



Systemic Safety Alert **Preventing trapping hazard for work** **underneath the raised dump body of truck**

Performing inspection, maintenance and repair underneath the raised dump body of truck pose imminent trapping hazards to maintenance/ servicing personnel. Common work activities requiring workers to perform their work underneath the raised dump body include inspection, maintenance and repair to air or hydraulic lines, electrical wires, hydraulic pumps, fuel pumps, and other activities such as routine cleaning, lubrication and framework welding. Workers are subject to the risk of being struck or trapped between the truck chassis and the dump body by its sudden lowering or collapse. Such sudden movement may be induced by inadvertent control operation, inadvertently pulling a release cable, hydraulic failure, and premature reconnecting of an air-line. Most of these accidents were attributed to the absence of a safe system of work and slack on-site control.

Major systemic safety problems

Proprietors/employers are required to adopt effective preventive measures and make necessary arrangements to ensure the safety and health at work of employees/workers engaged in work underneath the raised dump body of truck. Major systemic safety deficiencies include: -

- failure to conduct task-specific risk assessments, formulate method statements and clearly specify the safe working procedures and sequence of work;
- failure to develop and fully implement an effective permit-to-work system as necessary;
- slack monitoring and control to ensure the necessary safety precautions continue to be effective;
- failure to properly communicate necessary safety information and instructions, including the potential hazards and their corresponding risk control measures, through specific safety training to workers;



- failure to provide proper support to prevent the raised dump body from unexpected lowering;
- lack of proper repair or preventive maintenance for the truck and its auxiliary devices leading to degradation of mechanical integrity and malfunctioning;
- failure to designate and fence off the affected area for conducting inspection, maintenance or repair under the raised dump body to prevent unauthorized persons from approaching and interfering with the truck and put themselves at risk; and
- insufficient arrangement to ensure that the operating personnel such as dump truck operators and servicing personnel have the required competence in terms of knowledge, skills and experience to properly discharge their duties in connection with the work, resulting in, for instance, these personnel being ignorant about the operating instructions or functioning of safety devices.

Accident prevention measures

RSOs should advise their employers/clients to: -

- appoint a competent person to conduct task-specific risk assessments to identify all potential hazards associated with the work, taking into account the type of works to be carried out, the working conditions of the workplace and the personnel undertaking the tasks;
- formulate detailed method statements specifying the sequence of work with appropriate safe working procedures and safety precautions/measures based on the results of the risk assessments;
- ensure clear delineation of safety responsibilities and effective coordination and communication among the plant owner, supervisor, co-workers and any related personnel involved in the work activities for full implementation of the safe system of work;
- ensure the following safety precautions/measures are strictly adhered to:
 - as far as practicable the truck should be rendered inoperative and the



- engine should be switched off before carrying out any works, including inspection, cleaning, oiling or lubrication of the parts of the truck;
- avoid working under a raised dump body unless it is adequately supported by suitable supporting device (e.g. suitable props) with sufficient capacity to prevent its undue movement. Do not rely on the trucks hydraulic system to hold the dump body up while working on it;
 - if the supporting device is damaged, it should be repaired or replaced immediately before usage;
 - the operating zone for the work underneath the dump body should be properly demarcated and barricaded by exercising strict access control with suitable warning notices displayed at prominent positions to prohibit unauthorized entry into the zone;
 - every lever, handle or similar device for controlling the raising and lowering of the dump body is suitably constructed and positioned to avoid accidental actuation, e.g. equipped with locking control levers; and
 - every control device should be clearly marked to indicate its purpose and mode of operation, and prohibiting unauthorized access to these control device when the work is being carried out underneath the raised dump body.
- liaise with relevant parties to prepare a safety plan with details on the risk assessments and method statements, and safety precautions to be adopted prior to the commencement of the work;
 - ensure that only competent workers possessing adequate knowledge, skills and experience are employed to carry out the work;
 - provide the workers involved with the necessary safety information, instruction and training to ensure that they are familiar with the manufacturer's instructions, limitation unique to the dump body, the safe working procedures, safety precautions/measures, emergency procedures, and have fully understood their roles and responsibilities; and
 - establish and implement an effective monitoring and control system to ensure that the devised safe working procedures and safety precautions are strictly followed.



RSAs should take into account these systemic safety problems and accident prevention measures in executing safety audit functions.

DISCLAIMER

This Systemic Safety Alert (“the Alert”) is issued to drawing the attention of interested parties to the relevant systemic safety problems and accident prevention measures necessary to protect people engaging in similar work activities. The material contained in the Alert constitutes general guidance only. It does not reduce, limit, or replace, any legal obligations upon any person to comply with any statutory duties under relevant legislation. Users such as Managers and Supervisors should make their own evaluation of the information contained in the Alert to determine if it can be applied to their own situations and practices. The Labour Department does NOT accept any responsibilities for any loss or damage resulting from the use of or failure to use of the information on the Alert.