

nssga

- \* Quarry \*
- \* Power Haulage \*
- \* Mobile Equipment \*
- \* QC/QA \*
- \* Maintenance \*
- \* Conveyors \*
- \* Stockpiles \*
- \* Drilling \*
- \* Blasting \*
- \* Crushing \*

**NSSGA  
Part 46 Sample  
Training Program**

**Instructions**

This training plan was developed to help you comply with MSHA's Part 46 training regulation. The plan was reviewed and generally approved by MSHA, but you need to distribute or post it two weeks prior to conducting training just as if it had not been submitted. In addition, you will need to make the plan site-specific by doing the following:

### **Step One:**

Fill in items 1 through 3 on page 1. In item number 2 list persons responsible for health and safety training of miners. More than one person can and should be listed. Include the persons responsible for health and safety at the site such as plant managers, plant supervisors, and safety and health personnel. If the plan is for corporate or division staff personnel, who are considered miners by MSHA, department managers should be listed. Only the listed persons can certify that training was completed. Persons who certify training need to ensure that training was completed and that actual training time satisfies the requirements.

For item 3, list the competent persons and the specific subjects they will cover. Include site-specific training, new miner and experienced miner subjects, annual refresher subjects, and task training. If an outside organization is used, list the organization and not the individual. If you need more space use the continuation page.

Make sure the actual training duration matches the time shown in the plan.

### **Step Two:**

Complete Items 4 through 7, which address submittal and posting requirements. If you did not submit the plan to MSHA for approval, check no to items 4 and 5 and go to item 6 and check the appropriate box. Check the appropriate boxes in item 7 only if you submitted the plan to MSHA for approval.

### **Step Three:**

Use the Task List to show the tasks that will be subject to task training (Examples: haul truck driver, front end loader operator, primary crusher operator, plant helper).

### **Step Four:**

For the remaining pages in the plan, fill in the appropriate information at the top of each page. Also check the boxes for each subject in the columns that list teaching methods, course material, and evaluation methods. If you fail to do this, the plan will be considered incomplete by MSHA and any training that is performed will not be in compliance with the regulations. **Post or distribute the plan 2 weeks prior to the training.** Get and use feedback from employees to make the training effective. Make sure the times listed for each subject match what you are doing in terms of training duration.

**(Enter Company Name Here)**

**(Enter Plant Name Here)**  
**(Enter MSHA ID Number Here)**

## **TRAINING PLAN FOR AGGREGATES EMPLOYEES**

### **CONTENTS**

- I. Training Plan
- II. Competent Person Continuation Sheet
- III. Task List
- IV. Training - New Miners
- V. Training - Newly Employed Experienced Miners
- VI. Training - Annual Refresher
- VII. New Task Training - Reassigned Miners
- VIII. Training – Site-Specific Hazards

**PART 46**

**I. TRAINING PLAN FOR TRAINING AND RETRAINING OF SURFACE MINERS**

1. COMPANY NAME: \_\_\_\_\_

MINE OR INDEPENDENT  
CONTRACTOR NAME

MSHA ID NUMBER \_\_\_\_\_  
MAILING ADDRESS \_\_\_\_\_

2. PERSONS RESPONSIBLE FOR HEALTH AND SAFETY TRAINING OF MINERS: (May be the production operator or independent contractor)

NAME

POSITION

PHONE

| NAME  | POSITION | PHONE |
|-------|----------|-------|
| _____ | _____    | _____ |
| _____ | _____    | _____ |
| _____ | _____    | _____ |
| _____ | _____    | _____ |

3. PERSONS OR ORGANIZATIONS PROVIDING TRAINING

SUBJECT AREAS COMPETENT TO INSTRUCT

| PERSONS OR ORGANIZATIONS PROVIDING TRAINING | SUBJECT AREAS COMPETENT TO INSTRUCT |
|---|-------------------------------------|
| _____                                       | _____                               |
| _____                                       | _____                               |
| _____                                       | _____                               |
| _____                                       | _____                               |
| _____                                       | _____                               |
| _____                                       | _____                               |
| _____                                       | _____                               |

4. A copy of this Training Plan was furnished to the Representative of Miners two weeks prior to submission to MSHA. Yes  No

5. If no, a copy of Training Plan was posted on the bulletin board two weeks prior to submission to MSHA. Yes:  No:

6. If the plan was not submitted to MSHA, a copy was:  Given to the miners' representative at least 2 weeks before implementation or  a copy was posted at the mine or given to each miner at least 2 weeks before implementation.

7. If MSHA approved this plan, within one week of approval:  A copy of the plan was given to the miner's representative within one week of approval; or  A copy of the plan was posted; or  A copy was given to each miner





## IV. TRAINING - NEW MINERS

### Part 46

|    | Est. Hrs             | Subject   | Objectives   | Teaching Methods<br>(Check all that apply)   | Course Material<br>(Check all that apply)  | Evaluation Method<br>(Check all that apply)   |
|----|----------------------|---|--|--|--|---|
| 1. | 2 to 3 hours         | <b>INTRODUCTION TO THE WORK ENVIRONMENT</b><br><br><i>Note: Must be done before miner begins work</i>   | Employee will recognize potential hazards in drilling, blasting, hauling, crushing, conveying, and stockpiling. Employee will demonstrate knowledge of plant layout, traffic patterns, PPE requirements, and important safety and health issues in all active work areas.  | <input type="checkbox"/> Lecture<br><input type="checkbox"/> Discussion<br><input type="checkbox"/> Walk around<br><input type="checkbox"/> Other _____  | <input type="checkbox"/> Audio/visual aids<br><input type="checkbox"/> Handouts<br><input type="checkbox"/> Safety manual<br><input type="checkbox"/> Work rules<br><input type="checkbox"/> Other _____                                     | <input type="checkbox"/> Oral response<br><input type="checkbox"/> Discussion<br><input type="checkbox"/> Demonstration<br><input type="checkbox"/> Observation<br><input type="checkbox"/> Other _____ |
| 2. | 3 to 4 hours         | <b>RECOGNITION AND AVOIDANCE OF HAZARDS</b><br><br><i>Note: Must be done before miner begins work.</i>  | Employee will identify potential hazards in the quarry environment including electrical hazards, machinery hazards, fall hazards, engulfment hazards, hazardous energy, confined spaces, materials handling, water hazards, ground control hazards.  | <input type="checkbox"/> Lecture<br><input type="checkbox"/> Discussion<br><input type="checkbox"/> Walk around<br><input type="checkbox"/> Other _____<br><br>Training will address typical accidents and best practices. | <input type="checkbox"/> Audio/visual aids<br><input type="checkbox"/> Handouts<br><input type="checkbox"/> Hazard training cards<br><input type="checkbox"/> Lockout devices<br><input type="checkbox"/> Other _____                        | <input type="checkbox"/> Oral response<br><input type="checkbox"/> Other _____  |
| 3. | 30 minutes to 1 hour | <b>EMERGENCY MEDICAL PROCEDURES, ESCAPE AND EMERGENCY EVACUATION PLANS AND INSTRUCTION ON THE FIRE WARNING SIGNALS AND FIRE FIGHTING PROCEDURES</b><br><br><i>Note: Must be done before miner begins work</i> | Employee will explain/identify emergency evacuation procedures and alarms. Demonstrate how to select, use and maintain fire-fighting equipment. Identify fire and explosion hazards. Demonstrate steps to prevent fire and explosion. Demonstrate what to do in an emergency. Demonstrate knowledge of alarms and signals. | <input type="checkbox"/> Lecture<br><input type="checkbox"/> Discussion<br><input type="checkbox"/> Demonstration<br><input type="checkbox"/> Other _____  | <input type="checkbox"/> Audio/visual aids<br><input type="checkbox"/> Fire extinguishers<br><input type="checkbox"/> Safe procedures.<br><input type="checkbox"/> Site emergency plans<br><input type="checkbox"/> Other _____<br><br>_____ | <input type="checkbox"/> Oral response<br><input type="checkbox"/> Demonstration<br><input type="checkbox"/> Observation<br><input type="checkbox"/> Other _____  |
| 4. | 15 to 30 minutes     | <b>STATUTORY RIGHTS OF MINERS AND REPRESENTATIVES</b><br><br><i>Note: Must be done before miner begins work</i>   | Employees will explain their rights and responsibilities under Mine Safety & Health Act of 1977 and 30 CFR   | <input type="checkbox"/> Lecture<br><input type="checkbox"/> Discussion<br><input type="checkbox"/> Other _____  | <input type="checkbox"/> Handouts<br><input type="checkbox"/> Other _____  | <input type="checkbox"/> Oral review<br><input type="checkbox"/> Other _____  |
| 5. | 15 to 30 minutes     | <b>LINE OF AUTHORITY AND RESPONSIBILITIES OF SUPERVISORS AND MINERS AND THEIR REPRESENTATIVES.</b> <i>Note: Must be done before miner begins work.</i>  | Employee will explain MSHA's role and responsibility, personal responsibility of every employee including supervisors to correct hazards.  | <input type="checkbox"/> Lecture<br><input type="checkbox"/> Discussion<br><input type="checkbox"/> Other _____  | <input type="checkbox"/> Handouts<br><input type="checkbox"/> Audio/visual aids<br><input type="checkbox"/> Other _____  | <input type="checkbox"/> Oral review<br><input type="checkbox"/> Other _____  |



