Powered Mobile Equipment – Compliance Game Plan



The 12 things to do to prevent forklift and other PME injuries and violations.

Forklifts and other powered mobile equipment (PME) accidents are a leading source of fatal and serious work injuries. Failure to comply with OHS PME requirements is also one of the most common causes of stop work orders, fines and other penalties. Here's a 12-step compliance plan to prevent either of these things from happening at your workplace.

> *Defining Our Terms*
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> *Powered mobile equipment, aka, 'lifting equipment,' 'motorized materials handling equipment,' 'mobile equipment' and 'lift trucks,' includes forklifts, platform lift trucks, motorized hand trucks and other specialized industrial trucks used to lift and move materials powered by an electric motor or internal combustion engine.*

Step 1. Ensure PME Meets Design & Equipment Standards

All PME units at your workplace must be safely designed and constructed. Don't make modifications and additions that affect the equipment's capacity and safe operation (or use it for operations) that aren't in line with the manufacturer's instructions. PME must have legible nameplates and markings.

Step 2. Ensure PME Has Required Safety Equipment

You can't operate PME without verifying that it has all of the safety equipment and features the OHS regulations require, including:

- A horn and other audible backup warning device;
- Overhead protection from falling objects that meets Society of Automotive Engineers (SAE) standards for that particular type of PME (such as SAE Standard J1042 (2003) for general purpose industrial machines);
- Windows, windshields and/or canopies made of safety glass or other non-shattering material;
- A device enabling the operator to quickly stop any ancillary equipment driven from the PME;
- An effective brake system consisting of a primary brake system, secondary emergency or supplementary brake system and parking brake;
- Proper guards for gears and moving parts;
- Rear-view mirrors;
- Fire extinguishers; and
- Lights, if the PME is used in hours of darkness.

Step 3. Ensure PME Has Necessary ROPS

Forklifts and other PME at risk of tipping over must be equipped with rollover protective structures (ROPS) that meet the technical requirements of the applicable version of CSA B352 or SAE standard for that particular type of machine. ROPS-equipped PME must also have seatbelts meeting CSA, SAE or ISO requirements.

Step 4. Ensure Only Qualified Workers Operate PMEs

While operator qualification rules vary slightly by province,

in general, PME may be operated only by workers who:

- Are trained to safely operate the equipment;
- Demonstrate their competency in safely operating the equipment; and
- Are properly authorized by the employer to operate the equipment.

Exception: The first 2 requirements don't apply to trainees who operate the equipment under the direct supervision of a competent supervisor or worker for training purposes.

Step 5. Establish Written Procedures for Safe Operation of PME

OHS laws list general safety ground rules for use of PMEs, including the requirement that operators:

- Report any conditions affecting the safe operation of the equipment to the employer;
- Maintain full control of the equipment at all times;
- Use and ensure that any passengers use the seat belts and other safety equipment;
- Not carry passengers if the PME isn't designed for that use;
- Keep the cab, floor and deck free of materials, tools or other objects that could interfere with operating the controls or create a tripping or other hazard; and
- Take precautions when leaving the equipment unattended, including parking on level ground, setting the brake, disengaging the master clutch, lowering the blades and bucket, stopping the engine and removing the key.

Step 6. Require Visual Inspection Before Each Use

Ensure that nobody starts the PME unless and until the operator completes a visual inspection of the equipment,

following the manufacturer's instructions, to ensure that the PME is in safe operating condition. The visual inspection should also extend to the immediate area where the equipment is to be used to ensure that no worker is endangered when it's started up. Operators should also carry out regular visual inspections while the equipment is in use at intervals specified by the manufacturer.

Operators must report any defects or dangerous conditions. Upon receiving such a report, the employer must ensure that any worker in immediate danger is protected and that the PME is shut down and not put back into service unless and until the problem is fixed. Some jurisdictions also require employers to keep written records of reported defects and how they were corrected for a stated period, for example, 2 years in BC.

Step 7. Ensure Safety of Areas Where PME Is Operated

Operating areas must be properly lit and kept free from obstructions and other hazards like potentially harmful dusts, overhead powerlines or pipelines containing toxic or explosive chemicals. Ideally, PME should be operated on flat surfaces. You must also take measures to warn and protect the safety of pedestrians and workers in operating areas.

Step 8. Implement Necessary Signaling Procedures

Under OHS regulations, you must have a signaling system in case PME operators have an obstructed view consisting of a pre-determined code of signals delivered by a worker that performs no other duties while acting as a signaler. If for some reason visual signals aren't effective, you must provide the signaler and operator a telephone, radio or other audible signaling device.

Step 9. Ensure Safe Refueling

The methods you use to handle and store PME fuel must meet applicable NFPA standards, depending on whether liquid or gas fuel is used. Refueling should take place in well ventilated areas after the PME is shut down (unless manufacturer's instructions permit or require refueling while the engine is running). Ban smoking or any other sources of ignition within at least 7.5 metres/24.6 feet of a vehicle while it's being refueled.

Step 10. Ensure Loads Are Safely Secured

To avoid loads that the PME can't safely handle, the equipment must be legibly marked so the operator can determine its safe working load. The material or equipment that the PME is transporting must be loaded or secured to prevent potentially dangerous shifting or movement, particularly during braking or on gradients, which may involve installing a bulkhead or other restraining device.

Step 11. Ensure PME Is Properly Maintained

Employers must ensure that PME and all component parts are maintained in accordance with manufacturer's instructions. Keep written records documenting the maintenance work you perform on PME.

Step 12. Don't Use PME to Transport Workers

Ensure that nobody uses PME to transport a worker unless the equipment is specifically designed for that purpose. In that case, the PME must be equipped with a mechanical parking brake and hydraulic or pneumatic braking system. In addition, you can't use PME for hoisting or positioning a worker, unless the

equipment is equipped with a platform, bucket or basket designed for those purposes.