भारत सरकार
Government of India
श्रम एवं रोजगार मंत्रालय
Ministry of Labour & Employment
खान सुरक्षा महानिदेशालय
Directorate General of Mines Safety

सत्यमेव जयते

No. DGMS (Tech) Circular (MAMID)/ 01 Dhanbad, dated : 06/05/2015

To

The Owner, Agent and Manager of all Mines

Subject : Accidents/incidences due to exposure to high atmospheric temperature.

Sir,

During peak summer every year, many incidences of mine-workers getting exposed to high atmospheric temperature get reported. Some such cases had turned into fatalities. Opencast mines during summer are most vulnerable in this regard. In some cases, persons got affected due to heat in underground mines also, where ventilation was inadequate. Inquiries revealed that in most of the cases "Heat Stroke" was the major contributory cause. Heat stroke generally occurs when the body stops adjusting to the hot temperature by sweating, and can't keep up with the heat. It is characterized by hot, dry, red skin that is warm or hot to touch and immediate medical attention is needed in such cases. The other heat related disorders could be,

Heat Exhaustion
Heat exhaustion is caused by loss of large amounts of fluid from the body. A worker with heat exhaustion continues to sweat, but their body can't keep up with the heat. The worker may have a headache, fatigue, or flu like symptoms. In most cases the worker needs to rest, cool down, and drink plenty of fluid.

Heat Cramps
Workers may suffer from cramps and painful muscle spasms. This happens when workers drink water to replace the fluids they lose from sweating, but don't replace the body's loss of salt. Drinking fluids with electrolyte replacement ingredients are recommended in such cases.

Heat Syncope
Heat syncope is a fainting episode or dizziness that usually occurs with prolonged standing or sudden rising from a sitting or lying position. Factors that may contribute to heat syncope include dehydration and lack of acclimatization.

Heat Rash
Heat rash is a skin irritation caused by excessive sweating during hot, humid weather.

Neurological Effects
Excessive heat may also lower mental alertness and ability to work. Workers in extreme environments may make more mistakes and may have more injuries.

Contributing Causes

Heat can increase the risk of suffering from other illnesses and health problems.

The following precautions will go a long way in overcoming such incidences/accidents,

1. Slowing down the pace of work should be allowed, especially if the worker feels even slight heat strain,

2. Rest areas should be located as near to the workplace as practicable,

3. Ensure that adequate quantity of cool water and electrolyte supplements are easily available,

4. In really hot conditions, workers should drink at least a glass of water every 15-20 minutes,

5. Different schedules may be negotiated to let workers do the hardest work during the coolest parts of the day,

6. Rest timings may be re-scheduled to avoid work during high/extremely hot temperatures. Where this is not possible, a two-person crew should be assigned to perform work during extremely hot temperatures,

7. Ensure that worker do not enter/work in an atmosphere having no ventilation or inadequate ventilation in underground mines,

8. Workers must be made aware of the dangers from excessive heat and humidity and remedial measures.

Yours faithfully,

(Rahul Guha) 6.5.15
Director General of Mines Safety

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सत्यमेव जयते

No. DGMS (Tech) Circular (MAMID)/ 02 Dhanbad, dated : 07 / 05 /2015

To

The Owner, Agent and Manager of all Mines

Subject: Accidents due to wheeled trackless machinery during 2014.