| <b>Est.<br/>Hrs</b>       | <b>Subject</b> | <b>Objectives</b> | <b>Teaching Methods</b><br>(Check all that apply) | <b>Course Material</b><br>(Check all that apply) | <b>Evaluation Method</b><br>(Check all that apply) |
|---------------------------|----------------|-------------------|---|--|--|
| Needed to Perform Safely) |                |                   |   |  |  |

|    | Est. Hrs.                | Subject  | Objectives  | Teaching Methods<br>(Check all that apply)   | Course Material<br>(Check all that apply)  | Evaluation Method<br>(Check all that apply)   |
|----|--------------------------|--|---|--|--|---|
| 1. | 2 to 3 hours.            | INTRODUCTION TO THE WORK ENVIRONMENT<br><br><i>Note: Must be done before miner begins work.</i>  | Employee will identify potential hazards in drilling, blasting, hauling, crushing, conveying, and stockpiling. Employee will demonstrate knowledge of plant layout, traffic patterns, PPE requirements, and important safety and health issues in all active work areas.  | <input type="checkbox"/> Lecture<br><input type="checkbox"/> Discussion<br><input type="checkbox"/> Walk Around<br><input type="checkbox"/> Other_____   | <input type="checkbox"/> Audio/visual aids<br><input type="checkbox"/> Handouts<br><input type="checkbox"/> Safety manual<br><input type="checkbox"/> Work rules<br><input type="checkbox"/> Other_____              | <input type="checkbox"/> Oral response<br><input type="checkbox"/> Demonstration<br><input type="checkbox"/> Other_____   |
| 2. | 3 to 4 hours             | RECOGNITION AND AVOIDANCE OF HAZARDS<br><br><i>Note: Must be done before miner begins work. Do this on day 1</i>   | Employee will identify potential hazards in the work environment including electrical, machinery, fall, engulfment, hazardous energy, confined spaces, materials handling, water, ground control. Training will address typical accidents and best practices, and will teach hazard recognition specific to tasks to be assigned. | <input type="checkbox"/> Lecture<br><input type="checkbox"/> Discussion<br><input type="checkbox"/> Walk around<br><input type="checkbox"/> Other_____   | <input type="checkbox"/> Audio/visual aids<br><input type="checkbox"/> Handouts<br><input type="checkbox"/> Hazard training cards<br><input type="checkbox"/> Lockout devices<br><input type="checkbox"/> Other_____ | <input type="checkbox"/> Oral response<br><input type="checkbox"/> Written tests<br><input type="checkbox"/> Demonstration<br><input type="checkbox"/> Observation<br><input type="checkbox"/> Other_____ |
| 3. | 30 minutes to 1 hour     | EMERGENCY MEDICAL PROCEDURES, ESCAPE AND EMERGENCY EVACUATION PLANS AND INSTRUCTION ON THE FIRE WARNING SIGNALS AND FIRE FIGHTING PROCEDURES<br><br><i>Note: Must be done before miner begins work. Do this on day 1</i> | Employee will explain proper emergency evacuation procedures and alarms; explain how to select, use and maintain fire-fighting equipment; identify fire and explosion hazards; identify steps to prevent fire and explosion.  | <input type="checkbox"/> Lecture<br><input type="checkbox"/> Discussion<br><input type="checkbox"/> Walk around<br><input type="checkbox"/> Demonstration<br><input type="checkbox"/> Other_____ | <input type="checkbox"/> Audio/visual aids<br><input type="checkbox"/> Handouts<br><input type="checkbox"/> Fire extinguishers<br><input type="checkbox"/> Emergency Plans<br><input type="checkbox"/> Other_____    | <input type="checkbox"/> Oral response<br><input type="checkbox"/> Written tests<br><input type="checkbox"/> Demonstration<br><input type="checkbox"/> Observation<br><input type="checkbox"/> Other_____ |
| 4. | 15 minutes to 30 minutes | STATUTORY RIGHTS OF MINERS AND REPRESENTATIVES<br><br><i>Note: Must be done before miner begins work. Do this on day 1</i>   | Employees will explain their rights under the Mine Safety & Health Act of 1977 and 30 CFR   | <input type="checkbox"/> Lecture<br><input type="checkbox"/> Discussion<br><input type="checkbox"/> Classroom exercises<br><input type="checkbox"/> Other_____                                   | <input type="checkbox"/> Handouts<br><input type="checkbox"/> Audio/visual aids<br><input type="checkbox"/> Other_____   | <input type="checkbox"/> Oral response<br><input type="checkbox"/> Other_____   |
| 5. | 15 minutes to 30 minutes | LINE OF AUTHORITY AND RESPONSIBILITIES OF SUPERVISORS AND MINERS AND THEIR REPRESENTATIVES.<br><br><i>Note: Must be done before miner begins work. Do this on day 1</i>  | Employee will explain MSHA's role and responsibility, personal responsibility of every employee including supervisors, who has responsibility and authority to do what in reporting and correcting hazards.   | <input type="checkbox"/> Lecture<br><input type="checkbox"/> Discussion<br><input type="checkbox"/> Classroom exercises<br><input type="checkbox"/> Other_____                                   | <input type="checkbox"/> Handouts<br><input type="checkbox"/> Audio/visual aids<br><input type="checkbox"/> Other_____   | <input type="checkbox"/> Oral response<br><input type="checkbox"/> Other_____   |

| <b>Est.<br/>Hrs.</b> | <b>Subject</b> | <b>Objectives</b> | <b>Teaching Methods</b><br>(Check all that apply) | <b>Course Material</b><br>(Check all that apply) | <b>Evaluation Method</b><br>(Check all that apply) |
|----------------------|----------------|-------------------|---|--|--|
| s                    |                |                   |   |  |  |

|    | Est. Hrs.  | Subject  | Objectives   | Teaching Methods<br>(Check all that apply)  | Course Material<br>(Check all that apply)  | Evaluation Method<br>(Check all that apply)   |
|----|--|--|--|---|--|---|
| 6. | 15 minutes to 30 minutes                             | <p>RULES AND PROCEDURES FOR REPORTING HAZARDS</p> <p>Note: Must be done before miner begins work. Do this on day 1</p>   | Employee will explain steps to get issues addressed and what to do if corrective action is not taken.  | <input type="checkbox"/> Lecture<br><input type="checkbox"/> Discussion.<br><input type="checkbox"/> Other_____   | <input type="checkbox"/> Handouts<br><input type="checkbox"/> Audio/visual aids<br><input type="checkbox"/> Other_____   | <input type="checkbox"/> Oral response<br><input type="checkbox"/> Other_____   |
| 7. | 30 minutes to 1 hour.                                | <p>HEALTH TO INCLUDE TOPICS SUCH AS RESPIRATORY HAZARDS; USE, CARE AND MAINTENANCE OF RESPIRATORY DEVICES; PART 62 HEARING CONSERVATION REQUIREMENTS; AND THE CONTENTS OF THE MINE'S HAZARD COMMUNICATION PROGRAM.</p> <p>Note: Respirator training must be completed within 60 days. Part 62 training must be completed within 30 days of hire or enrollment in the operation's hearing conservation program.</p>   | Employee will demonstrate how to select, use, care, fit and maintain respirators and hearing protectors. Employee will explain advantages, disadvantages and limitations of respirators and hearing protectors. Employee will identify respiratory hazards and precautions; effects of noise on hearing; purpose and value of hearing protection. Employee will explain MSHA standards for Part 62 and respiratory protection. Employee will explain purpose and value of audiometric testing and summary of procedures. Employee will explain the contents of the HazCom program. | <input type="checkbox"/> Lecture<br><input type="checkbox"/> Discussion<br><input type="checkbox"/> Demonstration<br><input type="checkbox"/> Other_____  | <input type="checkbox"/> Handouts<br><input type="checkbox"/> Audio/visual aids<br><input type="checkbox"/> Respiratory Devices<br><input type="checkbox"/> Hearing Protectors<br><input type="checkbox"/> Haz Com Program<br><input type="checkbox"/> Other_____                          | <input type="checkbox"/> Oral response<br><input type="checkbox"/> Demonstration<br><input type="checkbox"/> Other_____   |
| 8. | 15 minutes to 4 hours<br><br>1 to 80 hours if needed | <p>INSTRUCTION IN HAZARD RECOGNITION SPECIFIC TO SAFETY AND HEALTH ASPECTS OF ASSIGNED TASKS, INCLUDING THE PERTINENT SAFETY STANDARDS, AND PHYSICAL AND HEALTH HAZARDS OF CHEMICALS USED IN ASSIGNED TASKS.</p> <p>NOTE: This must be done before conducting the instruction and practice under the close observation of a competent person.</p> <p>PERFORMANCE EVALUATION OF TASKS PREVIOUSLY PERFORMED AND SUPERVISED PRACTICE IN SAFETY AND HEALTH ASPECTS OF ASSIGNED TASKS IF NEEDED</p> | <p>Employee will identify the safety and health hazards of assigned tasks and how to avoid them, pertinent safety standards, the physical and health hazards of chemicals used in assigned tasks and the protective measures before actually performing the tasks.</p> <p>Employee will demonstrate that he or she can safely perform assigned duties.</p>   | <input type="checkbox"/> Review<br><input type="checkbox"/> Discussion<br><input type="checkbox"/> Show and Tell<br><input type="checkbox"/> Other_____<br><br><input type="checkbox"/> Observation on job<br><input type="checkbox"/> Other_____ | <input type="checkbox"/> J.S. A. s<br><input type="checkbox"/> MSDSs<br><input type="checkbox"/> Other_____<br><br><input type="checkbox"/> Checklists<br><input type="checkbox"/> Job training books<br><input type="checkbox"/> Operating manuals<br><input type="checkbox"/> Other_____ | <input type="checkbox"/> Oral response<br><input type="checkbox"/> Written tests<br><input type="checkbox"/> Other_____<br><br><input type="checkbox"/> Performance Eval<br><input type="checkbox"/> Other_____ |

