduced at Tuticorin in October 2004, covers the areas of health, hygiene, housekeeping, safety and environment and encourages the participation of every individual in the unit.

The total smelter complex has been divided into 28 areas and each area is owned by one designated HSE steward who implements the HSE system in its totality in his/her own area. In addition, five HSE representatives from the unit's HSE department work with these stewards to ensure the system is implemented effectively.

The HSE stewards regularly monitor their area to check hygiene, health, housekeeping, safety and environment. Boundary limits of the owned area include roads, drains, and greenbelt within the periphery. Based on this monitoring, cross-checked by HSE representatives, reports are produced and points are awarded to individuals and areas/stewards for good performance. These reports are regularly reviewed by the management to determine suitable rewards and penalties.

Experience so far: Over the past six months at Tuticorin, this HSE initiative has motivated and encouraged both individuals and teams to strive for a safe and clean workplace. The use of personal protective equipment has also improved significantly. With six audits completed so far, 760 suggestions for improvements in HSE have been received, of which about 650 have been acted upon. A few require significant expenditure and have been included in the current year's business plan. Further improvements in the system are being planned including quarterly rewards for employee safety.



Top: A company funded school, forming part of a wide range of educational activities undertaken by the Group. Bottom: The Group supports a variety of medical services for employees and local communities, such as the health clinic shown here.

Lost Time Injury Frequency Rate

Company	2002/03	2003/04	2004/05
BALCO	5.46	5.63	7.19
MALCO	16.50	12.34	10.28
HZL	25.18	22.43	25.21
Sterlite	3.75	2.05	4.13
Australian operations	7.88	7.97	7.19
Vedanta	13.79	11.38	13.13

During the year to March 2005, two fatalities occurred at our managed operations. Our sincere condolences go out to the families of the deceased. Fatalities at the Group's operations are totally unacceptable and irreconcilable with the Group's commitment to achieve zero fatalities and serious injuries. It is the Group's intention to improve safety by developing strategies to avoid such incidents in future.

During the past two years several sites have seen major construction projects relating to our expansion programme. In order to ensure a safe working environment, the Group has placed considerable emphasis, from the planning stage of the projects, on observing safety systems and precautions. Dedicated safety teams were formed for the projects and adherence to rigorous safety systems and compliance was a condition of terms agreed with contractors. As a result, the LTIFR for the two year period of project activities at these four sites was 1.43. Regretfully, over the same period, ten fatalities occurred, all relating to contractors. These were generally due to material handling and working at heights. Appropriate guidelines and operating procedures have been introduced to prevent any recurrence of such incidents.

Occupational Health

Programmes for regular occupational health surveillance of all employees and contractors are continuing. This includes specific examinations such as tests for blood lead, audiometry, chest x-rays and pulmonary function tests. As part of the improvement programmes, Tuticorin plans to augment its occupational health surveillance facility during the coming year.

Environment

The Group is focusing on environmental initiatives for effective water management, waste minimisation and recycling, reducing air emissions, energy conservation and land stewardship, which it believes are the main challenges to sustainability. The Group is committed to efficient use of all resources. Many of the Group's Indian operations made significant progress in implementing their commitments to the charter on Corporate Responsibility for Environmental Protection, which includes significantly reducing sulphur dioxide and fluoride emissions, achieving zero discharge of waste water, improved handling and disposal of hazardous wastes, and improvements in housekeeping and on-site plantations.

Water Use

Water availability, consumption and contamination constitute important risks. These risks range from water scarcity at sites located in arid and dry regions (for example, HZL's sites in Rajasthan and the Tuticorin smelter in Tamil Nadu), to mine dewatering and its impact on regional ground water levels in Rajasthan and Zambia. The Group is committed to the efficient use of water and has taken steps to ensure that this commitment is translated into specific actions to reduce water consumption. These steps have resulted in the reduction of water consumption, despite increased levels of production at many of the operations. BALCO, MALCO, HZL's mines and Sterlite all recorded a reduction in specific water consumption during the year, while the marginal increase at HZL's smelters was primarily the result of a lower level of production, set against

