Heavy Equipment Operation Meeting Kit



Heavy equipment is used on many different kinds of work sites all around the world. This equipment is very effective for the job it was designed to do, but it can also be very hazardous. Proper work planning as well as operating equipment within its designed limits are important basic steps for safe operation.

WORKERS BE AWARE OF HEAVY EQUIPMENT HAZARDS

- **Struck-by hazards-** Heavy equipment is responsible for many injuries and fatalities in the workplace. Ground personnel are far too often struck by equipment when they are in the line of fire.
- **Property damage-** When operators do not see vehicles, materials, objects, tools, buildings, etc. in their area of operation property damage occurs. This costs employers millions of dollars a year in losses.
- **Contact with powerlines-** Equipment should stay at least 10 feet away from powerlines and poles. When voltage of the lines increase the distance to stay away from lines also needs to increase.
- Leaks- Leaks can cause issues in the equipment as well as damage to the environment. Many project owners have a very strict zero tolerance policy when it comes to leaks.
- **Equipment failure-** Hydraulic or other systems that fail can cause a major incident.

COMMON SAFETY RULES FOR OPERATORS AND WORKERS

1) Good communication is essential. A standardized set of hand signals should be used by the operator and signal person. Operators should always know exactly where all ground-based workers are located, and the wearing of high visibility vests will help the operator to locate them quickly. The equipment should have a backup warning alarm that can be heard by all nearby workers. Two-way radios are also valuable communication tools.

2) Heavy equipment must have a rollover protective structure (ROPS) meeting OSHA requirements. The ROPS is designed to protect the operator if the machine tips over. A seat belt must be worn so that the operator will not be thrown out of the seat during a rollover. If working on slopes, try to avoid moving across the face of the slope. Try to operate up and down the slope face. Use extreme caution when operating near open excavations.

3) Wear hearing protection when required. If it has been determined that noise levels around the equipment could potentially cause hearing loss, always use protective

plugs or muffs when working on or around the equipment.

4) Never jump onto or off the equipment. Operators should always use the three-point contact rule when climbing onto or off heavy equipment. The three-point rule means having both feet and one hand, or one foot and both hands in contact with the ladder access at all times.

5) Inspect and service the equipment regularly. Complete equipment service in accordance with the manufacturer's recommendation. Periodic safety inspections on all components of the equipment should be done regularly by qualified personnel. Inspect the steering system and brake systems carefully. A pre-shift walk around inspection by the operator is highly recommended.

Tips To Keep Workers Safe

1. **Train, Train, Train – And Train Some More**

Many workers learn their jobs by operating light equipment, such as a trench roller, under the guidance of an experienced operator. Later, they may operate heavier equipment, such as bulldozers. Operators of some equipment, such as machines with computerized controls, may need more training and some understanding of electronics.

Anyone who operates a piece of heavy equipment must be certified and trained to use it. You should never allow an untrained operator into the cab of a piece of heavy machinery.

Make sure that workers who operate heavy equipment have a completely comprehensive understanding of how the machine works, what to do in emergencies, and the proper safety steps they need to take while operating the equipment.

Consider having biweekly or monthly safety training sessions for equipment operators to help them brush up on safety skills and knowledge.

2. **Inspect All Of Your Machines Regularly Before Operation**

Make sure that your equipment operators inspect the basics – such as brakes, fluid levels, tires, headlights, and so forth – every day.

Hire a trained professional to service your equipment regularly. The service schedule will vary – check the owner's' manual or documentation of your equipment for more details. Inspection and maintenance will keep workers safe.

3. **Don't Rush – Keep Things Slow And Steady**

We know what it's like to be behind on a job deadline, or to need to speed things along to finish a critical project milestone before night falls. You may be tempted to try to speed things up by rushing things when operating heavy equipment, or you may skip safety checks and tell operators to hurry.

4. **Communicate Effectively On Your Job Site**

Communication is key when operating heavy equipment. Make sure that all workers in the area know when a vehicle is occupied and in operation. Use a construction foreman and spotters to keep the danger areas around a vehicle clear – to keep workers away from the sweep area of a front-end loader, for example.

Make the responsibilities for communication clear among all equipment operators. In addition, create clear and comprehensive safety guidelines, procedures and policies –

and outline the penalties for breaching these procedures.

5. **Minimize Employee Distractions – No Phones!**

If you don’t already have a firm “no phones” policy on your worksite, now is the time to implement one. Construction sites are hazardous places, and there are many obstacles and other dangers that could be threatening to anyone who is distracted while walking – or operating a piece of machinery.

FINAL WORD

This is a small list of the many hazards that are present when dealing with heavy equipment on a work site. Consider what unique hazards the equipment and job tasks create on your work site. Constant focus on pre task planning as well as what safeguards are needed is important to remain safe while operating heavy equipment.