

**EXPLORING THE CAUSES OF ACCIDENTS IN
CONTAINER TERMINALS OF PORTS IN SRI LANKA**

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DECLARATION

I declare that this is my own work and this thesis does not incorporate without acknowledgment any material previously submitted for a Degree or Diploma in any other University or Institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgment is made in the text.

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ABSTRACT

Among the global competitive industries and the logistic supply chain ports container terminals play a crucial role. A significant amount of manpower and a heavy fleet of machinery equipment are deployed in order to achieve the high level of productivity with the time demands. Containers handling operations are conducted as loading, discharging and trucking from ships to quay, quay to yard and yard to gate or reverse of this around the clock in any weather. Container terminal operation is considered one of the riskiest industries due to the high accident rate reported.

This research aims to develop a mechanism for minimizing accidents in container terminals at ports in Sri Lanka by identifying the different types of accidents, investigating their causes, analyzing existing safety practices, comparing them with standard practices, and proposing solutions to mitigate the accidents. The research collects data from literature and interviews with experts from a specific container terminal and analyzes the data using basic statistical techniques and logical reasoning.

The findings of the study could benefit safety and health professionals and the management of port container terminals in order to identify the nature of accidents, the causal factors that contribute to accidents and preventive measures for addressing the critical factors behind them.

Key words: container terminal, accidents, existing safety practices, standard safety practices, negligence

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LIST OF ABBREVIATIONS

BO	-	Berthing Officer
CCTV	-	Closed Circuit Television
CFS	-	Container Freight Station
CSC	-	Convention for Safe Containers
CT	-	Container Terminal
DM	-	Duty Manager
DO	-	Duty Officer
EU	-	European Union
FSA	-	Formal Safety Assessment
HSE	-	Health and Safety Executive
ICHCA	-	International Cargo Handling Coordination Association
ICAO	-	International Civil Aviation Organization
ILO	-	International Labour Organization
IMO	-	International Maritime Organization
ISM	-	International Safety Management
ISPS	-	International Ships and Ports Facility Security
OSHA	-	Occupational Safety and Health Administration
PEMA	-	Port Equipment Manufacturers Association
PMA	-	Pacific Maritime Association
PPE	-	Personal Protective Equipment
PSS	-	Port Skills and Safety
SOLAS	-	Safety of Life at Sea
TEU	-	Twenty Equivalent Unit
TT Club	-	Through Transport Club
UK	-	United Kingdom
UNCTAD	-	United Nations Conference on Trade and Development
USA	-	United States of America
VTCS	-	Vessel Traffic Control Section

- XT - External Truck
- ZPMC - Zhenhua Port Machinery Company

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