**VI. TRAINING - ANNUAL REFRESHER**

Part 46

Page 6 of 8

**8 Hours Training Is Required**

|    | <b>Est. Hrs</b>      | <b>Subject</b>   | <b>Objectives</b>   | <b>Teaching Methods</b><br>( Check all that apply)  | <b>Course Material</b><br>( Check all that apply)   | <b>Evaluation Method</b><br>( Check all that apply)  |
|----|----------------------|--|---|---|---|--|
| 1. | 10 minutes to 1 hr.  | INSTRUCTION ON CHANGES AT MINE THAT COULD ADVERSELY AFFECT HEALTH OR SAFETY  | Employee will be able to explain any changes affecting safety and health and appropriate safeguards.  | <input type="checkbox"/> Lecture<br><input type="checkbox"/> Discussion<br><input type="checkbox"/> Demonstration<br><input type="checkbox"/> Other_____    | <input type="checkbox"/> Handouts<br><input type="checkbox"/> Audio/visual aids<br><input type="checkbox"/> Other_____  | <input type="checkbox"/> Written test<br><input type="checkbox"/> Oral response<br><input type="checkbox"/> Actual hazard ID<br><input type="checkbox"/> Other_____  |
| 2. | 5 minutes to 2 hours | EMERGENCY MEDICAL PROCEDURES , EVACUATION AND FIRE FIGHTING  | Employee will identify correct procedures in event of serious injury, fire or other emergency.  | <input type="checkbox"/> Lecture<br><input type="checkbox"/> Discussion<br><input type="checkbox"/> Demonstration or<br><input type="checkbox"/> Other_____ | <input type="checkbox"/> Audio/visual aids<br><input type="checkbox"/> Emergency plans,<br><input type="checkbox"/> Table top exercise<br><input type="checkbox"/> Other_____   | <input type="checkbox"/> Oral response<br><input type="checkbox"/> Mock exercise<br><input type="checkbox"/> Other_____  |
| 3. | 15 minutes to 1 hour | HEALTH TO INCLUDE TOPICS SUCH AS NOISE AND RESPIRATORY HAZARDS AND USE, CARE AND MAINTENANCE OF HEARING PROTECTORS AND RESPIRATORY DEVICES, AND THE CONTENTS OF THE MINE'S HAZARD COMMUNICATION PROGRAM.   | Demonstrate/explain how to select, use, care, and maintain respirators. Employee will explain limitations of respirators. Employee will identify respiratory hazards and precautions. Employee will explain the contents of the Hazard Communication Program. | <input type="checkbox"/> Lecture<br><input type="checkbox"/> Discussion<br><input type="checkbox"/> Demonstration<br><input type="checkbox"/> Other_____    | <input type="checkbox"/> Audio/visual aids<br><input type="checkbox"/> Handouts<br><input type="checkbox"/> Respiratory devices<br><input type="checkbox"/> Haz Com Program<br><input type="checkbox"/> Other_____  | <input type="checkbox"/> Oral response<br><input type="checkbox"/> Demonstration<br><input type="checkbox"/> Other_____  |
| 4. | 4 hours to 7 hours   | PREVENTION OF ACCIDENTS MAY INCLUDE TOPICS SUCH AS ILLUMINATION AND NIGHT WORK, ELECTRICAL HAZARDS, MAINTENANCE AND REPAIR, MATERIALS HANDLING, FALL PREVENTION, MOVING MACHINERY, MOBILE EQUIPMENT, CRUSHERS, CONVEYORS, DREDGES, TRANSPORTATION AND COMMUNICATIONS TO INCLUDE TRAFFIC PATTERNS AND CONTROLS, GROUND CONTROL, WORKING IN AREAS OF HIGHWALLS, WATER HAZARDS, PITS AND SPOIL BANKS, BLASTING AND THE USE OF EXPLOSIVES IF APPLICABLE, | Employee will identify the hazards and safe procedures to control or prevent accidents.   | <input type="checkbox"/> Lecture<br><input type="checkbox"/> Discussion<br><input type="checkbox"/> Demonstration<br><input type="checkbox"/> Other_____    | <input type="checkbox"/> Audio/visual aids<br><input type="checkbox"/> CFR Title 30<br><input type="checkbox"/> Safety Manual<br><input type="checkbox"/> Handouts<br><input type="checkbox"/> J.S.A.'s,<br><input type="checkbox"/> MSDSs<br><input type="checkbox"/> Other_____ | <input type="checkbox"/> Written exam<br><input type="checkbox"/> Oral response<br><input type="checkbox"/> Performance eval.<br><input type="checkbox"/> Other_____ |

| <b>Est.<br/>Hrs</b> | <b>Subject</b>   | <b>Objectives</b> | <b>Teaching Methods</b><br>( Check all that apply) | <b>Course Material</b><br>( Check all that apply) | <b>Evaluation Method</b><br>( Check all that apply) |
|---------------------|--|-------------------|--|---|---|
|                     | MANDATORY HEALTH AND SAFETY STANDARDS AND A REVIEW OF ACCIDENT TRENDS. |                   |  |   |   |

VII. TRAINING - NEW TASK TRAINING FOR REASSIGNED EMPLOYEES

Part 46

|    | <b>Est. Hrs</b>  | <b>Subject</b>  | <b>Objectives</b>   | <b>Teaching Methods</b><br>(Check all that apply)  | <b>Course Material</b><br>(Check all that apply)  | <b>Evaluation Method</b><br>(Check all that apply)                            |
|----|--|---|---|--|---|---|
| 1. | 5 minutes to 4 hours<br>(or Longer if Needed for Hazards to be Understood) | <p>INSTRUCTION IN HAZARD RECOGNITION SPECIFIC TO SAFETY AND HEALTH ASPECTS OF ASSIGNED TASKS, INCLUDING THE PERTINENT SAFETY STANDARDS, AND PHYSICAL AND HEALTH HAZARDS OF CHEMICALS USED IN ASSIGNED TASKS.</p> <p>NOTE: This must be done before conducting the instruction and practice under the close observation of a competent person.</p> | Employee will be able to explain the safety and health hazards of assigned tasks and how to avoid them, pertinent safety standards, the physical and health hazards of chemicals used in assigned tasks and the protective measures before actually performing the tasks. | <input type="checkbox"/> Lecture<br><input type="checkbox"/> Discussion<br><input type="checkbox"/> Demonstration<br><input type="checkbox"/> Walk around<br><input type="checkbox"/> Other_____ | <input type="checkbox"/> J.S. A. 's<br><input type="checkbox"/> MSDSs<br><input type="checkbox"/> Handouts<br><input type="checkbox"/> Equipment<br>Manuals<br><input type="checkbox"/> Checklists<br><input type="checkbox"/> Other_____ | <input type="checkbox"/> Oral response<br><input type="checkbox"/> Other_____ |
| 2. | 1 hour to 80 hours<br>( or Longer if Needed to Perform Safely)             | SUPERVISED PRACTICE IN HEALTH AND SAFETY ASPECTS OF THE TASKS ASSIGNED  | Employee will demonstrate correct job performance and perform tasks in accordance with the safely and health standards outlined in the training.  | <input type="checkbox"/> On the job training<br><input type="checkbox"/> Other_____  | <input type="checkbox"/> Checklists<br><input type="checkbox"/> Job training books<br><input type="checkbox"/> Operating manuals<br><input type="checkbox"/> Other_____   | <input type="checkbox"/> Observation<br><input type="checkbox"/> Other_____   |

