

### 3 Crushed by equipment--insp#1468412 Head Equipment

A **30 year old male** was **crushed** between the cab/counterweight of a John Deere 790D LC excavator and a piece he had cut off of the base of the excavator for salvage.

The employer is in the business of selling salvageable parts off various sized pieces of heavy equipment including excavators, bulldozers, backhoes, road graders, etc. The facility contains a 35 acre salvage yard. Once the salvaged parts have been cut off a piece of equipment, the equipment is marked with the word "cut" and then it is dismantled, cut into smaller pieces and sold to a scrap metal facility. It was determined that the victim was the only person at the facility who performed the task of cutting up heavy equipment.

According to employees, the victim normally separated the cab from the base of the equipment by cutting the slewing ring first then used a grapple to take the cab off the base. It was determined that when a machine is being scrapped, like the day of the accident, all of the hydraulic lines, brake system and springs to prevent the cab from rotating would have been removed. One employee stated that sometimes when this was the case, the victim would just put the boom on the ground to prevent the cab from spinning.

During the inspection, the excavator involved in the fatality was observed. It appeared that the safety systems (hydraulic lines, brake system, and springs, etc.) used to secure and stabilize the cab from rotating had been removed for salvageable purposes. Also it was noted that the machine was sitting on a rolling hill in the yard which put it at an angle and not on a level surface.

It is presumed that while the victim used the cutting torch to dismantle it, the excavator shifted allowing the cab to spin striking the victim then pinning him underneath it. He was working alone at the time of the incident.

#### **Citation(s) as Originally Issued**

A complete inspection was conducted at the accident scene. Some of the items cited may not directly relate to the fatality.

#### **Citation 1 Item 1**

**Type of Violation: Serious**

**\$5,400**

**TCA 50-3-105(1):** The employer did not furnish employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to employees:

In that an employee was crushed between the cab/counterweight of a John Deere 790D LC excavator and a piece that had been removed from the equipment for salvage.

3 Crushed by equipment--insp#1468412 Head Equipment

Among other methods, feasible and acceptable abatement methods to correct this hazard are:

- a) use a secondary means of supporting the heavy equipment while an employee is cutting it into smaller pieces,
- b) develop and implement procedures for employees to follow to ensure the safe removal of parts from heavy equipment,
- c) stage the piece of equipment to be cut up on a level surface during the cutting process to prevent movement and/or tip over,
- d) keep the hydraulic braking system and springs connected to prevent the cab from free spinning

**Citation 1 Item 2 a**

**Type of Violation: Serious**

**\$900**

**29 CFR 1910.134(c)(1):** A written respiratory protection program that included the provisions in 29 CFR 1910.134(c)(1)(i) - (ix) with worksite specific procedures was not established and implemented for required respirator use:

In that the employer had not developed a respiratory protection program for employees who were required to wear half face and full face tight-fitting respirators with cartridges when spray painting parts.

**Citation 1 Item 2 b**

**Type of Violation: Serious**

**\$0**

**29 CFR 1910.134(e)(1):** The employer did not provide a medical evaluation to determine the employee's ability to use a respirator, before the employee was fit tested or required to use the respirator in the workplace:

In that employees were required and given 3M half mask and full mask respirators to use when spraying Cat Yellow Enamel without first being medically evaluated to determine the employees' ability to use a respirator.

**Citation 1 Item 2 c**

**Type of Violation: Serious**

**\$0**

**29 CFR 1910.134(f)(2):** Employee(s) using tight-fitting facepiece respirators were not fit tested prior to initial use of the respirator and at least annually thereafter:

In that employees required to use a 3M half mask and 3M Full Face respirators when spraying parts with Cat Yellow Enamel, had not been fit tested.

**Citation 1 Item 2d**

**Type of Violation: Serious**

**\$0**

**29 CFR 1910.134(k)(1):** The employer did not provide effective training to ensure that each employee could demonstrate knowledge of 1910. 134(k)(1)(i) - (vii):

3 Crushed by equipment--insp#1468412 Head Equipment

In that employees required to use a 3M half mask and 3M Fall Face respirators with 3M 6001 CN Organic Vapor Cartridges when spraying parts with Cat Yellow Enamel had not received initial respirator training.

**Citation 1 Item 3**

**Type of Violation: Serious**

**\$1,050**

**29 CFR 1910.151(b):** In the absence of an infirmary, clinic, or hospital in near proximity to the workplace which is used for the treatment of all injured employees, a person or persons were not adequately trained to render First Aid:

In that there was no one on site, at all times when employees are working, with a valid certification in first-aid.

**Citation 2 Item 1**

**Type of Violation: Other-than-Serious**

**\$0**

**29 CFR 1910.1200(h)(1):** Employees were not provided effective information and training on hazardous chemicals in their work area at the time of their initial assignment and whenever a new hazard that the employees had not been previously trained about was introduced into their work area:

In that an employee had not been provided initial information and training on the hazardous chemicals to which he was exposed.



3 Crushed by equipment--insp#1468412 Head Equipment

