

# MULTIVERSE MINING AND EXPLORATION PLC

MINING TRAINING PLANS AND CURRICULLUM



# TRAINING PLAN & CURRICULLUM



### **INDUCTION COURSE FOR NEW STAFF**

### Duration – 2 - 3 weeks

- Welcome and overview of mine site.
- Employee standard of conducts
- Organization structure, Chain of command etc
- Hand scanner.
- Equipping miners.
- Introduction to work environment.
- Health and Safety aspect of assigned task.
- Walking tour of mine.
- Introduction to underground mine process and procedure.



# PERIOD TRAINING FOR ALL STAFF ONCE PER QUARTER

- Mine map: Escape way, emergency evacuation etc.
- Self rescue and respiratory devices.
- Entering and leaving the mine, transportation and communication.
- Mandatory health and safety standards.
- Hazard recognition, Electrical hazard, Chemical hazard
- Prevention of accidents.
- Emergency medical procedure.



# **PERIODIC TRAINING BI ANUALLY**

- Fire fighting and emergency evacuation plans.
- Procedure for working around water.
- Heat stress.
- Hygiene.
- Use and danger of explosives.



### **PERIOD YEARLY TRAINING**

# **Health Talk Shop-**

- Create awareness of harm cause by noise and dust.
- Create awareness on hazard associated with chemicals to which miner will be exposed.
- Create awareness on the respiratory devices required at the mine as well as self rescuers.



S/N	SUBJECT	OBJECTIVES	TEACHING METHODS
1	Welcome and overview	Introduction to HR, union, and management Enrollment into all programs and benefits, coupled with a step-by-step introduction to benefits, policies and procedures-2hours	Lecture and discussion.
2	Employee standards of conduct	Each miner will demonstrate his/her knowledge and understanding of the Employee Standards of Employment at the Pennsylvania operations	PowerPoint and handout
3	Organizational structure, union representation, chain of command	Introduce management and union officials and the organization structure-handling comments, complaints, and safety-related issues.	PowerPoint presentations, lecture and discussions
4	Hand scanner	Enroll each attendee in the hand-scan check –in and checkout process.The attendee will know how to scan in and out of the mine	On-site training- Demonstration and practice.
5	Introduction to the training program- Course agenda and UG work	To ensure that each participant is aware of the nature of the program and his/her responsibilities as an employee, coupled with an overview and program agenda. Overview of the 10	Discussion and kickoff

		days of training combining class-room with hands on UG training.	MULTIVERSE
6	Your new role as a miner; history and tradition	To orient the new miners to the mine, its environment and traditions. Show and discuss the first half of 'The History of Mining' from the History channel.	Video
7	Mine map: escape ways. Emergency evacuation barricading	Know how to read a mine map, when to evacuate a mine, which of the fire extinguishers to use in the event of a mine fire and how to use the fire hose and nozzles. Cover guidelines as to when and when not to use them. Mine-specific: Know where to report in the event of an emergency, how to get to safety from the workplace, the procedure in use to report a mine fire, how to erect barricades that isolate him/her from the rest of the mine. barricading rules and how to signal rescuers. Oxygen requirements for barricading.	Videos, PowerPoint discussion map. Program and test.
8	Self-rescue and respiratory devices	Aware of the importance of using the proper type, correctly fitting respirator and the need for proper storage and maintenance. Understanding of when and how to apply a self-rescuer, what it protects against, the effect of high carbon	Videos, PowerPoint discussion map. demonstration

		monoxide on the user, and the danger of removing it. Mini-specific: Will be trained in the proper use and care of the respiratory devices required at the mine, as well as self-rescuers.	MULTIVERSE
9	Securing the workplace	Training on how to evaluate the work area for safety. What to look for and how to secure it. Roof and rib evaluation using sight, sound 13and vibration method	Video PowerPoint discussion and demonstration. Video clip of sounding roof and scaling roof and rib.
10	Proper lifting procedures	Mini-workshop on how to use proper lifting technique in preparation to work on the training section	PowerPoint presentation with pictures and demonstration.
11	Equipping Miners	Assign lockers, outfit and have trainees dress for underground. Go over cap lights and how to maintain them. Review check-in and checkout, including hand scanners	Demonstrate proper outfitting.
12	Entering and leaving the mine, transportation and communication.	Demonstrate ability to use the mine's check-in and checkout system. Enrolled in scanner system on day 1 session. Demonstrate the check-in and checkout system. Training in operation of elevator, phones and pagers.	PowerPoint discussion, mine tour.
13	Walking tour of the mine.	Miners will tour area around bottom, travel to slope and main belt and haulage. Tour will take them to the training section for a preview of the	Tour, discussion Q & A session.

