

Safety and health alert

52/99 Employee injured by inadequately guarded PTO coupling

Incident

An employee of a turf farm received severe arm injuries (almost requiring amputation) when he was caught in a rotating power take off (PTO) shaft, near the power input coupling. The PTO shaft connected a tractor to a boom-spraying implement.

As the employee moved between the tractor and the implement to operate the implement's controls, his arm was caught in the rotating PTO shaft. Although the PTO shaft was guarded, the guard did not extend over the power input coupling at the implement end.

The employee's arm was almost severed just below the shoulder.

Factors

1. Although the PTO shaft itself was guarded, a power input coupling guard was not fitted to the boom spray end as recommended by AS 1121-1983 Section 3 "Implement (PIC) Guard". This resulted in the rotating coupling where the PTO shaft connected with the implement, not being adequately guarded.
2. This hazard had not been identified in the workplace, and both staff and the employer believed that the PTO shaft guard was adequate.
3. The boom sprayer was approximately ten years old and it is possible that it was not initially supplied with a power input coupling guard at the implement end. The alternative is that the guard had been removed at some stage and not replaced.

Recommendations

1. Ensure all PTO shafts are guarded with a power output guard on the tractor, a PTO shaft cover and a power input coupling guard on the implement.
2. Provide adequate guarding on all moving parts of the plant. 'Adequate' guarding should prevent any part of a person from being caught in the operating machinery.

Further Information

Further information can be obtained from the WorkSafe internet site www.worksafe.wa.gov.au, or by contacting customer service on 1300 307 877 or email: safety@docep.wa.gov.au.

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