OHTA 1001-MINING AND MINERAL PROCESSING INDUSTRIES

Course Description

@ohtatraining

Occupational Hygiene Training Association (OHTA)

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https://ohtatraining.org

OHTA 1001-MINING AND MINERAL PROCESSING INDUSTRIES

The mining industry has a very long history, but now mining is even more essential to everyday life. There is a growing demand for mining and refining of extracted materials for construction, electronics, power generation, medical devices, green technologies, and more.

Mining has a history associated with health effects such as silicosis, pneumoconiosis, and heavy metals exposures such as lead and arsenic. It is now a highly regulated industry to better protect workers' health. Mining companies need professionals with specialized training in occupational hygiene working with OHS generalists to raise awareness of health hazards, risk management, control strategies, and to comply with legal requirements.

The new OHTA1001 course has been designed to increase awareness, knowledge and management of health challenges in mining and subsequent processing of ores and metal concentrates. It is ideal for OHS manager, medical and emergency site teams, OH technicians, mine site doctors as well as contractors and OH service providers.

Students will learn...

To identify and evaluate hazards associated with different mining and metal extractions processes

To conduct health risk assessments which are appropriate and often required by local mining authorities

To select appropriate control strategies in these complex work environments based on the hierarchy of controls

To recognize occupational health issues which are associated with mining in remote locations such as tropical diseases, fatigue, and potable water.

Basic Occupational Hygiene Programs

Hazard Communication, Hearing Conservation, Respiratory Protection, Ergonomics, Confined Spaces, Radiation Protection, Asbestos Management, Thermal Environment, Legionella management, Welding, PPE, Potable Water, Food Safety, Fatigue, Vector borne and Infectious Disease, Specific Issues Associated with Mining Ventilation, Noise, Volatile Organic Vapors, Vibration, Diesel Emissions, NORM in ores, Intrinsic safety equipment, Tunnelling, Silica.

Training is provided on exposure assessment, monitoring techniques and strategies, statistical analyses, and data interpretation.

The course also enhances awareness of other occupational health issues associated with workers living in remote locations associated with mine sites.

Course Design

- Delivered as a 5-day on-line or classroom training program.
- On-line student examination with multiple choice questions.
- Translations of the exam into the native language of students may be available.
- Note that the student manual and training materials are only available for download by OHTA trainers approved for the Mining Course and/or students registered for the course.

To become an OHTA Approved Trainer to offer this course you will need to be experienced in the mining sector with over 10 years working at sites. Please apply using the link https://ohtatraining.org/trainers/apply/

The course will start the pathway to ICertOHTA and the other OHTA 500 series courses, https://ohtatraining.org/students/fmanuals/

For more information please contact the OHTA Secretariat, team@ohtatraining.org

Course Content

More details on the specific topics covered are provided below:

Overview of the Mining and Mineral Processing Industries
Open pit, Underground Mining, Hydrometallurgy Processes, Molten Salt Processes, and Pyrometallurgical Processes.

Role of Hygienists in the Mining Industry
Function of Hygienists in the HSE team, Emergency Response, Addressing OH issues in a structured approach

Basic Occupational Hygiene Programs
Hazard Communication, Hearing Conservation, Respiratory Protection, Ergonomics, Confined Spaces, Radiation Protection, Asbestos Management, Thermal Environment, Legionella management, Welding, Personal Protective Equipment, Potable Water, Food Safety, Fatigue, Vector borne and Infectious Disease

Specific Issues Associated with Mining
Ventilation, Noise, Volatile Organic Vapors, Vibration, Diesel Emissions, NORM in ores, Intrinsic safety equipment, Tunnelling, Silica.

Specific Issues Associated with Mineral Processing
Metals and Minerals, Acid and Chemical mists, Fixed Radiation Gauges

Exposure Assessment
Surveys, Exposure monitoring, Statistical Analysis, Biological monitoring, Effective Control Programs.

