CHAPTER 7

7.0 DISASTER MANAGEMENT AND CONTINGENCY PLAN

7.1 Introduction

The project proponent plans to develop and implement a Disaster Management Plan for the project aimed at identifying the different potential disasters that could impact the installation of the project. The term 'disaster' is loosely used in this section and is referred to as any incident, accident, or natural occurrence that could affect the operation of the project in whatever way. This plan will focus on five potential types of disasters that can arise from various sources and affect the operation and livelihood of the project in any form or fashion. The five types that are refer to are both anthropogenic and natural in origin.

7.1.1 Management Structure

The act of managing natural or man-made disasters will require a team effort approach. With this, the management of the proposed project will formulate an Emergency Group to address any of the aforementioned disasters in a quick, responsible and safe manner. This group will be charged with the task of electing an Emergency Coordinator and a subordinate, who shall direct and execute all the activities outlined by the response plans. The emergency committee must conduct periodic meetings to address important issues concerning the disaster management plans. Such important issues should be the objective of the committee, their roles and responsibilities, updates, training, drills as well as their terms of reference (TOR) which they will abide by.

7.1.2 Disaster Classification

Disaster Management (or Emergency Management) is the discipline of dealing with and avoiding risks. It is a discipline that involves preparing, supporting and rebuilding when natural or human made disasters occur. The actions (efforts to avoid or ameliorate the impact) taken depends in part on the perceptions of the risk. In any event, an effective emergency management system will rely on the emergency plans available.

Considering the possibilities of such an occurrence, the project proponent plan to develop and implement a Disaster Management Plan aimed at identifying the different potential disasters that could impact the development. This plan will focus on four potential types of disasters that can arise from various sources and affect the operation and livelihood of the project in some form or fashion. Table 7.1 outlines some of the more likely disasters that could occur on site.

Table 7.1 Summary of the Disaster Preparedness Plans for ***btl*** FOC Project

Disaster	Description	Response Plan	Stages
Hurricanes and tropical storms	Hurricanes and storms can vary in strength damaging equipment and delaying the project's operation.	Hurricane Preparedness Plan	Alert, Response, Recovery
Fire	Just like hurricanes, fire outbreaks can vary in size and location and can cause irreparable damage to the project's equipment.	Fire Prevention and Response Plan	Response
Fuel/oil Spills and leaks	This incident could pose a serious impact to the receiving environment in which the project site is located.	Spill Contingency Plan (Tier levels)	Response, Recovery
Medical	Medical emergencies can occur at any moment without giving notice and therefore requires a quick and coordinated effort to respond to this need.	Medical Emergency Plan (Transportation and Evacuation)	Response, Recovery

The proposed project will take into consideration these four potential disasters, among others and plan accordingly in order to mitigate and ameliorate any negative effects these types of disasters could have on the infrastructure, operation and management of the project.

7.2 Hurricane Preparedness Plan (Evacuation Plan)

The hurricane preparedness plan will involve an alert, response and recovery stage to deal with any natural disaster involving hurricanes, storms or tropical depressions. This is the most common natural phenomenon occurring in Belize and the only one that would require a full scale evacuation. Belize lies within the hurricane belt, and is vulnerable to high wind and storm surge. During the past 100 years, Belize has been hit several times by major hurricanes. Belize has been hit 40 times by storms ranging from tropical depressions to hurricanes (Usher, 2000). The return period for storms since 1870 is three (3) years, and the vulnerability increases from North to South (Usher 2000).

The hurricane season in Belize commences officially on June 1st and ends on November 30th. As part of its overall Management Plan, the EIA has also considered the issue of safety needs resulting from potential threats other than hurricanes. The Hurricane Preparedness Plan (HPP) is aimed at making reasonable preparations should the project be threatened by an imminent Tropical Depression or Hurricane strike. This is to enable the contractor to protect their equipment, employees and assets, and also to ensure that the project is able to continue after the hurricane has passed.

7.2.1 Purpose of Plan

The purpose of this hurricane preparedness plan is to:

(i) Establish the coordinating mechanisms necessary to prepare and implement measures to safeguard property and lives of all concerned during the threat of a storm or hurricane.

(ii) Increase awareness to management and others (captain, contractor, developer, staff, observers etc.) of the need for hurricane preparedness,

The basic overall responsibilities of the management is to ensure that the coordinating mechanism that will ensure maximum safety of property or lives during an incoming storm, is put in place, and to make sure the contractor and ***btl*** are familiar with the mechanism.

