



DEPARTMENT OF THE ENVIRONMENT
ENVIRONMENTAL COMPLIANCE PLAN

PREPARED FOR:

FALSE CAYE RESORT & RESIDENTIAL DEVELOPMENT

FOR

Maya Island Resort Properties Ltd.

**False Caye,
Offshore Placencia Peninsula,
Stann Creek District**

JULY 2008

I. LEGISLATIVE OUTLINE

The following are the terms and conditions of the Environmental Compliance Plan entered into between **MAYA ISLAND RESORT PROPERTIES LTD.** hereinafter both referred to as the "**DEVELOPER**" and the **Department of the Environment (DOE)** with respect to **FALSE CAYE RESORT AND RESIDENTIAL DEVELOPMENT**, a resort and residential development comprising of approximately 61 acres located 5 nautical miles north of Placencia Peninsula on False Caye, Stann Creek District.

It is agreed by the Developer that the terms and conditions of this Environmental Compliance Plan shall be binding upon the Developer, its servants or agents, successors, or assigns. The terms and conditions embodied in this environmental compliance plan are made pursuant to section 20 (7) of the Environmental Protection Act, Chapter 328 of the Laws of Belize (hereinafter called the "Act"), Revised Edition 2000-2003, the Environmental Impact Assessment Regulations as amended by S.I. No. 24 of 200 and all other relevant provisions of the Act. Environmental Clearance is being granted under these conditions.

II. PURPOSE

The purpose of this document is to officially institute best practice measures that would prevent, control and mitigate the environmental degradation that may arise from the project. The specific actions proposed have been made only after careful analysis by the National Environmental Appraisal Committee (NEAC) and the DOE of the information contained in the Environmental Impact Assessment documents for False Caye Resort and Residential Development, and identification of potential negative environmental impacts associated with this type of projects. It must be borne in mind that this Environmental Compliance Plan (ECP) was prepared based on the best available information on the project contained in the Environmental Impact Assessment prepared for this project. Therefore, the Department of the Environment (DOE) reserves the right to make modifications to this ECP, with prior notification to the Developer, as the project develops and more information becomes available.

The Developer agrees to strictly adhere to this document during all stages of the development of the project. The Department of the Environment and other relevant agencies will conduct compliance monitoring. Disregard of the terms and conditions of the ECP specified herein may result in the Developer's permits and environmental clearance being revoked.

This ECP is a dynamic one and may be reviewed and revised from time to time as the project develops and more information becomes available. The developer must note that obtaining environmental clearance does not absolve the developer from the need to obtain other permits and approvals from other relevant agencies.

The Environmental Compliance Plan is a non-transferable document, therefore it cannot be transferred to any other company, organization or interested party, this ECP was developed for the sole use by Maya Island Resort Properties Ltd.

1.0 SPECIFIC ACTIVITIES FOR WHICH CLEARANCE IS BEING GRANTED

Environmental Clearance is being granted for the following activities contained within the Environmental Impact Assessment (EIA) for False Caye Resort and Residential Development:

Construction of:-

- **2 Hotels Complexes with a maximum capacity of 276 guests**
- **53 Residential Villas with a maximum capacity of 386 guests**
- **6 Special Lots with a maximum capacity of 48 guests**
- **1 special estate with a combined total of 2 keys**
- **Employee Quarters**

- **Berthing Facility:**
 - **Utility Pier**
 - **Arrival and Departure Pier**
 - **Temporary Construction Piers**

- **Infrastructural & Ancillary Services**
 - **Pools**
 - **Restaurants**
 - **Recreational Beach on the eastern side of the Caye**
 - **Helipad**
 - **Sports Field**
 - **Swim Docks/Floating Platforms**
 - **Boardwalks, footpaths & roadways**
 - **Retaining Walls for Dredge Material**
 - **Spa**

- **Utility Infrastructure**
 - **Installation of a Sewage Waste Package Treatment Plant**
 - **Installation of diesel generator**
 - **Installation of Above Ground Fuel Storage Tanks (2500 gls) with containment area**
 - **Solid Waste Collection/Transition Site**
 - **Installation of an Earthtub or similar for composting**
 - **Installation of water treatment and storage facilities**
 - **Electrical/water/sewer distribution**