Sir,

At present, wheeled trackless transportation machineries like dumpers/tippers (henceforth 'dumpers' only) are used by mine operators widely in Open Cast mines. While increase in production of coal is a primary objective of the mine management, at the same time it has to ensure the safety and welfare of its workers. The coal mines in India need to use these machines in a judicious way to meet these two important goals. It is observed that during 2014, 13 accidents occurred due to dumpers out of a total of 64 fatal accidents. A detailed analysis of these fatal accidents revealed the following,

(i) During 2014, 67 persons were killed in coal mines as a result of 64 fatal accidents,
(ii) Out of these 64 accidents, 13 accidents involving 14 fatalities happened due to dumpers,
(iii) Majority of accidents occurred either at the haul road or at stock yard,
(iv) 8 operators, 3 fitters, 1 mechanic, 1 deputy supervisor and 1 tipper helper were victims,
(v) Out of 14, 11 were regular workers and 3 worked under contractors,
(vi) In some cases, mechanical fault of dumpers resulted into accidents indicating that the management was not vigilant enough to check the condition of dumpers before operating it,
(vii) One of the sub-causes was identified as movement of dumper in reverse direction indicating the failure of the dumper driver/supervisory staff/ management to ensure the safety and security of the workers in the vicinity and possibly non-functioning of the audio-visual reversing alarm. In a case, where a contractual light vehicle operator aged 22 years had died, it was revealed that the accident occurred while restarting a breakdown loaded dumper on the mine haul road. The dumper was moved in reverse direction mistakenly, hitting a contractual jeep driver standing behind it,
(viii) A case had been identified where the driver of the dumper was not wearing the seat belt,

(ix) In one case a loaded dumper with overburden material was travelling down on an unconsolidated ramp which was under preparation in an opencast coal mine. Due to this activity, the dumper fell into a sump to a depth of about 17m due to sliding of the ramp, submerging the operator cabin in sludge/water. The operator died due to drowning. Thus, if the dumper had not been allowed to operate in an unconsolidated ramp, the life of the dumper operator could have been saved.

The above mentioned analysis is brought to the notice of all concerned so that valuable lessons are learnt and similar incidents are avoided in future. I, once again reiterate the need of the following precautions among others in operation of dumpers in Open Cast mines of the country,

(i) Ensure that dumpers are fit to operate in all respects before it is engaged in mines,
(ii) Ensure that the path of the moving/standing dumper remains clear from objects/individuals,
(iii) Ensure that the alarm systems of the dumper are in working condition,
(iv) Ensure that the dumper operators use seat belt while operating the same,
(v) Ensure that the dumpers are not overburdened due to unmanageable load of material.

Yours faithfully,

7.5.15

(Rahul Guha)
Director General of Mines Safety

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Directorate General of Mines Safety

No. DGMS (Tech) Circular (MAMID)/ 03 Dhanbad, dated: 29 / 06 /2015

To

The Owner, Agent and Manager of Coal Mines

Subject: Accidents due to 'roof fall' during 2014.

Sir,

One of the major causes of accidents in underground coal mines is 'roof fall'. In the past, DGMS had issued several guidelines on the subject of 'roof fall'. While mine managements have taken considerable initiatives to reduce the risk of such accidents, but a real time analysis of incidents indicates that the industry as a whole has a long way to go to achieve 'zero incidents' in this area. It is observed that during 2014, 9 fatal accidents at coal mines occurred due to 'roof fall' out of a total of 64 fatal accidents. A detailed analysis of these fatal accidents revealed the following,

(i) During 2014, 67 persons were killed in coal mines as a result of 64 fatal accidents,
(ii) Out of these 64 accidents, 9 accidents (i.e. 14 percent) involving 10 fatalities happened due to 'roof fall' in the coal mines,
(iii) 3 face workers, 3 dressers, 2 support personnel, 1 contractor's workman and 1 mazdoor were the victims,
(iv) 55 percent (i.e. 5 out of 9) accidents due to 'roof fall' occurred while dressing freshly exposed roof,
(v) In most of the cases, the freshly exposed roof were not supported according to Systematic Support Rules,
(vi) In one of the cases, the person had entered beneath freshly exposed unsupported roof without the permission of a competent person/official, thereby endangering his own life.

