

Case 526. 56-year-old truck mechanic died when he was struck by the steel lever arm responsible for lifting and lowering a logging trailer axle which broke at the pivot point due to an uncontrolled expanding air lift bag system.

A 56-year-old male truck mechanic died when he was struck by the steel lever arm responsible for lifting and lowering a logging trailer axle which broke at the pivot point due to an uncontrolled expanding air lift bag system. The logging trailer being worked on utilized air lift bags for suspension. The incident occurred on the furthest most rear axle. Three air lift bags were positioned on each axle. One air lift bag in front of the axle lifted the axle and rear tires and the two air lift bags in the back pushed downward on the axle with the tires down to allow more support on the trailer during transport of the logs. An air valve on each axle controlled the pressure being applied to the air bags. There was a steel lever arm approximately 5 feet in length, 4 inches in width and depth that raised and lowered, lifting and lowering the rear axle. A steel pin approximately 1 inch in diameter and 6 inches in length allowed the lever arm to move up and down. The logging truck driver who was assisting the decedent indicated that the decedent heard a noise coming from the air line system. To investigate the source of the noise, the decedent placed his body under the trailer to inspect it. The air valve was not working properly and was holding constant pressure on all three of the rear axle air lift bags, resulting in force on both sides of the pivoting steel lever arm. The force placed on the lever arm by the inflated air lift bags resulted in the lever arm breaking and allowing the air lift bag to fully expand/extend. The decedent was struck by the lever arm when it broke.

MIOSHA General Industry Safety and Health Division issued the following Serious citations at the conclusion of its investigation.

Serious: GI PART 85, THE CONTROL OF HAZARDOUS ENERGY SOURCES (LOCKOUT/TAGOUT) [REF 408.18502]

- Rule1910.147(c)(ii): The procedures shall clearly and specifically outline the scope, purpose, authorization, rules, and techniques to be utilized for the control of hazardous energy, and the means to enforce compliance including but not limited to, the following:
 - (A) A specific statement of the intended use of the procedure;
 - (B) Specific procedural steps for shutting down, isolating, blocking and securing machines or equipment to control hazardous energy;
 - (C) Specific procedural steps for the placement, removal, and transfer of lockout devices or tagout devices and the responsibility for them; and
 - (D) Specific requirements for testing a machine or equipment to determine and verify the effectiveness of lockout devices, tagout devices, and other energy control measures.

The employer had not developed a procedure that clearly and specifically outlined the scope, purpose, and techniques to be utilized for the control of hazardous energy when employees were troubleshooting maintenance services to be rendered. On *Date* 2019, an employee was fatally injured while working on a logging trailer in the maintenance shop. The employee was in the process of troubleshooting issues with the rear lift axle on the back end of the logging trailer while the truck and trailer were energized. *MIFACE removed the specific incident date.*

- Rule 1910.147(f)(l): In situations in which lockout or tagout devices must be temporarily removed from the energy isolating device and the machine or equipment energized to test or position the machine, equipment or component thereof, the following sequence of actions shall be followed:
 - i. Clear the machine or equipment of tools and materials in accordance with paragraph (e)(1) of this section;
 - ii. Remove Employees from the machine or equipment area in accordance with paragraph (e)(2) of this section;
 - iii. Remove the lockout or tagout devices as specified in paragraph (e)(3) of this section;
 - iv. Energize and proceed with testing or positioning;
 - v. Deenergize all systems and reapply energy control measures in accordance with paragraph (d) of this section to continue the servicing and/or maintenance.

On *Date* 2019, an employee was fatally injured while working on a logging trailer in the maintenance shop. The employee was in the process of troubleshooting issues with the rear lift axle on the back end of the logging trailer while the truck and trailer were energized. The employee was not safely positioned when the lifting beam broke and contracted the employee. *MIFACE removed the specific incident date.*