Dredging of:-

- **Approximately 350,863 cubic metres of material for use as fill.**
- **Internal Lagoon and waterway**

Installation of:-

- **Submarine pipe network to transport potable water from mainland to False Caye Development**
- **Submarine cable network for transmission of power from national grid on mainland to False Caye Development.**

No further development whatsoever shall take place outside of what has been agreed to and described in this ECP, without the prior written permission of the Department of the Environment.

2.0 ENVIRONMENTAL RISK ANALYSIS

The Department of the Environment has prepared this environmental risk analysis based on the Environmental Impact Assessment documents and other relevant information gathered by the DOE and NEAC. This Environmental Compliance Plan (ECP) was then developed to mitigate the potentially negative environmental impacts associated with this type of development.

POTENTIAL SOURCES OF ENVIRONMENTAL IMPACT DURING DEVELOPMENT OF THE PROJECT:

- Alterations of the marine and terrestrial ecosystems.
- Contamination of soil and the marine environment during implementation, construction and operational stages of the project from siltation as a result of dredging, land reclamation, construction of the necessary infrastructure, hazardous waste, solid waste, effluent discharge fuel, oil and boating activities.
- Potential for erosion on False Caye and re-suspension of sediments in the surrounding environment due to land clearance and construction activities.
- Potential negative impacts on the surrounding reef systems and marine ecosystems and potential adverse impacts to the marine biodiversity due to dredging and construction activities.
- Changes to the hydrographic characteristics of the area.
- Alteration of marine & terrestrial wildlife in the area due to clearance of land, dredging activities and other related activities;
- Alteration to scenic areas.
- Potential impact on navigational safety during dredging operations.
- Changes in population dynamics arising from the development and its consequential environmental effects.
- Increased boat traffic in zone of influence.

- Alteration of the socioeconomic factor of the area in conjunction with development (population increase).

This list is by no means an exhaustive list of potential environmental problems that could arise from the said proposed project.

3.0 ENVIRONMENTAL COMPLIANCE PLAN

The implementation of this project will be carried out only for those activities described in Section 1.0 of this Environmental Compliance Plan (ECP). No further development shall take place outside of what has been proposed there under without the prior written permission of the **Department of the Environment**. **The Developer** will apply to the **DOE** for *Environmental Clearance* for all new activities outside of what is agreed upon in this Environmental Compliance Plan.

Recognizing that the project could have significant negative environmental impacts, **The Developer** hereby agrees to take the necessary measures described in the following actions, to mitigate these impacts.

After review of the Environmental Impact Assessment submitted, the Department of the Environment (DOE) and **The Developer** agrees to the following:

3.01 VEGETATION CLEARANCE AND IMPACTS ON WILDLIFE

In an effort to mitigate the negative impacts associated with clearance of the vegetation (habitat loss, decrease in wildlife and erosion), **The Developer** agrees to take the following measures:

- 3.01.1 Vegetation clearance will be limited to only what is required for surveying, construction of buildings, necessary filling of low lying areas and the laying of necessary infrastructure.
- 3.01.2 The Developer will ensure that all the requirements of the Forest Department for the clearing or alteration of mangroves and other vegetation are met and that the appropriate permits are obtained prior to the implementation of any activities on the project site.
- 3.01.3 Survey and development are to be done in accordance with alterations and requirements as requested by the Land Utilization Authority.
- 3.01.4 No permanent structure will be allowed within the mangrove reserve unless authorized by DOE and the Land & Survey Department.
- 3.01.5 Mangrove and other vegetation identified as reserve areas in the EIA within the perimeter of the entire False Caye will be maintained in its natural state, and alteration will be limited to trimming of this vegetation. A sixty-six feet reserve will be left along this perimeter (where permissible) upon which no permanent structures will be allowed, except where beaches are planned.
- 3.01.6 To prevent or minimize erosion, the developer will endeavor to maintain at a 1: 2 ½ (x: y) ratio submerged slope of the filled area.

