## Case 261. 39-year-old male heavy equipment operator died when he was ejected from the driver's seat of the Daewoo loader equipped with a tree fork and then pinned under the driver's side rear tire.

39-year-old male heavy equipment operator died when he was ejected from the driver's seat of the Daewoo loader equipped with a tree fork and then pinned under the driver's side rear tire. The decedent, who was an authorized operator of the loader, fueled the loader at the fueling station located at the top of a hill. After fueling, he proceeded down the steep hill's logging road to begin work at the bottom of the hill. It is unknown if, at the fueling station, he attached his seat belt. It appears that at one point during his descent, the decedent either lost control of the loader or attempted to apply the brakes which were non-functional. The loader began to gather speed and began to "bunny hop" or "buck" after it struck a dirt berm. The loader's fork marks were found on the path of his descent. Witnesses observed the decedent "bouncing around" in the operator cab as the loader proceeded down the slope. When the decedent and the machine reached the bottom of the hill, the decedent was ejected either through the front windshield or the operator door. The loader struck an excavator parked at the base of the hill, rolled back, and came to rest. The decedent was pinned under the driver's side rear tire. The front windshield came to rest behind and to the left of the loader. The investigating MIOSHA compliance officer did not note hydraulic fluid on the hill along the path of the loader. Another contractor, a few days later, moved the loader. He found that the brake hydraulic sight gauge did not show any fluid in the reservoir. No hydraulic fluid was found under the machine. He started the loader and the machine made a noise described as the hydraulic pump lacking oil. This contractor added five gallons of hydraulic fluid to the reservoir. The fluid was retained within the reservoir, but the brakes still did not work as he moved the machine. In addition, the loader as it was moved after the addition of the hydraulic fluid, continued to make the same sound. Investigation found that the front left brake line had been braised several months to a year prior to the incident.

The MIOSHA Construction Safety and Health Division issued the following Serious citations and Health and Safety Recommendation to the employer at the conclusion of its investigation.

SERIOUS: GENERAL RULES, PART 1 RULE 114(2)(c)

Inspections of the construction site, tools, materials, and equipment to assure that unsafe conditions which could create a hazard are eliminated were not conducted.

Employee was driving a Daewoo front end loader down a sloped access road when the brakes failed; he lost control and was ejected from the machine.

SERIOUS: MOBILE EQUIPMENT, PART 13

## RULE 1301 REF OSHA 1926.602(a)(4)

Brakes. All earthmoving equipment mentioned in this 1926.602(a) shall have a service braking system capable of stopping and holding the equipment fully loaded, as specified in Society of Automotive Engineers SAE-J237, LoaderDozer-1971, J236, Graders -1971, and J319b, Scrapers-1971. Brake systems for self-propelled rubber-tired off-highway equipment

manufactured after January 1, 1972 shall meet the applicable minimum performance criteria set forth in the following Society of Automotive Engineers Recommended Practices:

Self-Propelled Scrapers......SAE J319b-1971

Self-Propelled Graders ......SAE J236-1971

Trucks and Wagons .....SAE J166-1971

Front End Loaders and Dozers .....SAE J237-1971

Employee was driving a Daewoo front end loader down a sloped access road when the brakes failed; he lost control and was ejected from the machine.

## RULE 1301 REF OSHA 1926.602(b)(1)

Tractors covered in paragraph (a) of this section shall have seat belts as required for the operators when seated in the normal seating arrangement for tractor operation, even though back-hoes, breakers, or other similar attachments are used on these machines for excavating or other work.

The employee not wearing a seat belt was driving a Daewoo front end loader down a sloped access road when he lost control and was ejected from the machine.

## SAFETY AND HEALTH RECOMMENDATION

NOTICE: Potential Safety or Health Hazard. An inspection/investigation of your premises or worksite revealed the following conditions which may constitute a threat to the safety or health of your employees:

1. A complete inspection shall be performed on 7119 Daewoo Model MG 200-111 Serial Number 1034 and any repairs shall be fixed before the loader is put back in service or sold.