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SAFETY ALERT

07-S-12

HEAVY EQUIPMENT OPERATOR INJECTED WITH GREASE

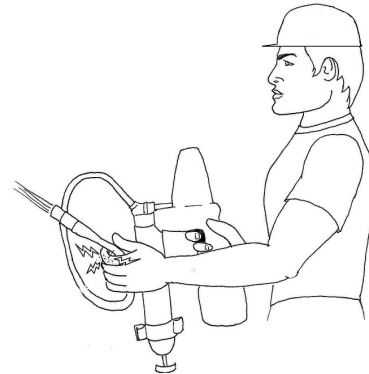
August 2007

www.forestresources.org/members/serpub/07-S-12.html

BACKGROUND: The operator of a whole-tree processor had finished merchandizing trees at the end of a hot, humid summer day in the South. He then started greasing the processor for the next day's work. The employee's company had been using the pneumatic grease guns to service the logging equipment less than two years.

PERSONAL CHARACTERISTICS: The 38-year-old operator had been working in logging operations about twenty years and was considered to be a trained equipment operator at the time of the accident. This employee had been operating the processor for about 22 months and had been with the company for four years.

UNSAFE ACT OR CONDITION: The operator was not wearing gloves when he started greasing up the processor with the pneumatic grease gun. The operator was holding the short, flexible hose in one hand to position the nozzle correctly on grease fittings and used the other hand to pull the trigger on the gun to inject grease into the fittings. The pneumatic grease gun was less than two years old and had no known history of problems or malfunctions.



ACCIDENT: As the operator pulled the trigger, he experienced the momentary stab of pain that comes with having grease injected into the finger. He immediately released the trigger. A later examination of the hose revealed a pin-sized hole in the flexible hose had caused the grease to be injected into his finger.

INJURY: The operator went to the crew truck and cleaned off the injured finger and squeezed out all of the grease he could. He then bandaged the finger and continued greasing the machine. He went home after the work was finished. Before the next morning, the operator experienced pain in his hand and was carried to a local hospital (about 12 hours after the accident) for treatment. The hospital recognized the problem and immediately rushed the employee to a larger hospital that specializes in treating injection injuries. Within 24 hours of the accident, the operator had undergone successful surgery to remove the grease in the finger, saving the finger. He was out of work for more than three weeks and fully recovered in two months. The total incurred cost of this accident was over \$32,000 (in addition to the logging crew's loss in productivity).

RECOMMENDATIONS FOR CORRECTION:

The amount of fluid injected, type of fluid (or material), pressure at which it was injected, and the elapsed time between injection and surgery all influence the chances of successful treatment for this type of serious injury.

- (a) Always remove dirt and grease from grease fittings prior to greasing.
- (b) OSHA requires that protective shrouds be kept on all grease gun nozzles as safety devices.
- (c) The most common types of pneumatic grease guns today deliver grease at pressures from 1.7MPa (246 psi) to 40 MPa (5801 psi). It takes less than 100 psi to inject a substance through human skin.
- (d) Replace any defective grease fittings on equipment with new fittings immediately.
- (e) Regularly inspect all parts of the grease gun for wear and tear and immediately replace all worn or damaged parts with new parts.
- (f) When badly positioned fittings are identified, replace them with angled or swivel fittings for easier access.
- (g) All operators of high-pressure grease guns, machinery, etc. should be thoroughly trained in the hazards of its operations and the treatment for such injuries.
- (h) ALWAYS get professional medical treatment immediately after any type of injection injury.
- (i) Provide the physician with information on the type of grease, the pressure setting of the gun, and similar details.

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Please follow equipment manufacturers' recommendations for safe operation and maintenance procedures.