

5 –Day Continuing Professional Development Programme

Mine Legislation and Management, Safe Practices in Opencast Mines

21 – 25 April 2025



Mining Division

Engineering Staff College of India

An Autonomous Organ of The Institution of Engineers (India)
Hyderabad

Centre for Promotion of Professional Excellence

Introduction

The mining industry has a reputation for being a potentially risky profession, with safety & health challenges and hence it is important for mining organizations to have protection system in place accordingly. Safety shall always be top most priority and safety strategy shall be ingrained in mission statement.

A well-defined safety policy is to be framed to ensure safety. All operations, systems and processes are to be meticulously planned and designed with due regards to safety, conservation, sustainable development and clean environment. Safety and Health Management System brings together the policies and procedures required to effectively mitigate the risks associated with the opencast mining operations. A strong relationship exists between a well-constructed and maintained haul roads and safe, efficient mining operations. Well designed and maintained haul roads and tyre care are the key to minimizing truck haulage on-road hazards and costs, as well as increasing productivity

Objectives

Mining has high potential risk of accidents. The programme is formulated to enable the identification and deliberation on the various risks in opencast mining, their assessment and preparation of risk assessment based safety management plans which are used to help to prevent or mitigate hazards.

Benefits to the participant

- Principles of risk assessment, Identifying the hazards and evaluation of the risk in all the operations in opencast mining and evolve precautions to eliminate, mitigate, tolerate or take action and further monitor
- Formulation of Safety Management Plan
- Principles of Integrated Management System-ISO:31000
- Principles of Safety- Audit

Course Coverage

- Relevant Mine Legislation & other Statutes in Opencast Mining
- Duties of Competent Persons
- Principles of Safety- Audit, Safety Culture
- Main Causes of Accidents, Analysis & Measures for Prevention
- Health Risks associated with Dust, Noise, Vibration, and Musculoskeletal Disorders.
- Risk Analysis, Risk Evaluation and Risk Assessment, Guidelines & Processes for Hazard Identification and Formulation of Safety Management Plan.
- Safe Practices in Drilling & Blasting, Controlled Blasting Techniques.
- .Key Safety Aspects in Electrical Engineering, Central Electricity Authority Rules and DGMS Statutory Obligations & Guidelines.
- Insights into Safety Features of HEMM and Maintenance
- Formation of Haul Roads, Care & Safe Handling of OTR Tyres
- Spoil-Dump Management & Slope Stability
- Principles of Integrated Management System-ISO:31000

Methodology

Lectures/Presentations, Case Studies, Interactive sessions.

Resource Persons

The faculty consists of experts from the industry and academia besides in-house faculty of ESCI.

Target Participants

This programme would be useful to supervisors, mining engineers and managers, safety officers, excavation and equipment engineers, blasting personnel etc. working in opencast Mines

Programme Dates & Timings

21 - 25 April 2025

10.00 am - 4.00 pm each day.

Course Fee for 5 -Days

- **Residential: INR 30,000/-** (Rupees thirty thousand only) per participant which includes soft copy of course material, course kit, twin-sharing/single AC accommodation, breakfast, lunch, dinner, tea and snacks during the actual days of training programme.

Goods and Service Tax @ 18% is to be paid extra over and above the programme fee.

- **Non-Residential: INR 24,000/-** (Rupees twenty four thousand only) per participant which includes soft copy of course material, course kit, lunch, tea and snacks during actual days of training programme.

Goods and Service Tax @ 18% is to be paid extra over and above the programme fee.

PAN Card No AAATT3439Q; GST No. 36AAATT3439Q1ZV. H.S. No. 999293 (Under commercial training or coaching services – clause 65(105) (ZZC) of Finance act – 1994).

- *Special concession of 10% in course fees to organization for 5 or more nominations and attendance.*
- ESCI provides complimentary boarding & lodging to participants a day prior to the commencement of training programme and a day after the conclusion of the programme. The check in & check out at 12:00 noon respectively.
- Overstay charges will be charged as per ESCI norms.
- *Spouses may be allowed to stay along with the delegates on prior request and on additional payment of INR 1000 per day for boarding & lodging.*

Programme fee is to be paid in favour of **“THE I.E. (I) – ENGINEERING STAFF COLLEGE OF INDIA”** in the form of cheque payable at Hyderabad. Alternatively the payment may be made by **Electronic Fund Transfer (EFT)** to ESCI – **SB A/c No. 33705165550 with State Bank of India, Manikonda Branch, Door No.2-30/1, Indira Nagar, Gachibowli, Hyderabad – 500032, our NEFT/RTGS/IFSC Code No. SBIN0011076 – MICR No. 500002107.** *While using EFT method of payment, please ensure to communicate your organization name, contact details, our invoice reference and programme title.*

Registration

To register, please send your nominations by providing name, designation, contact address, email address, mobile no. / telephone number of the participant along with the details of mode of payment of fee, addressed to: mining@escihyd.org.