		work to be performed throughout the mine training sessions. During work at training section.each trainee will receive the appropriate task training for the jobs performed.	MULTIVERSE
14	Leaving the mine	Travel to elevator and explain caging to the surface.	
15	Health and safety aspects of assigned task	Aware of hazards associated with common underground mine tasks. Mine-specific: Know the hazards of the assigned task and procedures to minimize them.	Videos, PowerPoint discussion demonstration.
16	Transportation and Communication	Aware of applicable regulations regarding riding on or in mobile equipment.  Methods of transporting personnel and materials into and out of the mine, traffic, controls, various types of communication, warning and directional signs in use.	Videos, PowerPoint discussion mine tour.
17	Roof control and ventilation	Able to identify roof conditions and to demonstrate an understanding of methods of removing/supporting loose roof and ribs and procedures for maintaining and controlling ventilation. Minespecific: Demonstrate knowledge of roof/rib control procedures.	Videos, PowerPoint, discussion, mine tour
18	Ventilation plans	Able to identify the various systems and devices how air	Ideo,powerpoint

		gets to the face, mine and section ventilation, methane, and other gases and how they are controlled. Introduction to the ventilation plan.	and handouts.V MULTIVERSE
19	Enter mine	Check in and travel to section.	
20	Introduction to work environment-basic job skills and work hardening.	Aware of methods used to address mine hazards. Each employee will demonstrate sight, sound, and vibration method. Demonstrate proper scaling procedures. Shovel along ribs and rock dust the area.	Shovels, bars,pick and rock dust.
21	Exit mine	Walking tour to elevator and discuss manholes, switches, and safety guidelines for walking along the haulage.	
22		Aware of harm done by noise and silica dust, correct use of hearing protection and respirators, engineering and administrative controls for dust and noise, benefits of audiometric testing and purpose of sampling (dust,noise,etc)  Mine-specific: Will be able to	Videos, PowerPoint discussion.
		demonstrate proper donning and use of the respirators and/or hearing protection provided by the mine.	
23	Mandatory health and safety	Will be able to demonstrate an awareness of the most	Videos. PowerPoint

	standards	commonly violated health and safety standards and what the inspector considers when issuing a citation.	discussion MULTIVERSE
24	Hazard recognition	Aware of hazards and correct operating procedures. Will have participated in a job safety analysis.  Mine-specific: Knowledge of special hazards at the mine and operating procedures to minimize them.	Videos PowerPoint, discussion mine tour.
25	Electrical hazards	Aware of electrical hazards in mines how to avoid them and the need for lockout/tagout.  Mine-specific: Aware of special hazards at the mine and able to accurately explain the electrical lockout/tagout procedure in use at the mine and when/how it is applied.	Videos PowerPoint discussion.
26	First aid	Understand the importance of checking the scene to avoid personal injury, the need to get immediate help, how to perform a primary survey on the victim (check for consciousness, breathing, pulse, and severe bleeding) know about universal precautions, know how to do artificial respiration and how to control severe bleeding.  Mine-specific: Will know how to call emergency medical	Videos, PowerPoint, discussion.

		personnel and be able to direct them to the workplace.	MULTIVERSE
27	Mine gases	Know about the hazardous gases typically found in mine airways, when/where to expect them, the importance of ventilation, gas measurement instrumentation calibration and reliability.	Videos, PowerPoint, discussion.
		Mine -specific: Understand gas measurement procedure, requirements and actions taken when gas is encountered.	
28	Introduction to work environment	Aware of mining methods used and associated hazards.  Mine-specific:Will have observed mining in progress in particular, any unusual processes and equipment.	Videos, PowerPoint, discussion, mine tour.
29	Information about physical and health hazards of workplace chemicals	Information on hazards associated with chemicals to which the miner will be exposed.  Mine-specific: Mine -specific chemical hazards.	Videos, MSDSs, company program
30	Protective measures a miner can take against chemical hazards.	Information on protective measures the miner can take to minimize exposure to hazardous chemicals.  Mine-specific: Protective measure for mini-specific chemical hazards.	Videos, MSDSs, other.

31	Prevention of accidents.	Aware of the major causes of serious mine accidents and correct operating procedures to prevent/minimize them. Include our SWP and Observation Program-Task training.	Videos, PowerPoint, discussion. IVERSE
32	Emergency medical procedures.	Mine-specific: Will know very basic first aid how to get immediate help in a medical emergency. Full -Day Training.	Videos, PowerPoint, discussion.
33	Health	Aware of harm caused by noise and silica dust, correct use of hearing protection and respirators, engineering and administrative controls for dust and noise, benefits of audiometric testing and pyrpose of samplinig (dust, noise etc)  Mine-specific: Will be able to demonstrate proper donning and use of respirators and/or hearing protection provided by the mine. Hearing	Lecture and discussion.
34	Health and safety aspects of assigned tasks	conservation and HazCom.  Aware of hazards associated with common underground mine tasks.  Mine-specific: Know the hazards of the assigned task and procedures to minimize them.	Lecture and discussion, demonstration.
35	Self-rescue and respiratory devices	Will have been instructed in the use, care, and	Lecture and discussion,

		maintenance of a self-rescuer.	demonstration.  MULTIVERSE
		Mine -specific: Will be fit- tested and trained in the proper use and care of any respiratory devices required at the mine, as well as self- rescuers.	
36	Information about physical and health hazards or workplace chemicals	Information on hazards associated with chemicals to which the miner will be exposed.  Mine-specific: Mine -specific chemical hazards.	Videos, MSDSs company program
37	Protective measures a miner can take against chemical hazards	Information on protective measures the miner can take to minimize exposure to hazardous chemicals.  Mine-specific: Protective measures for mine-specific chemical hazards	Videos, MSDSs, other.

Approved by the	Board of Directors this	Day of	2018
Secretary	Director		