- 3.01.7 All planned beach areas will be protected using erosion prevention measures such as selective shrub level vegetation removal and trimming. These beach areas will be designed in a manner so as to limit the stripping of any mangrove or existing vegetation along the edges of the Caye. The beaches will be constructed of material that is suitable for such purposes. These beach areas will be closely monitored to assess the impacts of erosion and/or siltation.
- 3.01.8 The littoral forest will be preserved and incorporated into the proposed developments overall beach development and land use plan as denoted in EIA.
- 3.01.9 Native plants, along with other horticultural plants, will be utilized in landscaping and replanting, particularly in areas devoid of trees.
- 3.01.10 No burning of any cleared vegetation will be allowed. This waste will either be chipped and used as mulch or composted on site.

3.02 CONSTRUCTION OF BUILDINGS AND STRUCTURES

The Developer will pay careful attention to the quality of the overall design of the buildings facilities and landscaping of the development. The Developer hereby agrees to abide by the following conditions:

- 3.02.1 Abide by the recommendations of the comprehensive geotechnical study/assessment conducted to investigate the stratigraphy of the rocks or unconsolidated materials within the project site to determine load bearing capabilities of the proposed locations for buildings and piers.
- 3.02.2 Construction of buildings will be carried out with the approval/consultation from the relevant agencies, namely the Central Building Authority.
- 3.02.3 Over Water Structures for the False Caye Development shall be reviewed at a later date, upon completion of the "Development Guidelines for Over Water Structures" being developed by the DOE and the National Environmental Appraisal Committee (NEAC).
- 3.02.4 No hotel structure shall be constructed above a maximum of three (3) storeys and no residential structure shall be constructed above two (2) storeys.
- 3.02.5 All buildings will have an elevation of a minimum of five ft (5) above mean sea level and built to withstand storm surges and a minimum category four (4) hurricane force winds.
- 3.02.6 No piers or other structures will be constructed on the seabed except those designated by the Land & Surveys Department and the Department of the Environment with input from the Fisheries Department. Prior to construction of these designated piers, the developer shall obtain the necessary permit (s) from the Lands and Survey Department.
- 3.02.7 No piers will be located over coral structures.

- 3.02.8 Furthermore, no permanent structures will be allowed within the sixty-six feet beach reserve unless otherwise approved by the Department of the Environment and the Land & Survey Department.
- 3.02.9 Buildings will be designed to allow as much natural lighting as possible to minimize the need for electrical lights. Sustainable technologies including solar design practices will be incorporated as practical.
- 3.02.10 Prior to construction of the helipad, the necessary permits/approvals must be obtained from the Civil Aviation Authority.
- 3.02.11 Proper lighting, signs and fencing will be placed around the helipad as stipulated by Civil Aviation Authority.

3.03 EARTH MOVEMENT AND RELATED ACTIVITIES

In an effort to mitigate the negative impacts associated with the extraction, dredging or earth moving activities, the developer agrees to take the following measures:

- 3.03.1 The Developer will obtain the necessary license/permit from the relevant agencies involved, namely the Geology and Petroleum Department, before embarking on any earth movement activities.
- 3.03.2 Approval in writing shall first be obtained from the Lands and Survey Department prior to any land reclamation and beach creation activities.
- 3.03.3 If at any time during earth movement activities an archaeological feature or item of historical significance is unearthed, the matter should immediately be reported to the Institute of Archaeology. In such event, all activities in the immediate area will cease and will resume only after approval has been given by the Institute of Archaeology, with such approval given within a reasonable time frame.
- 3.03.4 The total volume of material to be dredged is 350,863 m³. Taking into consideration sensitivity of area and reef habitat, dredging requirements will be limited to the following:
 - a. Location of the burrow site will be designated and approved through a joint agreement by Geology and Petroleum Department, Fisheries Department and the Department of the Environment in association with the developer prior to commencing any dredging operations.
 - b. The burrow site will be located in areas where the seagrass bed and coral head density are low.
 - c. The burrow site will be dredged to a depth which is to be agreed upon in conjunction with section 3.03.4 (a) in order to reduce a smaller geographic coverage to ameliorate the impact to the seagrass and coral habitat.
 - d. The interior waterway and lagoon basin will be excavated to a depth not to exceed 5 ft. These operations will be conducted using a mechanical operator.
 - e. All spoils generated will be used as fill material and to elevate the mean ground level 3-5ft above mean sea level for the project site.

