

Minutes of meeting on “Approval System of Mine Safety Equipment by DGMS - Present and Future Approach”-held in Committee Room, MOLE, New Delhi on 18.6.2014

- 1.0 Vide Ministry's letter No. Z16025/48/2013 –ISH-II dated 3rd June 2014, a meeting was convened at Ministry's Committee Room on 18th June 2014 at 11.30am in which all the stakeholders, namely mining companies, equipment manufacturers, research institutions and representatives of BIS, NABL, were requested to attend to discuss the system of approval of equipment, appliances and materials for use under hazardous conditions in mines.
- 2.0 List of participants who attended the meeting is enclosed. Shri A C Pandey , JS, MoLE chaired the meeting.
- 3.0 At the very onset of the meeting, Shri AC Pandey, JS, while welcoming the participants stated that like in any system there can be gaps in the present approval policy of DGMS and that the conformity system also needs a review. He also stated that there is lot of concern being expressed by the user companies and equipment manufacturers of imported equipment on testing procedures required under the present approval policy of DGMS and this meeting, thus aims to look at the scope of improvement and path forward to streamline adoption of international technology in Indian mines.
- 4.0 Director General of Mines Safety, Shri Rahul Guha, while welcoming the delegates agreed with chairman that though the concerns expressed by user companies and equipment manufacturers of imported equipment may appear to be genuine, DGMS's Approval Policy also needs to look at quality assurance at the users end. The procedures in place in the mining Industry, in so far as use of such approved equipment is concerned, also needs to be looked into. Matter of reciprocity and mutual recognition of test reports from test laboratories abroad also needs to be addressed. He stressed that mining is a hazardous profession and the equipment deployed in mines need to perform in difficult mine environment. Any fault in the equipment may lead to disasters and that the issues connected with testing procedures and integrity of performance of the equipment/appliance/material over its entire service life cannot be ignored. He then requested Shri UN Pandey, DDG (Electrical) to give a presentation on DGMS approval System as in its present form and the future approach.
- 5.0 Shri UN Pandey, DDG(Elect), in his address stated that in respect of mining equipment/appliances/material, all countries have some set standards which are approved by their respective statutory bodies , who also provide guidelines to the manufacturers. There are similarities as well as differences in approval policy of DGMS and approval policies of different countries. Standards also vary, he stated. He then gave a presentation on DGMS Approval Policy,2013, outlining statutory provisions that require such approvals of equipment, appliances and materials. Categories of items that need approval for use in mines, was also touched upon in the presentation. The approval process and the testing standards followed by DGMS vis-à-vis international standards was also explained. Reservations on accepting test reports of foreign test houses across the board was also spelt out , that certain test certificates might not conform any standards. He, however, explained that reports from internationally accredited test houses based abroad based on IS/IEC Standards are accepted by DGMS. A list of bodies notified by under directive 94/9/EC and of approved IEC Ex certification bodies were also made over to the

participants. The presentation also deliberated upon approval practices prevalent in China, Australia, USA, etc.

- 6.1. The house was then thrown open for discussion by the chairman, Shri Pandey, JS.
- 6.2. Shri Chandan Gupta, BIS Representative, stated that several committees exist in BIS for formulation of standards and few such committees also address setting of standards for mining equipment. BIS has also accepted some of ISO / IEC standards and the same have been harmonized with Indian standards. He also informed that BIS is gradually developing certification system as well as testing facilities within the country.

Shri R. Guha, DG, in response to BIS submission stated that development of standards and building up of testing facility within the country shall take time. Many countries like Australia and New Zealand have their own Standard – ANZEx and acceptance of standards of country of origin by DGMS remains a matter of concern. BIS, thus should harmonize Indian standards with various international standards at an early date.

Shri B. Ramesh Kumar, Director, Singareni Collieries Company Ltd expressed that till Indian Standards are formulated and testing facilities are developed in India, test reports from internationally accredited labs and the standards of country of origin should be accepted.