VIII. TRAINING – SITE-SPECIFIC HAZARDS

Part 46

| PERSONS TO RECEIVE TRAINING   | ESTIMATED TIME OR RANGE  | SUBJECTS   | TEACHING OR INSTRUCTIONAL METHODS  | TRAINING MATERIALS<br>(Check all that apply)  | EVALUATION METHODS<br>(Check all that apply)  |
|---|--------------------------|--|--|---|---|
| VENDORS, VISITORS, OFFICE STAFF OR OTHER SUPPORT PERSONNEL              | 1 minute to 60 minutes   | INFORMATION OR INSTRUCTIONS ON HAZARDS A VISITOR COULD BE EXPOSED TO WHILE AT THE MINE AS WELL AS APPLICABLE EMERGENCY PROCEDURES.   | Use signage, hazard training handouts or accompany these visitors with an experienced miner to show, explain and inform of site specific hazards and safety and health requirements. | <input type="checkbox"/> Signs<br><input type="checkbox"/> Handouts<br><input type="checkbox"/> Other_____  | <input type="checkbox"/> Oral response<br><input type="checkbox"/> Observation<br><input type="checkbox"/> Other_____ |
| CUSTOMER TRUCK DRIVERS  | 1 minute to 5 minutes    | INFORMATION OR INSTRUCTIONS ON HAZARDS A CUSTOMER COULD BE EXPOSED TO WHILE AT THE MINE AS WELL AS APPLICABLE EMERGENCY PROCEDURES.  | Signs or hazard training handouts or verbal instructions.  | <input type="checkbox"/> Signs<br><input type="checkbox"/> Handouts<br><input type="checkbox"/> Other_____  | <input type="checkbox"/> Oral response<br><input type="checkbox"/> Observation<br><input type="checkbox"/> Other_____ |
| MAINTENANCE OR SERVICE WORKERS  | 5 minutes to 15 minutes  | INFORMATION OR INSTRUCTIONS ON HAZARDS MAINTENANCE OR SERVICE WORKERS COULD BE EXPOSED TO WHILE AT THE MINE AS WELL AS APPLICABLE EMERGENCY PROCEDURES.  | Signs, verbal instructions or accompanied by experienced miner.<br>Note: If consider a miner by MSHA, hazard training must be certified using checklist of hazards.                  | <input type="checkbox"/> Signs<br><input type="checkbox"/> Handouts<br><input type="checkbox"/> Checklist on hazards<br><input type="checkbox"/> Other_____ | <input type="checkbox"/> Oral response<br><input type="checkbox"/> Other_____   |
| ENGINEERS, CONSTRUCTION WORKERS OR EMPLOYEES OF INDEPENDENT CONTRACTORS | 10 minutes to 30 minutes | INFORMATION OR INSTRUCTIONS ON HAZARDS ENGINEERS, CONSTRUCTION WORKERS OR EMPLOYEES OF INDEPENDENT CONTRACTORS COULD BE EXPOSED TO WHILE AT THE MINE AS WELL AS APPLICABLE EMERGENCY PROCEDURES. | Site specific hazard training information will be given to contractors who will be responsible for conducting the training , certifying and verifying that it has been done.         | <input type="checkbox"/> Handouts<br><input type="checkbox"/> Checklist on hazards<br><input type="checkbox"/> Other_____                                   | <input type="checkbox"/> Safety performance<br><input type="checkbox"/> Other_____                                    |
| MINERS WHO TRAVEL FROM ONE MINE SITE TO ANOTHER                         | 10 minutes to 1 hour     | INFORMATION OR INSTRUCTIONS ON HAZARDS THAT MINERS, WHO TRAVEL FROM ONE MINE TO ANOTHER, COULD BE EXPOSED TO WHILE AT THE MINE AS WELL AS APPLICABLE EMERGENCY PROCEDURES.                       | Site specific hazard training information will be given to miners, and the training will be certified.   | <input type="checkbox"/> Site-Specific Hazard Awareness Checklist<br><input type="checkbox"/> Other_____  | <input type="checkbox"/> Oral Response<br><input type="checkbox"/> Observation<br><input type="checkbox"/> Other_____ |

## Lesson Plan 1

### Introduction to the Work Environment (2 Hours)

**Task:** Familiarize Miners with the active work areas of the facility.

**Conditions:** Use actual work situations to explain and review the safe operating procedures related to drilling and blasting, loading, hauling, dumping, highwalls, berms, electrical safety, stockpiles, bins and hoppers, conveyors, crushers, screens, and other processing machinery, maintenance operations, equipment servicing and fueling facilities.

**Standards:** Miners to identify and explain the regulations in 30 CFR, Part 56 covering the active work areas.

#### Learning Objectives:

- 1) Employees will be able to describe the facility layout, work areas, traffic patterns, PPE requirements, and important safety and health issues in the active work areas.
- 2) Employees will explain and demonstrate how to carry out their personal responsibilities for safety and health within the active work areas.
- 3) Employees will identify and explain the regulations contained in 30 CFR Part 56 as they relate to potential hazards in the active work areas.
- 4) Employees will demonstrate how to take action for complying with the regulations and avoiding hazards within the active work areas.

#### Materials needed:

- 1) Mine Safety and Health Act of 1977.
- 2) A copy of 30 CFR Part 56 for each trainee.
- 3) Employee Handbook or Company Safety Manual/Rule Book.
- 4) Overheads, slides, or photo's showing the various active work areas within the facility.
- 5) A screen and overhead projector or slide projector
- 6) Copies of MSHA citations giving details of any safety and health violations for each trainee.
- 7) Pencil and paper for each trainee.

#### Allotted Time:

This training session is allotted 2 hours for completion as per the training plan. More time can be devoted to this subject if you desire to exceed the 24-hour training requirement for inexperienced miners.

#### Strategy

1) Introduce the lesson by using a video or slides to give a general overview of the facility and the various active work areas (quarry face, haul roads, crushing, screening, conveying, load-out, etc.).

Copyright 1999 National Stone Association

2) Use slides or overheads to show examples of accidents that have occurred on access roads, at stockpiles, at highwalls and haul roads, at conveyors, screens, bins and hoppers and in electrical switch houses to illustrate why we have company procedures and rules and federal and state safety and health regulations.

3) Explain the site specific rules that the employee must obey and why. Cover personal protective equipment, lock out and tagout procedures, traffic patterns and traffic controls, general fall protection requirements, and any specific safety and health issues that apply to each of the active work areas reviewed.

5) Take the employee on a walk around tour of all work areas using the show and tell approach to help the employee understand the hazards you previously reviewed and to emphasize the applicable safety and health requirements he or she will be responsible for following.

#### **Performance Assessment and Evaluation Methods:**

1) Get trainees to identify verbally the various active work areas.

2) Get trainees to describe the safety and health measures in each active work area.

3) Get miners to describe the procedures for reporting and correcting safety and health hazards in the active work areas.

4) Get trainees to explain their personal responsibilities and to repeat back to you what you expect them to do when working in or entering the areas they have seen.

## Lesson Plan 2

### Recognition and Avoidance of Hazards (2 Hours)

**Task:** Identify and Recognize hazards in each of the areas covered by this module.

**Conditions:** Use scenes from or visits to a busy work environment where there are many distractions. Use partially concealed hazards to enhance identification skills.

**Standards:** Miners will identify all hazards and the best safety practices available to avoid hazards.

#### Learning Objectives:

- 1) Miners will demonstrate their ability to identify potential hazards in the mine environment including; electrical hazards, machinery hazards, fall hazards, engulfment hazards, hazardous energy, confined spaces, materials handling, water hazards, and ground control hazards.
- 2) Miners will demonstrate their knowledge of the proper procedure to correct and/or avoid identified hazards.

#### Materials needed:

- 1) Mine Safety and Health Act of 1977.
- 2) Title 30, Code of Federal Regulations, Parts 1 through 199.
- 3) Employee Handbook or Company Safety Manual / RuleBook.
- 4) Overheads or slides depicting various hazards found in the workplace.
- 5) Overheads or slides showing the best practice for avoidance or correction of various hazards found in the workplace
- 6) Selected videos pertinent to each hazard segment.
- 7) TV/VCR for video presentation.
- 8) White board or blackboard with markers or chalk.
- 9) A screen and overhead projector or slide projector.
- 10) Citations from a MSHA inspection for each class participant.
- 11) Pencil and paper for each trainee.
- 12) The company's workplace examination program and related materials.

#### Allotted Time:

This training session is allotted approximately 2 hours for completion as per the training plan. More time can be devoted to this subject if you desire to exceed the 24-hour training requirement for inexperienced miners.

