

**EMERGENCY RESPONSE PLAN FOR
RAJANG PORT AUTHORITY,
SIBU**

BY

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**PROJECT SUBMITTED IN FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCES IN
THE FACULTY OF ENGINEERING
UNIVERSITY PUTRA MALAYSIA
NOVEMBER 1999**

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ACKNOWLEDGEMENTS

The author wishes to place on record his grateful thanks to his project supervisor Dr. Faku'l-Razi bin Ahmadun for research guidance and support during the period of this study. The author is indebted so much to Dr. Mohammad Daud for his friendly abuses, in giving motivation and guidance for the success of this project. Great thanks also goes to Ir. Tuan Hj. Fuad Abbas and Dr. Nor Mariah Adam for their support.

The author also extends his sincere appreciation to Prof. Datuk Dr. Soh Chai Hock, Director General Fire and Rescue Department of Malaysia, for giving an opportunity for his officer to pursue further studies and enhance organizational knowledge.

Lastly, to his office colleague for heir helps and his wife Sorryta bt. Asgar Khan and his wonderful children in motivating and giving great aspiration for the completion of this project report.

CHAPTER 1

EMERGENCY RESPONSE PLAN OF RAJANG PORT AUTHORITY, SIBU

INTRODUCTION

Port

Sea transport remains the cheapest form of transport per ton kilometer available at present. About 80% of the world's goods and cargo's are moved by sea and ports in various parts of the world. Ports are very important links in the world commerce and transportation of goods. There are direct and indirect impacts on the economy development which ports are contributing. They are:-

- a. To facilitate a cargo between inland and maritime transport.
- b. Stimulate International trade.
- c. Generate economic growth of the country.

The major setback in operating a port are risks associated with it. Many port activities or services associated with the port have the potential to endanger the safety and well-being of its workers and the ports in the event of inappropriate procedures or of an accident. Sources of potential accidental fires and spills at the port are:

- i. Anchoring and Berthing

The port will provide berthing facilities for ships coming to the port.

Intermediate anchorage of vessels may be required prior to berthing to permit inspections, or to await wharf space. Collisions can occur during anchoring and berthing and may result in chemical and / or fuel-oil spillage's in the Port.

ii. Cargo Handling and Storage

Port handles and stored dangerous good. Accidental spillage or fire associated with the permitted dangerous goods may still pose a serious threat to health and safety of the port workers, property and environment.

iii. Equipment Maintenance Operation

Lubricating oil and hydraulic fluid use in equipment maintenance will pose danger and contamination.

iv. Refueling

The port in study does not provide bunkering for ships and thus will not store large quantities of fuel oil. Small spills is common during refueling and potential source of spills and fire.

v. Vehicular Traffic

Movement of heavy transport lorries, crane for loading and unloading cargo to and from ship. Potential collision involving these vehicle pose a great danger if carrying dangerous chemical / cargo.

vi. River Traffic

The potential increase in traffic combined with the concentration near the port will result in an increased risk of collision that can cause fire and spillage's.

vii. Others

Other activities or incident that can endanger the safety and health of workers, port and environment.

- a. Fire and / or explosion of flammable or combustible solvents.
- b. Explosion of containers containing shock, pressure or heat sensitive materials.
- c. Penetration or rupture of compressed gas cylinders containing toxic material or fuel oil.
- d. Hazardous Chemical Release.

The above list is by no means exhaustive as there is always a possibility that an unexpected event will happen.

The above environment can cause major disaster or calamities if there no proper action or steps in the right direction taken. Being aware of these potential hazards and being prepared to handle the situation are very important. The need of perfect Emergency Response Plan in port is very vital to minimize the impact of any incident and sometime avoid the potential disaster.

Emergency Response Plan

An emergency response plan is a plan for survival in an emergency and mitigation is perhaps the most important element of emergency management. Mitigation is the daily efforts to reduce the hazards and quick recovery from disaster/incident depend on pre-planning. The ERP can help us to prevent and prepare the effect of a disaster/incident.

(Prof. Datuk Soh Cai Hock 1999).