Ms Nandini Chakrawarty, MD, Mineline Ltd, stated that foreign manufacturers find India as a potential market for their equipment once mining activity in their country has stopped, or is on decline. She appreciated that the approval policy of DGMS has stood the test of time over decades and that it is reflected in the high safety standards existing in mines today. Opening the doors to adoption of foreign technology and equipment has many pitfalls as sub-standards equipment may be dumped in the country. Only prototype is tested in labs abroad and the equipment supplied may not conform to standards prescribed even in the country of origin. This may lead to disasters in mines and thus a balanced approach must be taken. She further submitted that the need today is to upgrade in-house systems and in-house testing facilities including by mining companies.

Shri CB Sood, ED (S&R), CIL, expressed that state of art technology is being implemented in underground coal mines of CIL and thus BIS should develop Indian Standards and harmonize them with various international standards.

Shri IVN Prasad, of Joy Global, stated that IEC standards should be accepted if Indian Standards and lab facilities for testing are not existing in India. Shri R. Guha, DG, informed that this aspect is already in place in the DGMS approval policy.

Shri Baliga of IFMA stated that many international standards like, ATEX are based on self - certification and no third party certification or testing is done. Use of such equipment may be disastrous. The ATEX certified equipment is not accepted in Gulf countries for use in oil Mines.

- 6.3. Shri B. Ramesh Kumar Director SCCL, stated that renewal of approvals is getting difficult, as many a times the OEM does not come forward for seeking such renewal. So a life time approval should be granted.

Shri IVN Prasad, of Joy Global, supported submission made by Shri Ramesh Kumar and corroborated that the period of approval should commensurate with the life of equipment.

Shri Piyush Kumar, Director, Ministry of Coal stated that running equipment should not be asked to go through renewal process.

- 6.4. There was a general opinion that the grant of approvals in some cases takes a long time and that a time-frame should be formulated.

Shri Piyush Kumar Director Ministry of Coal supplemented that there should be less of human interface in seeking approvals and that the DGMS should consider the grant of approvals online.

Shri Rahul Guha expressed that there could have been isolated cases in the past when grant of approval might have been delayed. Most of the time, it is because of incomplete applications and non-submission of requisite documents. He also stated that submission of on-line application is under active consideration. He also supplemented that at times voluminous test reports and other documents makes submission of application online is difficult.

Shri AC Pandey, J S, agreed that DGMS needs to cut down the time for grant of approvals, simplify procedures to make them user friendly, minimize human interface and go for on-line grant of approvals.

- 6.5. Shri J Lahari of M/s OIL, and Shri M C Das of M/s ONGC, stated that, the nature of their onshore surface installations is same as in refineries and petro-chemical plants, and that PESO grants approval for factory installations on the basis of ATEX certification. In case of surface installations forming the part of mine, similar equipment/apparatus requires approval from DGMS. They wanted PESO approval to be accepted by DGMS. They also stated that vendors were not interested to obtain DGMS approvals because the testing procedures require submission of design documents which are confidential in nature. Testing of prototype type increases the cost of the equipment/apparatus also.

Shri Sanjeeb Goswami, Representative of DGH, stated that equipment/apparatus carrying API certificate/monogram should be accepted by DGMS for onshore surface OIL and Gas installations.

- 6.6. Shri Dr AK Singh, in-charge, flameproof and explosion proof laboratory, CIMFR Dhanbad submitted that many overseas equipment submitted for testing in CIMFR have failed in the past during non-transmission of flame test even though they were certified by overseas laboratories. He stated that this may lead to disastrous conditions in mines. Thus testing of critical equipment within the country should be insisted upon. While endorsing the views of Dr. AK Singh of CIMFR, Ms Nandini Chakrawarty, MD, Mineline Ltd., stated that the similar equipment imported from UK failed during testing in one of the laboratory in India.