Fresh water consumed in primary activities								
	Total consumption			Specific consumption				
-	(million cubic metres)			(cubic metre per tonne of product)				
				Change (%) over				Change (%) over
Company	Year 02/03	Year 03/04	Year 04/05	2 years	Year 02/03	Year 03/04	Year 04/05	2 years
Sterlite	1.91	1.86	1.67	(12.57)	12.25	10.39	9.73	(20.57)
MALCO	4.91	4.25	4.31	(12.22)	159.20	131.90	120.90	(24.06)
BALCO	22.84	22.32	21.34	(6.57)	239.23	230.34	212.38	(11.22)
HZL smelters	3.67	3.56	3.56	(3.00)	15.89	14.40	15.27	(3.90)
HZL mines	4.14	3.65	3.79	(8.45)	7.63	5.51	5.05	(33.81)
Australian operation	s 4.56	5.81	5.43	19.08	34.29	29.01	39.32	14.67

constant water consumption at Chanderiya. The Group is targeting a further 5% reduction in water consumption in the year ending 31 March 2006.

The following cases illustrate the major efforts made to reduce water consumption and increase recycling:

- at the MALCO Mettur aluminum smelter, water consumption in the cooling towers was 11,465 cubic metres per day constituting 72.5% of the total fresh water consumption. Use of diagnostic and statistical tools pinpointed the evaporator, vacuum pump and foundry as areas requiring improvement. The problem included non-usage of recycled water for the evaporator vacuum pump and periodic overflow of the foundry cooling towers. Action plans were drawn up to implement improvement in these areas and were completed in March 2005. As a result, the overall water consumption in the cooling towers has now come down to 8,675 cubic metres per day, saving about 2,800 cubic metres per day of fresh water and a corresponding reduction in waste water discharge. The full impact of these improvements will be felt during the coming year;
- at Sterlite's Tuticorin copper smelter, all waste water streams are treated and recycled within the plant. A further reduction in fresh water consumption was achieved by introducing air coolers in the sulphuric acid plants in August 2003. The hot water generated in the process is cooled in air-cooled radiators so that closed loop cooling takes place and evaporation losses are avoided. This has resulted in a lower water consumption rate of 9.73 cubic metres per tonne of finished copper, compared to 10.34 cubic metres in the previous year;
- various initiatives in water conservation at HZL include the use of desliming hydrocyclones for increased recovery from tailings, the use of a reclaim water reservoir for tailing dam water at the Rampura Agucha mine, installing a reverse osmosis plant for desalination and recycling of water at the Chanderiya smelter; and
- the BALCO smelter reduced its effluent discharge by 3,500 cubic metres per day in the last two years by increased recycling at various places, including the main receiving step-down station, sheet rolling shop, alumina plant and anode paste plant.

Air Quality

In the last two years, many of Vedanta's operations have begun generating captive electricity on site to help reduce high power costs. This has led to increased sulphur dioxide emissions which are expected to increase further in the coming year as a result of the power plants currently being commissioned at Korba and Chanderiya. Fluoride emissions are also expected to increase following the commissioning of expanded smelter capacity at BALCO. However, plans have been made to reduce these emissions.

Plans are progressing at the HZL and Tuticorin smelters to reduce sulphur dioxide emissions from process areas by introducing tail gas scrubbers. Similar efforts are in progress to reduce fluoride emissions at the Korba and Mettur aluminum smelters, together with the adoption of pre-baked technology in the expanded capacity. The Mettur aluminium plant will be provided with a dry scrubber which will help reduce fluoride emissions.

Some of the efforts to exercise good control and minimise emissions are listed below:

Improvements

- adoption of highly efficient DCDA technology for the new sulphuric acid plants at Tuticorin and Chanderiya;
- adoption of state-of-the-art Cansolv technology for absorption of sulphur dioxide from the Ausmelt plant under construction;
- addition of conversion stage in the DCDA plant at Tuticorin and replacement of heat exchangers with superior types;
- plans for installing tail gas scrubbers at Tuticorin, Debari and Chanderiya are well under way. Tail gas scrubbers at Chanderiya and Debari will be based on calcine scrubbing which will use zinc oxide as the scrubbing medium. This will generate zinc sulphate solution which will be utilised in the downstream process. As a result, there will be no chemical consumed and no solid or liquid waste generation from the process;
- adoption of pre-baked technology for the new aluminum smelter at BALCO;
- installation of a dry scrubber at BALCO's old smelter to minimise fluoride emissions is in progress;

Monitoring

- on-line stack analysers are in use at all sulphuric acid plant stacks for continuous monitoring and improved control;
- monitoring of fluoride emissions has also been strengthened; and
- on-line SPM monitors provided for kiln and paste plant stacks at MALCO.

