

Safety, Health, Environmental Protection and Social Responsibility

Production Safety Continued Leading Position in Production Safety in China

In 2006, our fatality rate per million tonnes of raw coal produced was 0.027, which is significantly lower than the national average rate of 2.041. Our fatality rate is among the lowest in the industry nationwide and is relatively low by international standards.

Increase of Mines with Long Production Safety Period

In 2006, 13 of the 17 coal mines of the Company achieved zero fatality rate. Five of our pits were among the 108 pits nationwide with safe production for a continuous period of more than 1,000 days. There were no material accidents in our railways, ports and power plants.



Checking of operating equipment in the power plants

New Record in the Standardisation of Safety

In 2006, seven of the Group's branches and subsidiaries were awarded superior grade in the standardisation of safety, accounting for 58.3% of our total branches and subsidiaries and representing a year-on-year increase of 29%. 42 of our branches and subsidiaries and 24 of our branches and subsidiaries have attained superior grade and first grade respectively, representing a year-on-year increase of 11% and 50% respectively, thereby laying a solid foundation for the production safety.

Further Innovations and developments in Safety Management

We have adopted the safety management principles of eliminating fatality rates in mines and keeping gas emission levels within restricted levels to avoid accidents. These principles have been promoted and implemented throughout all our production units.

Further Commitment to Safety with the Essential Safety System Strengthened

In 2006, the Company had committed RMB1,684 million to improve safety, of which RMB653 million was used in the Shendong Mines mainly for improvements to the mine monitoring system, gas ventilation and dust removal system, centralised railway control system, port navigation system and the protection and safeguarding system of the generation units.

Strengthening training and cultivation of a safety culture, improving safety awareness of our staff

In 2006, the Company organised a total of 712 courses on various topics for technical and management staff, with an aggregate of 57,169 training attendances⁽¹⁾, to enhance safety responsibility awareness and operational skills of shift staff and technical staff. We also organised a "100-Day Safety" campaign and other activities, to fully promote our vision of safety awareness among all employees, in all aspects and throughout all processes.

Implementing risk management measures, new standards in health and safety, and environmental protection

We jointly commenced the study on "Coal Mines Essential Safety Management System" with the State Coal Mines Safety Supervision Bureau, and have made initial proposals for a safety management system emphasising risk management. Guohua Power Branch Company, China Shenhua Shendong Coal Branch and Shenhua Huanghua Port Company Limited ("Huanghua Port Company") had made major efforts in promoting the NOSA safety, health and environmental protection standards, resulting in an increase of branches and subsidiaries with NOSA 3 stars, 4 stars and 5 stars accreditation from eight to 15.



Maintenance of electric railway

Occupational Health

The Company has fully implemented the laws and regulations of China in respect of occupational illnesses, and strictly adhered to the principle of prevention is better than cure. This further highlights our "people-oriented" approach, and we are firmly committed to the monitoring and care of health of our staff, and monitoring and control of the occupational hazards in the workplace. We take the initiative to create a working environment and conditions favourable to the health of our staff.

Dust treatment works at the Zhunge'er preparation plant has been completed. Further efforts have been put in the treatment of dust in operating units of mines, railways and ports, and protection kits had been distributed regularly with their use being monitored. Records have been made, and are closely monitored, of the sources of X-ray radiation at power plants and the sources of radiation at the preparation plants.

Note:

(1) "Training attendances" is calculated as the number of training sessions multiplied by the number of attendees at each session.

Environmental protection

Over the years, we have been stringently implementing laws, regulations, policies and standards in respect of environmental protection. We are making significant efforts to protect our environment and to build a green mining area and environmentally friendly power plants, so as to ensure that our production is in harmony with the development of the community and the environment.

Environmental management

We have established various environmental protection rules. Shendong Mines recently introduced the "Measures for the Operation and Supervision of Environmental Protection Facilities" and the "Assessment Measures for the Supervision and Management of Environmental Protection Facilities". It has also integrated the ISO14001 standards and safety quality management system to establish a new and comprehensive management system. Its environmental management has also achieved the PDCA cycle and standardised its operation. Our power segment has adopted the "NOSA Implementation and Safety, Health and Environmental Protection Assessment Management Standards" in its power generation management system. Applying the power generation management system as guiding principles, and employing the ISO14001 standards as the means of implementation, our power plants have established a scientific system for environmental protection.

