



Company Name: _____ Job Site Location: _____

Date: _____ Start Time: _____ Finish Time: _____ Foreman/Supervisor: _____

Topic 510: General Material Handling Safety

Introduction: Tasks should be evaluated and altered to reduce awkward posture, twisting, bending, reaching over head, excessive weight, and repetition. Following are safety guidelines for handling material at the jobsite:

- **Prior to handling** unfamiliar and hazardous materials or chemicals, read the label for safety instructions, and refer to the material safety data sheet, or consult with your supervisor. Only handle materials and chemicals in approved containers and approved locations.
- **Wear** specific personal protective equipment when handling materials that present health hazards such as acids, corrosives, caustics and irritants.
- **Use** chemicals for approved purposes only. Do not siphon toxic liquids by mouth. Always clean up with non-hazardous cleaning agents.
- **Use** proper tools, hand trucks, dollies, carts, and hoists to lift and move heavy objects. Do not exceed the rated capacity of a hoist or lifting device.
- **Inspect** items to be handled for slivers, jagged edges, burrs, and rough or slippery surfaces. Wear protective gloves.
- **Wipe off** oily, wet, slippery or dirty items before trying to handle them. To adjust your grip set the object down.
- **Never carry** an object you cannot see over or around. Plan your route of travel and be sure it is clear of obstacles.
- **When moving items** on dollies or hand trucks, push rather than pull whenever possible. Chains used for material handling must be made of alloy steel. Test the weight of objects to be lifted. Get help if an item is too heavy to lift alone.
- **When team handling** an item, one person should give voice commands to coordinate the activity.
- **Avoid** getting your fingers, hands or other body parts pinched between the load and objects nearby.
- **All material** must be stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, falling, or collapse during transit.



Whenever lifting, use the proper lifting methods to avoid an injury:

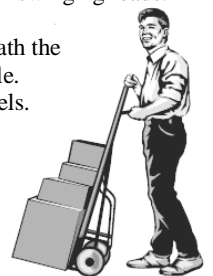
- **Stand** close to the load. Be sure footing is firm, feet slightly apart.
- **Squat** down. Bend at the knees, keeping the back as straight as possible, yet comfortable.
- **Grip** the load firmly. Place hands where they won't slip.
- **There must be** safe clearance in aisles, at loading docks, through doorways and where turns are made, where mechanical handling equipment is in use. Aisles and passageways must be clear and in good repair. Use tag lines or guide ropes when manual control is needed over swinging loads.
- **Workers must not** be under or near elevated loads and moving material unless they have adequate protection.
- **Block or crib** loads suspended in slings or supported by hoists, jacks, or other devices, before allowing workers to be underneath the load. Load pallet boards and trays so that the material is stable. Do not drop or throw material from an elevation to other people.
- **Material** must not obstruct lights and fire extinguishing equipment, including sprinklers, aisles, exits, or electrical control panels. When storing materials that could cause hazardous reactions, segregate and mark them with appropriate warning signs.
- **All equipment, structures, and accessories** used for handling materials must comply with sound engineering practices and the specifications and recommendations of the manufacturer. They must support the load of the material plus the weight of itself. Allow for wind, impact, erection and any special loadings that may occur. No combination of these loads may cause a stress on any part that exceeds the allowable stress for that part.



- **Breathe** in before the lift. Inflated lungs help support the spine.
- **Lift** with the legs. Keep the back straight and straighten up slowly and smoothly, avoiding jerking motions.
- **Hold** the load firmly. Keep it close to your body. Exhale.



- **Move** the item to its new location. Make turns with your feet instead of twisting your back.
- **When** putting the load down, squat, bend at the knees, and keep the back as straight as possible.



Batteries: Use only a carboy tilter or siphon to handle electrolyte. Set truck brakes before changing or charging batteries.

Risk factors for handling materials include: Repetitive and/or prolonged activities, forceful exertions with the hands, prolonged static postures or excessive gripping, awkward postures, including reaching above the shoulders or behind the back, and twisting the wrist and other joints, continued physical contact with work surfaces like sharp edges, hard concrete, excessive vibration, hot and cold temperatures, and inadequate handling of tools.

Reduce extreme and awkward postures by using adjustable fixtures and rotating tables, work stations, and delivery bins that can accommodate the height and reach limitations of various sized workers. Work platforms that move up and down, rotating the part in front of the worker so the wrist and waist can be straight, are excellent ergonomically correct pieces of equipment.

Conclusion: Proper lifting techniques are crucial to preventing back injuries in the workplace. All employees should be trained in the safe handling of materials. Always utilize these safety guidelines when handling materials.

Work Site Review

Work-Site Hazards and Safety Suggestions: _____

Personnel Safety Violations: _____

Material Safety Data Sheets Reviewed: _____ (Name of Chemical)

Employee Signatures: _____
(My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)

Foreman/Supervisor's Signature: _____

These guidelines do not supersede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.