Waste Management

The Group is focused on proper identification, characterisation, quantification, segregation, storage and disposal of all solid wastes. Overburden and waste rock from mines are systematically stacked at earmarked areas while tailings are disposed of in tailing dams. Jarosite from hydrometallurgical zinc smelters is disposed of in secure, lined containments. whilst red mud from aluminum smelters is disposed off in earmarked ponds, including a poly-lined dyke facility at MALCO. A dry disposal system for red mud is in place at MALCO. BALCO is moving towards the dry disposal of red mud. A new secure landfill facility was constructed at MALCO and Chanderiya as part of the expansion programme. For safe jarosite disposal at Chanderiya's new hydrometallurgical smelter, technology has been adopted which involves stabilisation of jarosite with the addition of lime and portland cement to produce a hard, compact and inert mass known as jarofix. A secure, lined disposal facility has been constructed for jarofix even though dynamic leaching tests suggest the waste will remain stable for more than 500 years. A new HDPE-lined disposal facility has been constructed and commissioned at Tuticorin for disposal of gypsum resulting from phosphoric acid production.

Waste Utilisation

Opportunities to reuse and recycle waste are being explored. Research studies are being undertaken to reduce the hazardous characteristics of waste and to ensure the re-use of waste materials. Some of the significant successes in this area are listed below:

- overburden from bauxite mining at BALCO and MALCO is used for concurrent reclamation of the mined out areas;
- a portion of overburden and waste rock from zinclead mining at Rampura Agucha and Zawar mines at HZL is utilised for construction of tailing dam embankments;
- fly ash from coal-based power plants at BALCO, MALCO and HZL is utilised for producing cement;
- copper slag at Tuticorin is used in road construction and abrasives. Its use in cement is being explored;
- during the past year, about 46% of red mud generated at MALCO was used in the cement industry as a partial replacement for low-grade bauxite;
- a facility was commissioned at Debari smelter to recover lead and zinc from old stockpiled leach residues;
- studies and plant trials are under way to use zinclead slag in cement manufacturing at the Chanderiya smelter; and
- a research project has been undertaken to recover zinc and lead from Rampura Agucha mine tailings by bio-leaching.

Energy Conservation at HZL Mines

Energy consumption at HZL mines is primarily electrical and is mainly consumed in the ore beneficiation process. During the past year, the specific electricity consumption at all HZL mines decreased by about 6%, following a 3% reduction in the previous year.

Much of this was achieved through optimum capacity utilisation, increasing the throughput rates, improving grinding mill efficiencies and working at optimal levels to minimise energy consumption in addition to reducing the consumption of chemicals and maximising metal recoveries.

Increased process automation and the use of energy efficient equipment contributed to the reduction in energy consumption per tonne of concentrates produced.

Significant saving of diesel fuel was achieved at the Rampura Agucha mine where better scheduling of dumper trucks improved refuelling practices and more efficient engines have reduced diesel consumption in dumpers by 7%.

Top: A tailings dam at Rampura Agucha, used for the disposal of tailings. Bottom: Tailoring classes empower women, enabling them to find employment and create small businesses.



Energy Consumption

Total energy use (fuels and electricity) amounted to 19.6 million GJ during the year ended 31 March 2005. Excluding KCM, this represented an increase of 5% over the previous year. This higher energy use was primarily due to higher production levels. Electrical energy accounted for about 70% of the total energy used, an increasing proportion of which is now being generated through captive facilities.

Energy conservation efforts at Vedanta include energy audits and identifying energy efficiency projects such as the use of energy efficient equipment. Use of energy efficient practices, allocation of adequate resources for energy conservation projects and regular follow-ups reflect the Group's belief in energy conservation.

Total energy use will increase significantly over the next few years as a result of the Group's expansion projects. However, the Group is targeting a 5% reduction in specific electricity consumption through energy efficient projects.

Land Stewardship

The Group fully appreciates the importance of minimising the disturbance to land and of rehabilitating disturbed land. Vedanta's initiatives in this area include some significant successes:

- in all our bauxite mines at BALCO and MALCO, we follow the practice of concurrent reclamation of mined out areas by backfilling with overburden and tree planting with suitable species;
- an abandoned HZL zinc-lead tailing dam of about 38 hectares at Zawar was rehabilitated by planting, including an area with acid-producing tailing, using an integrated biotechnological approach with the help of the National Environmental Engineering Research Institute;

- the systematic closure of two HZL underground zinc-lead mines at Sargepali (Orissa) and Agnigundala (Andhra Pradesh), including mine and mill decommissioning, clean-up and plantation on the waste dump and tailing dam; and
- a significant proportion of land in use at various operations is under green cover. Tuticorin smelter has 25 hectares of greenbelt within its premises while Rampura Agucha mine has 230 hectares of greenbelt within its mining area, which constitute about 25% of their respective land areas. These are regularly maintained and augmented. Land outside the facilities is also planted with the permission and partnership of the local people.

