



Company Name: \_\_\_\_\_

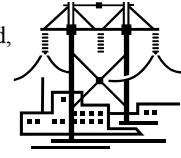
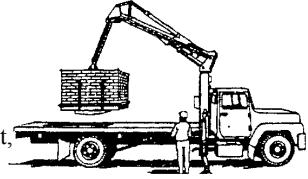
Job Site Location: \_\_\_\_\_

Date: \_\_\_\_\_ Start Time: \_\_\_\_\_ Finish Time: \_\_\_\_\_ Foreman/Supervisor: \_\_\_\_\_

**Topic 349: Power Lines and Equipment Operations (Part B – Safe Work Practices)**

**Introduction:** “Working in the vicinity of power lines” can be regarded as any work area where the possibility of contacting an energized electric line exists. Power lines present a serious hazard to equipment operators and all personnel using aerial equipment or elevated tools. Following are some guidelines for safety when working around power lines:

- **Employers must ensure** that all personnel who operate aerial equipment or elevated tools are properly trained and knowledgeable of the hazards of working near power lines.
- **Comply with all** local, state, and federal regulations concerning work near power lines.
- **Always check** the jobsite for the location of power lines. Make appropriate plans to avoid the lines.
- **Call the utility operator** before beginning any excavation or job near overhead power lines. The power company can de-energize the line and provide additional assistance to perform your job safely.
- **Minimum clearance** distance from power lines is not only for stationary equipment but also apply to any equipment, tool, or part passing within the clearance area even momentarily.
- **Before elevating** any equipment, tools, or ladders, check overhead to ensure you have proper clearance from overhead lines.
- **Always assume** a power line is energized.
- **Do not raise** or place ladders within 10 feet of an electrical supply line.
- **Anticipate the effects** of wind, momentum, stress, and sudden movement of equipment which may cause contact with power lines. Locate operations an additional distance from the power lines to take such factors into account.
- **Do not lift loads** over power lines without taking into account the minimum clearance distance which extends 360 degrees around a power line.
- **Never locate** the construction site for a well, drilled shaft, or any structure under or near a power line. The chance of an accident occurring during the course of work is a hazard which can easily be avoided with proper planning.
- **If there are** power lines anywhere on the jobsite, do not move elevated equipment in the raised position (including raised dump beds on trucks).
- **If equipment operations** are required anywhere near power lines, use a signalman to watch clearances and guide equipment. Designate **only one person** as a signalman.
- **If any work** is to be performed within minimum clearances specified for power lines, the line must be de-energized and grounded, or other adequate protective measures must be provided before work is started. If the lines are to be de-energized, arrangements must be made with the person or organization that operates or controls the electric circuits to de-energize and ground the lines.
- **If protective measures** such as guarding, isolating, or insulating, are used, these measures must prevent employees from contacting the lines directly with any body part or indirectly through conductive material, tools, or equipment.
- **If any vehicle** or equipment having part of its structure elevated near energized overhead lines is intentionally grounded, employees working on the ground may not stand at the location where the equipment is grounded whenever there is the possibility of overhead line contact.
- **Additional precautions**, such as the use of barricades or insulation, shall be taken to protect employees from hazardous ground potentials, that depend on earth resistivity and fault currents, which can develop within the first few feet or more from the grounding point.
- **If excavating** in the vicinity of buried cables, carefully uncover and positively locate the exact position of the power line by hand digging before performing machine operations.



Grounding of equipment, insulating devices, and sensors all help ensure the safety of workers, but all have limitations and may not prevent an accident or injury. If a piece of equipment does come in contact with an energized line observe the following guidelines:

- **Do not touch** any part of the equipment or vehicle, or attempt to enter or exit the vehicle. Keep all personnel away from the equipment.
- **If you must** exit the equipment or vehicle, it is important that you not touch any metal parts and leap as far away from the equipment/vehicle as possible (high voltage electricity can arc several feet to ground).
- **Attempt rescue** only as a last resort. If rescue must be attempted, use a dry clean piece of rope or wood to remove the victim. Keep as far away as possible. Do not touch the victim until he/she are well clear of the hazard. Do not become a victim yourself.
- **If the victim** is unconscious when clear of the hazard seek emergency medical assistance and immediately evaluate the victim. If necessary, and if trained, begin Cardio Pulmonary Resuscitation (CPR).



**Conclusion:** Maintaining proper clearance at all times is the best precaution to eliminate electrical accidents on the job. This safety training is intended for use with Topic 348: Power Lines and Equipment Operations (Part A-OSHA Requirements).

**Work Site Review**

Work-Site Hazards and Safety Suggestions: \_\_\_\_\_

Personnel Safety Violations: \_\_\_\_\_

**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.)*\_\_\_\_\_  
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\_\_\_\_\_**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.*