



STATE OF WEST VIRGINIA
OFFICE OF MINERS' HEALTH, SAFETY AND TRAINING
BUREAU OF COMMERCE

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GASTON CAPERTON
GOVERNOR

MEMORANDUM

STEPHEN F. WEBBER
DIRECTOR

TO: ALL MINING OPERATIONS
FROM: STEPHEN F. WEBBER, DIRECTOR *SFW*
DATE: APRIL 25, 1996
RE: WV ADMINISTRATIVE REGULATION 36-16-4.2

Recently West Virginia has experienced two fatal accidents involving miners working under raised machinery or equipment. One fatal occurred when no blocking material was placed under the boom of a continuous miner prior to tightening a fitting on a hose and the other accident resulted when the head of a continuous miner fell off of inadequate blocking during maintenance of the machine.

WV state regulation 36-16-4.2 requires, "No work shall be performed under machinery or equipment that has been raised until such machinery or equipment has been securely blocked in position."

When blocking machinery or equipment the following should be considered:

- Raised, elevated and unsecured equipment must be securely blocked to prevent movement before person position themselves under movable components of the equipment.
- An adequate and readily available supply of blocking materials should be provided at locations where such materials are routinely needed.
- Blocking material must be capable of supporting the weight of the equipment or component to be blocked.
- Wood used for blocking material must be solid and flat sided.
- Wooden cribs should be installed on solid footing and wedged tightly to the machine to prevent any movement that could dislodge the blocking.
- Cribs should be built so that the crib blocks are off-set half the thickness of the blocks being used, from the end of the block it is resting on. This provides a 10% greater load capacity and reduces the possibility that the blocks will dislodge.
- The load of the machinery component being supported, should be positioned on the center of the crib to reduce the potential that the machinery will slip off the crib.

**SAFETY AWARENESS TOPIC
JULY 1996**

West Virginia Joint Accident
Prevention Team

**SAFETY PRECAUTIONS WHEN
WORKING UNDER RAISED EQUIPMENT**

Blocking Against Motion

Federal regulations 75.1725(c) and 77.404(c) require: "Repairs or maintenance shall not be performed on machinery until the power is off and the machinery is blocked against motion, except where machinery motion is necessary to make adjustments." (Observe lock out and tag out procedures).

Federal regulations 75.1726(b) and 77.405(b) require: "No work shall be performed under machinery or equipment that has been raised until such machinery or equipment has been securely blocked in position."

West Virginia State regulation 36-16-4.2 requires: "No work shall be performed under machinery or equipment that has been raised until such machinery or equipment has been securely blocked in position."

Raised, elevated and unsecured equipment must be securely blocked to prevent movement before persons position themselves up-der or between movable components of the equipment.

Occasionally, more than one component loca-tion on a machine must be blocked to prevent movement.

An adequate and readily available supply of blocking materials should be provided at loca-tions where such materials are routinely needed.

Blocking materials must be capable of sup-porting the weight of the equipment or com-ponent to be blocked.

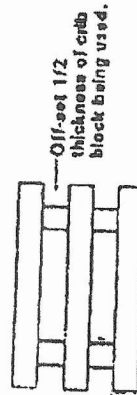
Wood used for blocking material must be solid and flat sided.

Wooden cribs should be installed on solid footing and wedged tightly to the machine to prevent any initial movement that could dis-lodge the blocking.

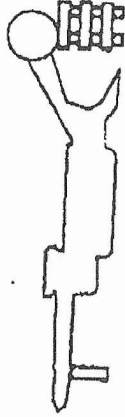
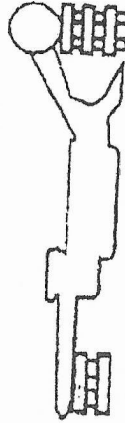
The blade or bucket and other attachments of surface mobile equipment must be lowered to the ground and the park brake set.

When a hoist or crane is used to lift loads, the workers must keep away from pinch points and avoid falling object hazards.

Cribs should be built such that the crib blocks are off-set half the thickness of the blocks being used, from the end of the block it is resting on. This provides a 10% greater load capacity and reduces the chance that the blocks will dislodge.



The load of the machinery component being supported should be positioned on the center of the crib, so as to reduce the chance that the blocks will dislodge.



A minimum of two (2) cribs should be in-stalled under the continuous miner ripper head, when work is to be performed with the ripper head in the raised position.



Load-Locking Valves

Federal regulation 75.1725(s) requires: "Ma-chine and stationary machinery and equip-ment shall be maintained in safe operating con-dition and machinery or equipment in unsafe condition shall be removed from service im-mediately."

West Virginia State regulation 36-18-1 re-quires: "Mine operators shall maintain equip-ment in safe operating condition. Equipment operators shall exercise reasonable care in the operation of the equipment entrusted to them and shall promptly report defects known to them..."

MSHA Program Policy Manual requires: "Loading machines and continuous mining machines shipped from the manufacturer after January 1, 1981, are required to be equipped with load-locking valves in the boom and head lift cylinders."

Hydraulics should never be relied upon to keep a component from falling.

CONCLUSION

Proper blocking is a must!! Just re-member that you have created a trap known as a dead fall, while you are working under raised equipment. Without proper blocking you will be dead if it falls! Maybe that's where the name came from.

Blockings of Equipment