

TRAINING PROGRAMME
ON
ENVIRONMENTAL MANAGEMENT IN IRON AND MANGANESE MINES
January 29-31, 2013

INTRODUCTION

The economic development of any country is dependent upon the availability of raw materials for making necessary provisions of infrastructure, goods and services. A large portion of these raw materials are obtained from mining. In order to meet the ever-increasing demands of the modern society, the mineral production is continuously increasing in our country, along with the scale of mining operations. However, mineral production is often not in consonance with conservation of forests since at many places commercial reserves exist below thick forests. Mining being a site-specific activity, there are a large number of environmental concerns as well. Apart from causing air, water and soil pollution, mining may lead to socio-economic problems and affect wildlife population and their behavior. Moreover, the problems of environmental pollution due to mining are becoming more complex and are depreciating in life sustaining capabilities at an ever increasing pace. At this rate, we may soon reach a point of no return and face the wrath of global climatic change.

Successful environmental management in the mining sector is dependent on recognising, and avoiding or minimising the adverse environmental impacts. Protection of the environment requires careful planning and commitment from all levels and groups within a mining company. Environmental management best practices in mining demands a continuing, integrated process through all phases of mining, viz., from development, extraction, decommissioning and closure. Mining of mineral and their processing, have the potential to cause a number of environmental problems if they are not properly planned and managed. Thus, it calls for trained and well informed manpower for effective management of the environment. Keeping these problems in mind, the Department of Mining Engineering in association with Odisha State Pollution Control Board, Bhubaneswar is organizing a training programme on “**Environmental Management in Iron and Manganese Mines**” at NIT, Rourkela during January 29-31, 2013.

ABOUT NIT ROURKELA

National Institute of Technology (NIT), Rourkela was founded as Regional Engineering College, Rourkela on 15th August 1961. The Institute was declared as National Institute of Technology with Deemed to be University status on 26th June 2002 and Institute of National Importance on 15th August 2007 by an act of Parliament. It is a highly prestigious institute with a reputation for excellence in research, consultancy and education at undergraduate, postgraduate and doctoral levels. The institute is striving to be known round the world for high academic standards and to be counted among the best technological institutes of India in terms of innovation, entrepreneurship and creation of intellectual wealth. The institute is spread over 262 hectares of lush green picturesque landscape, against a hilly backdrop, creating a tranquil environment within a completely residential campus for students and faculty.

The city of Rourkela is a bustling industrial town, cosmopolitan by nature and is well connected to all parts of the country by road and rail. It is en-route Howrah-Mumbai main line of South-Eastern Railway. NIT campus is approximately 7km from Rourkela railway station. Rourkela is also connected by Air via Ranchi and Kolkata.

DEPARTMENT OF MINING ENGINEERING

The Department has been in the forefront of mining education, research and consultancy services in India. It is located in close proximity of many coal and metal mines both opencast and underground. The Department has well qualified faculty and staff dedicated to applied research in the field of Mining Technology, Geomechanics, Mine Environment and Safety Engineering, Solid Fuels and Clean Coal Technology, Mine Planning, Mining Geology, Hydrogeology and Mine Surveying. The Department has also excellent computing facilities with state-of-the-art softwares like SURPAC, FLAC-2D & 3D, UDEC, LABVIEW, PETRASIM, VENTSIM and WHITTLE etc. The academic curricula is continuously revised to keep abreast of the industry needs as well as vision and an all round development of the students is aimed at through practical training, field camps and study tours, seminars, project work, inter institute students technical meets and a host of extracurricular activities.

SCOPE OF THE COURSE

The basic goal of the training programme is to update the knowledge of the participants regarding the technological developments, legal requirements and environmental issues associated with mining activities and their management. It is expected that the participants from mining industry in general; and iron and manganese mines in particular will be highly benefited by the course.

COURSE CONTENTS

- Technological developments in opencast mining
- Environmental regulatory compliance requirements in Mining
- EIA/EMP for iron and manganese mines- Case studies
- Forest conservation act and its implementation in mining areas
- Air pollution and its control in mining areas
- Application of remote sensing in environmental management of mining areas
- Progressive mining and its implementation
- Stability of waste dumps in mines
- Controlled blasting practices in mining
- Straggles for noise control in opencast mines
- Assessment of water quality around mine sites
- Management of surface run-off in Mining areas
- Reclamation and closure of mines
- Resettlement and rehabilitation planning
- Mine waste management
- Environmental management best practices – case studies

FACULTY

The course will be offered by the faculty members of NIT Rourkela. Experts from Odisha State Pollution Control Board, Bhubaneswar; Ministry of Forest and Environment; ISM, Dhanbad; IIT, Kharagpur; prominent industries and Environmental Consultants have also given their consent to deliver specialized lectures on different subjects. Each session would be followed by interactive sessions on the subject matter.

REGISTRATION & FEE PARTICULARS

Applications in prescribed format and the course fee in the form of demand draft drawn in favor of “Continuing Education, NIT, Rourkela” payable at **SBI, NIT Branch, Rourkela-8 (Code-2109)** in Rourkela must reach the coordinator on or before **January 24, 2013.**

COURSE FEE: Rs 10,000.00 (Rupees ten thousand only)

Accommodation will be provided in Institute Guest House(South/North Block) on Twin-sharing basis on prior request. The selected participants will be informed by **January 25, 2013.**

COURSE COORDINATOR

Dr. H. B. Sahu

Associate Professor

Department of Mining Engineering

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SPONSORSHIP CERTIFICATE

Dr./Mr./Ms..... is an employee of our institute/organization and his/her application is hereby sponsored. The applicant will be permitted to attend the short-term course at NIT, Rourkela during January 29-31, 2013 if selected.

Date:

**Signature & Seal
of Sponsoring Authority**

THE DULY SPONSORED APPLICATION SHOULD BE MAILED TO

Dr. H. B. Sahu

Associate Professor

Department of Mining Engineering

National Institute of Technology

Rourkela – 769 008