OCCUPATIONAL SAFETY AND HEALTH
The Coal Mines of Dhanbad, Jharkhand, India

By Sanjiv Pandita

This report is based on the occupational safety and health needs assessment exercise that was carried out by Asia Monitor Resource Center (AMRC), South Asian Research and Development Initiative (SARDI) and the International Confederation of Free Trade Unions (ICFTU) in collaboration with the Indian National Mine Workers Federation (INMWF affiliated to the Indian National Trade Union Congress) on behalf of the Asian Workers’ Occupational Health, Safety, and Environment Institute (OHSEI). The exercise was carried out in the coal mining region of Dhanbad, Jharkhand state (previously part of Bihar) in India.

Provisions related to occupational safety and health

The safety setup (administrative) for mining is the best of any industry in India. The legislation related to mining is very comprehensive. Under the Constitution of India, safety, welfare, and health of workers employed in mines are the concerns of central Government. The objective is regulated by the Mines Act 1952 and the rules and regulations framed there. These are administered by the Directorate-General of Mines Safety, under the Union Ministry of Labour. The health and safety of the workers is governed by Coal Mines Regulations 1957, Metalliciferous Mines Regulation 1961, Maternity Benefits (mines) Rules 1963, and Mines Rules 1955 created under the jurisdiction of the Mines Act 1952. Specific provisions have been made to protect workers from occupational health hazards and prevent occurrence of occupational disease.

Visit to a colliery in Katras

On the morning of 27 December 2002, the team from AMRC and SARDI visited an underground coal mine in Katras, about 20 kilometres from Dhanbad city, operated by Bharat Coking Coal Limited (BCCL). Observations about the mine are as follows:

- The mine is about 500 to 600 metres deep with only one shaft in which a cage style lift is operated manually via a crane and pulley. Coal tubs and personnel ascend and descend using the same lift, however, when the lift is carrying tubs, no persons are allowed in and vice versa. There are about 50 workers in the mine working an eight hour shift with no breaks.
- Workers cannot go inside the mine without a safety lamp, self rescuers, hard hat, and safety shoes. However, the batteries powering safety lamps are the wet type (easily rechargeable like a car battery). These batteries are quite heavy and workers have to wear this gear for eight hours with no breaks. Sometimes acid leaks out of the batteries causing skin burns and damage to clothes.
- Coal is extracted by blasting the coal face, followed by water spray and exhaust so as to remove or suppress the coal dust. Coal is loaded into the tubs mechanically by means of Slide Discharge Loading (SDL). Once in tubs the coal is transported by an extensive, mechanically driven, rope haulage system to the haulage stop. The tubs are then pushed manually into the cage and pulled above ground. The loading and unloading of tubs is carried out manually and involves hard labour; miners work (pull and push) in a very uncomfortable position. Sometimes they drill the coal from the coal face using a long mechanical drill.
- Some workers were not wearing safety shoes. It appeared that there was shortage of safety shoes as BCCL is running under heavy financial losses.
- We asked workers safety related questions, but they could not speak openly (due to obvious reasons) in front of the manager. However, in the meeting with the workers at the union office, they detailed problems in the mines (discussed later).
- The mine has little lighting and most of it is pitch black, which makes it very
There are no toilets in the mine; workers use abandoned work areas instead, which is unhygienic and creates an offensive smell.

On 29 December, a half-day consultation was conducted with workers and trade unionists. A total of 23 workers from all major trade unions (INMWF, HMS, BMS, AITUC, and CITU) attended the meeting.

Some workers complained about the Periodic Medical Examination (PME). Even though it is a legal requirement and every worker has to undergo PME every five years, some workers who had worked in mines for more than five years had never had an examination. Even when the PME is conducted, workers do not have access to their reports. One worker termed the whole system ‘faulty’ as in his case his examination was carried out by a gynaecologist!

Workers also complained about the short-age of safety equipment (e.g. safety shoes), and they work only in their undergarments because of the heat.

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Hauling coal tubs at the top of the shaft – half a kilometre above the coal face

Photograph: Sanjiv Pandita

Salient features of the Mines Act

- minimum age of employment is 18;
- one day of rest per week;
- limited working hours (48 a week);
- no underground work for women;
- provision of clean water and medical facilities;
- constitution of tripartite safety committees;
- no unsafe mines;
- right of inspectors to survey safety and health;
- emergency plans;
- notification of occupational diseases.

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Health issues

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Water and drinking water at the workplace

Drinking water seems to be a major issue in the whole mining area. Almost all the workers complained about the non-availability of potable water. They have to work for hours without water, causing serious dehydration; some miners drink dirty and polluted water; many buy water to survive. After blasting water is never available for spraying, so miners work in a dangerously dusty environment. Even in the opencast mines, workers complained that water is sprayed only on the road but not at the place of work.

Other safety issues

- Some workers complained of heat and gas inside the mines due to the poor ventilation system.
- Others complained about the shortage of safety equipment (e.g. safety shoes), and they work only in their undergarments because of the heat.

Hazard allowances

- The trade union INMWF cited an interesting case of safety mismanagement. According to their representative, BCCL officials receive a dust allowance of 500 rupees per month whereas workers in the mines, where the dust poses serious risks to workers, receive nothing.

Living conditions

- BCCL provides residential quarters for miners. However, many of them complained that the quarters are filthy and have almost no drinking water. Workers also complained of unhygienic conditions around the residential areas, where mosquitoes are also a menace.

Overall, coal mining in India is at a very critical juncture (like many other public sector companies). Workers and their organisations face an uphill task of preventing privatisation and protecting their jobs, working conditions, and union membership. There has been a steady decline in employment in the coal sector due to mechanisation and other cost-cutting measures. There is no doubt that occupational safety and health has taken a back seat and miners are faced with a Hobson’s choice between no jobs or hazardous jobs. The accident figures which appear in government statistics do not reveal the actual situation, as they reveal almost nothing about occupational diseases in mining as the PMEs are not carried out properly and also due to a lack of doctors who are qualified in this sector.

Notes

1 Self rescuers allow miners to breathe in an atmosphere devoid of oxygen, and help them to escape in emergencies.
2 This is a new technique which is replacing previously used ‘basket loading’, where workers load coal manually into the tubs. Basket loading is still used in many coal mines.
3 Haulage involves moving mine cars/tubs with wire rope.
4 It should be noted that the hazard allowance cannot be accepted by workers as it is a trick employed by management to cut on safety costs and put workers’ lives at risk. However, this point only highlights the notion that managers who live miles away from the coal mines receive dust allowance, which otherwise could have been used to improve safety conditions.