- f. The developer will implement all additional strict measures stipulated by the Fisheries Department, Geology & Petroleum Department and the DOE with regards to the dredging activities to be conducted around False Caye in order to minimize impacts to the coral reef structures within the area.
- 3.03.5 If the amount of spoils dredged from the burrow site is not sufficient for the development, the developer may pursue the following options for sourcing fill material: (1) outsourcing the material from mainland; or (2) explore options for deepening the inner lagoon, thus increasing flushing and circulation and improving the habitat; (3) and other approved sites. Prior to commencing with either of these options, the developer shall submit the necessary details to the Department of the Environment and the Geology and Petroleum Department for vetting and approval.
- 3.03.6 The developer, upon consultation with the Fisheries Department and the DOE, will finance the development and implementation of a program for the transplanting of corals from the area of most impact to a suitably qualified habitat in order to mitigate against impacts to the corals as a result of dredging. This transplanting program will be conducted prior to the commencement of any dredging activities and the operations will be conducted by the Fisheries Department and/or DOE with costs being borne by the Developer.
- 3.03.7 In order to minimize impacts to the marine environment, the interior portion of the inland waterway and lagoon will be first excavated prior to opening of all accesses to the sea.
- 3.03.8 Dredging operations should substantially limit sediment plume development and travel within the immediate vicinity (i.e. ≤ 100 meters) of the point of excavation. Silt screens/curtains will be deployed to limit sediment travel; the lower ends of the silt curtain should rest on the seabed whilst the top should always be above the surface.
- 3.03.9 The Developer will ensure that marker buoys and navigation lights are deployed and activated on the barge and that sediment curtains are marked with brightly coloured buoys on a daily basis.
- 3.03.10 In order to minimize sedimentation from the burrow pit, dredging operations will be conducted in phases. The Developer will ensure sufficient time between each phase to allow any suspended material to settle.
- 3.03.11 The developer shall ensure that appropriate shore protection measures are implemented. These measures may include but not be limited to the use of cement, sheet piles and geotextile/geo-grid materials.
- 3.03.12 Sediment traps will be constructed in drains leading from disturbed sites to the sea to allow sediments to settle out from storm-water runoff. In doing so, temporary diversions will be used to direct runoff to sediment traps.
- 3.03.9 Considering that material from the dredging activities on and adjacent to False Caye could have impacts on the surrounding water quality, the Developer will have on False Caye a

proper spoil de-watering area, where berms of appropriate height will be constructed around the perimeter of the dewatering site to properly contain any spoil associated with the material. All berms will be constructed as per EIA, and properly compacted to avoid structural failure of the walls.

- (i) To assist in the reduction of sediments within the effluents released from the de-watering site, geo-textile materials will be employed if and when the need arises.
- (ii) To assist in the filtering of the spoils, velocity reduction structures will be employed in the de-watering site. The Developer will install "Y" shaped flow-reducing structures along with raised bars and other appropriate structures at the effluent outfall to minimize the amount of suspended sediment in the released effluents.
- (iii) No sediments deposited at the de-watering site will be removed from the site until a minimum of eighty percent (80 %) of the water content has been removed from within the sediments.