The above analysis is brought to the notice of all concerned so that lessons are learnt and similar incidents are avoided in future. I, once again, reiterate the need of the following precautions to be taken in underground coal mines by ensuring that,

(i) Risk due to strata control has been assessed and included in Safety Management Plan,
(ii) Safe operating procedure has been prepared on the basis of risk assessed,
(iii) Only trained persons employed in dressing of freshly exposed roof,
(iv) Strict compliance to the Systematic Support Rule under Regulation 108 of the Coal Mines Regulations, 1957,
(v) Training and re-training of workers on a regular basis,
(vi) Discipline at work place is maintained so that indiscipline does not lead to loss of any valuable life,
(vii) Nobody is allowed to work below unsupported roof.

Yours faithfully,

19.6.15

(Rahul Guha)
Director General of Mines Safety

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No. DGMS (Tech) Circular (MAMID)/ 04 Dhanbad, dated : 15 /07 /2015

To

The Owner, Agent and Manager of all Mines

Subject: Effective utilization of Health & Safety Management System in mines

Sir,

DGMS has taken initiatives to bring down accidents in Indian mines to improve mine safety and health and a fresh look into mine safety & health management system. These initiatives helped in bringing down fatal and serious injuries considerably over the years. However, when we refer the accident figures of 2014, it is apparent that much needs to be done. It has been observed that during 2014, 84 fatal accidents occurred in Coal mines, 30 in Non-Coal mines and 5 in Oil mines. During the same year 2014, it has been observed that 421 serious injuries were reported in Coal mines, 33 in Non-Coal mines and 9 in Oil mines. These numbers are not acceptable at all. It is essential that Mine operators should adopt more effectively safety and health management programs, or re-examine their existing programs to better manage safety and health, eliminate hazards, and prevent injuries and illnesses.

We would like to reiterate that an effective and successful safety & health management program must include as its core components the following six areas:

(1) Management commitment;
(2) Workers involvement;
(3) Workplace inspection to identify hazards and violations of mandatory health and safety standards;
(4) Hazard prevention and control;
(5) Safety and health training; and
(6) Program evaluation.

During evaluation of the current safety scenario, it was repeatedly a concern amongst stakeholders at grassroots level, that the miners are not actively engaged in the health and safety management programs. We need to remember that spontaneous participation of the mine workers will definitely give our initiatives towards better safety & health a quantum leap. Some steps in this regard could be,

- Encouraging the use of safety and health committees;
- Reviewing near-miss accidents with miners;
- Setting benchmarks for injury and illness reduction and regularly evaluating progress;
- Fostering effective communication at all levels;
- Providing education along with training;
- Creating adaptive and responsive approaches to finding and fixing hazards;
- Holding regularly scheduled safety meetings; and
- Empowering miners.

As we all work together to achieve the goal of "zero harm", we strongly encourage all concerned to re-look into our present health & safety management systems in mines and strengthen the present systems keeping the above mentioned core-components in mind. This will have considerable impact in ensuring that our miners come home safe after toiling hard each day at the mines.

(Rahul Guha) 15.7.15
Director General of Mines Safety

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सत्यमेव जयते

No. DGMS (Tech) Circular (MAMID)/05 Dhanbad, dated: 23 / 07 /2015

To

The Owner, Agent and Manager of Non-Coal Mines

Subject: Accidents due to 'fall of persons from height/into depth' during 2014.

Sir,

One of the major causes of accidents in non-coal mines is 'fall of persons from height/in to depth'. In the past, DGMS had issued several guidelines on the subject of 'fall of persons from height/into depth'. While mine management have taken considerable initiatives to reduce the risk of such accidents, but a real time analysis of incidents indicates that the mining industry as a whole has to go a long way to achieve 'zero incidents' in this area. It is observed that during 2014, out of total 36 fatal accidents in non-coal mines, 7 occurred due to 'fall of persons from height/into depth'. A detailed analysis of these fatal accidents revealed the following,

(i) During 2014, 38 persons were killed in non-coal mines as a result of 36 fatal accidents,
(ii) Out of these 36 accidents, 7 accidents involving 7 fatalities happened due to 'fall of persons from height/into depth',
(iii) In 57 percent cases, the casualties occurred due to slipping from side/edge of working of the mine,
(iv) 1 assistant rigman, 1 non-statutory supervisor, 2 loaders & 3 mazdoors were the victims. All victims were regular employees,
(v) In one of the cases, the victim fell from a height of 7.58 meters while walking at the top of a bench. Enquiry into the accident revealed that the victim was talking over mobile phone while walking endangering his valuable life.