## Strategy:

- 1) Introduce this session by discussing various MSHA citations or accidents that have resulted from unsafe conditions or work practices. Use slides or overheads to show actual scenes in the workplace and get employees to evaluate and analyze the hazards by identifying how likely it is for an accident to occur and to predict the likely consequences. The goal is to get employees to be a better job at hazard recognition by fully evaluating what can go wrong. Discuss various corrective measures that can be taken to correct or avoid the hazard.
- 2) Explain:
  - a) Electrical hazards at the mine
    - How electricity works and what causes shock.
    - Examples of electrical hazards – how to recognize.
    - How to avoid shock; principles of grounding and ground fault protection
    - What to do if someone gets shocked
  - b) Moving machinery hazards; gears pulleys, belts, sprockets, idlers, and shafts.
    - Principles of guarding
    - Handrails and stop cords.
    - Replacing and securing guards.
    - Identifying and avoiding pinch points
  - c) Hydraulic, pneumatic, and stored energy hazards
    - Lockout/Tagout procedures
    - Gravity
    - Compressed air or fluid injection
    - Securing against whipping action of hoses
  - d) Confined space hazards
    - Ventilation and engulfment
    - Lifeline, attendant, communication and rescue
    - Lockout/Tagout, moving machine parts
    - Permit system
  - e) Bin, Hopper and surge pile hazards
    - Bridged material, underground hazards
    - Bridged material, overhead hazards
    - Attendant and lifelines
    - Ground conditions and environmental factors, weather
  - f) Fall hazards
    - Personal fall arrest systems  
(Harnesses, lifelines, lanyards, attachment points, shock absorbers)
    - Handrails, guardrails, toe boards, gates and chains
    - Ladders, portable and fixed

- g) Crane and rigging hazards
    - Electrical hazards
    - Stability, capacity, leverage, center of gravity
    - Load charts and calculations
    - Overhead, swing, and area hazards
    - Rigging, inspection and signaling
  
  - h) Aerial Work Platform (Man-lifts)
    - Scissors, boom and bucket truck
    - Fall hazards and stability
  
  - i) Small tool hazards
    - Hand tool hazards
    - Electric power tool and portable light hazards
    - Hydraulic and air tool hazards
  
  - j) Welding and Cutting Hazards
    - Oxygen / Acetylene Hazards
    - Electric Welding Hazard
    - Storage Hazards
  
  - k) Ground control hazards
    - Highwalls, berms, scaling
    - Stockpiles, ramps
    - Banks and dumpsites
    - Haul Roads
  
  - l) Water hazards
    - Lifejackets and life-rings
    - Boats, floats, and barges
  
  - m) Drilling hazards
    - Rotating parts
    - Procedures for moving and placing drills
    - Noise, dust
    - Falls
    - Drill logs, drill hole problems and the impact on blasting
  
  - n) Explosives and blasting
    - Communication and signals
    - Caps, boosters and initiation systems
    - Transportation, handling, storage
- 3) Cover the appropriate MSHA regulations for each of the areas listed above. Use inspection history information to get the participants to identify where and how the conditions were permitted to exist. Discuss how to correct or have corrected identifiable hazardous conditions.

- 4) Review procedures in the company rule book or safety manual for reporting and correcting safety and health hazards.

**Performance Assessment and Evaluation Methods:**

- 1) Have class participants identify verbally or write down some potential hazards from each topic above.
- 2) Have class participants describe how the company workplace examination procedure for reporting and correcting safety and health hazards works.
- 3) Have class participants describe their personal experiences regarding hazards and their recognition.
- 4) Have class participants identify standard violations related to hazard recognition.
- 5) Have class participants identify various correction and avoidance techniques for dealing with hazards.

## Lesson Plan 3

### Escape and Emergency Evacuation Plans Fire Warning Signals and Fire Fighting Procedures (30 Minutes)

**Task:** Plan for, organize and safely control emergency fire situations to minimize the effects upon the employees, company and the community.

**Conditions:** Use a real life emergency incident such as an actual fire incident at an aggregate operation to emphasize the importance of planning and practicing a response to emergency situations. The case study include emergency medical situations, and emphasize the need for fire prevention, fire warning, fire fighting, and emergency evacuation.

**Standards:** Miners will identify each of the fire prevention and control standards that are covered in the Mine Safety and Health Act and the regulations in 30CFR, Parts 56/57, Subpart C and will explain emergency procedures.

#### Learning Objectives:

- 3) Employees will explain emergency evacuation procedures, understand the priority of emergency notification and demonstrate what to do in an emergency.
- 4) Employees will identify unsafe conditions that could cause fire and explosion-hazards and describe prevention procedures.
- 5) Employees will identify the features of a fire extinguisher, the types of fire extinguishers and their use and demonstrate the proper activation of the fire extinguisher.

#### Materials needed:

- 1) 30 CFR Part 56/57
- 2) Employee Handbook or Company Safety Manual/Rule Book
- 3) Handouts and visuals from the module
- 4) A screen and overhead projector or slide projector
- 5) Transparencies or slides
- 6) Pencil and paper for each trainee
- 7) Demonstration models of your mine's fire extinguishers
- 8) First aid kit of the type used at your mine
- 9) Copies of your mine's emergency response/evacuation plan

#### Allotted Time:

This training session is allotted 30 minutes for completion as per the training plan. More time can

be devoted to this subject if you desire to exceed the 24-hour training requirement for inexperienced miners.

### **Strategy:**

- 1) Introduce the lesson with a visual representation of a serious fire that occurred in one of your mining operations. Discuss the causes of fires typical to a mining operation, i.e.- poor housekeeping, electrical problems, poor maintenance of equipment, improper storage of flammables, sparks from welding and cutting, defective heaters, smoking in prohibited areas, etc. Explain that the miner can prevent fires by practicing safe work procedures, by exercising good judgment in determining potentially hazardous situations, by taking the time to correct those hazardous situations, and by acting promptly and properly to prevent small fires from becoming large, destructive fires.
- 2) Ask the miners to describe the surface mine areas or situations in which fires are more likely to occur. Have them list on sheets of paper the commonsense work procedures they should follow to prevent fires. Emphasize training, inspection, housekeeping and maintenance as effective prevention techniques. Relate the above incident to the operator's responsibility, the miner's responsibility and MSHA regulations.
- 3) Explain Federal law governing surface mine fire fighting equipment. While compliance with Federal regulations on fire prevention, such as posting "No Smoking" signs, is the mine operator's responsibility, it's equally important that you, as a miner, obey and support these regulations. You should stress that it is their life that's on the line.
- 4) Federal law is very specific about the location, capacities, sizes, types and maintenance of fire fighting equipment at surface mines. Ask the miners to identify where fire extinguishers may be found at their mine in compliance with Federal law.
- 5) When the fire does start, the action you take in the first few minutes could be the difference between minor and major damage, and the difference between life and death. What type of fire you are fighting determines what type of fire extinguisher you should use. Obtain a fire extinguisher for display. Review the MSHA regulations governing inspection with the class. Have a volunteer demonstrate the proper procedure for operating a fire extinguisher. Incorporate the acronym PASS:
  - P - Pull the Pin
  - A - Aim Low (at the base of the fire)
  - S - Squeeze the Handle
  - S - Sweep (from side to side)
- 6) Review procedures in the company rule book or safety manual for the actions to initiate when a fire starts. Explain that their safety and the safety of their fellow workers should always be their number one priority.
- 7) In the event of a fire or accident at a mine, the miners should be aware of the location of first aid supplies in case they must help injured miners. Describe to the miners what their first aid kit looks like. If possible, show them a first aid kit so they will be able to identify it on sight. Tell the miners exactly where first aid supplies are located at the mine.
- 8) Get the participants to compare their workplace to the one described in the accident report.

Begin exploring ways to correct any weaknesses that are identified while reviewing the accident case.

- 9) Review emergency operations plan and site evacuation procedures. If possible, distribute copies of the plan and explain the priority of notification. Stress the importance of keeping abreast of any changes in your emergency plan. Review emergency assignments at the mine and identify where the plan is posted at their site.

**Performance Assessment and Evaluation Methods:**

- 1) Get trainees to write down or identify verbally the areas or situations in which fires are more likely to occur in their location.
- 2) Get trainees to describe the procedures for preventing fire and explosion hazards.
- 3) Get trainees to describe their personal responsibilities in fire prevention; Have them identify the responsibilities of supervisors.
- 4) Get trainees to identify the location of fire fighting equipment and first aid supplies; Have them demonstrate the proper operation of the equipment.
- 5) Get trainees to describe their site evacuation procedures and specific responsibilities assigned.

## Lesson Plan 4

### Statutory Rights of Miners (30 Minutes)

**Task:** Identify the rights of miners.

**Conditions:** Use real life examples such as complaints about hazardous conditions, citations for violations, issuance of withdrawal orders, and participation in mandatory training sessions to identify the specific rights of miners.

**Standards:** Miners will identify each of the miner's rights that are covered in the Mine Safety and Health Act and the regulations in 30CFR, Parts 1 - 199

#### Learning Objectives:

- 1) Employees will be able to explain their rights under the Mine Safety & Health Act of 1977 and the applicable regulations contained in 30 CFR Parts 1 - 199.
- 2) Employees will describe their personal responsibilities in safety and health.
- 3) Employees will practice using their miner's rights and personal responsibilities to proactively improve safety and health efforts.