7.2.2 Information System

The "official alert" system for a storm or hurricane entails the coordination between management, the National Emergency Management Organization (NEMO) and the Belize National Meteorological Service (NMS). The emergency coordinator will therefore activate the required hurricane plan.

The proposed project will follow the official alert and hurricane categories profile put in place by NEMO. Such categories along with the wind speeds are illustrated in the following:

Tropical Depression	29 mph – 38 mph
Tropical Storm	39 mph – 73 mph
Hurricane Category 1	74 mph – 95 mph
Hurricane Category 2	96 mph – 110 mph
Hurricane Category 3	111 mph – 130 mph
Hurricane Category 4	131 mph – 155 mph
Hurricane Category 5	Above 155 mph

The official Warning Flag System as follows:

Flags	Phases
One Red Flag	Preliminary Alert Phase (Storm/Hurricane Watch)
One Red flag with Black Center	RED I Phase (storm or hurricane watch)
Two Red Flags with Black Centers	RED II (Warning Phase)
One Green Flag	Green Phase (ALL CLEAR)

7.2.3 Pre-Season Preparation

The Emergency Coordinator will ensure that all equipments are checked and available at all times during the project installation process. The Emergency Coordinator will also ensure that all assets such as equipment and boats etc. and vehicles are photographed (digital with date) at the beginning of the project installation, for possible insurance claims.

7.2.4 Implementation Plan during Threats

Preliminary Alert - Hurricane Watch

This is the First Phase, and means that a storm or hurricane may threaten within 72 hours. A storm or hurricane is within 21° N 80° W of Belize.

Actions to be Taken:

(i) The Emergency Committee should be prepared to convene and take action if the Belize Weather Bureau issues a warning.
(ii) Stay informed by radio and television of the storm progress.
(iii) Obtain hurricane tracking chart for group members and project management,
(iv) Obtain the contact number etc. from the Management and inform vessel captain of the alert phase,
(v) Prepare a checklist (electronically) of items required in the event of a strike.
(vi) The Emergency Coordinator will identify and categorize items or equipment to be removed as follows: list of equipment to stay, and list of those to be removed to designated site.
(vii) Prepare a tentative list of all the employees on site.

Hurricane Warning – Red 1 Phase (Watch)

During this phase, a hurricane may threaten within (36) thirty-six hours. A hurricane or storm is located within 20° N 85° W.

Actions to be taken:

(i) Advise vessel Captain to leave the marine area immediately and take their vessel to safe harbor or properly moor their boats at a designated marina.

(ii) Identify official shelter for contractor staff and any other employee in need of such shelters,

(iii) Management will identify employees to report to work after the hurricane or after the Green Phase all clear is given.

(iii) Update NEMO on all actions taken.

Hurricane Warning – RED 2 Phase

Whenever Phase 2 (Red) is given, this means that a hurricane is likely to strike project area within (24) twenty-four hours.

Actions to be taken:

(i) The checklist of items required will then be printed and each head of sections will be provided with a checklist,

(ii) The precautionary list will be printed and provided to each head of sections,

(iii) Final hurricane preparations should be concluded

(iv) Evacuation of employees should be completed

Fourth Phase – Green (All Clear)

This is the ALL CLEAR, which will be declared by NEMO after the hurricane has passed and it is safe to return to review the effects of the hurricane.

Actions to be taken:

(i) The Emergency Committee will attempt to return and survey the project site as soon as possible,

(ii) The Emergency Committee will immediately make a brief report on all damages (supported with photographs), and prepare an estimate of damages, and submit the same to NEMO and Management for their perusal.

(ii) Employees of the project ownership will report as previously advised.

(iii) Clean-up phase will commence with the assistance of project employees, and all available human resources, where possible.

7.3 Fire Prevention and Response Plan

The fire prevention and response plan will focus on the possibility of a fire and any fire outbreak, whether large or small, that might occur. It is therefore important to consider its likelihood and with this in mind, the development will develop a response plan aimed at addressing the awareness and the mechanism necessary for its response.

The contractor will have the vessel fully equipped with its own fire-fighting equipment, thus provide quick response and service as well as a comprehensive fire prevention plan.