The above mentioned analysis is brought to the notice of all concerned so that valuable lessons are learnt and similar incidents are avoided in future. I, once again reiterate the need of the following precautions to prevent accidents due fall of persons from height/in to depth in mines by ensuring the following,

(i) That the sides of the opencast working is kept benched, sloped and secured whilst working the mines so as to prevent danger from fall of sides,
(ii) That suitably anchored safety belts are worn while working at height,

(iii) That the persons are not allowed to work at any place/edge of working from where they are likely to slip or overbalance to fall, unless they are secured by safety belt/full body harness, suitably anchored to prevent them from falling,

(iv) That the steps, made on the slope for carrying load, are in accordance with the norms prescribed in the Metalliferous Mines Regulation, 1961,

(v) That the road or a footpath of prescribed width, having steps of prescribed dimensions are equipped with hand rails or ladders with hand rails and platforms at intervals not exceeding 10m are provided in the mines to allow safe travel of persons, to and from their working places,

(vi) That the use of mobile phones is restricted in the working area so that no valuable life is lost due to mobile phone induced absent mindedness,

(vii) That proper lighting arrangements are provided in the mines, as required under provision of Regulation 146(1)(a) of the Metalliferous Mines Regulations, 1961.

Yours faithfully,

23.7.15

(Rahul Guha)
Director General of Mines Safety

GOVERNMENT OF INDIA
MINISTRY OF LABOUR & EMPLOYMENT
DIRECTORATE GENERAL OF MINES SAFETY

DGMS (Tech.) Circular No. 06 of 2015 Dhanbad, Dated 29/09/15

To

All Owners, Agents and Mangers of Mines

Subject: Arrangements and facilities for occupational health surveillance of persons employed in mines.

Sir,

The 39th meeting of the Standing Committee on Safety in Coal Mines was held on 13.03.2015 under the Chairmanship of Hon'ble Minister of State (I/C) Coal at New Delhi. In the meeting, among others, concerns were raised about the poor arrangements prevailing in PME Centers of the coal companies. It was highlighted that none of the hospitals / PME Centers of coal companies were properly equipped with pneumoconiosis detection kits, which might lead to the cases of pneumoconiosis being mistakenly diagnosed as tuberculosis. It was also stressed in the meeting that protocol and guidelines should be given for rehabilitation of pneumoconiosis patients.

Needless to say, pneumoconiosis is a preventable but incurable disease. As mining is a dust prone industry, it is imperative on part of the mine managements to see that all suitable measures for prevention of dust generation and for proper health surveillance of the persons employed in mines are given utmost priority and importance.

Several guidelines and directives relating to occupational health surveillance in mines, including conduct of Initial and Periodical Medical Examinations for early detection of pneumoconiosis, silicosis and other occupational diseases; training of medical officers in occupational health and for use of standard ILO chest radiograph for classification of pneumoconiosis and silicosis; measures to be taken for prevention of such diseases and rehabilitation of affected persons; and for the equipments and other arrangements to be provided in PME Centers; have already been issued by DGMS time to time through circulars, such as DGMS Circular (Tech.) Nos. 1/1989, 4/1992, 2/1994, 3/2000, 4 & 5 of 2007, 1/2008, 1/2010, 3/2011, 5/2011 and 3/2012.