3.04 WATER RESOURCES

- 3.04.1 The Developer will be responsible to supply potable water for the entire development on False Caye. The primary source of potable water will be provided by an authorized water provider via submarine pipeline from mainland, Placencia Peninsula to False Caye.
- 3.04.2 Prior to installation of the submarine pipeline, the Developer will submit all layout plans, designs, routing and methodology for the installation to the DOE for vetting and approval.
- 3.04.3 The quality of the potable water supplied must comply with Ministry of Health standards.
- 3.04.4 The Developer may construct suitably sized potable water storage cisterns for the storage of water for an appropriate period of time. The developer will ensure that this stored water is adequately treated/ chlorinated before distribution and use on the caye.
- 3.04.5 Freshwater may be supplemented by means of rainwater catchments. For this purpose the developer may construct cisterns for storage of rainwater. Should this source be intended for consumption, the developer will ensure it is adequately treated/ chlorinated before distribution and its use.
- 3.04.6 If an alternate water source becomes necessary, a proposal will be submitted to the Department of the Environment at the time it is applicable.
- 3.04.7 In an effort to conserve water, the Developer shall use exclusively low volume flush toilets & other water saving devices for the project.
- 3.04.8 Water for flushing of toilets & irrigation purposes may be obtained from recycled water from the sewage treatment system. If this alternative is utilized, the Developer will ensure that a separate storage & distribution system is installed and the treated effluent is chlorinated before use.

- 3.04.9 Considering that the project site is not serviceable by the National Fire Department, the Developer shall put in place the necessary infrastructure and consider the demand for water needed for fire protection purposes. Additionally, the Developer will maintain a mobile pump that can utilize water from the sea or lagoon in the event of a fire.

3.05 WATER QUALITY MONITORING PROGRAMME

- 3.05.1 **The Developer** will develop and implement a Water Quality Monitoring Programme within three (3) months of signing this ECP of the lagoon basin and surrounding waterbodies; the first analysis will function as base line data. During construction and operational phases, testing sites will also include the interior waterways, the parameters to be monitored on a monthly basis will include: **Dissolved Oxygen, Turbidity, Ammonia, Nitrogen, Suspended Solids, Sulphates, Alkalinity, Chemical Oxygen Demand (COD), Phosphates, Nitrites/Nitrates, Chlorine, Temperature, pH, and Total coliform and fecal coliform.** Data resulting from this monitoring programme will be submitted to the DOE on a quarterly basis. The Developer will ensure that the results of its water quality monitoring programme are made available on-site at all times for inspection.

3.06 WASTE MANAGMENT

In an effort to control, reduce and prevent the environmental impacts associated with waste generation and disposal, **The Developer** agrees to take the following measures:

Liquid Waste

- 3.06.1 All sewage wastewater and domestic grey wastewater will be treated by means of Package Sewage Treatment Plant, specifically the Biologically Engineered Single Sludge Treatment System, Purestream ES Model BESST, as stipulated in the EIA report or similar. The Developer shall ensure that these systems are adequately sized to treat all sewage waste generated by this project and are strategically sited where they will not pose a nuisance to guests of this project.
- 3.06.2 In the event that the Developer intends to use another system, specifications on the system of choice will need to be submitted to the DOE for vetting and approval prior to its installation.
- 3.06.3 No domestic grey water from any drainage pipe will be allowed to drain into any natural drainage system or surrounding water-bodies. These pipes will lead to the appropriately designed sewage treatment plant prior to disposal.
- 3.06.4 The untreated wastewater will not be allowed to discharge directly into the natural drainage system and/or water body. Only the treated wastewater which meets the minimum standard set in the Effluent Limitations Regulations, as amended from time to time will be recycled for non potable use only (irrigation, fire fighting, etc.).

- 3.06.5 Filtered effluent from swimming pools will be put in holding tanks for salinity reduction and chlorine oxidation prior to incorporation into the overall irrigation system for the proposed development.
- 3.06.6 Three (3) months after the commencement of operations, the Developer shall conduct water quality tests on untreated influent and treated effluent from the different sewage treatment system(s) to ensure that the treated effluent complies with the Effluent Limitations Regulation.
- 3.06.7 The results of water quality tests on treated effluent from the treatment system will be submitted to the DOE on a quarterly basis. Regular monitoring of the treated effluent will be incorporated in the Water Quality Monitoring Programme stipulated in 3.05.1 above in order to ensure that the sewage package treatment system is functioning appropriately.
- 3.06.8 Regular maintenance of all sewage and wastewater facilities will be performed by the Developer to ensure proper functioning of the facility for environmental and other reasons. Special care must be taken in order to avoid contamination of the surface and ground water, and the surrounding environment. In order for this to take place, the following measures will be taken:
- i) Grease and oils shall not be disposed of into any drain, as this could be a potential source of soil and water contamination. Grease traps are to be installed on each kitchen sink or zone.
 - ii) Chemical wastes (such as paints, thinners, acids, used oil etc.) will be disposed at a designated site.