Community

Operations undertake various activities based on an assessment of the needs and aspirations of the community. The major thrust of community initiatives are in the following areas:

- health care;
- education, sports and the disabled;
- female empowerment and rural livelihood;
- rural infrastructure and community development; and
- financial and organisational support to people in distress.

Health Care

Organised health care activities are only one part of the Group's community initiatives. KCM continues its pioneering initiatives in health care. Its rollback malaria programme has recorded great success with a 62% reduction in malaria cases and no fatalities from malaria since 2001. This has resulted in the KCM model being adopted by the Zambian government in its national programme.

Reclamation Process at BALCO

The reclamation of mined out areas at BALCO is carried out in the following manner:

- removal and storage of topsoil;
- hard overburden and waste material are placed in the previously mined out area;
- after levelling and compaction of this backfilled material, the areas are covered with topsoil stacked separately in the earlier cycle of mining; and
- the reclaimed land is then afforested.

Ongoing care and maintenance is carried out to ensure a good survival rate for the plantation.

Case Study

KCM has been central to Zambian mining industry workplace HIV/AIDS awareness and prevention, and community outreach programmes. The International Finance Corporation's HIV/AIDS guide for the mining sector was developed in partnership with KCM and launched at the Konkola mine on 1 December 2004, being World AIDS Day.

Our health centres at the operating locations in India routinely reach out to the needy by distributing primary medicines. Awareness camps are regularly organised by company doctors on reproductive health, child immunisation and health problems of specific target groups. The tribal populations around the Zawar mines of HZL and Kolli bauxite mines of MALCO have been the beneficiaries of such health camps.

The Vizag smelter organised two blood donation camps as part of an HIV/AIDS programme jointly with the District AIDS Control Society and Blood Bank Cell of King George Hospital, Visakhapatnam. The Yashad Hospital at the Vizag smelter works with PHC's in the villages of Mindi, Gajuwaka and Shriharipuram as part of our immunisation and family welfare outreach programmes. Three immunisation camps covered 1,485 children and 277 people were covered under four family welfare camps.

Comprehensive health check-ups and systemic examinations are being conducted for children in and around the Zawar mine on a regular basis with a follow-up including remedial measures. The Rajpura Dariba mine's health centre conducted check-ups on 360 children in the year ended 31 March 2005.

Support was extended to PHC's in three villages near Tuticorin by providing necessary medical equipment to enhance the quality of health care. Sterlite also operates five rural health clinics providing access to quality health care in twelve villages. Ten health and hygiene awareness camps were conducted during the year ended 31 March 2005.

At BALCO, doctors visit adopted villages regularly, with consultation and primary medicines provided free of charge. At MALCO, a health clinic caters for people below the poverty line and medical camps are organised for the neighbouring population. VAL has organised mobile health units for efficient and quality health care, impacting 35 villages and 700 tribal families in the drought and famine stricken terrain of Kalahandi district in the State of Orissa. The PHC is being upgraded by adding 20 beds and other accessories. Emphasis is placed on malaria eradication by regular fume fogging.

There is also a vision of health care at the Group and company level which transcends the boundaries of the individual units. HZL sponsored a state-of-the-art cardiology centre at Udaipur in 2002, funding the entire capital cost itself. The centre is being run by the Government of Rajasthan and in a short time span has emerged as a leading centre benefiting mainly the poor and tribal population of southern Rajasthan.

HZL contributed INR 500,000 to Kalyan Arogya Sadan, Sikar and INR 4,100,000 to Vivekananda Memorial Research Society, Tamil Nadu to strengthen their infrastructure to promote the Indian system of medicine. Himjyoti Foundation, Dehradun received INR 1,100,000 for the promotion of herbal and medicinal plants and development of a plant-based health care system for rural areas. The Dr CT Mehta Rehabilitation Centre received INR 800,000 as a donation for the distribution of artificial limbs and "Jaipur Foot" to the poor and needy.