7.3.1 Purpose of Plan

The purpose of the plan is to ensure that the coordinating mechanism will ensure maximum safety of property or lives during a blaze, and to ensure the contractor, Captain of the vessel and BTL are familiar with the mechanism. The purpose of the Fire Prevention and Response plan for the proposed project is to:

(i) increase awareness to all concerned the need for a fire prevention and response plan,

(ii) To establish the coordinating mechanisms necessary for management to prepare and implement measures to safeguard property and lives of all concerned should a fire occur in on board the vessel,

(iii) Indicate all possible evacuation routes for all sections of the vessel.

7.3.2 Fire Protection Equipment/Systems

All the BEL poles will be protected from fire in one form or another. Firstly, the poles are trated with a fire retardant, and secondly, they keep a corridor area clean of brush, especially during the fire season. Additionally, on board the vessel the following will be made available:

1) *Fire Suppression Systems.*

- *Water Pumps:* The pumps will be used on the vessel as a means of fighting fire. Water for these pumps will be gotten from the sea. Flexible water hoses will be coupled to the pumps and used to extinguish the fire.
- *Fire Extinguishers:* The vessel has installed multi-purpose dry chemical (Class ABC) fire extinguishers. Dry chemical extinguishers will range in sizes of 5 lbs to 10 lbs and will be installed in the hallways and deck of the. These will also be installed at key areas such as, corridor walls, generators, electrical panels, maintenance areas, etc.

7.3.3 Fire Prevention

Fire prevention is an important aspect in precluding its occurrence. While water is plentiful at the project site and its immediate availability is possible, there are some measures designed to prevent fires. These include:

I. Use of fire retardant material - The use of nonflammable material will be encouraged within the project.

II. Qualified personnel to operate equipment and electrical system - Only certified technicians will be allowed to carry out any work on the vessel.

7.3.4 Fire Response

As mentioned previously, fire outbreaks are unpredictable but can be prevented. It is difficult to portray a response plan for the project site considering the different scenarios that might arise from a fire. It is important though, to have in mind certain tips and guidelines relating to the event of a fire. These guidelines may come in the form of a fire combating plan whereby trained staff may utilize the different fire controls to extinguish the fire.

Fire outbreaks sometimes require an evacuation plan and for this reason, a comprehensive

evacuation plan is required to be developed. This plan is important and must address congested areas such as a boat.

In the advent of a fire (small fires)

Fires first start small and then grow large as time progresses and if there is enough fuel, oxygen and heat for the fire.

Actions to be taken:

(i) Sound the alarm

(ii) Use an extinguishing media preferably a fire extinguisher to fight the fire.

(iii) Do not fight a large fire with a fire extinguisher.

(iv) Check to see that the fire is completely extinguished.

(v) Inspect the fire area and assess for damages.

(vi) Close off the area for safety purposes.

At some point, the Emergency Coordinator needs to be notified of the situation. A report of the incident should be submitted to the Emergency Committee for assessment.

In the advent of a large fire

Utilize these procedures if a large fire occurs or otherwise:

Actions to be taken:

(i) Sound the Alarm

(ii) Use an extinguishing media such as a fire extinguisher and the pumps and hoses to fight the fire.

(iii) If possible, remove any fuel (combustible material) that could be engulfed by the fire

(iv) Use fire hoses at full pressure aiming at the base of the fire

(v) Evacuate any persons within the area or found in the area at the time of the incident

(vi) Once contained, check if the fire has been completely extinguished

(vii) Inspect the fire area and assess for damages

At some point, the Emergency Coordinator along with the project's fire station needs to be notified of the situation. A report of the incident should be submitted to the Emergency Committee for assessment. Notify any member of the National Fire Service for further investigation and recommendation.

7.4 Spill Contingency Plan

The proposed project will institute and develop a Spill Contingency plan in the interest of the fuel storage on board. This plan will basically cover any hydrocarbon spill and/or leak that could

occur on the premises. Since each spill is different, it is not practical to develop a spill response procedure that will encompass every situation. Such understanding coupled with training will enable those involved in the response effort to determine the best practical procedures given the various conditions.

7.4.1 Purpose of Plan

The purpose of the plan is to outline the procedures necessary to:

- Increase crew awareness on Spill Response procedures taking into consideration the different governmental tier response levels.
- Define the coordinating mechanisms necessary for crew to utilize their resources in Response Procedures.
- Establish and define clearly the roles and responsibility of Management in Spill Contingency and Response procedures.