The Owners, Agents and Managers of all Mines are, therefore, requested to review their occupational health surveillance facilities with reference to the above guidelines to identify the gaps and take necessary measures to strengthen such facilities. They are also requested to make a system of undertaking such reviews periodically for continual improvement.

(Rahul Guha) 23.9.11
Director General of Mines Safety

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धनबाद / Dhanbad – 826 001

DGMS (Tech)(S&T) Circular No. 07 of 2015 Dhanbad, dated 23/09/ 2015.

To,
The Owners, Agents and Managers of all mines.

Subject: **Application for Medical Re-examination by Appellate Medical Board, constituted under Rule 29 K of the Mines Rules, 1955 .**

It is being observed that many applications of Appellants for Medical Re-examination by Appellate Medical Board constituted under Rule 29K of the Mines Rules, 1955, are not being forwarded in accordance with the procedure specified in Rule 29J of the Mines Rules, 1955. Many applications are being forwarded by the officials other than the manager of mine, as defined in Rule 2(f) of the Mines Rules, 1955 to the Convenor, Appellate Medical Board, Directorate General of Mines Safety, Dhanbad.

The procedure for Appeal for re-examination by Appellate Medical Board constituted under the Rule 29K of Mines Rules, 1955, is as follows:

(1) A person has been declared **unfit** for employment in mines or in particular category of mines or in any specified operations in mine as a result of an Initial Medical Examination or Periodical Medical Examination under 29B of mines rules.1955, he/ she within thirty days of the receipt of a copy of Form-O, may file an appeal with **Manager of mine**, as defined in Rule 2(f) of the Mines Rules,1955, requesting him to forward the appeal to an Appellate Medical Board constituted under rule 29K of Mines Rules, 1955. The Appeal shall be signed by the appellant (in case of illiterate left thumb impression), Date of Appeal, Name of appellant and his/her complete address with pincode shall be mentioned on the appeal.

(2) Within 30 days of receipt of appeal, the appeal shall be forwarded by the **Manager of mine** to Convenor, Appellate Medical Board, Directorate General of Mines Safety, Dhanbad-826001, Jharkhand. Letter no. with date, Name of the manager of mine,

name of the mine, complete address with pincode shall be mentioned on the forwarding letter.

(3) The manager of mine shall ensure that application shall be accompanied by;

(a) A legible certified copy of medical certificate in Form- O issued under Rule 29F(2) of the Mines Rules, 1955. The signature & stamp of manager of mine shall be on the certified copy of Form-O.

(b) The appeal of appellant in original.

(4) Letter without a pincode is not accepted by the Post-Office. Therefore, application submitted without a pincode shall not be considered and may be recorded.

(5) The applications made not in accordance with above guidelines may be returned to forwarding official or appellant.

All concerns are being requested to strictly adhere with the above procedure, while forwarding applications for medical re-examination by Appellate Medical Board, constituted under Rule 29K of the Mines Rules, 1955.

(Rahul Guha)
Director General of Mines Safety

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No. DGMS Circular (Tech.) No. 08 /Dhanbad, dated 28/09/2015

To

The Owners, Agents, Managers of Coal Mines, Superintendent of Mines Rescue Stations, Manufacturers/Suppliers of Approved type of Self Contained Self Rescuers, Test Houses conducting tests of Self Contained Self Rescuers and all Inspecting Officers of the Directorate .

Sub: Protocol on use, care, maintenance, sampling & testing of Self Contained Self Rescuer (SCSR) under Regulation 191 D (2) & (3) of the Coal Mines Regulations, 1957.

In view of the difficulties expressed by the users in use, care, sampling and maintenance of Self Contained Self Rescuers (SCSR) a meeting of users, regulators, scientific institutions, academicians and manufactures/suppliers was held on 19th May, 2015 to review issues related to use, care, maintenance, sampling & testing of Self Contained Self Rescuer (SCSR) among other issues. This was followed by another meeting on 3rd June, 2015.