Education, Sports and the Disabled Education

Education is an important part of the Group's community initiatives:

- HZL, BALCO and MALCO fully fund schools at their units, mainly catering for the children of employees but also allowing children from the neighbouring population to attend;
- HZL spent INR 2,180,000 this year on various educational activities including distribution of uniforms, books, stationery and teaching/learning aids;
- there are more than a dozen private schools operating in and around the townships of BALCO.
 BALCO provides these schools with land and building facilities, as well as providing grants-in-aid and subsidised school buses to encourage formal schooling amongst local children;
- MALCO assisted in renovating two "Anganwadi" centres to provide nursery facilities for local children and provided books, stationery and uniforms where required;

- the distribution of study material benefited over 1,400 children enrolled in the evening study centres being run in and around Tuticorin by Sterlite;
- VAL is creating a hostel facility at the Industrial Training Institute, Bhawanipatna for 50 students, renovating and constructing rooms in the existing Government school at Lanjigarh for tribal children and creating two child care centres at the resettlement village, Niyamgiri Vedanta Nagar, which will accommodate 200 underprivileged children; and
- HZL is contributing INR 100,000 per month to ISKCON Chowpatty for midday meals to children. During the year ended 31 March 2005, HZL also contributed INR 100,000 to Matrimangal Kanya Mahavidyalaya, Ringas, INR 750,000 to Rawal Mallinath ji Foundation, Jodhpur and INR 250,000 to Ramanandacharya Sanskrit Vishwavidyala, Jaipur for midday meals to children.

Sports

The Group provides support to local communities in a variety of sporting areas:

- in January 2005, KCM signed an agreement with the Football Association of Zambia to provide sponsorship for the KCM Premier League. This league was officially launched on 18 March 2005;
- the prestigious All India Hind Zinc Mohan Kumara Mangalam Football Tournament is organised each year by HZL at the Zawar mine, with teams participating from across the country;
- the Tuticorin operation organised a district level sports meet for children jointly with the sports authority of Tamil Nadu. Over 900 promising athletes from various parts of Tuticorin district attended the meet in August 2004;
- the Zawar mine hosted a national camp for 1,300 cadets during the year and hosted a state-level and district-level sports meet for school children; and
- the Vizag smelter hosted the Andhra Pradesh Welfare Board Sports and Culture Meet 2005, attracting 1,200 participants representing over 225 companies. The Vedanta Rolling Championship Cup was introduced for the best team of the event.

The Disabled

HZL has been extending assistance to physically and mentally challenged children. To support this, the Badhir Balkalyan Vikas Samiti, Bhilwara in Rajasthan and Viklang Kalyan Samiti in Udaipur are recipients of annual financial support for training and rehabilitation of disabled children, specifically aimed at strengthening educational programmes for them. Sterlite has signed a corporate membership agreement with Vidya Pragasam Special School in Sankaraperi Panchayat which has physiotherapy and vocational training facilities for children with cerebral palsy, autism and multiple disabilities. The school has 55 children coming from families living below the poverty line.

Female Empowerment and Rural Livelihood

The Group is conscious of the issues of rural livelihood and the important role that women can fulfil. The aim is to organise SHG's, in coordination with other agencies, and to provide support for vocational and skills training. The programme is at an early stage but holds great promise, in particular:

- Tuticorin has made a start this year by promoting and supporting a number of SHG's;
- HZL has donated INR 2,000,000 to local rural selfgovernance through an NGO, Seva Mandir, to create an endowment in February 2004 for the protection and conservation of village commons spread over six tribal blocks near Udaipur;
- VAL is providing regular employment to about 2,000 unskilled village youths in various projectrelated activities by constantly upgrading their skills. It has also facilitated the formation of eight SHG's in a resettlement village involving about 95 women to make them sustainable through small businesses;
- KCM's capacity building for small and medium entrepreneurs holds great promise and is likely to be extended to other units. KCM has a local business development plan, which seeks to:
- i) develop local business and contribute to poverty alleviation in the short term, and
- ii) diversify the economy of the copper belt in the long term;

- KCM has to date trained 23 SME's in capacity development under a partnership programme with the African Project Development Facility, financed by the International Finance Corporation. An evaluation revealed that turnover and employment for the participating SME's increased substantially; and
- the KCM Widows Cooperative was launched to give financial support to this vulnerable group. In addition, training and other support was given to farmers, mainly women, in beekeeping and honey production.