7.4.2 Mechanism

This plan institutes the need for a timely and effective response to incidents. In order to respond rapidly and successfully to a spill, personnel responsible for containing and cleaning up the spill must know the steps that need to be followed during and after the spill. Contingency plans describe information and processes for containing and cleaning up a spill that occurs in a defined area of the project. Because the approaches and methods for responding to oil spills are constantly evolving, and each spill provides an opportunity to learn how to better prepare for future incidents, contingency plans are also constantly improving and providing increased protection to human health and the environment from these accidents.

7.4.3 Response Policy

The following tables are DOE Tier levels as described by the National Emergency Preparedness Plan for Oil Spills (NEPPOS)

Table 7.2 Marine Spills Levels

Tier	Quantity (gals)	Location	Response
I	1,000-10,000	Coastal/ Marine	To be managed by polluter
II	10,000-100,000	Coastal/ Marine	Requires government assistance for management
III	>100,000	Coastal/ Marine	Requires Government and/or external assistance

Table 7.3 Inland Spill Level

Level	Quantity	Location	Response
A	<1,000	On land or Inland	To be managed by polluter
B	>1,000 or poses significant health hazard and requires evacuation	On land or Inland	Responsible party requires GoB assistance to manage the discharge.

For the purpose of this project both Tier I and Level B will be considered.

7.4.4 Fuel Management

Fuel management has a very critical safety issue considering the type of development and its location. It is however, not a difficult task to do considering the small to medium volumes, 1,000 to 2,000 gallons that will be handled by the project. Fuel will be managed to prevent spills and leaks via the following:

- *Storage:* Fuel will be stored inside the vessels built in fuel tanks that have reinforced steel containment wall. To protect against any accidental fire the tank will be sited away from all electrical installations within the vessel.
- *Documentation:* It is important to keep in mind that the project must order the correct amount or volume of fuel required for operation. For this reason, all the fuel consumed and received must be recorded.
- *Maintenance:* It is necessary to inspect the fuel tanks, dispensing pumps, hoses, supply fuel lines and generators for spills and/or leaks. An important issue is fuel lines. The less there are, the better. It is with that reason that the fuel supply lines be of anticorrosive material and fuel tanks must be as close as possible to the generator(s).

7.4.5 Waste Oil Management

Although not required considering the volumes that will be produced, it is important however, to reiterate that the project is in a fragile environment. Small oil spills for this matter, do fall under the Spill Contingency Plan. Waste oil will be managed according to the following:

- *Storage:* All waste oil will be stored in properly sealed drums and inside a containment wall. This would most probably be below in the vessels holding area.
- *Handling:* Used oils are a legal responsibility of the project and thus should be handled adequately and with care.
- *Disposal:* Although the volume may be very small, it is important to properly discard the accumulated waste oil. Once stored, the waste oil should be disposed by an approved or certified DOE contractor.

7.4.6 Contingency Equipment and Safety Priorities

Spill response equipment is the most important component in the Spill Contingency Plan. This equipment can vary depending on the size and type of the activity. For the interest of the project the following equipment will be required:

- Spill Response Kits – these will be installed at key locations such as dispensing pumps, generators, maintenance areas, etc.
- Containment Booms –mostly for marine spills which will be deployed if need be the case.

The Emergency Committee will ensure that the following priorities are taken into consideration:

- Safety to human life is the highest priority in any response, and should be ensured that all management personnel are protected.
- Containment of incident to stabilize the situation.
- Minimize and prevent any adverse environmental impact.

7.5 Tidal Rise Contingency Plan

Tidal rise is a natural phenomenon derived from the process of global warming. Included in this phenomenon is the terminology of climate change. This process impacts a wide range of naturally occurring process on earth such as agriculture, sea rise, hurricane impacts etc.

The natural phenomenon of tidal rise is an extremely slow process taking several years to decades to materialize. Nevertheless, sea level rise can primarily impact the project's shoreline. Other such impact can include increased shoreline erosion, high storm surges, flooding, project inundation, changes in the surface water quality and ground water characteristics, increased flood risks and loss of tourism, recreation and transportation functions. Considering its importance from an economic long term investment, the project will be going underground with the FOC in San Pedro, thus eliminating the need to mitigate against sea level rise.

