Ask the following questions and give time for answers.

**What are the hazards?** Struck-by or pinned against an object or equipment

**What are the results?** Broken or crushed limbs and bones, entrapment, internal damage, and death.

**What should we look for?** Proper operation, designated work areas for employees and equipment, back up alarms, rollover protection, proper equipment training

**Actual Incident:**
In May 2015, three workers were removing a fence (with stakes) that surrounded a housing development drainage pond. The loader was being used to pull up the stakes as overgrowth around the pond made it difficult to remove them by hand. As the operator was raising the lift arms to pull the third stake, the loader tipped forward. To stabilize the machine, the operator lowered the bucket. At the same time, an employee was standing in front and to the side of the loader, in the operator’s blind spot. The bucket struck him in the chest and he died shortly thereafter from traumatic chest injuries.

**How do we prevent these results?**

* Always use and maintain the safety devices provided by manufacturer.
* Interlocked controls; Backup alarms; Seat belts and Roll Over Protective Systems (ROPS).
* Operate the loader from the operator’s compartment, never from the outside.
* Stay seated when operating the loader; work with the seatbelt fastened and the restraint bar in place.
* Keep your arms, legs, and head inside the cab while operating the loader.
* Load, unload, and turn on level ground when possible; operate on stable services when possible.
* Keep people clear when a load is being lifted or when in the operating zone of the equipment.
* Never go beyond the manufacturer’s load capacity for the machine.
* Develop and implement a traffic control plan and train all employees on plan elements.

**OSHA STANDARDS:** 1926.600 and Section 5(a)(1) of the OSHA Act

**Source:** 2013 CPWR—The Center for Construction Research and Training www.cpwr.com

This information has been developed by OSHA and its partners with the intent to assist employers, workers, and others as they strive to improve workplace health and safety. This information must be understood as a tool for addressing workplace hazards, rather than an exhaustive statement of an employer’s legal obligations, which are defined by statute, regulations, and standards.