Solid Waste

To address the possible problems associated with solid waste, the Developer will develop and implement a comprehensive Solid Waste Management Plan for the entire Project site. This plan shall be submitted to the Department for vetting and approval three (3) months after the signing of this compliance plan and will include, but should not be limited, to the following:

- 3.06.9 The Developer will ensure that regular services are provided for the proper storage, collection, transportation to mainland and disposal of solid waste.
- 3.06.10 Specially designed, sealed containers will be used for transportation of domestic solid waste from False Caye to an approved dump site.
- 3.06.11 The developer will ensure that large bins are conspicuously located throughout the project. Waste bins for project sites will have a minimum capacity of eight cubic feet and must be covered at all times.
- 3.06.12 During the construction phase, the policy will be to reduce the waste at the source. This could be accomplished by the following activities:
- i. Local combustion of cement bags using controlled methods in order to avoid nuisances from smoke and in order to prevent fires;
 - ii. Stockpiling of construction rubble that is inert, such as concrete waste, for use as fill in low-lying areas; and

- iii. All other waste will be transported to the designated disposal site.
- 3.06.13 The Developer will ensure:
- a. The separation of garbage into organic and inorganic wastes;
 - b. The reuse, recycle and composting of organic wastes;
 - c. To educate its working staff on the importance of solid waste management by incorporating educational awareness programs and the posting of litter/garbage signs
- 3.06.14 Organic waste will be treated by means of an earth tub or similar type technology and the resulting compost used in landscaping the compound.
- 3.06.15 If the use of an incinerator becomes necessary, specifications for the incinerator will be forwarded to the DOE for vetting and approval prior to its procurement and installation. A location plan showing the proposed sighting of the incinerator will accompany the specifications.

Hazardous Waste:

To address the problems associated with hazardous waste, the Developer will implement a Hazardous Waste Management Plan, in conjunction with the Solid Waste Management Plan. This plan will include, but should not be limited, to the following:

- 3.06.16 The Developer will ensure that services are provided for the proper collection, storage, transportation and disposal of hazardous waste generated on site both during construction and operation. These include used oil, oil filters, fuel filters, accumulators, lead acid batteries, hydrocarbon residues; hydrocarbon impregnated materials, used chemical containers, incandescent bulbs and used tires. Hazardous waste will be separated and stored within a secure containment area prior to transportation to mainland for final disposal by an approved or certified contractor.
- 3.06.17 The Developer is encouraged to recycle hazardous waste where appropriate and to ensure that this waste does not mix with the general solid waste.

3.07 TRANSPORTATION AND DRAINAGE

Roads, walkways, trails and footpaths

- 3.07.1 All roads, walkways, trails and footpaths will be developed in such a way as to minimize potential erosion. In addition, all necessary measures will be taken to ensure that drainage along walkways and accesses are of adequate dimensions to avoid water logging, excessive erosion and minimize disruption of natural drainage.

Drainage

- 3.07.2 Sediment traps will be designed into drainage systems to prevent siltation.
- 3.07.3 Household drainage pipes will not be allowed to empty directly into any wetland area, or any other water resource and surrounding environs. These pipes shall lead to the sewage

package treatment plants.

- 3.07.4 The Developer will be responsible to properly manage storm water by constructing adequate drainage with silt traps before its discharge into the sea. **ONLY** storm water will be directly discharged into the permanent water bodies.

