

**Task Training:
Miner Awareness,
Pre-op and Work Place Examinations**

DMME

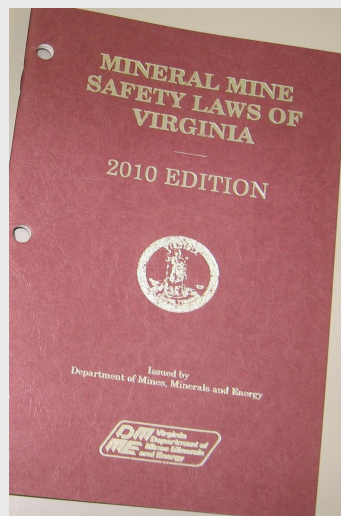
Division of Mineral Mining

AR Training

Updated 2012

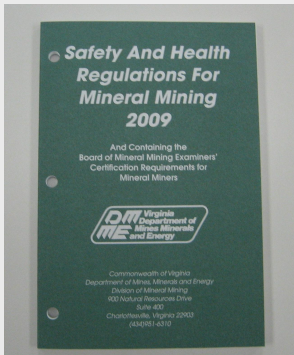
Virginia Law Requires Task Training

- **45.1-161.292:73.**, States in part:
 - A. Each operator shall have a plan containing ... training for miners for new tasks.
 - B. Plans shall be available to the Director for review upon request.



* Note: The law says, “each operator”. It is important to understand that contractors are, or may be, operators too!

Virginia Safety and Health Regulations Are Specific



- **4VAC25-40-100. Employee Training**
 - “New or reassigned employees shall be trained in state and company safety regulations and be task trained prior to being assigned a task or duty. Records of training shall be kept in writing at the mine site for two years or 60 days after termination of employment.”
- **4VAC25-40-190. Compliance With Regulations**
 - “Miners shall comply with all state safety and health regulations applicable to their task or duty.”

Regulations Referring To Specific Tasks

- **4VAC25-40-630.** Training and Practice Drills
 - “All employees assigned to firefighting responsibilities by the operator shall be trained in firefighting and practice drills shall be conducted at least every six months.”
 - **4VAC25-40-800.B.** Use of Explosives
 - “Persons who assist in blasting activities shall be under the direct supervision of the certified blaster in charge and shall be alerted to the hazards involved.”
- * Records of these types of task training must be kept as well.

MSHA

30 CFR Part 46

- Miners assigned a new task must receive training in the health and safety aspects specific to that task prior to performing that task.
- Task training applies to any new or modified equipment or procedures.
- Training must be presented in a language understood by the miners receiving the training.

Part 46, cont.

- Calls for close supervision, by a competent person, of practice with equipment (non-production and production conditions) or procedures and training regarding safety and health and safe work procedures specific to the task.
- A “competent person” is required for all Part 46 (and DMM) training.

For Example....

The Plan

- The task:
 - Operator, Caterpillar 980H wheel loader.
- Teaching Methods:
 - Lecture/discussion
 - Audiovisual
 - Demonstration
 - Supervised practice
- Teaching Materials:
 - Va. Safety and Health Regulations For Mineral Mining, Part IX (mobile equipment)
 - MSHA 30CFR, Part 56
 - Company policies/handbook
 - CAT 980H Operators Manual
 - CAT film, “980H Operator Training”



- Evaluation Method:
 - Oral examination
 - Observation
- Duration of training:
 - 8 to 24 hours ????????

(This will depend on the specific job and employee needs)

For Example....

The Training

- Based on the training plan on the previous slide:
 - A “competent person”, begins by covering state, federal and company regulations related to wheel loaders/mobile equipment. Ground control and/or other areas of the regulations may need to be covered.
 - Next, refer to the operators manual to cover basic machine operation and functions.
- This is the time to move to the loader itself:
 - The 980H operators training film should be shown at this point.
 - Introduce a factory/dealer trainer (if used) that will teach machine specifics.
 - After a general introduction to the machine, how to perform a pre-operational inspection should be taught.
 - The trainee should be instructed in proper procedures involving start-up and moving the machine.
 - In a non-production setting, machine operation is fully demonstrated to the trainee. They are then given “hands-on” instruction and allowed to practice operating the machine.



The Training, cont.

