CHAPTER 12

DISASTER MANAGEMENT

12.1 Introduction

The proposed development is prone to threats from both natural and man-induced disasters. As the development continues, these certain threats further increase the potential for destruction and human suffering. To cope with these threats, a workable plan must always be available to the individuals charged with particular responsibilities to the residents. Such a plan must involve not only preparing an organized reaction but must also provide for the guidance of the resident community in exercising protective measures to minimize damage and human suffering.

Considering the possibilities of such threats, the project proponent plans to develop and implement a Disaster Preparedness and Management Plan aimed at identifying the different potential disasters that could impact the development. 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 some form or fashion. Table 12.1 outlines some of the more likely disasters that could occur on site.

Table 12.1 Summary of the Disaster Preparedness Plans for Palm Harbour Development

Disaster	Description	Response Plan	Stages
Hurricanes and tropical storms	Hurricanes and storms can damage the project's infrastructure thus affecting the operation of the project.	Hurricane Preparedness Plan	Alert, Response, Recovery
Fire	Fire outbreaks can vary in size and location and can cause irreparable damage to the project's infrastructure.	Fire Prevention and Response Plan	Response
Fuel/oil Spills and leaks	This incident could pose a serious impact to any sensitive environmental habitat.	Spill Contingency Plan (Tier levels)	Response, Recovery
Climate Change	This slow occurring natural occurrence can impact the project if not adapted and monitored over time.	Tidal Rise Contingency Plan	Alert, Response
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 development will take into consideration these five 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 development.

12.2 Disaster Management Structure

The Disaster Preparedness and Management Plan will delineate the basic conceptual plan, which will outline the response procedures necessary for residents to formulate an emergency committee capable of addressing any of the aforementioned disasters in a quick, responsible and safe manner.

This committee, that will be made up of residents and Farm management will be charged with the task of electing an Emergency Coordinator and his/her 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 objectives of the committee, their roles and responsibilities, updates, training, drills as well as their terms of reference (TOR) which they will abide by. The Emergency Committee will also decide on the election policies for coordinators.

12.3 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) and most notable by Hurricane Iris in 2003 which made landfall more to the south. 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 residents to protect their homes and assets, and also to ensure that the subdivision site is accessible after the hurricane has passed.

12.3.1 Purpose of Plan

The purpose of this hurricane preparedness plan is:

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

(ii) To increase awareness to residents and others (boaters, guests etc.) of the need for hurricane preparedness,

12.3.2 Information System

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

Residents will follow the official alert and hurricane categories profile 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 residents will adopt the following 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)

These warning flags will be placed at location prescribed by the residents.

12.3.3 Pre-Season Preparation

At the beginning of May each year the Emergency Committee will ensure that the residents have their required hurricane items available and that they are ready for use. The Emergency Coordinator will ensure that all of these equipments are checked and available during the hurricane season. The Emergency Coordinator will ensure that all assets such as equipment, boats and vehicles are photographed at the beginning of each hurricane season, for possible insurance claims.

12.3.4 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 convene with residents 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 resident members and project management,

(iv) Obtain the contact number etc. from the Management, including residents with marine vessels, and inform vessel owners of the alert phase,

(v) Ensure that contact is made with all residents and captains of vessels, whether by direct or indirect means to alert them of the phase and to make initial contact.

(vi) Prepare a checklist (electronically) of items required in the event of a strike

(vii) 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.

(viii) Prepare a tentative list of all the resident and management staff on the project 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 all vessel Captains to leave the marina areas immediately and take their vessel to safe harbor or properly moor their boats to the marina.

(ii) The Emergency Coordinator will advise all residents and available human resources to install the hurricane shutters on their dwellings.

(iii) Advise all residents of the project including visitors and employees to be prepared to evacuate the site upon the recommendations of NEMO.

(iv) Identify an official shelter for residents/visitors/staff and any other person in need of such shelters,

(iv) 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 the subdivision within (24) twenty-four hours.

Actions to be taken:

(i) Residents should make last efforts preparations including securing their property and the stocking of provisions and rations.

(ii) Residents, visitors and employees of the subdivision should be prepared to evacuate if necessary.