#### Materials needed:

- 1) Mine Safety and Health Act of 1977
- 2) 30 CFR Parts 1 - 199
- 3) Employee Handbook or Company Safety Manual / Rule Book
- 4) Overheads or slides summarizing rights and responsibilities
- 5) A screen and overhead projector or slide projector
- 6) An MSHA fatality investigation report giving details of serious safety and health violations for each trainee.
- 7) Pencil and paper for each trainee
- 8) A Guide to Miner's Rights and Responsibilities under the Mine Safety and Health Act of 1977.

#### Allotted Time:

This training session is allotted 30 minutes for completion as per the training plan. More time can

be devoted to this subject if you desire to exceed the 24-hour training requirement for inexperienced miners.

### **Strategy:**

1. Introduce the lesson by telling a story about a serious accident in which the investigation revealed multiple alleged violations and resulted in the issuance of significant enforcement actions. Relate the incident to miners rights, the mine operator's responsibility, the miner's responsibility and MSHA's responsibility.
2. Explain the rights of all miners including the right to a safe and healthy workplace, the right to refuse to do unsafe work, to file a complaint about violations and dangers, the right for a representative to participate in inspections, the right to receive training and pay during training, the right to receive pay if affected by the issuance of a withdrawal order by MSHA, the right against discrimination because of exercising other rights under the MSHA Act, the right to provide input into settlement of citations and contests and requests for modification of safety standards, and the right to see copies of new and revised standards which must be posted and to comment on proposed regulations.
3. Explain the responsibilities of miners, operators and MSHA. Use the accident case history to get the participants to identify where the system broke down and to discuss what should be done to correct the problems identified. Structure this by using a group exercise if possible to get employees analyze a serious accident case to identify where rights and responsibilities were ignored.
4. Get the participants to compare their workplace to the one described in the accident report. Have them explore ways to correct any weaknesses that are identified.
5. Review procedures in the company rule book or safety manual for reporting and correcting safety and health hazards. Review responsibilities of employees and supervisors as outlined in the manual.
6. Get the participants to identify a strategy for using their rights under the act to positively influence the safety and health program. Get them to focus on ways to build trust and show the employer that their involvement and empowerment in building an effective safety and health program has benefits.

### **Performance Assessment and Evaluation Methods:**

- 1) Get trainees to write down or identify verbally at least one example of a miner's rights in each of the following areas: Safe workplace; freedom from discrimination; to report hazards; to participate in inspections;
- 2) Get trainees to describe the procedures for reporting and correcting safety and health hazards.
- 3) Have trainees describe their personal responsibilities in safety and health; have them identify the responsibilities of supervisors.



## Lesson Plan 5

### Line of Authority and Responsibilities of Supervisors and Miners (30 Minutes)

**Task:** Identify the line of authority and responsibility of supervisors and miners to provide a safe workplace.

**Conditions:** Use real life situations such as a serious accident, an employee complaint about hazardous conditions, or citations for violations of MSHA standards to identify the line of authority and responsibility of miners and supervisors to report and correct hazards.

**Standards:** Miners will identify sections of the "Act" and 30 CFR regarding their responsibility to report and correct unsafe conditions and acts that are detrimental to their safety and health

#### Learning Objectives:

- 1) Miners (includes supervisors) will explain their personal responsibility to examine their work areas for hazardous conditions and to perform inspections on equipment to identify defects affecting safety and health.
- 2) Miners (includes supervisors) will explain individual and supervisory responsibilities for reporting hazards in accordance with the company structure and policy, the Mine Safety & Health Act of 1977 and the applicable regulations in title 30, Code of Federal Regulations.
- 3) Miners (includes supervisors) will be able to follow the required steps for reporting and resolving workplace hazards and defects on equipment that affect safety and health.
- 4) Miners (includes supervisors) will demonstrate how to perform as a member of a team in setting the right example and being proactive in improving safety and health for all employees.

#### Materials needed:

- 1) Mine Safety and Health Act of 1977.
- 2) Title 30, Code of Federal Regulations, Parts 1 through 199.
- 3) Employee Handbook or Company Safety Manual / RuleBook.
- 4) Overheads or slides depicting the company organizational chart.
- 5) Overheads summarizing the employees individual responsibilities regarding reporting
- 6) Examples of safety & health discrepancies in the workplace.
- 7) A screen and overhead projector or slide projector.
- 8) Citations from an MSHA inspection for each class participant.
- 9) Pencil and paper for each trainee.
- 10) The company's workplace examination program and related materials.

**Allotted Time:**

This training session is allotted approximately 30 minutes for completion as per the training plan. More time can be devoted to this subject if you desire to exceed the 24-hour training requirement for inexperienced miners.

**Strategy:**

- 1) Introduce this lesson by discussing an MSHA inspection where there were serious alleged violations and the inspection resulted in the issuance of citations. Relate the finding of the inspection to the company's commitment to providing a safe work environment, to the individual's personal responsibilities and to the supervisor's personal responsibilities in correcting hazardous conditions and work practices.
- 2) Explain:
  - The responsibility of the miner.
  - The responsibility of the supervisor.
  - The responsibility of the company.
  - Disciplinary actions.
  - MSHA's responsibilities. The right of the "miner" to report unsafe conditions to MSHA.
  - MSHA's responsibility to investigate the "miners" complaint.
  - State regulatory agency responsibilities.
  - The right to refuse to work in an unsafe environment or be party to an unsafe practice.
  - The right to speak with company management about violations and workplace dangers.
  - Relate these to the citation information discussed in this session.
- 3) Use inspection history information to get the participants to identify where and how the conditions were permitted to exist. Discuss what should be done to correct identifiable hazardous conditions.
- 4) Have the class participants analyze a citation related to defects on mobile equipment, and review procedures for inspecting and reporting defects. Have them identify weakness and recommend what needs to change.
- 5) Review a citation that resulted from someone failing to identify a plant hazard during a daily workplace inspection. Have employees identify any breakdowns that occurred in the workplace examination program and recommend improvements.
- 6) Review procedures in the company rule book or safety manual for reporting and correcting safety and health hazards. Review responsibilities of employees and supervisors as outlined in the manual.

- 7) Have the participants to positively influence the safety and health program by feeling comfortable in reporting observed unsafe conditions without the fear of reprisal. Have them focus on ways to build trust and show their employer that their involvement and empowerment in building an effective safety and health program has many benefits.

### **Performance Assessment and Evaluation Methods:**

- 1) Have the class participants write down their individual “chain of command” or identify verbally their “chain of command” and give a brief description of each of their responsibilities.
- 2) Have the class participants describe how the company workplace examination procedure for reporting and correcting safety and health hazards works.
- 3) Have the class participants describe their personal responsibilities regarding safety and health issues.
- 4) Have the class participant identify the responsibilities of their individual supervisor.
  - Supervisors must protect all employees.
  - Supervisors must realize that they cannot take chances. They are responsible for their personal safety as well as others.
  - Supervisors must know and obey safety rules and regulations and enforce the company’s policies and procedures regarding safety.
  - Supervisors should actively participate in proper training of employees.

### **Supervisors that don’t do the above could be:**

- **Held personally liable for accidents and injuries.**
- **Criminally prosecuted.**
- **Be held civilly liable.**

- 5) Have the class participant briefly describe the responsibilities of the company.
- 6) Have the class participants briefly describe MSHA’s role in:
  - Miners complaints.
  - Inspections.
  - Special Investigations
  - Issuing citations.



## Definitions and Terms

- Operator** Means any owner, lessee, or other person who operates, controls, or supervises a coal or other mine or any independent contractor performing services or construction at such mine.
- Agent** Means any person charged with responsibility for the operation of all or a part of a coal or other mine or the supervision of the miners in a coal or other mine.
- Miner** Means any individual working in a coal or other mine.
- Coal or Other Mine** Means an area of land from which minerals are extracted in non-liquid form or, if in liquid form, are extracted with workers underground.
- Private ways and roads appurtenant to such area, and
  - Lands, excavations, underground passageways, shafts, slopes, tunnels and workings, structures, facilities, equipment, machines, tools, or other property including impoundments, retention dams, and tailings ponds, on the surface or underground, used in, or to be used in, or resulting from, the work of extracting such minerals from their natural deposits in non-liquid form, or if in liquid form, with workers underground, or used in, or to be used in, the milling of such minerals, or the work of preparing coal or other minerals, and includes custom coal preparation facilities. In making a determination of what constitutes mineral milling for purposes of this Act, the Secretary shall give due consideration to the convenience of administration resulting from the delegation to one Assistant Secretary of all authority with respect to the health and safety of miners employed at one physical establishment.
  - For purposes of titles II, III, and IV, "coal mine" means an area of land and all structures, facilities, machinery tools, equipment, shafts, slopes, tunnels, excavations, and other property, real or personal, placed upon, under, or above the surface of such land by any person, used in, or to be used in, or resulting from, the work of extracting in such area bituminous coal, lignite, or anthracite from its natural deposits in the earth by any means or method, and the work of preparing the coal so extracted, and includes custom coal preparation facilities;
- Imminent Danger** Means the existence of any condition or practice in a coal or other mine, which could reasonably be expected to cause death or serious physical harm before such condition or practice can be abated.
- Accident** Includes a mine explosion, mine ignition, mine fire, or mine inundation, or injury to, or death of, any person.
- Mandatory Health or Safety Standard** Means the interim mandatory health or safety standards established by titles II and III of this Act and the standards promulgated pursuant to title I of this Act.