Testimonials

Have a look at what OHS professionals with extensive mining experience are saying about the OHTA 1001 course:

"If you are an OHS professional working in mining and/or resources, the OHTA1001 course, Occupational Hygiene in the Mining & Mineral Processing Industries, is a comprehensive but succinct overview of key aspects of this industry. The course material was prepared and reviewed by practitioners with over a combined 100 years of experience in the industry. As an OHS practitioner in the mining and refining areas for over 35 years, I believe the content will be invaluable to those currently working or considering a career in OHS in the resources sector."

Dr Ross Di Corleto (Australia)
PhD, MSc, BApp Sci, FAIOH, FAIHS, Certified Occupational Hygienist (COH)®
Principal Consultant with over 35 years of experience in mining and refining.

"OHTA 1001 provides the know-how for company management and H&S professionals to comply with national, sectorial, lender or company specific requirements for identifying, measuring, and controlling health hazards from mining, both underground and surface, and affiliated mineral processing operations in an easy-to-read, logically laid out format. As an OEHS professional with over 30 years of experience in mining and mineral processing, understanding these types of risks and addressing them early will help protect the workforce from harmful exposures, and prevent costly incidents down the line."

Dr. Albert Jung Tien (United States)
PhD, MS, Past-President, WHWB-US; OEHS professional with over 30 years experience in the mining and mineral processing sectors.

"Having served the mining industry for a good number of years as an Occupational Hygienist and having identified the need for specialised training courses tailored to broader Occupational Hygiene aspects within mining, I am excited to see that OHTA has taken the initiative to actively launch and promote its specialised course specifically tailored to mining to address this exact need. The course material covers most all aspects related to Occupational Hygiene in mining and provides fresh insight into health risks faced by mineworkers in the 21st century mining industry. This course is a must for all miners, not just mineworkers responsible for health and safety!"

Peter-John (Jakes) Jacobs (South Africa)
MPH, Registered Occupational Hygienist: SAIOH, Radiation Protection Officer: SA National Nuclear Regulator, Mine Environmental Control Certificate: Mineral Council of SA, Radiation Protection Officer: SA National Nuclear Regulator, Certificate of Operational Competence: BOHS; Past President SAIOH and IOHA.

Testimonials

Have a look at what OHS professionals with extensive mining experience are saying about the OHTA 1001 course:

"The OHTA provides an excellent training manual for all Occupational Health professionals in the Mining industry. The manual uses a logical and straightforward approach that explains the value of occupational hygiene and of a team approach to occupational health and safety. From a process perspective, the manual describes mining and refining processes and does a deeper dive on some specific industries as well as some key issues that arise in the mining and processing industries. I would highly recommend the OHTA 1001 course for all Occupational Health professionals in the mining industry, whether they are new to the field or looking to enlarge their knowledge about Occupational Hygiene in the mining industry."

Dr. Ian M.F. Arnold (Canada)
MD, MSc, DOHS, CRSP, FRCPC, FCBOM
Occupational Medical Specialist who has 50 years of experience as an occupational health consultant and medical director to multi-national corporations including mining companies; Consultant with the International Council of Mining and Metals, and an OHS Consultant with (IAI) International Aluminium Institute for 22 years, among other roles.

"The OHTA 1001 Mining & Mineral Processing Industries Student Manual (2024) is a detailed and useful resource for students, early-stage occupational hygienists, as well as safety professionals seeking to increase their knowledge of occupational health risk in mining and mineral processing. While Australian in terminology and reference to relevant regulation and standards, the manual addresses the broad and diverse scope of occupational health issues common to mines and processing facilities worldwide, with limited exceptions, e.g., high altitude risk, COVID-19. Its use of images, process flow diagrams and infographics increases its usability in understanding an increasingly diverse and complex industry."

Tom Hethmon
MS, Certified Mining Safety Professional (CMSP), FAIHA
Health, Safety, Environment executive with 35 years of experience in the mining industry across 35 countries.

OHTA is pleased to provide you with an opportunity to...
BECOME AN OCCUPATIONAL HEALTH AND SAFETY SPECIALIST IN AN INDISPENSABLE INDUSTRY THAT PROVIDES METALS AND MINERALS THAT TOUCH THE LIVES OF MOST EVERYONE ON THE PLANET!

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