(iii) Contact numbers and emergency services should be made available.

(iv) Keep listening to the radio and keep in contact with the Emergency Committee.

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) Residents of the project subdivision will assess the property for damages as advised by the committee.

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

12.3.5 Safety Precautions

These precautions will be made available to each head of a residence or a home owner in the event of a hurricane. These will be delivered during Phase 2 – Red Warning Phase, and shall be updated every year by the Committee.

The following are some basic precautionary guidelines:

1. Pay no attention to rumors. Only rely on the official reports and weather advisories but under no circumstances telephone the Weather Services, nor any other national radio station) or B.T.L. exchange as this will hamper the hurricane tracking and information service for everyone.

2. Close and secure all hurricane shutters properly.

3. Be sure that a window or door can be opened on the side of the house opposite to the one facing the wind.

4. Be sure that you have an adequate supply of drinking water as well as canned food or other food that needs no cooking or refrigeration. If you own a coal or kerosene stove get it into working order and procure a supply of kerosene and coal as it may come in handy after a hurricane.

5. Keep a good flashlight handy as well as candles and storm lanterns as the electricity supply will likely be cut off or knocked out during the storm.

6. Check on everything that may blow away or be torn loose during a storm and store them inside the buildings if possible. Remember that garbage cans, garden tools, signs, awnings and other objects may become weapons of destruction in hurricane winds.

7. If the center of the "eye" of the storm passes directly over you, there will be a lull in the wind lasting from a few minutes to half an hour or more depending on the speed of movement of the hurricane. Remain in a safe place. Make emergency repairs if necessary during the lull, but remember that the wind may return suddenly from the opposite direction, frequently with even greater violence.

8. Never leave your shelter until the official "ALL CLEAR" has been given.

12.4 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.

Presently, there is no fire service provided for the immediate area, therefore, it is in the best interest of the proposed development to create its own service via the Emergency Committee in the form of engineering controls (fire protection equipment and building design) and the fire prevention plan.

12.4.1 Purpose of Plan

The purpose of the plan is to ensure that the coordinating mechanism that will ensure maximum safety of property or lives during a blaze, is put in place, and to make sure the developer and residents are familiar with the mechanism. The purpose of the Fire Prevention and Response plan for the proposed project is to:

(i) increase awareness to residents, management and others of the need for a fire prevention and response plan,

(ii) To establish the coordinating mechanisms necessary for management and residents to prepare and implement measures to safeguard property and lives of all concerned should a fire occur in a dwelling or building

(iii) Indicate all possible evacuation routes for each resident dwelling and other buildings on the property.

12.4.2 Fire Protection Equipment/Systems

All the resident dwellings along with other buildings (boat storage/maintenance yard, service station etc.) on the property will be protected from fire in one form or another. Palm Harbour Development will encourage residents install fire protection systems designed to protect lives and property. Some of these devices are summarized below:

1) *Fire alarm detection and notification systems.*

- *Smoke detectors:* The project development will encourage residents to install fire detection equipment in the form of smoke detectors in each of the resident's rooms and hall ways. The smoke detectors will activate the smoke alarm possibly signaling a fire or of something burning.
- *Manually activated pull station:* The project equipment buildings will have a manually activated pull station in the event that someone sees a fire. It is essential that management and staff are aware of these warning devices and their potential use in detecting fires.

2) *Fire Suppression Systems.*

- *Hydrants:* Fire hydrants will be used on the project as a means of fighting fire. These hydrants will be spaced out according to each developmental phase and sub-phase. Water for these hydrants will be gotten from the stored potable supply. Separate pumps will be placed at each zone and at the service marina pier to pressurize the fire hydrant loops. Flexible water hoses will be coupled to the hydrants and used to extinguish the fire.
- *Fire Extinguishers:* Individual residents will be encouraged to install 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 where required inside the dwelling. These will also be installed at key areas such as on the containment walls, generators, electrical panels, maintenance areas, etc.

12.4.3 Fire Prevention

Fire prevention is an important aspect in precluding its occurrence. While water is plentiful at the project site, its immediate availability may not be possible. Measures designed to prevent and control fires include:

I. Use of fire retardant material - The use of nonflammable building materials will be encouraged within the project construction. For example the use of sheet roofing material

instead of shingles will be encouraged and the use of fire rated doors, fire resistant windows and barriers.