## **SECTION 110 of the “Act”**

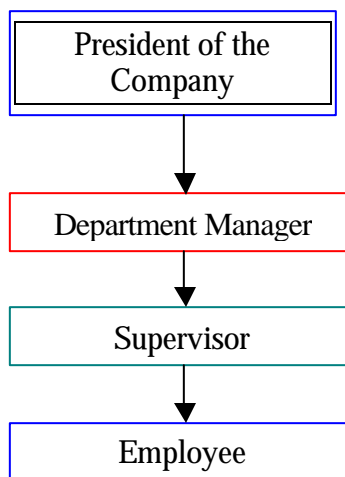
- (a) The operator of a coal or other mine in which a violation occurs of a mandatory health or safety standard or who violates any other provision of this Act, shall be assessed a civil penalty by the Secretary which penalty shall not be more than \$10,000 for each such violation. Each occurrence of a violation of a mandatory health or safety standard may constitute a separate offense.**
- (b) Any operator who fails to correct a violation for which a citation has been issued under section 104(a) within the period permitted for its correction may be assessed a civil penalty of not more than \$1,000 for each day during which such failure or violation continues.**
- (c) Whenever a corporate operator violates a mandatory health or safety standard or knowingly violates or fails or refuses to comply with any order issued under this Act or any order incorporated in a final decision issued under this Act, except an order incorporated in a decision issued under subsection (a) or section 105(c), any director, officer, or agent of such corporation who knowingly authorized, ordered, or carried out such violation, failure, or refusal shall be subject to the same civil penalties, fines, and imprisonment that may be imposed upon a person under subsections (a) and (d).**
- (d) Any operator who willfully violates a mandatory health or safety standard, or knowingly violates or fails or refuses to comply with any order issued under section 104 and section 107, or any order incorporated in a final decision issued under this title, except an order incorporated in a decision under subsection (a) or section 105(c), shall, upon conviction, be punished by a fine of not more than \$25,000, or by imprisonment for not more than one year, or by both, except that if the conviction is for a violation committed after the first conviction of such operator under this Act, punishment shall be by a fine of not more than \$50,000, or by imprisonment for not more than five years, or both.**
- (e) Unless otherwise authorized by this Act, any person who gives advance notice of any inspection to be conducted under this Act shall, upon conviction, be punished by a fine of not more than \$1,000 or by imprisonment for not more than six months, or both.**
- (f) Whoever knowingly makes any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to this Act shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than five years, or both.**
- (g) Any miner who willfully violates the mandatory safety standards relating to smoking or the carrying of smoking materials, matches, or lighters shall be subject to a civil penalty assessed by the Commission, which penalty shall not be more than \$250 for each occurrence of such violation.**
- (h) Whoever knowingly distributes, sells, offers for sale, introduces, or delivers in commerce any equipment for use in a coal or other mine, including, but not limited to, components and accessories of such equipment, which is represented as complying with the provisions of this Act, or with any specification or regulation of the Secretary applicable to such equipment, and which does not so comply, shall, upon conviction, be subject to the same fine and imprisonment that may be imposed upon a person under subsection (f) of this section.**
- (i) The Commission shall have authority to assess all civil penalties provided in this Act. In**

assessing civil monetary penalties, the Commission shall consider the operator's history of previous violations, the appropriateness of such penalty to the size of the business of the operator charged, whether the operator was negligent, the effect on the operator's ability to continue in business, the gravity of the violation, and the demonstrated good faith of the person charged in attempting to achieve rapid compliance after notification of a violation. In proposing civil penalties under this Act, the Secretary may rely upon a summary review of the information available to him and shall not be required to make findings of fact concerning the above factors.

- (j) **Civil penalties owed under this Act shall be paid to the Secretary for deposit into the Treasury of the United States and shall accrue to the United States and may be recovered in a civil action in the name of the United States brought in the United States district court for the district where the violation occurred or where the operator has its principal office. Interest at the rate of 8 percent per annum shall be charged against a person on any final order of the Commission, or the court. Interest shall begin to accrue 30 days after the issuance of such order.**
- (k) **No proposed penalty, which has been contested before the Commission under section 105(a) shall be compromised, mitigated, or settled except with the approval of the Commission. No penalty assessment, which has become a final order of the Commission shall be compromised, mitigated, or settled except with the approval of the court.**
- (l) **The provisions of this section shall not be applicable with respect to title IV of this Act.**

### Company Organization Chart

(Example)



Note: There are many variations in organizational charts and lines of reporting at each location. Accordingly, your “chain of command is dependent on your facility’s organizational structure.

Check with your immediate Supervisor or Department Manager and make sure you know your reporting lines.

## Lesson Plan 6

### Introduction to Company Safety Rules and the Procedures for Reporting Hazards (30 Minutes)

**Task:** Become familiar with the company's Employee Safety Rules and the MSHA regulations and know the procedure for reporting hazards.

**Conditions:** Use the Employee Safety Rules or Safety Manual to understand the procedure for reporting hazardous conditions. Locate standards in 30 CFR to become familiar with MSHA regulations.

**Standards:** Trainees will understand the following MSHA standards, which describe the procedures for identification of hazardous conditions:

- 1) Part 56.3200, Correction of hazardous conditions
- 2) Part 56.14100, Safety defects; examination, correction and records
- 3) Part 56.18002, Examination of working places

**Company Rules:** Trainees will identify the following company safety rules, which describe the reporting of hazardous conditions:

- ★ Report hazardous working conditions, defective tools or equipment, or unsafe acts to your supervisor promptly.
- ★ All equipment operators are required to conduct a pre-shift inspection

#### Learning Objectives:

- 1) Employees will demonstrate their understanding of the employee safety rules and how to properly report hazards for correction.
- 2) Employees will understand how MSHA standards are organized and their importance in providing a safe and healthful workplace.
- 3) Employees will practice strategies for using their knowledge of the safety rules and regulations to work safely and to improve safety and health at their workplace.

#### Materials needed:

- 1) A copy of the employee safety rules or safety manual
- 2) 30 CFR Part 1 - 199
- 3) Operator's Daily Report
- 4) Overheads or slides listing the safety rules
- 5) A screen and overhead projector or slide projector
- 6) Fatalgrams

## 7) Safety Quiz

8) Quiz Answer Sheet

9) Quiz Answer Key

10) Pencil and paper for each trainee

### **Allotted Time:**

This training session is allotted 30 minutes for completion as per the training plan. More time can be devoted to this subject if you desire to exceed the 24-hour training requirement for inexperienced miners.

### **Strategy:**

- 1) Introduce the lesson by discussing a fatalgram in which the investigation revealed a failure to obey an established safety rule or which shows how an uncorrected hazardous condition resulted in the death of a miner. Relate the incident to your workplace.
- 2) Explain imminent danger conditions and the need to report these conditions to supervision immediately and to withdraw from the area. Relate these conditions to the fatalities or serious disabling injuries that occur in our industry each year.
- 3) Explain the responsibilities of miners to report unsafe conditions or practices in their work area to protect their safety and health and that of their coworkers. Discuss how no workplace is immune from serious injuries occurring if employees and supervisors fail to work together to report and correct dangerous conditions.
- 4) Get the participants to compare their workplace to the one described in the fatalgram. Ask them how they can improve their own workplace.
- 5) Review procedures in the company rule book or safety manual for reporting and correcting safety and health hazards. Review the responsibilities of both employees and supervisors to report and correct identified hazards.
- 6) Ask the participants to identify several unsafe conditions or practices that they believe are the most serious.
- 7) Explain the function of the Employee Safety Committee if there is one and show how unsafe conditions can be included on the Committee safety report.

### **Performance Assessment and Evaluation Methods:**

- 1) Have trainees define an imminent danger condition.
- 2) Get trainees to verbally describe the procedures for reporting and correcting safety and health hazards.

- 3) Trainees will take a quiz to demonstrate that they understand the employee safety rules and the regulations in 30 CFR. A passing grade of 80 is required.

## Lesson Plan 7

### Instruction and Demonstration on Use, Care, and Maintenance of Respiratory Devices (60 Minutes)

**Task:** Identify how different respirators are selected for different hazards and how they should be properly worn and cared for and maintained.

**Conditions:** Describe the different respiratory hazards present at the mine, and show the different types of respirators available for the hazards. Explain the limitations of the respirators and let miners wear and fit test the devices. Show miners how to inspect, maintain and store the respirators.

