

## RECOMMENDATIONS OF FIFTH CONFERENCE ON SAFETY IN MINES

*Held in New Delhi on 26-27 December, 1980*

### 1. Defining the Safety Policy of Mining Companies

Every company whether in the public or private sector should have well defined policy in the field of safety and health of its employees. The policy could be laid down in the form of a resolution at the company's Board meeting. In defining such a policy, the Company should spell out, among other things, the following:

(i) Objectives;

(ii) Funds and facilities to achieve the objectives;

(iii) The set-up for execution of the policy at different levels, the duties and responsibilities at each level and for close monitoring of execution;

(iv) Arrangement for publicizing the above among the different segments of mining personnel, workers, their representatives and the concerned Government departments;

(v) Any other matter that may arise during the execution of the policy.

2. (a) The Board of Directors of the Public Sector units should review the progress of execution of the Policy at intervals not exceeding 6 months. During the review, various other recommendations of this Conference should also be reviewed.

(b) The Board should make specific mention regarding the progress of safety in its units and specific steps taken by the units in the year, in its annual report.

(c) The Ministry of Labour should communicate guidelines in respect of action to be taken at (a) and (b) above, to the administrative ministries, who in turn will instruct the public sector units under their control.

(d) The Private Sector units also should be persuaded to adopt a similar course of action.

3. Tripartite meeting consisting of the management, the workers' representatives and the DGMS should be arranged at intervals not exceeding 6 months during which the safety performance and progress of implementation of Company's policy on Safety and Health and of the recommendations of this Conference and of different courts of inquiry should be discussed. These meetings could be presided over by representatives of management, labour and DGMS by rotation.

4. An in-depth, minewise and causewise analysis of all fatal and serious accidents that have occurred at every mine of each mining company during the last three years shall be made by the ISO (Internal Safety Organisation) of the Company. (A copy of the analysis made should be submitted).

5. On the basis of the said analysis, the Board of Directors should every year, draw up a programme of Safety Campaigns at selected mines to eliminate avoidable accidents.

6. Effective publicity would be given to the proposed 'Safety Campaigns' and the details thereof would be finalised in consultation with workers and their representatives. The duties and responsibilities of workmen, supervisors and management officials would be spelt out and every member made aware of the role to be played by him, either alone or in groups.

7. To make the Safety Campaign successful goodwill and co-operation in full measure will be extended by workers and their representatives.

8. The impact of such Safety Campaigns should be continuously monitored by the ISO and reported to the Board of Directors at intervals not exceeding three months. This would enable the Board to issue fresh guidelines in the matter.

9. Every year the company would bring out a report detailing the Safety Campaigns launched and the results achieved. These reports would be presented before the Tripartite Committee. The first report should become available by 31.12.1981.

### 2. Quality Control Cell

To prevent accidents due to failure of equipment each mining company should have a well equipped quality control cell which should not only ensure the purchase/procurement of good quality equipment/apparatus but should also monitor the performance of the same in actual use. These cells should also lay down schedules for the proper maintenance and operation of such

equipment/apparatus. Periodical testing of the equipment/apparatus should also be the responsibility of these cells, which should maintain effective liaison with the DGMS, CMRS and other Institutions. Such Internal Quality Control Cells should be set up before the end of 1981.

### **3. Adoption of Improved Technology**

1. All Degree III gassy mines should have a comprehensive network of environmental monitoring system within next two years.

2. (a) Tele-communication system should be introduced in a phased manner in below ground mines in the next five years, giving priority according to distance, mechanisation, degree of gassiness and problems of fire. Telecommunication should also be provided in all mechanised opencast mines in the next two years.

(b) Surface communication systems should be improved expeditiously.

3. R&D Board of Coal India should be re-activated. R&D capabilities should be provided in each mining company in collaboration with CMRS.

4. for proper development and growth of new technology, specialist cells should be set up in each Mining Company and in DGMS for Ventilation, Environment, mechanisation, Dust Control, and Strata Control.

### **4. Training & Re-training of workmen**

1.V.T. Programme to be recast and made more comprehensive so that the future mining community is self-reliant and professionally competent to do face operations including those required for safety. Specialised training courses should also be arranged for the development of skilled operators required for heavy earth moving equipment, longwall face equipment etc.

2. Adequate infrastructure should be provided at the Company and Area levels and efforts should be made to attract talented persons having aptitude to run training programmes.

3. Training in Vocational Training Centres should be oriented towards how to do the job rather than being shown how the job should not be done.

4. There should be sectoral budget for training.

5. Central Training College/institute should be established for training Instructors and development of special cadres of mine surveyors and mine overmen/foremen.

6. Each mining company should formulate a comprehensive five year scheme for training of all supervisory staff and' workers within six months. The Training scheme should be implemented thereafter with the help of Central and the Government and other agencies.

7. Based on the requirement of trained manpower for future development of mining industry, training programmes should be launched. A Tripartite Committee should be set up to advise on the modalities and infrastructure for such training.

### **5. Internal Safety Organisation**

1. The Internal Safety Organisation (ISO) should be independent of the production line at all levels.

2. The Chief of ISO should be a senior officer next in rank only to the Director (Tech.) if any or MD/ the Chief Executive.

3. The ISO should be a multi-disciplinary team and the field setup should start above the; level of mine. The Safety Officer at the mine level being a specialist staff officer to the Mine Manager should not be deemed to be part of the ISO.