- When deemed appropriate, training should move to the normal production area for the machine:
 - In this setting, machine operation should be fully demonstrated to the trainee once again.
 - Site specific issues regarding ground control, other equipment or personnel working in the area and etc. should be covered.
 - The trainee is given “hands-on” instruction and then allowed to practice operating the machine.
 - Any remedial training necessary is given.
- Final evaluation, per the plan, consists of oral examination and observation:
 - Throughout the training, and at the end, the trainee is quizzed on proper procedures.
 - The trainer’s observations should include:
 - The trainee performing a pre-operational inspection.
 - The trainee operating the loader in all areas of operation.
 - The trainee performing any and all tasks related to operating the loader.

Recordkeeping

- MSHA's 5000-23 form may be used (most organizations do).
- It is the information that is important, not the form.

U.S. Department of Labor
Mine Safety and Health Administration

Approved OMB Number 1219-0009, Expires November 30, 2004.

This certificate is required under Public Law 91-173 as amended by Public Law 95-164. Failure to comply may result in penalties and other sanctions as provided by sections 108 and 110, Public Law 91-173 as amended by Public Law 95-164.

Issue Certificate Immediately Upon Completion of Training

Serial Number (for operator's use)

1. Print Full Name of Person Trained (first, middle, last)

2. Check Type of Approved Training Received:

Annual Refresher Experienced Miner Hazard Training
 New Task (specify below) Newly Employed, Inexperienced Miner Other (specify)

Date	Task	Initials		Date	Task	Initials	
		Instr.	Studt.			Instr.	Studt.

3. Check Type of Operation and Related Industry:

A. Surface Construction Underground Shaft & Slope
B. Coal Metal Nonmetal

4. Date Training Requirements Completed Check if not completed and go to item 5, below.

➔ If completed, go to item 6, below.

5. Check Subjects Completed (use only for partially completed training):

Introduction to Work Environment Roof/Ground Control & Ventilation Health
 Hazard Recognition Mine Map; Escapeways; Emergency Evacuation; Barricading Electrical Hazards
 Emergency Medical Procedures Cleanup; Rock Dusting First Aid
 H&S Aspects of Tasks Assigned Mandatory Health & Safety Standards Mine Gases
 Statutory Rights of Miners Authority & Responsibility of Supervisors & Miners' Representatives Explosives
 Self-Rescue & Respiratory Devices Other (specify)

Transport & Communication Systems

6. False certification is punishable under section 110 (a) and (f) of the Federal Mine Safety & Health Act (P. L. 91-173 as amended by P. L. 95-164).

I certify that the above training has been completed (signature of person responsible for training)

7. Mine Name, ID, & Location of Training (if institution, give name & address)

8. Date I verify that I have completed the above training (signature of person trained)

MSHA Form 5000-23, Jan. 99 (revised)

Recordkeeping, cont.

- This is a MSHA suggested form that can be used instead of, or with, the 5000-23 under Part 46.
- Note that it contains all of the required information stated earlier and in the 5000-23 form (except trainee signature which is not required under Part 46).

NEW TASK TRAINING RECORD/CERTIFICATE

Miner's Full Name (Print): _____

Mine or Contractor Name: _____ ID# _____

New Task 30 CFR Part 46.7	Course Length	Date	Competent Person	Location (Name & Address, if Institution)	Miner's Initials
<i>The miner received the following training before performing a new task, or a change occurred in an assigned task that affects health and safety:</i>					

False certification is punishable under Section 110(a) and (f) of the Federal Mine Safety and Health Act
I certify that the above training has been completed.

_____ (Date)

(Signature of person responsible for health and safety training) _____

Record Retention and Availability

- State regulation 4VAC25-40-100 requires records of training to be kept for 2 years or 60 days after termination of employment.
 - Do not be misled by this, training and updating records is an ongoing process. The 2 years mentioned in the regulation is a sliding window showing the most recent 2 years of training.
- MSHA says training records are to be in writing with original versions kept by the mine operator, or independent contractor, and made available to MSHA inspectors, State inspectors, miners and miner's representatives.

Pre-operational Inspections Mobile Equipment

DMME

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Updated 2012

Pre-op Inspections, Requirements



4VAC25-40-145. Mobile equipment that is to be used during a shift shall be inspected by the equipment operator. Equipment safety defects shall be reported to the certified mine foreman. Defects that affect the safety or health of persons shall be corrected before the equipment is used.

- Check all vehicle fluids
 - brake fluid
 - steering fluids
 - hydraulic fluids
 - coolant
 - washer fluid
- Check belts & hoses.
- Check for leaks or any unusual wear and tear.
- Check tires, wheels and lug-nuts.
- Check all signal and travel lights.
- Check back-up alarm or other visual or audio warning devices.
- Check parking and service brakes.
- Inspect and clean windows & mirrors.

