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STUDY ON EFFECTIVE RESPONSE FOR DANGEROUS GOODS HANDLING AND REDUCING IMPACT FROM CBRNE ACCIDENTS IN COLOMBO PORT

\mathbf{BY}

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ABSTRACT

With the development of Chemical, Biological, Radiological and Nuclear power consumption in the world, the CBRN threat has been increased. CBRN is been used as agricultural, industrial power sources, medicine compounds and treating methods etc. Most of modern marine vessels and submarines use nuclear power instead of fuel. Nature of using CBRN materials created advantages and disadvantages as well to human and other organisms. Most of CBRN materials are hazarders to human and other live things in various ways.

A port is a maritime facility comprising one or more warehouses or loading areas, where ships load and discharge cargo and passengers. Usually situated on a sea coast. Ports can also be found inland, such as Hamburg and Manchester with access to the sea via river or canal. Ports involve with international and domestic trade and play a major role in the economy of the country with supply chain. The most recent literature has focussed on safety and security of ports and better handling of dangerous goods.

This research is a part of master degree programme of Disaster Risk Reduction and Development in Kotelawala Defence University. This study is focus on effective process of dangerous good handling at Colombo port and effective first responding to the CBRNE accidents. Initially study the security arrangement in port and handling the cargo. Then examine the first responding mechanism. Also examine the various incident took place in the world and lesson learned from them. Researcher conduct field visits and examined physically how operation of handling goods. Collected data through questionnaire from the active operators of first responding within the port complex. Also conduct series of interview from the lined authorities of emergency management related to CBRNE. Finally put forward the recommendation to establish the effective dangerous good handling and first responding to the CBRNE related accidents at the Colombo Port, Sri Lanka