4 In order that the Internal Safety Organisation is able to play an effective role, detailed guidelines for their functioning may be laid down covering, inter-alia, the following:

(i) Formulation of safety policy at the corporate level;

(ii) Effective monitoring of the state of implementation of the policy directives on safety;

(iii) Periodic inspection of mines for assessing status of safety;

(iv) Enquiry into all accidents and dangerous occurrences;

(v) Actively associated in opening new districts and in obtaining permissions, relaxations and exemptions under the statute;

(vi) The findings of ISO should be placed before the Pit Safety Committee for discussion and dissemination.

## **6. Workers' participation in Safety Management**

1. Mines Act should be amended to give statutory backing to the institution of Pit Safety Committee and Workmen's Inspectors, keeping in view the recommendations made by the Committee on Workmen Inspectors.
2. The institution of Pit Safety Committees being a fine example of a co-operative effort on the part of all concerned on mines safety at the unit level, there should be recognition of the same. Participation by officials of higher management in the deliberations of the committee would ensure positive encouragement. The performance should be periodically reviewed at a level higher than the local management level.
3. For effective liaison, the Workmen's Inspector should be an ex-officio member of the Pit Safety Committee.

## **7. Prevention of roof/side fall accidents**

1. While adopting the policy that with effect from 1.7.82 no worker shall be permitted to work under unsupported roof that has been freshly exposed, each Company should plan and phase out the above programme in three phases of six months each. For this purpose, suitable support systems shall be selected and provided.
2. Strata Control Unit should be set up in Mining Companies and the DGMS within one year.
3. In order to expose as few workers as possible under freshly exposed roof, multiple-skills would be developed in consultation with Trade Unions.

## **8. Health & Prevention of Fatigue**

1. (a) Immediate steps shall be taken by the mining companies to establish the required infrastructure for implementing the provisions relating to initial and periodical medical examination of mine workers.
2. There should be suitable machinery both in the industry and in the DGMS to carry out regular surveys on dust evaluation and evaluating dust control techniques.
3. In mines, supply of drinking water and adequate ventilation at working places should be ensured.
4. In mines where long or arduous travel is involved, arrangement for transport of men should be made.
5. Recognizing the adverse effect on health of employees while working over-time employment of persons beyond their hours of normal duties should be minimized.
6. There is scope for improvement in the design and quality of footwear in use in mines. The Boot Committee may be revived for the purpose.
7. Each Mining Company should launch suitable programme for improvement of working environment and living conditions and maintenance of ecological balance affected by air and water pollution, noise and despoliation.

## **9. Accuracy of Mine Plans**

1. Mining Companies should make a realistic appraisal of the survey and supporting personnel required to fulfill statutory and other obligations within a period of 3 months and take immediate action to make good the shortfall during the course of next 3 years. For this purpose the Mining Companies should recruit survey apprentices and take immediate steps for training of mine surveyors either by opening specialised courses in the existing institutions or entering into collaboration with Polytechnics or Training Institutions under Survey of India etc. for meeting the present and future demand. Mining Companies should also take steps to attract and retain qualified and competent surveyors by formulating a suitable Survey Cadre Scheme.
2. Basic requirements to carry out efficient survey work and preparation of plans in terms of equipment, material and accommodation be ensured within a period of one year.
3. Existing survey personnel, both in the industry and DGMS, should be given refresher training and exposed to modern survey instruments and techniques.
4. (a) The work of correlation of mine plans and linking them with the National Grid to the required standards of accuracy should be expedited and completed within a period of one year.

(b) For inaccessible old water-logged and other workings, suitable techniques should be evolved to delineate them with modern methods of proving, within a period of 3 years.

#### **10. Reorganisation of Mines Rescue Services**

1. It was decided that this item would be considered further by the Ministry of Labour and that Shri Kanti Mehta, Shri Kalyan Roy, Shri P. Chanda and Shri G.S. Marwaha would send their views on the subject to the Ministry of Labour.

#### **11. Role and Functions of DGMS**

1. While carrying out its traditional role and functions including setting standards on safety, the DGMS should reassess priorities in organized sector giving greater emphasis on system examination and prevention of major accidents. Granting permissions should likewise be broad based rather than piecemeal.

2. The inspection policy should be based on:

(a) Enquiry into all fatal and immediate serious accidents and important dangerous occurrences.

(b) Two general inspections of all mines every year.

(c) Follow up inspections, where necessary.

(d) Inspections required to deal with applications for permissions, relaxations, exemptions and complaints.

(e) Inspections required for promotional and developmental work.

(f) Undertake special investigations, such as strata control, ventilation, slope stability, mining electronics etc.

For complying with the above norms it would be essential to provide necessary inputs.

3. A high-power Committee comprising of representatives of Ministries of Finance and Labour, Department of Personnel and the DGMS may be constituted to examine and recommend the size and structure of DGMS organisation taking into account the present and anticipated size of and technological developments in the mineral industry in the country, the associated safety problems and the norms of inspection/enquiries and other statutory and Non-statutory work expected of the Organisation. The Committee might also suggest steps to be taken to attract qualified and competent officers to DGMS. The Trade Unions will place their views before the high-power committee.

Since compliance with recommendation (3) above will take some time, as an immediate measure the service and work conditions (Pay scales, allowances, transport facilities etc.) of the employees of DGMS should be improved.

Technical expertise in the DGMS shall be kept up-to-date by exposing the officers to advanced technology in other countries and allowing them to participate in National and International Seminars.