Shri Rahul Guha, DG, appreciated the suggestions given by the participants and stated that

- in the present approval policy, if BIS has accepted any International standard and the same has been adopted as our national standard, test reports based on these standards from any internationally accredited laboratory is accepted. However, in case of equipment, material and appliance for which no Indian Standard exists, relevant International Standard(s) are accepted on its merit and are tested in India if facilities are available in any Govt/Govt. approved labs. However, if test facilities are not available in India, then the test report of the country of its origin / any internationally accepted laboratory is accepted subject to condition that the

concerned laboratory figures in the list of various internationally accredited independent test houses. There is a need for harmonizing International standards with Indian Standards. The approval policy of DGMS is being re-drafted and shall address the issues raised by the participants.

- Applications seeking approvals are normally dealt and disposed off within 3 months. A check-list shall be devised to make the application user friendly so that delays due to incomplete applications and non-submission of requisite documents are minimized.
- On line submission and tracking of applications is proposed to be introduced in line with e- governance.
- Grant of approval of equipment/apparatus in surface installations of Oil mines needs a relook and the concerns raised by M/s OIL and M/s ONGC shall be addressed suitably.

7.1 Shri AC Pandey , JS and chairman of the committee, summing up the discussions, stated that -

- It is principally agreed that time frame for grant of approvals needs to adhered to.
- The procedures should be simplified and made user friendly.
- Human interface needs to be minimized by introduction of on-line submission of applications and tracking of the same.
- The approval policy of DGMS being redrafted needs to be transparent and accountable, howsoever not at the cost of safety.
- BIS may consider upgrading and harmonizing the Indian standards with international standards, through a mutual recognition regime.
- Grant of life-time approval equipment, material and appliance may be considered
- Feedback for improving the system of grant of approval by DGMS is invited from all stakeholders at mail-id : ish2labour@yahoo.com

8.0 It was decided that three working groups as mentioned below be formulated to look into different aspects of Approval System of Mine Safety Equipment by DGMS-

1) **Working group for harmonizing International Standards with Indian Standards** : Its terms of reference will be –

- Acceptance of International Standards and harmonization of the Indian Standards with such International Standards
- Review, examine and recommend list of equipment, appliances, gadgets and material which should require DGMS approval for use in mines under hazardous conditions.
- Review, examine and recommend list of appliances, gadgets & material that carry BIS certification which can be used in mines without approval of DGMS being called for.
- Examine ATEX, IECEx, ANZEx, BASEEFA, SIRA, CSA, PTB, KA/MA and other International standards and their testing procedures; review & recommend which International Standards can be accepted and conditions for acceptance attached thereto.
- Review the existing testing procedures of DGMS; examine, review and recommend policy for acceptance of test reports from international laboratories and conditions attached thereto for grant of approval by DGMS.

The members of the group will be drawn from the representatives of BIS, NABL, test houses and equipment manufacturers. The working group may consist of the following members:-

- (a) Sri U N Pandey – Dy. DG (Elect.), DGMS - **Chairman**
- (b) Sri Ajay Singh - Dy. Director (Elect.), DGMS - **Secretary**
- (c) One representative each from BIS, M/s NABL Limited, M/s C IMFR&IFMA after due consultation - **Member**
- (d) Ms Nandini Chakrawarty, MD, Mineline - **Member**

2) **Working group for simplification of approval procedures:-** Its terms of reference will be

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- To simplify the procedure involved in seeking approval
- To devise check -list to make the application user-friendly so that delays due to incomplete applications and non-submission of requisite documents are minimized.
- To suggest procedures for on-line submission and tracking of applications

The members of the group will be drawn from the representatives of equipment manufacturers and mining companies. The working group may consist of the following members:-

- (a) Sri P Ranganatheeswar – Dy. DG (Mining), DGMS - **Chairman**
- (b) Sri C B Prasad- Director of Mines Safety(Mining), DGMS - **Secretary**
- (c) One representative each from M/s Coal India Limited, M/s Singareni Coal Companies Limited & M/s ONGC after due consultation - **Member**

3) **Working group for review of approval system of mine safety equipment related to Oil mines:-** Its terms of reference will be -

- to review the existing approval system for oil mining sector in the existing Approval Policy
- Suggest measures for improvement in Approval Policy of DGMS
- Facilitate introduction of safety gadgets and other apparatus in use in refineries and petro-chemical plants for use in surface installations of oil mines.

