

 CORPORATE SAFETY MANUAL	ENVIRONMENTAL, HEALTH AND SAFETY STANDARDS	
TITLE: VEHICLES AND MECHANIZED EQUIPMENT	Document Number: *	
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1 Purpose

The purpose of this document is to establish the procedures for working around vehicles and mechanized equipment on a jobsite.

2 Responsibilities

It is the responsibility of all employees to follow the procedures outlined below while working on a jobsite.

3 Policy Content

3.1 GENERAL INFORMATION

Prior to any activities involving excavation, underground installations (sewer, water, electric, gas or telephone) must be located and marked. When such installations are uncovered, proper supports must be provided. Utility companies must be advised of the proposed work before work begins. DIGSAFE must be contacted prior to any excavation work.

3.2 WORK PRACTICES

Safe clearances between all equipment, ladders, power transmission lines, roadways, loading areas and walkways must be maintained at all times.

Covers, guards, guard rails and warning signs must be used and placed in locations to adequately protect site workers, visitors and the general public.

It is important that site access and control be maintained at all times to prevent the inadvertent exposure to the site by unauthorized personnel.

Dust control techniques should be used to keep the dust generated to a minimum.

Getting on and off equipment while it is in motion is strictly PROHIBITED. Equipment that requires an operator cannot be allowed to run unattended.

Operators must operate all equipment according to procedures outlined in the manufacturers literature and observe all speed and load limits.

Stationary equipment must be placed on a firm foundation and secured before being operated.

No one is permitted in a power unit cab during loading operations. The driver only may be allowed in the cab during the loading operation of a dump truck if the truck has a cab protector.

Mechanized equipment must be shut down prior to and during filling operations.

All towing devices must be securely mounted and structurally adequate for the weight they are towing. Personnel are not permitted between a tow vehicle or the towed piece of equipment until the equipment has stopped.

The controls of loaders or excavators or similar equipment with folding booms or lift arms must not be operated from a ground position unless so designated.

Personnel may not work or pass under the buckets or booms of loaders in operation.

No guard or safety device can be removed or made ineffective except when making immediate repairs, lubrications, or adjustments and only after the power has been turned off. All guards or safety devices must be replaced immediately after completion of repair or adjustment and before the power is turned back on.

A warning device or signal person must be provided where there is danger of persons from moving equipment, swinging loads, buckets, booms, etc.

Accessible areas within the swing radius of the rear of the rotating superstructure of a crane must be barricaded to prevent an employee from being struck or crushed by the crane.

The load capacities, recommended operating speeds and special hazard warnings and instructions must be posted where they are clearly visible to the crane operator. The manufacturer's load rating chart must be securely fixed to the operators cab. If a change in the boom, the counter weight, or other structural numbers is made, the crane must be recertified to safely maneuver 125% of the anticipated load. A boom angle or radius indicator must be provided within the operator's view. A means of visually determining the levelness of the crane must be provided to the operator.

With the exception of certain performance tests, no crane may be loaded in excess of the manufacture's rating.

No personnel may ride on any device attached to the cable on hoisting equipment. When hoisting equipment is in operation, the operator may not perform any other work nor leave their position at the controls until the load has been safely landed or returns to ground level.

A standard signaling system must be used on hoisting equipment.

Whenever a slack line condition occurs, the setting of the rope in the pulleys and on the drum must be checked. The hoist rope cannot be wrapped around the load.

3.3 EQUIPMENT SPECIFICATIONS

Off road mechanized equipment must have a service brake system and a parking brake system capable of stopping and holding the equipment fully loaded on the expected grades of operation.

All equipment with windshields must be equipped with power wipers.

No modifications or additions, which affect the capacity or safe operation of equipment, can be made without the manufacturer's written approval.

Steering or spinning knobs must not be attached to the steering wheel unless the steering mechanism prevents the road reactions from causing the steering wheel to spin. When permitted, the steering knob must be mounted within the periphery of the wheel.

Bulldozers, cranes, front-end loaders, backhoe and other similar equipment must be equipped with a 5BC rated dry chemical or CO2 fire extinguisher.

All earth moving equipment must be equipped with a reversal alarm signal that is audible and sufficiently distinct to be heard under prevailing conditions. The alarm must operate automatically and continuously during the entire backward movement.

Belts, gears, shafts, pulleys and other moving parts of the equipment must be guarded.

Hot surfaces must be guarded or isolated to prevent injury or fire.

Fuel tanks must be located to disallow spill or overflows on to engine exhaust or electrical equipment.

Glass used in windshields or cabs must be safety glass.

Seatbelts and rollover protective devices must be installed on crawler and rubber tire tractors such as dozers, front-end loaders and backhoes. Rollover protective structures must be installed in accordance with the manufacturer's or designer's recommendation. The contractor must be able to certify that the rollover protective structures meet SAEJ-104c criteria. Welding, patching and refitting is prohibited unless the protection is recertified.

Suitable protection from the elements, falling or flying objects, swinging loads, and similar hazards must be provided for all machinery and equipment.

All load drums on load lifting equipment must be equipped with positive holding devices.

Braking equipment capable of stopping, lowering and holding a load of at least a full test load must be provided.

There must be at least two full wraps of cable on the drums of hoisting equipment at all times.

All bi-directional machines, such as rollers, front-end loaders, bulldozer, etc., must be equipped with an operable horn.

3.4 UNATTENDED EQUIPMENT

All equipment left unattended at night adjacent to construction areas where work is in progress, must be clearly marked, barricaded or identified.

Whenever equipment is parked the parking brake must be set. Equipment parked on inclines must have the wheels chocked in addition to having the parking brake set.

Booms must be lowered to ground level or secured against displacement by wind loads or other outside forces when not in use.

3.5 INSPECTION, MAINTENANCE AND REPAIR

Before mechanized equipment can be used, a competent mechanic must inspect it for safe operation. Records of tests and inspections must be maintained at the site. Any equipment found to be unsafe cannot be permitted on the jobsite until the deficiency has been corrected.

The Site Safety and Health Supervisor or his designee should visually inspect all equipment on a daily basis and during use to make sure it is in safe operating condition. Inspections should be made at the beginning of each shift during which the equipment is to be used to determine that the brakes and operation systems are in proper working order.

All equipment must be placed on a preventative maintenance schedule as recommended by the manufacturer.

All hoisting equipment must be capable of satisfactorily completing a performance test before being placed in service on the project. The test consists of maneuvering a specified test load through maximum lift height, lift radius and boom quadrant. The test must be repeated at least every 12 months and prior to unusual and critical tasks and after alterations, modifications, repairs or reassembly have been made. Test records must be part of the official project file.

With the exception of equipment designed to be serviced while running, all equipment must be shut down and a positive means taken to prevent its operation while repairs or lubrications are being done. See the **(Insert Company Name)** procedure for lockout tagout.

All heavy equipment or parts of equipment must be substantially blocked or cribbed before personnel are permitted to work underneath or between blades, buckets and dump bodies. Controls must be in a neutral position with the engine stopped and brakes set, unless work requires otherwise.

All repairs must be done in a location that is away from traffic.

All points requiring lubrication during operations must have fittings located or guarded so as to be accessible without hazardous exposure.

3.6 TRAINING

Only designated, properly trained and experienced personnel will be allowed to operate any (Insert Company Name) owned equipment. Records of training will be maintained at the (Insert Company Name) Headquarters.

All subcontractors prior to beginning work on a jobsite must provide certification of training on equipment operated by subcontractors to (Insert Company Name).

4 References

None

5 Appendices

None