Implementation of well through out Emergency Response Preparedness can mean the difference between success and failure (American Society For Industrial Security, 1997) Emergency response plan are comprised of two key pieces. Incident Action Plan (IAP) Plus the Emergency management organization, which is the Incident Command System (ICS), equals an Emergency Response Plan (ERP) (John S. (Jack) Flannery, 1999). The need for Rajang Port Authority to develop an effective emergency response plan, making it at ease to anticipate possible threats and makes all the initial decision ahead of time, so that they can focus their time and attention on the most important actions required in the event of an emergency. The Emergency Response Plan outlines specific steps to follow in the event of a real crisis situation and provides specific measures for recovery after the crisis has passed.

From previous recorded incident, that happen in Rajang Port in 17 January, 1991 where explosion of dangerous chemical (Toulene) - killing two security personal on patrol and placed Sibul Fire Department personnel in a mess-up and disorganized.

In 26 June, 1992 explosion and fire at Port Klang involving Toulene And Xylene chemical during unloading from ship named Choon Hong II killed 13 persons and cause a havoc to emergency team.

The preparation of Emergency Response Plan for Rajang Port is to minimize the unexpected impact in any emergency during a crisis and recovery after the crisis or avoiding it totally from happening.



Justification of the Project

The project has been carried out for the reason given below:-

- Presently safety and emergency preparedness awareness for Rajang Port Authority not satisfactorily base on previous incident.
- Presently there is no emergency Response Plan For Fire and Chemical / oil spill for Rajang Port Authority.

Objective of the Project

In order to create a very effective Emergency Response Plan in Fire and Chemical / oil spill for Rajang Port Authority, Sibul, a study to the facilities through safety auditing and interviews are carried out and objective of this study is:

- To evaluate the present facility, equipment, trained personal, emergency plan and communication system.
- To propose an Emergency Response Plan for Fire chemical / oil spill in Rajang Port Authority, Sibul.

Response Plan

A response Plan, which is a part of the ERP, is a document written to prepare for an accident before the actual accident happens so as to be able to respond and control the accident. It is presented in a readily and easy to use handbook which is provided to all persons tasked with duties and responsibilities during an accident. Typically it provides the following information and guidance:

- a) Emergency communication detail
- b) Site role of persons in authority
- c) Action required for various emergency situations
- d) Control of personnel and information and
- e) Resources inventories

Basically, item (a) is a listing of contacts and phone numbers for all personnel and institutions critical to the operation a successful ERP. Item (b), (c), and (d) will be described in the emergency response plan (ERP) sections. Item (e) is a detailed handbook listing available equipment and supplies indicating exactly where they can be located. By following this handbook an optimum effort can be achieved with each person carrying out his/her assigned duties in an organized manner, employing the established communication network and tapping and listed resources. Rajang Port Authority (RPA) will provide with basic alarm system in all buildings.

All buildings in the Port had must been designed and equipped with minor fire suppression and fire fighting equipment such as fire extinguishers, hosereel and sprinklers which meet the State and National approved standard. Adequate and

appropriate warning signs will also be posted at various locations in the Port ensure safety.

Outside the building, a reticulated water systems with fire hydrants and hoses will be installed. In addition, the Port will have a fire station which will house the basic fire truck equipment with a standard fire-suppression and fighting equipment and a trained fire brigade and security personnel to man and station and to suppress fire at the Port. The Port will have four to five firefighters and a truck capable of dispensing a total of 8,300 liter as water. Equipment to contain fuel oil/chemical spill will also be provide at the fire station. Periodical safety auditing must be carried regularly to identified potential hazards and preventing from occurrence.

Training and coordination with other agencies from the surrounding community, agencies which could be assistance in responding to an emergency occurring inor outside the vicinity of the port.

Revision need to be done periodically with changes of machinery, components of the Port, location of dangerous goods and their quality and types material handled/stored/Strict compliance to Port V Dangerous Goods under The Port Authority (Declaration of Port (No. 2) Notification, 1970). It also required that RPA employees to practice the emergency exercise periodically under the supervision a local emergency personal and agencies or authority.

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