Rural Infrastructure and Community Development

The creation of durable assets and the renovation, repair and maintenance of the existing public utility infrastructure is a major part of the Group's community programme.

HZL, as part of ongoing community support to local needs at all units, has undertaken the digging of tube wells and the maintenance of hand pumps.

In partnership with the Government of Rajasthan, HZL is contributing INR 186 million towards the cost of constructing the Mansi-Wakal dam. This dam is due for completion in August 2005 and will augment the drinking water supply of Udaipur.

Tuticorin has contributed INR 716,000 to implement the Government's Sajaldhara Scheme which will provide drinking water to 43 villages around Tuticorin and benefit 20,000 people.

MALCO undertook desilting operations at Yercaud Lake by using local youths. This was an important task in revitalising local drinking water sources. School children have planted saplings around the lake for better recharge and the use of plastic in and around the lake has been banned.

Sterlite Foundation

The Group maintains close links and helps the Sterlite Foundation, although this is an independent charitable body.

The Sterlite Foundation was founded in September 1992, with the objective of assisting underprivileged youths to realise their aspirations. The Foundation focuses on three areas: education, child care and female empowerment.

Education

The education funding consists of three areas:

- Sterliteracy provides training for around 70,000 students in 230 centres across India;
- the prison programme, where there are 26 centres running education and vocational training in jails throughout India; and
- the municipal training programme, which has computer labs in 24 municipal schools, covering some 30,000 school students.

Child Care

There are 16 child care centres in Tamil Nadu and two in Orissa for children between three and six years of age. This was developed in response to research looking into the needs of families below the poverty line.

Female Empowerment

The Female Empowerment Scheme encourages women to complete their higher education through Reengus College, founded in 1995. The programme is driven by the belief that "if a woman in the family is educated then the entire family gets educated".

Financial and Organisational Support to People in Distress

Our deepest sympathies go out to all those who suffered in the unprecedented Tsunami disaster. The Group extended both financial and in-kind support. The Group contributed INR 15 million to the disaster relief funds in addition to one day's wages contributed by employees. Relief material in the form of clothes, blankets, stoves, food packets and utensils from the MALCO and Sterlite operations located in Tamil Nadu were distributed to the victims.

HZL has undertaken various activities as part of drought and famine relief in the villages around its units in Rajasthan. The activities primarily focus on providing fodder to livestock, drinking water to humans and livestock, and digging/deepening of wells. Immediate relief in terms of food packets and clothes were distributed to an area near Rampura Agucha mine which experienced flash floods.

Fire tenders, ambulance and medical aid are routinely offered in emergencies to assist in areas near to Group units.

Way Forward

Vedanta's work in the community will be greatly enhanced by the recent employment of a Group manager, along with site level managers, to provide thrust and focus in engaging with stakeholders, assessing their needs and aspirations, and putting in place appropriate plans and actions. The Group is systematically seeking NGO's who can act as partners in our development initiatives.

The Group commissioned the Institute of Rural Management, Anand, and Xavier Labour Research Institute, Bhubaneshwar, for NGO mapping in Rajasthan and Orissa, respectively. Similar exercises are being carried out in Tamil Nadu and Chhattisgarh. The Group envisages further improvements in community initiatives in the four Indian states in which it operates. GIVE International, a leading international NGO, is providing direction and supervision in planning, monitoring and evaluating these initiatives.

Substantial resources have been allocated to each Group subsidiary to allow them to provide support to their local communities on an ongoing long-term basis.

Scope and Basis of Sustainable Development Report

This report attempts to highlight our contribution to sustainable development by our managed operations, focusing on our performance in the areas of safety, health, environment and community development. Performance data for some of the key indicators has been included in the report for all current operations, except KCM, along with comparative data for the past two years. These have also been aggregated across the Group, except for KCM.

Reporting of data for current and past years, and their comparability, is influenced by a number of changes to the Group's operations, including new production capacity, brownfield expansion projects and adding captive electricity generation facilities at many of the Indian operations. These limitations have been appropriately explained in this report. Comparability of data is also affected by the different methodologies adopted for data collection systems. We are committed to continuous improvement and the achievement of uniformity and consistency in data collection and reporting systems, whilst also adding further performance indicators in the coming years.