“Fluids”



Including; “Engine Coolant”



A close-up photograph of a mechanical assembly. The image shows a complex arrangement of metal parts, including a cylindrical component on the left, a central bracket-like structure with several bolts, and various rods and plates extending from it. The metal surfaces are somewhat weathered and show signs of use. A prominent yellow label with the word "Belts" in black text is overlaid on the central part of the image. The background is dark and indistinct.

“Belts”



“Rims & Lugs”

“Hoist Jacks, Frame, Tires”



“Hydraulic Leaks”





**“Back-up
Alarms”**

“Lights”



“Brakes”

A close-up photograph of a vehicle's brake system. The image shows a dark, circular brake disc with several curved vanes. A brake caliper is mounted over the disc, and a brake pad is visible. The surrounding area is metallic and shows signs of wear and dirt.

4VAC25-40-1320. Powered mobile equipment shall be provided with adequate service brakes capable of stopping and holding the equipment with its typical load on the maximum grade it travels.

4VAC25-40-1330. Mobile equipment shall be equipped with emergency brakes separate and independent of the regular braking system when generally available for a particular class of equipment.

“Steering Components”



Pre-op Inspection, Safety Equipment



- Check vehicle fire extinguisher to assure proper charge and if it is adequately sized.
- If equipped with a fire suppression system, check the primary and remote actuator for function.
- Check first aid kit and/or other equipment as provided by your company.



A red fire extinguisher is mounted inside the cab of a piece of heavy machinery. The extinguisher is red with a white label that has the word "INSTRUCTIONS" visible. It is mounted on a metal bracket. In the background, through the window, a concrete mixer truck is visible. The truck is white with a large rotating drum. The scene is set in an industrial or construction area.

“Fire Extinguisher”

4VAC25-40-670.A. Whenever a fire or its effects could impede escape from self-propelled equipment, a fire extinguisher shall be on the equipment.



Pre-op Inspections, In The Operator's Cab

- Check/clean windows & mirrors.
- Assure operator's compartment is clean, with no loose materials and that all controls are unobstructed.
- Check seat belt condition.
- Start vehicle.
- Check all gauges to assure proper function.
- Check transmission and steering operation (auxiliary).
- Prior to moving equipment, sound the appropriate warning.

4VAC25-40-1350. Cabs shall be maintained to provide visibility for safe operation.

4VAC25-40-1360. Cab windows shall be of safety glass or equivalent, in good condition, and shall be kept clean.

4VAC25-40-1380. Cabs of mobile equipment shall be kept free of extraneous materials.

“Gauges”





“Seat Belts”

4VAC25-40-1370. Heavy duty mobile equipment manufactured after June 30, 1969, shall be equipped with acceptable roll-over protection structures and seat belts. Equipment operators shall use the seat belts provided.

End Stationary Pre-op

On The Move, Final Pre-op Issues and Work Place Examination

4VAC25-40-460.

All personnel shall examine their active workings for unsafe conditions prior to starting work and frequently thereafter. Any unsafe condition found shall be corrected or reported to the designated certified mine foreman.



Brakes, Traffic Patterns, Road Hazards, etc.

- Check your brakes as soon as you start off (steering, shifting).
- Follow and adhere to posted traffic patterns. Be alert for anything new.
- Be aware of and read all traffic warning signs and devices.
- Watch for hazards on the roads, pit walls, etc. Report issues to the certified foreman and warn other operators.
- Never assume the other operators see you, use lights and horn as needed.
- Always watch for personnel on the ground.

4VAC25-40-1540. Traffic rules, including speed, signals, and warning signs, shall be posted at each mine.

4VAC25-40-1390. Equipment operating speeds shall be consistent with conditions of roadways, grades, clearance, visibility, traffic, and type of equipment used.

4VAC25-40-1420. Mobile equipment shall be operated under power control at all times.

First Load Of The Day



4VAC25-40-1430. Mobile equipment operators shall have full control of the equipment while it is in motion.

4VAC25-40-1470. When traveling between work areas, the equipment shall be secured in the travel position.

4VAC25-40-1530. Water, debris, or spilled material which creates hazards to moving equipment shall be removed.

- Position vehicle following proper, established procedures. Check mirrors and sound proper warnings prior to backing up. Remember that smaller machinery used for clean up may be located in your blind spot.
- Stay in the vehicle.
- Wait for signal prior to leaving the loading area.
- Pull away slowly checking for load stability.
- Never transport oversize materials or loads larger than the vehicles design capacity.
- Check your brakes on the steepest grade. And.....have a safe day!