**Standards:** Miners will identify the proper respirator types for the different hazards present, demonstrate how to wear, inspect, maintain and store the devices.

#### Learning Objectives:

- 1) Miners will explain the different respiratory hazards present at the mine site and where they are located.
- 2) Miners will correctly identify the proper respirator for the different hazards.
- 3) Miners will demonstrate how each respirator type is to be worn, fit tested, inspected, maintained and stored.

#### Materials needed:

- 1) Chart or Slide of human respiratory system.
- 2) Overheads, slides or video summarizing the health hazards for respirable dust and silica, welding fumes, paints and solvents
- 3) A screen and overhead projector, slide projector or TV/VCR
- 4) Sufficient quantities of the different respirator types to allow miners to wear.
- 5) Respirator manufacturer's employee handbooks, posters and/or videos on respirators used.
- 6) Cleaning solution and paper towels
- 7) Qualitative fit testing kit for particulate and organic vapor masks
- 8) Copies of Mine Respiratory Protection Plan for each miner
- 9) Pencil and paper for each miner

#### Allotted Time:

This training session is allotted 60 minutes for completion as per the training plan. More time can be devoted to this subject if you desire to exceed the 24-hour training requirement for inexperienced miners.

**Strategy:**

- 1) Introduce the lesson by describing how the respiratory system works.
- 2) Describe the different respiratory hazards that are potentially present at the mine site (e.g. silica, welding fumes, paint, solvents, etc.). Tell them where these hazards may exist.
- 3) Show them the different respirators used at the mine site to address the different respiratory hazards. Explain the differences and limitations among the respirators (explain where the respirators can and cannot be used and which type are acceptable for specific uses).
- 4) Get the participants to try on the different respirators for proper fitting techniques and randomly fit test several miners using the fit test kit. Emphasize the problems with facial hair and glasses with getting a proper seal.
- 5) Identify what parts of the respirators need to be inspected and how and what to look for.
- 6) For non-disposable respirators, show miners how to clean the respirators and properly store them. Let the miners clean the non-disposable respirators that have been handed out previously.
- 7) Identify special respirator use circumstances such as abrasive blasting and confined space entry and what procedures need to be followed.
- 8) Review the mine respiratory protection plan

**Performance Assessment and Evaluation Methods:**

- 1) Get trainees to write down or identify verbally each of the respiratory protection devices and what hazards they protect against.
- 2) Get trainees to describe the procedures for proper fitting, inspecting, cleaning and storage of respirators.
- 3) Have trainees describe their personal responsibilities under the mine's written respiratory protection plan.

## Lesson Plan 8

### Review of First Aid Procedures (60 Minutes)

**Task:** Review of basic lifesaving techniques for medical emergencies.

**Conditions:** The program should review first aid techniques for treating sprains, lacerations, burns, broken bones, shock, loss of respiration, heat injuries, poisoning, choking, heart attacks, and shock.

**Standards:** Miners will have the basic understanding and applying the proper first aid techniques when injuries occur.

#### Learning Objectives:

- 1) Employees will demonstrate and explain basic lifesaving techniques.
  - ABC's of basic first aid treatment
  - First Aid - Breathing
  - First Aid - Control Bleeding
  - First Aid - Shock/Fainting
  - First Aid - Wounds/Burns
  - First Aid - Fractures/Dislocations
  - Assess and evaluate an emergency situation
  - Demonstrate steps to protect yourself from Bloodborne pathogens
- 2) Employees will demonstrate and explain steps to follow if a medical emergency occurs:
  - How to summon help during an emergency
  - The location of emergency medical telephone numbers
  - Emergency equipment that is available and its location
  - Plant maps and directions to provide emergency personnel
  - Emergency assignment personnel (who does what) - escort, notify plant personnel, get emergency equipment
  - Controlling the medical emergency situation
- 3) Employees will apply their knowledge of basic lifesaving techniques in a mock emergency medical situation by identifying what steps to take.

#### Materials needed:

- 1) First Aid Safety Manual No. 3 (Revised 1995) U.S. Department of Labor Mine Safety & Health Administration -National Mine Health and Safety Academy
- 2) Facilities Site Specific Emergency Plan (including)
  - Establishes evacuation procedures
  - Assigns responsibilities to specific individuals
  - Provides for notification of outside agencies
  - Establishes means of communication
  - Emergency Telephone Number
  - Site Map of Emergency Equipment
  - Emergency procedures for who does what during a medical emergency
- 3) Overheads or slides summarizing the emergency plan
- 4) A screen and overhead projector or slide projector
- 5) Video and/or Visual aids on the ABC's of Medical Emergencies
- 6) Pencil and paper for each trainee

**Allotted Time:**

This training session is allotted 60 minutes for completion as per the new miner training plan. More time can be devoted to this subject if you desire to exceed the 24 hours training requirement.

**Strategy:**

- 1) Begin the meeting by welcoming the participants. Introduce yourself and give each person the opportunity to become acquainted if there are new miners joining the training session.
- 2) Explain how employees can reduce the causes and consequences of injuries from hazards by following safety rules, procedures, and practices, and by applying the proper first aid techniques when injuries occur.
- 3) Explain that the primary purpose of the training session is to provide an understanding of proper basic first aid techniques.
- 4) Review the program content by presenting the information in the program outline, and lead discussions about the benefits of applying first aid techniques properly.
- 5) Develop a list of questions that follow the program outline to check how well program participants understand the information.

**Performance Assessment and Evaluation Methods:**

- 1) Develop a list of questions that follow the program outline to check how well program participants understand the information.
- 2) Get trainees to write down or identify verbally some of the ABC's of Basic Lifesaving Techniques.



## Lesson Plan 9

(Duration of Training Varies On Need)

### Hazard Recognition for Assigned Tasks

**Task:** Hazard Recognition for Assigned Tasks.

**Conditions:** Using videos, slides, and scenes showing the actual tasks to be performed, employee will identify the hazards and best practices to avoid occupational injury and illness.

**Standards:** Employee will identify each of the major health and safety hazards of the assigned task and will explain how to avoid them before actually performing the

#### Learning Objectives:

- 1) Employees will identify the safety and health hazards of assigned tasks.
- 2) Employees will demonstrate and explain how to avoid the safety and health hazards.
- 3) Employees will identify safety and health standards from 30 CFR parts 1 through 199 for the assigned tasks and other applicable standards including company safety rules.

#### Materials Needed:

- 1) Company Safety and Health Rules
- 2) 30 CFR Parts 1 - 199
- 3) Applicable MSHA Hazard Alerts and Fatalgrams
- 4) Overheads or slides showing scenes of the assigned tasks.
- 5) MSDSs for chemicals to be used in assigned tasks.
- 6) MSHA On The Job Training Modules
- 7) A screen and overhead projector or slide projector
- 8) TV, VCR and applicable training videos addressing assigned tasks which cover hazards and safety & health procedures.
- 9) Pencil and paper for each employee

#### Allotted Time:

The length of this training session varies depending on the employee's awareness of the hazards, but the hazards must be fully identified and safe procedures understood before the employee is permitted to try or practice the task under close observation by the competent person.

**Setting:**

This training will take place in the plant office or meeting room using slides, videos and visuals to emphasize the major hazards and preventive measures. It will be followed by a visit to active work areas where the show and tell method of training will be used to develop a clear understanding of the hazards and possible consequences if safety and health procedures are not followed when performing the assigned task.

**Strategy:**

- 1) Introduce the lesson by describing the task and the hazards related to it. Use task training books or other hazard information to emphasize key points.
- 2) Give the employee a copy of the MSDSs for any chemicals that are used or handled in the task. Review the characteristics and hazards of the chemical and steps to prevent injury or unnecessary health exposure. Have employee identify the hazards, the signs and symptoms of overexposure, the work procedures and the necessary personal protective equipment that must be used. Make sure the employee understands how to read an MSDS and knows where to go for information.
- 3) Review MSHA's "On the Job Training Module" for the task if one has been developed. Make sure the employee understands each hazard and how to avoid it. Use pictures, sketches, or fatalgrams to explain the hazard and illustrate how it has caused accidents in the past.
- 4) Use MSHA hazard alert cards that address the task to illustrate and emphasize safety and health procedures.
- 5) Make use of a checklist, to verify that all pertinent hazards and safety practices have been covered. Have employee repeat back the hazards and the steps he or she must follow to prevent injury or illness.
- 6) During the show and tell portion of the training, observe others performing the task if possible. Reinforce what was previously discussed by showing the hazard or letting the employee identify any hazards that might be present. Ask questions to ensure understanding.
- 7) When this training is completed, the competent person trainer can begin the demonstration and practice under close observation in a safe area or under controlled conditions.

**Evaluation**

Have the employee observe a scene showing the task and identify the hazards you reviewed with him or her. For each hazard, have the employee explain the safe procedures that apply. If the employee does not identify any major hazards, review them again until all hazards are fully understood.

