

Fatal Alert

On October 17, 2017 three Town maintenance employees were helping a home owner fix a broken water line. The water line had been broken by the home owner's contractor who then had to leave the work site. The three employees had fixed a misconstrued sewer clean out line, and had just finished digging the excavation for the water line with a backhoe.

The supervisor had employee #1 move the trench shield closer to the backhoe using a skid steer. Employee #2 hooked the trench shield to the boom bucket of the backhoe using a four-legged synthetic bridle with oblong gathering ring. The ring was set in a welded on grab hook on the backhoe boom bucket. The trench shield was lifted and moved from right to left to the excavation.

During this movement of the trench shield the operator of the backhoe had to raise the trench shield over a six foot high spoil pile. While raising the trench shield employee #2 singled that the backhoe operator was coming into contact with an above ground telephone line. The backhoe operator began to slowly manipulate the controls to see if he could get the overhead telephone line to slide across the bucket. At this point, the left rear edge of the trench shield contacted the spoil pile, lifting the gathering ring off the hook on the backhoe boom. The trench shield fell, as the ring left the hook and employee #1 walked next to the backhoe's right out rigger. The trench shield fell striking and pinning employee #1 to the ground, crushing him.

Significant factors

- The hook was not being used as intended by the manufacturer.
- The hook was also pulled open which allowed the ring to somewhat be accepted by the hook. But the ring would not fall into the belly of the hook.
- The rigging had not been adequately inspected by a competent person.
- The three employees had been adequately trained in the fundamentals of rigging, including inspection, rigging the load, out of service requirements of rigging gear, and the hazards associated with rigging.

Recommendations

- Use the rigging gear as the manufacture intended.
- Train employees in the fundamentals of rigging.
- Implement the use of tag lines to keep employees clear of dropped loads.