The members of the group will be drawn from the representatives of BIS, DGH and Oil companies. The working group may consist of the following members:-

- (a) Sri U N Pandey – Dy. DG (Elect.), DGMS - **Chairman**
- (b) Sri T Srinivas - Dy. Director (Elect.), DGMS - **Secretary**
- (c) One representative each from Bureau of Indian Standard, M/s Oil India Limited, M/s ONGC & M/s Cairn Energy(P) Limited after due consultation - **Member**.

The above three working groups shall consider the views of the participants of this meeting and DGMS should submit the recommendations within fifteen days.

9.0 Vote of thanks was presented by Shri T. Srinivas, Dy. Director (Electrical).

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List of Participants in the Meeting held on 18.6.2014 in the Ministry regarding DGMS approval system of equipment for use in Mines.

1. Sh. A.C. Pandey, JS, Ministry of labour & Employment,in chair
2. Sh. Rahul Guha, Director General , DGMS
3. Sh. UN Pandey, DDG(Elect.), DGMS
4. Sh B. L. Meena, Dy. Secretary, MoL&E
5. Sh. Rakesh Kulshrestha, Director,, DGMS
6. Sh P. Majumdar, GM (ERM) C.M.P.D.I L
7. Sh B. Ramesh Baliga, Mg. Director, Baliga Lighting
8. Sh Ramesh H. Patel, Mg. Director, FCG power
9. Sh Nil Shesh Agarwal, Director,M/s Shyam Switch Gear (P), (IFMA)
10. Sh T.Kailash, Senior Manager, EIMCO
11. Sh Hirendra Chatterjee, Vice President, Draedger Safety India
12. Sh ShreeshNadgouda, Chief Executive Drager Safety,
13. Sh M.C. Das, Chief HSE, ONGC
14. Sh S. Mehra, CGM, ONGC
15. Sh Soumendu Kumar Majhi, Head Engineer service, Tata Steel Ltd.
16. Sh Ruchi Guntuku, Accreditation Officer, NABL
17. Sh John Varughese, Technical Manager
18. Sh Peeyush Kumar, Director, Ministry of Coal
19. Sh Sanjeeb Goswami, Directorate General of Hydro Carbons
20. Sh D. Dash, , Directorate General of Hydro Carbons
21. Sh R.K. Guha, Solar industries Ltd. Nagpur,
22. Sh Dr. D.V. Prasad, S.C.C.L
23. Sh. M.R. Rajput, Director ,DGFASLI
24. Sh Chandan Gupta, Scientist (B),Bureau of Indian Standards

25. Sh. B. Ramesh Kumar, Director, SCCL
26. Sh C.B. Sood, E.D. (S&R). Coal India Limited
27. Sh J. Lahiri, Chief Manager , Oil India LTD.
28. Sh U.K.Mukherjee, GM, Oil India, Noida
29. Sh P.K.Goswami, Chief Engineer,(MSO) Oil India
30. Sh S.Das, Chief Engineer, Oil India
31. Sh B.Bhuyan, Chief Engineer, Oil India
32. Sh R.S. Garbyal, Chief Engineer Oil India
33. Sh N.J. Vijay Prasad, DGM , ONGC
34. Sh Ratanlal Sharma, Joy Global India Ltd.
35. Sh Amit Kumar, Chief Engineer, ONGC
36. Sh Nandini Chakrawarty, MD, Mine Line Pvt. Ltd
37. Sh I.V.N. Prasada Rao, Zonal Head, Joy Global
38. Sh S. Mukherjee, Intech. Kolkata
39. Sh Dr. G.M. Prasad, CSIR- CIMFR, Dhanbad
40. Sh Dr. A.K. Singh, CSIR-CIMFR, Dhanbad
41. Sh C.B. Prasad, Director, DGMS
42. Sh U.P.Singh, Director, DGMS
43. Sh T.Srinivas, Dy. Director, DGMS