II. Qualified personnel to install electrical system - Only certified Electricians will be allowed to carry out any electrical installation on the premises. Each resident building will be approved by the certified electrician in conjunction with BEL personnel.

III Building Codes - The project will call for the construction of resident dwellings and other buildings, with heights above (1) one and possibly (2) two stories high. A set of building codes will be developed by the engineers of the project, in order to ensure the adequate construction of buildings. Engineering standards will also include provisions for adequate and safe wiring installation, plumbing, heating, and cooling systems all designed to confirm with acceptable building codes.

12.4.4 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 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 will be required to be developed by the Emergency Committee and individual residents. This plan is important and must address congested areas such as the service station, generating station and other buildings.

12.5 Spill Contingency Plan

The Spill Contingency plan for the subdivision project will outline the basic responsibilities that should be carried out in the event of a hydrocarbon leak or spill. Risk areas of concern include the Utility Zone, boat storage/maintenance yard and marina service station. Each spill is different and it is not practical to develop a spill response procedure, which will encompass every situation. It is better to understand the goals of the response plan in order to tackle every spill situation. Such understanding coupled with training will enable those involved in the response effort to determine the best practical procedures given the various conditions.

12.5.1 Purpose of Plan

The purpose of the plan is to outline the procedures necessary to reduce and contain the effect of a spill by means of a well-coordinated response and is intended for the following purposes:

- To increase management's awareness on Spill Response procedures.
- To define the coordinating mechanisms necessary for management to utilize their resources in Response Procedures.

- To establish and define clearly the roles and responsibility of Management in Spill Contingency and Response procedures.

12.5.2 Mechanism

This plan institutes the need for a timely and effective response to incidents. In order to respond rapidly and successfully to a spill, maintenance 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.

12.5.3 Fuel Management

Fuel management is a very critical safety issue as described in Chapter 8. As a first measure a containment wall will be built around the fuel tanks to safeguard both against spills and against fire. This will be designed to contain 110% of the maximum volume that the tank can hold. This design will follow specifications set by the National Fire Service. To protect against any accidental fire the tank will be sited away from all electrical installations within the utility zone. Additionally a fire extinguisher will be required to be kept on hand to deal with any small fires. It is anticipated that fuel will be used for the generators and servicing of vessels. When not in service the pump will be kept locked.

12.5.4 Waste Oil Management

Although not required to be developed fully considering the volumes produced, it is important however, to reiterate that the project is in an ecologically 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 inside a fuel tank containment wall.
- *Handling:* Used oils are a legal responsibility of Palm Harbour 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 contractor.

12.5.5 Contingency Equipment

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 proposed subdivision project the following equipment will be required:

- Spill response Kits – these will be made available to the management and installed at key locations such as the marina piers, service stations, maintenance yard and Utility Zone.
- Containment Booms – these are mostly for marine spills and will be deployed in need be the case.

12.5.6 Safety and Response Priorities

The Emergency Committee for the proposed subdivision development 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

Basic response information that should be available whenever an action is taken includes the following:

- Type of oil involved: this could be lubricating oil, engine oil, waste oil, diesel fuel, and gasoline fuel.
- Size of spill: this includes the levels described by DOE.
- Location of spill: this involves the canals and lagoon shoreline
- Prevailing Conditions: choppy seas, windy, rainy, overcast, sunny, calm, low/high tide.
- Environmental sensitivity of potential or actual impact area: this includes the sensitive area of the beach and inland locations.

12.6 Tidal Rise Contingency Plan

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 the following impacts:

- Exacerbated erosion of the coastline and accompanying beach loss;
- Coral bleaching as a result in temperature rise,
- Potential negative impacts, including depletion of sea grass beds from resulting fresh water run off (including siltation etc.),
- 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,
- Inundation and salinization of agriculture lands, resulting in net decrease in productivity,
- The destruction of aquaculture activity resulting from pond destruction due to storm surge and freshwater intrusion,
- Vulnerability to flooding and soil erosion of low lying communities,
- Loss in net tourism economic activities as a result of the combined effects of climate change (damage to coral reef etc.),
- Impact on human health due to the change in patterns of infectious diseases, especially in water supplies and food,

These issues are of a national scale, and the results would be more visible as cumulative impacts of climate change, rather than resulting from individual project development. However, it is important to plan along these lines, which is the primary focus of this section.

