Farming Around Power Lines Meeting Kit

ELECTRICAL HAZARDS

Overhead power lines on a farm or ranch can pose a significant electrocution hazard. Because power lines may have been installed without insulation or the insulation may have worn off due to exposure to weather, you should assume that all power lines are bare. When electricity enters something or someone, it takes the easiest and shortest path to electrical ground, the point at which the electricity is absorbed.

DANGEROUS FARM EQUIPMENT

There are numerous pieces of equipment on a farm or ranch that, due to their height, can come in contact with overhead power lines:

- loader tractors
- portable grain augers and elevators
- dump trucks
- cultivators in transport mode
- irrigation pipes
- equipment with antennas

SPECIFIC RISKS

Dump trucks: The person operating the dump truck should note the location of power lines before raising the bed and should not move the dump truck or trailer while the bed is in the raised position.

Typically, if a raised bed contacts a power line, the operator will not be at risk of electrocution if he or she remains inside the vehicle because the truck’s tires provide insulation. If, however, a person standing on the ground touches the dump truck or

trailer while it is in contact with an overhead line, he or she could be electrocuted.

Hay: A loader tractor or telescopic loader may be used during hay handling. Because the booms of such vehicles may reach as high as overhead power lines, hay should not be stored under power lines.

Grain bin: Electrocution incidents associated with grain bins occur when augers and/or elevator equipment is used in the vicinity of overhead power lines.

REDUCE RISK OF ELECTROCUTION

- When possible, choose equipment routes that avoid known power line locations.
- Never touch a power line.
- Avoid using ladders, portable augers, or irrigation equipment around power lines.
- Maintain 10 feet of clearance space between the power lines and your equipment. Contact your power company to determine the height of power lines on your farm.
- Review safety measures with all individuals working on your farm, whether full-time, part-time, or voluntary.
- Remember that even non-metallic objects, such as tree limbs, ropes, and straw, can conduct electricity.

ELECTRICAL FACTS AND SAFETY NEAR POWER LINES

1. Most overhead power lines have no protective insulation. Physical or equipment contact is dangerous.
2. Non-metallic materials such as lumber, tree limbs, tires, ropes, straw and hay, are capable of conducting electricity, depending on moisture content and surface contamination.
3. Electricity always seeks the path of least resistance to the ground.
4. You can be electrocuted by simply coming too close to a

power line. Electricity can arc or “jump” between a wire and a conducting object, such as a ladder or a truck.

5. When electricity flows into the ground, it can electrocute anyone who comes close. Stay at least 10 metres away from fallen wires. Also, if you see equipment or a person in contact with a power line, be aware that the ground may be energized and be dangerous to bystanders.

FARM SAFETY RECOMMENDATIONS

- Start each morning by planning your day’s work. Know what jobs will happen near power lines and have a plan.
- Use care when raising augers or the bed of a grain truck. It can be difficult to estimate distance, and sometimes, a power line is closer than it looks. Use a spotter to make certain you stay far away from power lines.
- Always lower equipment extensions, portable augers, or elevators to their lowest possible level, under 14 feet, before moving or transporting them. Wind, uneven ground, shifting weight, or other conditions can cause you to lose control of equipment and make contact with power lines.
- Be aware of increased height when loading and transporting larger modern tractors with higher antennas.
- Never attempt to raise or move a power line to clear a path. If power lines near your property have sagged over time, call your utility company to repair them.
- Don’t use metal poles when breaking up bridged grain inside and around bins.
- If you are on equipment that contacts a power line, do not exit the equipment. When you step off the equipment, you become the electricity’s path to ground and receive a potentially fatal shock. Wait until utility workers have de-energized the line and confirmed it is safe for you to exit the vehicle. If the vehicle is on fire and you must exit, jump clear of the vehicle with both feet together. Hop as far from the vehicle as you can with your feet together. Keep your feet together to prevent current flow through your body.

NITTY-GRITTY OF FARMING AND POWER LINES

- Never stack hay or pile grain near power lines.
- Use care when doing field work around power poles and guy wires. Watch for broken or dislodged guy wires.
- Never place bulk fuel tanks or granaries near power lines.
- Never spray water hoses or irrigation pivots at power lines.
- When using machinery to dig, a clearance distance of one metre (3.2 feet) has to be maintained from any underground electrical cable. If you must work closer, contact your electrical service provider.

FINAL WORD

Farm equipment like augers, hoisted truck boxes and large cultivators in transport position are a few examples of farm equipment that could come into contact with power lines.