7.5.1 Climate Change Effects

According to Usher, (Usher 2000), the changes in the hydrological cycle in Belize as a result of climate change, would be characterized by changes in sea levels, the intensity of hurricanes and its accompanying storm surge, and changes in rainfall patterns and temperature. These changes may result in devastating impacts on the project such as:

- Exacerbated erosion of the coastline and accompanying beach loss;
- Alteration or destruction of mangrove communities due to changes in precipitation and seasonality, resulting in the alteration of the productivity of mangrove ecosystems,
- Increased inundation as a result of sea level rise, with consequences such as salt-water intrusion,

- Vulnerability to flooding and soil erosion of low lying areas within project site,
- Loss in net tourism economic activities as a result of the combined effects of climate change,

These issues are of a limited scale to the project; nevertheless, the net effect of a national scale would be more visible. Planning will include the elevation of property by land filling, the construction of buildings to standards to withstand major hurricanes, and the establishment of building codes and guidelines that will be satisfactory to minimize damage during disasters.

7.6 Medical Emergency Plan

The project plans to implement a medical emergency plan in the event of a medical emergency. A medical emergency is an injury or illness that poses an immediate threat to a person's life or long term health. These emergencies may require assistance from another person, who should ideally be suitably qualified to do so, although some of these emergencies can be dealt with by the victim themselves. Dependent on the severity of the emergency, and the quality of any treatment given, it may require the involvement of multiple levels of care, from a first-aider to an emergency physician through to specialist surgeons.

Any response to an emergency medical situation will depend strongly on the situation, the patient involved and availability of resources to help them. It will also vary depending on the location of the emergency.

This response plan will cater to basic first aid health care only and any emergency transportation to a recognized health institution such as a hospital or health center.

7.6.1 Purpose of the Plan

The primary objective of the medical response plan is to:

- Establish the coordinating mechanism necessary to respond to a health situation and to implement basic first aid treatment where applicable.
- Develop and implement a coordinating mechanism necessary to secure appropriate emergency transportation to a recognized health institution.
- Increase awareness to employees of the availability of such primary health care.

7.6.2 Basic First Aid

As mentioned previously, the proposed development plans to offer basic first aid treatment in the event of a medical emergency. **First Aid** is the provision of limited care for an illness or injury, which is provided, usually by a certified person, to a sick or injured patient until definitive medical treatment can be accessed, or until the illness or injury is dealt with (as not all illnesses or injuries will require a higher level of treatment). It generally consists of series of simple, sometimes life saving, medical techniques, that an individual, either with or without formal medical training, can be trained to perform with minimal equipment.

This equipment usually involves the medical supplies commonly found in a First Aid Kit. A First Aid Kit is a collection of supplies and equipment for use in giving first aid, particularly in a medical emergency. Most First Aid Kits contain bandages for controlling bleeding, personal protective equipment such as gloves and a breathing barrier for performing rescue breathing and CPR (cardiopulmonary resuscitation), and sometimes instructions on how to perform first aid.

Aims

The 3 main aims of first aid, commonly referred to as the "3 Ps" are:

- **Preserve life**
- **Prevent further injury**
- **Promote recovery**

7.6.3 Transportation (Evacuation) of Patient

When conventional first aid requires additional medical attention, the patient must be transported to a recognized health institution for further treatment as quickly as possible. The act of preparing the patient and notifying the institution is a very complicated and critical issue.

Time is of the essence and therefore important in a life or death situation. For this reason it is important to establish relations with the project's proposed health institution as well as those of the Belize City and San Pedro Town area and notify them on the project's plan and whether the institution is able to assist in emergency cases. In any event, the Emergency Coordinator will be required to make transportation arrangements to the health institution in the event of a medical emergency.

The closest health institution, whether it is the San Pedro Lions Clinic or the KHMH, where professionals are available to provide health care to the residents will need to be advised of the project and project injuries. These health professions can also be contacted at night or in the advent of an emergency. Similarly, the island has several other health institutions that are also available (See Table 7.4). In the same token critical patients will be required to be transported to the Karl Heusner Memorial Hospital or any private tertiary care facility in Belize City for immediate emergency treatment.

Transportation or evacuation of the patient will first involve transportation to the project's health institution with referrals to the nearest health clinic. If further and immediate treatment is required then patients will be transported from the clinic to the Karl Huesner Memorial Hospital utilizing the best means available.

7.6.4 Contact Information

Contact information is an important factor in considering emergency situations. It can be used in cases of fire, medical and hurricane emergencies. The following table lists the possible contact information for emergencies. This table must be supplemented by the emergency committee listing the member's contact information.