It's difficult to predict how much the mean lagoon level will rise and how will it affect the subdivision development. For the moment, the current level of the proposed subdivision project site is that of 0 feet above the mean sea level. 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. In addition to this, all of the development infrastructure will be built five (5) feet above this level.

12.7 Medical Emergency Plan

The proposed subdivision development 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. Depending on the severity of the emergency, and the quality of any treatment given, it may require multiple levels of care, from a First Aider to an Emergency physician 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. 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 centre. In any event, the plan will be required to be approved by a certified doctor, health institution or NEMO.

12.7.1 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 closest health

institution is the Silk Grass Health Center where a nurse and doctor are available to provide health care to the villagers. These health professions can also be contacted at night or in the advent of an emergency. In the same token critical patients will be required to be transported to the Southern Regional Hospital in Dangriga for immediate emergency treatment with subsequent referral to the Karl Heusner Memorial Hospital or any private tertiary care facility in Belize City.

In any event, the Emergency Coordinator will be required to make transportation arrangements to the health institution in the event of a medical emergency. Transportation or evacuation of the patient will first involve the transportation of the patient off the development site and then unto the aforementioned health center with referrals to the previously mentioned Hospitals.

12.7.2 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 that may be required for individual emergencies. This table must be supplemented and updated by the Emergency Committee.

Table 12.2 Palm Harbour Emergency Services

Institution/Department	**Contact Number**	**Alternate Number**
Silk Grass Health Center		**911**
Dangriga Police Station	522-2022	522-2028
Dangriga Fire Service	522-2091	
Southern Regional Hospital	522-3822/	522-2078
Karl Heusner Memorial Hospital	223-1548	223-5686

12.8. Environmental Safety

Environmental safety is a growing trend in the world today. This context covers the basic training that is required in order to undertake the desired contingency plan because risks and hazards abound our society and therefore the proposed development is no exception. With this intent that the Emergency Committee of Palm Harbour will develop a training mechanism to deal with the different scenarios (See Table 12.1) that can occur at the project site, especially the medical emergencies considering the retired market.

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.

Training

Training is the field concerned with workplace learning to improve performance. Such training can be generally categorized as *on-the-job* or *off-the-job*. On-the-job describes training that is given in a normal working situation, using the actual tools, equipment, documents or materials that they will use when fully trained. On-the-job training is usually most effective for vocational work. Off-the-job training takes place away from normal work situation which means that the

employee is not regarded as productive worker when training is taking place. An advantage of off-the-job training is that it allows people to get away from work and totally concentrate on the training being given. This is most effective for training concepts and ideas.

(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 yearly 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 Emergency Committee of Palm Harbour will ensure that the persons assigned to fight a fire are properly trained. Training can be carried out by the National Fire Service upon request. 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 project's fire hydrant system 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 Sapodilla Lagoon or in the canals. Precedence will be given to the small spills since the probability is much higher. 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 are no specific training in this field nevertheless, a monitoring program must be develop of some sort to monitor the erosion of the project site, deposition of sediments and 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 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.

Training in first aid is often available through the Red Cross or through commercial providers, who will train the staff for a fee. This commercial training is most common for training of employees to perform first aid in their workplace.

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**.

(f) Others

There are many other on the job training that somehow involves the environment, for example solid waste collection, water quality sample collection, landscaping, life guard, fuel dispatcher etc. In the tourism field, there are many such instances that require some sort of qualification and training. Nevertheless, the proposed development plans to implement training exercises into the operation of the project.

12.9 Conclusion

In obtaining quick and decisive responses, the Emergency Committee and residents of the proposed subdivision project should have regular meetings, training and 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. This relationship extends far beyond the property boundary lines as members also take this experience at home. A quick and well-planned response is always an essential tool in dealing with any natural or man-made disasters.