After detailed deliberations, the house opined that Condition No. 6 of Clause A and Condition No. 1.1 of Clause B of DGMS (Tech.) Circular No. 08 of 2008 dated 27.10.2008 requires modification and two new conditions may be incorporated.

A. USE, CARE & MAINTENANCE

1. Condition No. 6 of Clause A is modified as:

   " Every Self Contained Self Rescuer (SCSR) on roll of the mine or mines rescue station shall be subjected to 'Leak Tightness Test', at least once in a quarter by a competent person duly authorized by the manager or superintendent of the mines rescue station for the purpose, in the manner as prescribed in the IS:15803-2008 (Annexure E-1) under Clause 5.7 for Leak Tightness."

2. Condition No. 1.1 of Clause B is modified as:

   " Before a batch of Self Contained Self Rescuer (SCSR) is put into service, samples at the rate of three percent (3%) subject to a minimum of twelve units, for every batch of supply shall be drawn at random for the testing by a joint sampling team comprising of representatives from manufacturer/supplier and user at the user's site."

3. Batch testing of self rescuers may be performed at test houses prescribed in Clause 6.8 of the Approval Policy and in a mines rescue station, in presence of representatives of users and manufacturers who shall sign their respective attendance in a bound paged book kept for the purpose, before commencement and after completion of the tests.

4. Shelf life and service life of self rescuers shall be declared by the manufacturer, based on the prevailing practices and working environment of the mines and would be subject to fulfillment of prescribed conditions for their use. It shall be the responsibility of the user to certify the fitness of self rescuers for use in mines on quarterly basis or any other suitable interval as may be prescribed, which shall be recorded in a bound paged book kept for the purpose and duly countersigned by the mine manager/rescue superintendant/rescue room incharge.

5. All other provisions of the protocol issued vide DGMS (Tech.) Circular No. 08 of 2008 dated 27.10.2008 shall remain unchanged.

28.9.15

Director General of Mines Safety

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No. DGMS Circular (Tech.) No. 08 /Dhanbad, dated 28/09/2015

To

The Owners, Agents, Managers of Coal Mines, Superintendent of Mines Rescue Stations, Manufacturers/Suppliers of Approved type of Self Contained Self Rescuers, Test Houses conducting tests of Self Contained Self Rescuers and all Inspecting Officers of the Directorate .

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After detailed deliberations, the house opined that Condition No. 6 of Clause A and Condition No. 1.1 of Clause B of DGMS (Tech.) Circular No. 08 of 2008 dated 27.10.2008 requires modification and two new conditions may be incorporated.

A. USE, CARE & MAINTENANCE

1. Condition No. 6 of Clause A is modified as:

   " Every Self Contained Self Rescuer (SCSR) on roll of the mine or mines rescue station shall be subjected to 'Leak Tightness Test', at least once in a quarter by a competent person duly authorized by the manager or superintendent of the mines rescue station for the purpose, in the manner as prescribed in the IS:15803-2008 (Annexure E-1) under Clause 5.7 for Leak Tightness."

2. Condition No. 1.1 of Clause B is modified as:

   " Before a batch of Self Contained Self Rescuer (SCSR) is put into service, samples at the rate of three percent (3%) subject to a minimum of twelve units, for every batch of supply shall be drawn at random for the testing by a joint sampling team comprising of representatives from manufacturer/supplier and user at the user's site."

3. Batch testing of self rescuers may be performed at test houses prescribed in Clause 6.8 of the Approval Policy and in a mines rescue station, in presence of representatives of users and manufacturers who shall sign their respective attendance in a bound paged book kept for the purpose, before commencement and after completion of the tests.

4. Shelf life and service life of self rescuers shall be declared by the manufacturer, based on the prevailing practices and working environment of the mines and would be subject to fulfillment of prescribed conditions for their use. It shall be the responsibility of the user to certify the fitness of self rescuers for use in mines on quarterly basis or any other suitable interval as may be prescribed, which shall be recorded in a bound paged book kept for the purpose and duly countersigned by the mine manager/rescue superintendant/rescue room incharge.