Examination and Assessment of the Environmental Impact of Projects

In 2006, the approval, construction and operation of our new projects met the environmental requirements of the PRC. The technological revamp of mines such as the Halagou mine at the Shendong Mines passed the examination by the State Administration for Environmental Protection. Eight new projects, including the alteration and expansion of Ninghai Power Plant, had been approved by relevant State or local government authorities on its environmental assessment.

Control of Pollutants Emission

In 2006, our power segment accelerated the construction of the dust removal, FGD and de-NOx works with the FGD works of nine units and de-NOx works for two units completed. These units have been in operation and pilot test works for a noise shield have been completed by Shuohuang Railways Development Company Limited. The improvement made by the Shendong Mines to its waste water treatment plant, with the total capacity of the 15 waste water treatments upon completion exceeding 96,000 tonnes/day, will increase the utilisation rate of pit water to 50% and living waste water to 35%.



Afforestation belt at the Shendong Mines



Improvement of the waters in the mines

Recycling efforts and development of power plants utilising gangues

Shendong Mines has adopted the railless plastic wheels to simplify the system of the underground mines, so that the layout of shafts is within the entry of the coal deposit, thus eliminating the accumulation of hundreds of tonnes of waste gangues outside the exits. All our underground mines have been equipped with large-scale preparation plants and realised closed recycling, minimising water consumption and discharge of waste water. The extracted gangues, after being prepared and processed, are being utilised for the construction of two power plants, namely Daliuta and Shangwan, with annual utilisation of 2 million tonnes of gangues. Coal dust produced in the process is recycled into bricks.

Recycling of resources

In 2006, extension of panel and technological revamp on new mining technologies had been carried out at the Daliuta mine at the Shendong Mines. This has increased the recovery rate from 76% to 81%. We also made major efforts in water recycling so that water from the mine can be used after purification. The average recovery rate of Zhunge'er Energy reached 98% for the open-cut mines, and 97% for its underground mines which is among the highest among other industry players in China.

Improvement of the ecological environment of the mines

In 2006, Shendong Mines focused its greening effects on the sandstorm control works of the Gong Nie Er Gai Reservoir, ecological evergreen woods for east and west side of the hill at Daliuta, landscaping of the Shegetai mine, an irrigation network and the rubber dam works, which will have an area of 4.55 million square meters upon completion. Following over 10 years of greening projects, the rehabilitated vegetation area of Zhunge'er Mine amounted to 2,814,000 sq. m., and the afforestation rate was 41.4%. Of this the afforested area of our industrial concourse amounted to 2,100,000 sq. m., with an afforestation rate of 89.5%; the rehabilitated vegetation area of the dump amounted to 780,000 sq. m., with a rehabilitated vegetation rate of 24.8%, which was 12 times that of the average rehabilitated vegetation rate of China. The accumulated funds used in the rehabilitation of land and ecology by the Company amounted to more than RMB50 million. The vegetation coverage rate of the mines rose from less than 25% previously to over 70%, and the rate of vegetation is 2-3 times that in the natural landscape while the volume of soil erosion was reduced by over 80%.

Awards for environmental protection

In February 2006, Shendong Mines was awarded by the State Administration for Environmental Protection the highest national honour for environmental protection, the "China's Environment Award" and was the only enterprise which received such award in 2006. In June 2006, the Shuohuang Railway works was awarded the "State Environmentally Friendly Projects" by the State Administration for Environmental Protection. In December 2006, Daliuta mine at the Shendong Mines and Zhunge'er Mines were awarded the "Nationwide Exemplary Mining Companies in the Development and Exploitation of Resources" title by the Ministry of Land and Resources.

Social Responsibility

In 2006, the Company and its branches and subsidiaries made donations totalling RMB94 million, representing a year-on-year increase of RMB82 million. The money was mainly used in the following areas: sponsorship for education of RMB54 million; aid to underdeveloped areas of RMB22 million; and aid to areas suffering from natural disasters of RMB18 million.