

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



Dhanbad, Dated 11<sup>th</sup> September, 2024

## MESSAGE

То

All Stakeholders,

अमत महोत्सव

Use of metals and history of mining in India dates back to pre-Christian era. Being one of the Core sectors, use of minerals and mining is the prime driving force for the economic growth of any country. It is impossible to think of without the use of some metals or minerals in our daily life from the use of small pin to use of large machines in factory & agricultural fields, electricity, fuels for cooking & transportation to modern day computers & it's accessories, mobile phones, etc. India is fortunate enough to be abundant with natural resources of minerals. At present India produces as many as 89 minerals (4 fuel, 10 metallic, 48 nonmetallic, 3 atomic and 24 minor minerals including building and other materials). After economic liberalization and globalization of market, mining industry has undergone sea changes in terms of size, capacity, capital investment, infrastructure development and production level. Further transparency in auction process and ease of doing business approach has added to its momentum. Recently use of information technology, artificial intelligence, IoT, have taken root in the process of mining enabling automation and robotization in mining activities sparingly in India. The demand of clean fuel and competition for critical minerals like Lithium, Cobalt, Nickle, etc. essential to functioning of modern technology for the production of semi-conductor (essential ingredients to battery, solar panel etc.), tremendous growth is anticipated in mining sector in years to come. In the journey of our beloved country after Independence from being an under developed Country to Developing nation has given us hope for aspirational growth with a GDP of \$ 5 trillion by 2030 and proceed systematically towards to be one of the Developed Nation. The contribution of the mining industry has to grow at faster space for this economic growth and the contribution of 3% or more of the GDP from mining industry is essential.

Mining is specifically characterized with constant change of working conditions and truly termed as peace time war against the nature while digging out the natural resources from the mother earth. Moreover, mines are remotely located and mining in eco-sensitive areas causing imbalances in the eco-system and real concern for the habitats thereat. So, modern approach of Sustainable Mining may address this issue. Mines in India vary in characteristics from being small to medium to large to mega capacity having ownership of private, joint venture (JV) and public. These are also sometimes classified (though not specifically mentioned in the Mines Act) as organized and unorganized sector; methods of working are broadly being open cast & underground and few only mixed mines.

Whereas mining and minerals provide for comfort in life and major source of employment in the bright side, the dark side is that Mining is digging out minerals from the earth and is associated with number of dangers causing huge losses to live and property engaged in mining activity due to fire, explosion, inundation, inflammable & noxious gases, roof & side falls, landslides, etc. The positivity is that Mining being a structured activity there is also always scope for improvement in the domain of safety and working conditions. India being one of the members of ILO (International Labour Organization) and as mandated in our Constitution, the Government is committed to ensure just & safe working conditions for the persons working in the mines. All the variety of mines of all minerals (coal, oil& gas and non-coal) except minor minerals brought under the purview of the Mines Act, 1952, and Regulations and Rules framed thereunder to enact Constitutional Provisions. Since inception of Bureau of Mines in 1901, DGMS administered the Mines Act and has the legacy of more the 123 years to the service of the Nation. Though there is phenomenal growth in mineral production and gross value added into the GDP, substantial achievements have been made in improving working conditions, conservation and mine safety reducing number of accidents, fatality rates (per 1000 persons employed from 1.20 during the decade 1911-1920 to 0.19 during the decade 2011-2020 in coal mines and from 0.73 to 0.24 in non-coal mines for the corresponding period) and saving loss of life and properties.

This has been achieved through collaborative approach of all stake holder like mine operators, managers, supervisor, trade union representative, manufacturer, users of mining equipment's with DGMS at the helm at center. The tripartite reviews, national safety conference, promotional activities are the testimony of such collaborative approach. The participative approach and processes of industrial democracy is uniquely recognized when workers deliberate in safety management through pit safety committee and workman inspector mechanism as enshrined in our legislative framework. The Competency based appointment of managers and supervisors (three tier supervision) have given the mining industry a definite structure to further the cause of safety performance and accountability apart from improving efficiency in mining operation.

Tremendous developments have taken place in application of technology in the mining field and simultaneously in OSH issues worldwide. Indian mining industry though has taken some initiative in the arena, there is further scope to deep drive into this field. In safety, modern scientific tools like Risk Assessment and SMP, Scientific Study and Design of mines, SOP based operation of machinery and Code of Practice based activities have made inroads in process of mining activities but broad-based participation of higher echelon in the ladder of management will further the cause of safety.

Mining industries has been potential source of employment and economic development particularly in remote area where mines are general located and DGMS facilitate the industry by providing statutory and competent person by conducting competency examination regularly. DGMS also conduct inspections of mines on regular basis and enguires time to time; gives approval of different items used in mines and permission/exemptions as a measure to control activities and improve safety in mines. DGMS has pioneered in the regularity mechanism by conducting computer-based test (CBT) and grant of competency certificate in five regional languages online. Risk based randomized inspection system, online return submission, permission and approval system in a time bond manner in order to enhance speed and transparency in vogue. The mandate to update the legislation at par with international standards DGMS is always in the forefront. The concept of inspector-cum-facilitator from the role of inspector regime has also made in road in DGMS through proactive initiative like conducting awareness programme on safety and health, workshops, seminars, safety week observations, conduction of Rescue and First-Aid competition etc. As per the Government initiative for woman empowerment under the "Nari Shakti Programme", woman are allowed to work in mine beyond day hours at surface and day hours in underground mines and there

is more potentiality for women employment enhancing scope for equal opportunities for all genders.

With increasing production and productivity through large scale mechanization mainly through contractual employment, Ergonomics in general, Occupational health issues and need based training particularly for contractual employees cropped up manifolds to address with due diligence. The concept of Behavioral Safety and Duty of Care is essential for further development in substantial change from confrontational attitude of only for production to scientific attitude of production with safety and conservation for sustainability. The challenging task is to bring the un-organized small mines under the ambit of adequate OSH regulation so that large portion of small-scale sector employees are not left behind perpetually.

As part of "Atmanirbhar Bharat" (self-reliant India) initiated by Govt. of India to boost the domestic production and manufacturing, there is huge potential for further development of indigenous manufacture of mining equipment & machinery in general and particularly for safety equipment and gadgets for the domestic use requiring more R & D activities. So, this is need of the hour of our very own mining fraternity to recognize the challenges ahead and leverage upon the current opportunities to contribute appropriately in the journey towards Developed Nation "Vikshit Bharat".

Therefore, it is solicitated upon all the stake holder to join hand towards the achievement of "Zero Harm" as part of Vision Zero and ensure better working condition and environment for the working community in particular and society in general for the better future and sustainability.

With Warm Regards

(Ujjwal Tah) Chief- Inspector of Mines

DGMS, INDIA