Table 7.4 Emergency Services

Institution/Department	Contact Number	Alternate Number
San Pedro Lions Clinic	226-4052	**911**
San Pedro Policlinic II	226-2536	
Los Pinos Clinic	226-2686	
Medical Emergency (ACER)	226-3231	
Karl Heusner Memorial Hospital	223-1548	223-5686
Wings of Hope	223-3292	
Fire	226-2372	
Police	226-2022	

7.7. Environmental Safety and Health

Environmental safety is a growing concept that must be developed, especially considering the growing number of tourists who visit the country. Moreover, this concept must be practiced on a daily basis by those who make up the tourism industry. Risks and hazards abound in our society, thus the proposed project is no exception.

The project will develop a program that will cover basic areas designed to minimize and prevent injury and illness where possible. This program will not be required to divulge in general or in details about the many risks and hazards that exist or affect the project. Nevertheless, it's important to address these concerns, especially considering the location of the project.

(a) Hurricane Preparedness Plan

Hurricanes and storms can cause severe property damage and flooding, especially considering the project environment. Moreover, the restoration time is virtually unknown with these types of sustained damages. With this in mind, the Emergency Committee will carry out training in the form of drills to fine-tune and sort out the preparation process. These drills are important in accessing the integrity and functionality of the preparedness plan.

(b) Fire Prevention and Response Plan

Fire outbreaks are dangerous if not contained and extinguished in time. Time is of the essence when dealing with fires. The contractor will ensure that the persons assigned to fight a fire are properly trained. The trainee will basically get an understanding of the concepts of a fire and how to properly operate and use a fire extinguisher to fight small fires.

The training will be enhanced to include the usage of the vessels pumps and hoses to extinguish large fires that might occur. Special attention will be paid to this section as it signifies the last line of defense for the proposed project. The training will also include the maintenance of both the fire extinguishers and fire hydrant systems.

(c) Spill Contingency Plan

Training in this field will be limited to small localized spills that could occur on the project site and any marine spills. Precedence will be given to the small spills since the probability is much higher. Needless to say, marine spills will be of concern, but these can be more aptly addressed by mitigation measures. Trainees in this area will be required to learn the basics in spill containment and remediation process. This will involve the deployment of spill kits to the required areas and also undertaking remediation services. Training in this field can be undertaken by the Department of the Environment, or private consultancies.

(d) Tidal Rise Contingency Plan

There is no specific training in this field nevertheless; a monitoring program must be developed of some sort to monitor the erosion of the caye, deposition of sediments, water quality and flooding where necessary.

(e) Medical Emergency

Much of first aid is common sense, and people are almost certain to learn some elements as they go through their life (such as knowing how to apply an adhesive bandage to a small cut on a finger)

However, effective life-saving first aid requires hands-on training by experts, especially where it relates to potentially fatal illnesses and injuries, such as those that require Cardiopulmonary Resuscitation (CPR), as the procedures may be invasive, and carry a risk of further injury to the patient - which the '3 aims' of first aid above, clearly try to avoid.

To be adequately trained, a person must attend a course (hopefully leading to a qualification or certificate) provided by the Red Cross on First Aid and CPR. CPR can be broken down into three (3) sectors, Adult, Child and Infant CPR. Due to regular changes in procedures and protocols, based on updated clinical knowledge, the First Aid and CPR Certification is only valid for 2 (two) years, therefore, re-certification must be sought in order to ensure best patient practice and care (and to minimize the chance of being held liable for further injury or deterioration).

As the key skill to first aid is preserving life, the single most important training a first aider can receive is in the primary diagnosis and care of an unconscious or unresponsive patient. The most common mnemonic used to remember the procedure for this is ABC, which stands for **Airway**, **Breathing** and **Circulation**.

7.8 Conclusion

In obtaining quick and decisive responses, the project should have a few drills to update their continued effort in disaster preparedness and management. It is in fact a coherent relationship between management and employees to display sound actions in the case of a disaster. A quick and well-planned response is always an essential tool in dealing with any natural or man-made disasters.

It is also important in maintain constant communications with the interested authorities in an effort to streamline the response mechanism. It is also essential that the employees of the project be in constant communication with the vessel Captain and vice versa, especially when it comes to fire, health and natural disasters. Overall, it is important in conducting regular training exercises for those employed to protect the well being of the employees and of the project.