5. All other provisions of the protocol issued vide DGMS (Tech.) Circular No. 08 of 2008 dated 27.10.2008 shall remain unchanged.

Dr. 22.9.15

Director General of Mines Safety

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No. DGMS Circular (S&T)Tech. No. 10 /Dhanbad, dated 21st Dec, 2015

To

All Owners/Agents/Managers of coal, metal and oil mines and heads of technical institutes and research organisations.

Subject: Protocol for clearance for undertaking R & D projects in mines

As stipulated in the statute, Chief Inspector of Mines has been according approval of certain equipment/apparatuses/appliances and materials for use in mines. The Directorate has framed a policy to prescribe the procedure for according approvals to such products.

Lately, in different forums, mine operators, research organisations and equipment manufacturers have been requesting DGMS for grant of clearances for undertaking R & D projects in mines.

A meeting was held at DGMS on 23.11.2015, with participation from mining industry, research/academic institutes and DGMS, where the issue under reference was discussed and deliberated in detail. On the basis of inputs gathered from the stakeholders' meeting and in-house consultation at DGMS, a protocol for issuing clearance for undertaking R & D projects in mines have been developed.

Clearance for such R & D projects will not be within the purview of the Approval Policy of the DGMS prescribed for products which are commercially marketed by the manufacturers for use in mines.

The protocol for granting clearance for undertaking R & D projects in mines is given as Appendix with the format for submitting the application given at Annexure I.

18.12.15

Director General of Mines Safety

Appendix

Protocol for clearance for undertaking R & D projects in mines

Abbreviations - DGMS: Directorate General of Mines Safety; R&D: Research & Development; S&T: Science & Technology; CIMFR: Central Institute of Mining and Fuel Research; CMPDI: Central Mine Planning and Research Institute; IIT: Indian Institute of Technology; ISM: Indian School of Mines; NIT: National Institute of Technology; NIRM: National Institute of Rock Mechanics; TCS: Tata Consultancy Services; CMC: Computer Management Corporation.

Considering the hazardous atmosphere and working environments in mines, the statute stipulates use of certain prescribed approved type of equipment, appliances etc. in such hazardous atmosphere. This issue of granting clearance for undertaking R&D projects in mines has been raised by mine operators and research institutes on several forums.

To facilitate technological development, it has been decided to frame a protocol for issuing clearance for undertaking R & D projects in Indian mines. Academic institutions of repute (IITs/ISM/NITs/National Universities etc.), R & D organizations recognised by Govt. of India, eminent research institutes (CIMFR, CMPDI, NIRM etc.) interested in taking up R & D projects in mining may approach DGMS requesting for clearance. It may be noted that under no circumstances, the type of equipment/appliances etc. used in the R & D project shall be considered approved by this Directorate. Clearance for such R & D projects will not be within the purview of the Approval Policy of the DGMS which stipulates the procedure for according approvals to equipment, machinery, materials and appliances, etc. which are commercially marketed by the manufacturers for use in mines.

The conditions for issue of clearance, among others, are furnished below:

(1) Proposals shall be made in the prescribed application format (Annexure I).

(2) An executive summary on the project specifying the technical details shall be submitted with the application.

(3) In case of a joint venture project, a brief write-up on the background of the individual organizations and their scope in the project shall be submitted with the application.

(4) At least one research institute/R&D organization/academic institution who will be the principal executing agency, is required to be a part of the project in case of a joint venture project.

(5) A write up on the methodology to be adopted and the benefits expected out the project shall be submitted with the application.

(6) One Project Head shall be nominated by the research institute/R&D organization/ academic institution.

(7) A list of all persons involved in the project with details of their academic background and relevant experience shall be submitted with the application. In case of requirement of any additional support personnel, there details shall also be furnished.