Certification

A **“certificate of participation”** on the signature of the Director, ESCI would be awarded to each participant on conclusion of the programme.

Profile of Expert Speakers



Mr. P Ranganatheswar graduated in Mining Engineering from Osmania University. He worked in The Singareni Collieries Company Ltd. as Mine Manager & is well experienced in the coal winning operations from manual, semi mechanized to fully mechanized working faces including highly productive long-wall faces. Joined Directorate General of Mines Safety/DGMS as Dy. Director and promoted as Dy. Director General. He visited Germany, France, U.K., Australia, USA, South Africa and China and later worked as Advisor (Mining) for M/s Central Coal Fields Limited.



Dr. H. Sarvothaman functioned in different scientific capacities in Geological Survey of India in many places of India before retiring as Deputy Director-General. He conducted Geological Mapping and Mineral Exploration for tungsten, graphite and limestone, besides other research activities of GSI.

Currently, he is (i) Visiting Faculty in the Earth Science Department of University of Hyderabad; (ii) Member, Training Quality Improvement in Centres for Agrarian Studies (CAS) and Natural Resources Management (CNRM), NIRD&PR, Hyderabad; (iii) Guest Faculty in GSI Training Institute, Hyderabad and Badruka College, Hyderabad.



Mr V Lakshmi Narayana obtained Diploma in Mining Engineering in 1977 and graduated in Mining Engineering from University of Jodhpur, Rajasthan in 1982. He obtained ME (OCM), MCA, M.Sc.in Yoga (2010, Annamalai University), PGD in Materials Management (1987) and Diploma in Naturopathy. He is holder of First Class Manager's Certificate in Coal and Metal. He worked in SCCL as Colliery Manager and later joined DGMS as Dy. Director and promoted as Dy. Director General of Mines Safety. .



Mr. Elpula Jayakumar, Director of Mines Safety, DGMS (Rtd).

He holds B.E. (Mining) degree and worked as Assistant Manager and Manager in different underground Coal Mines in Singareni. He did his post-graduation in MBA (Marketing) from OU, and post-graduation diplomas in Industrial safety & Data mining from Annamalai University, Chennai.

He holds I class (Coal & Metal) competency certificates in Coal & Metal Mining.

He joined central services as Deputy Director of Mines Safety and promoted as Director of Mines Safety .He has a vast experience in the working of Coal, Iron, Gold, Copper, Zinc, Gypsum, Chromite, and Phosphate and was trained in USA on the latest trends of mine safety & health management.



Mr P Kumar graduated in B.Tech.(Mechanical) from NIT, Calicut , Kerala, M.Tech (IC Engines and Gas Turbines) from NIT, Warangal,Telangana, MBA (Marketing) from IGNOU, FIE - The Institute of Engineers (India) and SMIIE - Sr. Member in Indian Institute of Industrial Engineering.

He Worked in Opencast projects in fields of Erection, commissioning, Maintenance of various models and capacities of HEMM and as a TPM coordinator.

Worked as Executive Director to Radials International of Michelin OTR Tyres.



Mr G L Kanta Rao Graduated in B-Tech in Electrical Engineering, from JNTU, Kakinada.He worked in Hindustan Zinc Limited as Manager (Elect) in an underground semi- mechanized lead mine deploying SDL, winders, crushers and rock breakers, locomotives etc.and as Deputy Director General of Mines Safety.

He conducted technical safety audits of mines of HINDALCO (Orissa), JSW (Orissa) and HZL, Rajasthan. He was nominated as a member of "High Level Expert Committee On Safety" of Coal Mines under Ministry of Coal, Govt. of India.



Er K J Amarnath a Gold Medalist, in BE (Mining Engineering) from College of Engineering, Osmania University, Hyderabad. He worked as Chief General Manager in The Singareni Collieries Company Ltd. (A Government Company) in various capacities in Underground and Opencast Technology in Planning & Operations, Human Resource Development, Business Development, Education, Safety, Corporate Planning and Projects and as a Board of Director in the Joint Venture Company of NTPC Ltd and The Singareni Collieries Company Ltd.

He visited the United Kingdom, Spain, United States of America & Australia. He is also a holder of First Class Manager's Certificate of Competency issued by The Director General of Mines Safety, Ministry of Labour, Government of India.

Presently he is working as Senior Faculty-Head, Mining Division, Engineering Staff College of India.



Er L Krishna did his M. Tech in Mining Engineering and worked as an Assistant Professor at JBIET, Hyderabad and worked as Graduate Trainee for one year in SCCL He holds Second Class Manager's Certificate of Competency (Unrestricted) He published 4 papers in National Journals. He is an Associate Member of Institute of Engineers India (AMIE) and Life Member of MEAI (Mining Engineers' Association of India).

Presently he is working as a Faculty, Mining Division, Engineering Staff College of India

Contact Persons

Er K J Amarnath, FIE
Course Director
Mining Division
mining@escihyd.org
9491144022

Er L Krishna
Faculty
Mining Division
9553939316