Sustainable Development Report Glossary

Sustainable De	velopment Report Glossary
AIDS:	acquired immune deficiency syndrome
Cansolv:	sulphur absorption technology
	patented by Cansolv of Canada
DCDA:	double contact double absorption technology for sulphuric acid
	production
DGMS:	Director General of Mine Safety in the
	Government of India
E&OHSMS:	Environmental and Occupational
Fatality	Health & Safety Management Systems
Fatality:	the death of an employee or contractor resulting from a work
	related injury
GJ:	gigajoules
HDPE:	high density poly-ethylene, a synthetic
	material used for providing an impervious lining in waste disposal
	facilities
HSE:	health, safety and environment
HSEC:	health, safety, environment and
	community
ISKCON:	International Society for Krishna Consciousness
ISO: 14001:	an international environmental
	management system standard
	published by the International
	Organisation for Standardisation
Lost Time Injury:	an accident/injury forcing the employee/contractor to remain away
	from his/her work beyond the day of
	the accident
LTIFR:	lost time injury frequency rate; the number of lost time injuries per million
	manhours worked
NGO:	non-governmental organisation
OHSAS: 18001:	Occupational Health and Safety
	Assessment Series (standards for occupational health and safety
	management systems)
PHC:	primary health centre
Recycled Water:	water released during mining or
	processing and then used in
SHG:	operational activities self help group
SME:	small and medium entrepreneurs
SPM:	suspended particulate matter. Fine dust
	particles suspended in air
TPM:	total productivity maintenance
Water used for	total new or make-up water entering
Primary Activities:	the operation and used for the operation's primary activities; primary
	activities are those in which the
	operation engages to produce its
55:	product a Japanese concept laying emphasis on
55.	housekeeping and occupational safety
	in a sequential series of steps as Sort
	(Seiri); Set in Order (Seiton); Shine (Selso); Standardise (Seiketsu); and
	Sustain (Shitsuke)

U ERNST & YOUNG

ASSURANCE STATEMENT

1. Background

At the request of Vedanta Resources plc (the "Group"), we have reviewed the contents of their Sustainable Development Report of the 2005 Annual Report found on pages 31 to 44 (the "Report") relating to performance on Health, Safety, Environmental and Community initiatives ("HSEC"). The Report is prepared by the Group, which is responsible for collection, compilation and presentation of information within it.

Our responsibility is to provide conclusions regarding the information presented in the Report with respect to HSEC performance of the Group. However, this Statement should not be taken as a basis for interpreting the Group's performance across the scope of issues covered in the Report.

2. Approach

There is currently no statutory requirement in India for preparation and publication, nor generally accepted international standard relating to verification, of HSEC reports.

Therefore, a review process was used employing a series of customised work steps to ensure consistency in our assessment. This involved challenging and substantiating the assertions and claims made in the Report, to the extent the Report relates to current year's performance, and also involved a review of processes for the collection, collation and internal reporting of HSEC data.

3. Limitation of scope

- The scope of our work was limited to making verification visits to the Group's units at HZL (Udaipur), BALCO (Korba), Sterlite (Tuticorin) and MALCO (Mettur). The Australian and Zambian operations are not covered by this assurance statement.
- Our review of the data reporting procedures was limited to sample checks of HSEC data for the year ended 31 March 2005.

4. Basis of our review

The following steps were carried out by us in order to form our conclusion:

- Interview of the Group Manager (HSE) and key personnel at units such as functional heads as well as personnel with responsibility for functions of HSEC.
- Review of selected documents which were used to capture and collate information relating to HSEC
 performance parameters as well as policy and system documents.
- Conducted visits to key units, to review data collection, reporting and internal assurance processes relating to HSEC performance.

5. Conclusions

The senior management of the Group has demonstrated commitment towards HSEC management and implementing an HSEC governance system, as evidenced by periodic Group level review of such matters. There is also the presence of Health, Safety and Environment and Corporate Social Responsibility functions at individual units as well as at Group level. We observed that the Group has developed internal procedures for HSEC data collection, compilation and analysis. Based on our review, the key conclusions are as follows:

- Our sample check of some of the significant data in the Report indicated that these have been correctly transposed from internal reporting, and the contents of the Report is consistent with documentary evidence obtained during the course of our work, with the exception of data related to water usage at units (other than Sterlite, Tuticorin), which rely partly on estimation and not on metering, and therefore there is scope for improving reliability.
- The Report provides few key performance indicators ("KPIs") on HSEC matters. Completeness of the Report could be improved if additional HSEC KPIs, relevant to the Group's processes and operations, were included.

Ernst & Young Pvt Ltd

Delhi 1 June 2005