17.12.2015

(8) The application shall specifically mention the name of the mine where it is proposed to undertake the project. Further it shall also specify the location(s) where the equipment, machinery, materials and appliances, etc. is/are proposed to be installed decided in consultation with the mine management. The consent of the Owner/Agent/Mine Manager in this regard shall be submitted with the application.

(9) Unless otherwise specified, such issue of clearance shall be mine specific and will not be permitted:
   (a) In any mines/seams other than mines/seams of first degree of gassiness in case of coal mines.
   (b) In zones other than Zone 2 hazardous area, in case of oil mines.

   In case of metalliferous mines, there will be no such restrictions.

(10) Unless otherwise specified;
   (a) In case of belowground coal mines, use of electrical equipment/apparatus forming integral part of the project may be permitted, if certified to be safe for use in mines with first degree of gassiness and subject to adherence of prescribed conditions. In case of intrinsically safe and flameproof equipment/apparatus certified as per relevant and acceptable standards, may be accepted.
   (b) In case of oil mines, use of electrical equipment/apparatus forming integral part of the project may be permitted, if certified to be safe for use in mines in zone 2 hazardous area, and subject to adherence of prescribed conditions. In case of intrinsically safe and flameproof equipment/apparatus certified as per relevant and acceptable standards, may be accepted.

(11) A time frame for completion of the project shall be mentioned in the application and clearance shall be issued accordingly. Any extension beyond the declared time frame shall be based on the justification seeking such extension.

(12) Under the overall charge of the Mines manager, the execution of the R & D project shall be under the supervision of an official of the mine not below the rank of an assistant manager/ installation manager. A panel of supervisors entrusted with the task of supervision and a mechanism of supervision shall be prepared by the mine management. A copy of the mechanism shall be submitted with the application.

(13)Where special condition(s) exist, the Chief Inspector may consider issue of clearance subject to the conditions he may specify therein for:
   (i) coal mines/seams other than first degree gassiness and;
   (ii) zones other than zone 2 hazardous area in case of oil mines.

(14)A half yearly report on the progress of the R&D project shall be submitted to DGMS by the Project Head.

18.12.2015

Annexure-I

Format for application for clearance for undertaking R & D Projects

(To be filled in by the Project Head)

Part I (General)

1. Title of the project:
2. Names and addresses of institutions and organisations involved in the project:
3. Name and address of the Project Head:
4. Brief Description of the project:
5. Objectives of the project:
6. Detailed methodology (Enclose a separate write-up):
7. Scope of responsibilities of the individual institutions and organisations:
8. Work plan on the projected time frame:
9. Minimum duration of the project:
10. Expected outcomes from the project:
11. Agencies which may be benefitted by the project:

Part II (Equipment/material/appliance)

1. Name of the equipment, materials or appliances involved in the project:
2. Description of the equipment, materials or appliances with specifications (Enclose as separate annexure):
3. Test reports of electrical equipment regarding intrinsically safe/flame proof characteristics if applicable (Enclose self certified copies):
4. Service life:
5. Provide details, in case the equipment, materials or appliances have approval in any industry in India or abroad:

Part III (Application Area)

1. Name and full address of the mine where it is intended to carry out the project:
2. Specify location on the mine plan with ventilation details where the concerned equipment, materials or appliances are intended to be installed (Enclose mine plan):
3. Name of the manager of the mine (Enclose copy of the consent of the Owner/Agent/Mine Manager):
4. Details of supervision (Enclose a mechanism of supervision separately):

I, hereby, certify that all information furnished in this application and documents, reports, drawings etc. enclosed with the application are correct. I also undertake to abide by all the conditions prescribed in the protocol for grant of permission and the applicable provisions stipulated in the regulations, rules etc. framed under the Mines Act, 1952.

Signature:
Name:
Designation:
Institution/organisation:

18.12.2015