Sea-Based Transportation

- 3.07.5 Proper and adequate signage will be placed to establish designated navigational lanes, no-wake zones and reporting requirements and information in the event of injury to marine wildlife, i.e. manatees. This signage will be accordance with Belize Port Authority standards.
- 3.07.6 Prior to commencing construction of the pier for boat docking purposes, the Developer will obtain the necessary license/permit from the Lands and Survey Department and the Department of the Environment with input from the Fisheries Department.
- 3.07.7 During the operational phase of the development, the public will have access to the piers for temporary use during reasonable times.
- 3.07.8 No repairing of vessels, engines or dry dock facilities will be conducted on False Caye.

3.08 ENERGY AND FUEL ISSUES

- 3.08.1 The Developer will ensure that all electrical installations & wiring within the project conforms to Central Building Authority & BEL Standards.
- 3.08.2 The primary source of energy will be by means submarine cable from mainland, Placencia Peninsula to False Caye. Prior to installation of the submarine cable, the Developer will submit all layout plans, designs, routing and methodology for the installation to the DOE for vetting and approval
- 3.08.3 The supplementary source of energy will be by means of diesel generators installed on a concrete pad within properly a sealed containment structure and within a soundproofed building strategically located on site so as to avoid/minimize the possible nuisance to onsite guests. Proper measure will be taken in order to avoid fuel and oil spills during operations and maintenance. Any accidental spill of oil or fuel will be immediately contained and cleaned and the matter reported to the DOE as early as possible. The Developer shall bear the cost associated with the clean-up of any spills.
- 3.08.4 The Developer shall install a 2,500 gallon Aboveground Storage Tank (AST) on a concrete pad within in a re-enforced containment bund to minimize potential negative impacts from oil/fuel spills. The containment area must have a volume of 110% of the biggest fuel storage tank and must be made of an impervious material (such as concrete). The storage of any fuel (butane, diesel, gasoline, etc) will comply with the guidelines of the Department of the Environment and the National Fire Service.
- 3.08.5 Waste oils will be collected and properly stored in containment areas. All waste oils will be stored for future disposal as per recommendation by the DOE.

- 3.08.6 The developer will provide training for all staff members involved in the management and disposal of fuels and waste oils to minimize the potential risk of spillages. Training should be conducted on a quarterly basis.
- 3.08.7 Proper measures will be taken in order to avoid fuel and oil spills, during their operations and maintenance. If fuel or oil spills occur accidentally, they will be immediately cleaned and reported to the DOE. The following guidelines should be followed in cleaning up small spills:
- i. Prevent any of these substances from entering storm water system or drainage pipes.
 - ii. Mop up and contain spill immediately with Drizit, sandbags, sand or soil;
 - iii. If any of the spill enter the storm water system, the flow must be intercepted before it can contaminate other areas; and
 - iv. If natural water systems are contaminated, use straw bales, absorbent booms and sand bags dams for containment and absorption.
- 3.08.9 There should be at least one (1) twenty-pound fire extinguishers per building site which should be placed at strategic locations within the development. Additionally, smoke detectors will be placed in each building.

3.09 CULTURAL AND SOCIAL ISSUES

It is important that cultural and social issues be addressed so as to achieve sustainable development.

- 3.09.1 As long as there are qualified and available Belizean workers, no labor force will be imported. If this labour force is not sufficient, then foreigners with a valid Belize work permit will be employed.
- 3.09.2 All safety and health measures will be observed for all workers. Potable water, rest-room facilities and adequate accommodations will be provided during the construction phase and operation of the project. Adequate health services will be provided for guests and employees.
- 3.09.3 The Developer will ensure that this project does not negatively affect or obstruct the traditional use of the area by fisher-folk and others.
- 3.09.4 The Developer will ensure to train, educate and familiarize all employees with the various emergency plans for the project. Moreover, the developer will educate them about their roles and responsibilities in case of an emergency(s). These emergency plans/ and duty rosters should be posted where all employees can access them easily.

3.10 DISASTER MANAGEMENT

In order to mitigate the negative effects of natural or man-made disasters, the Developer will develop a comprehensive Emergency Management and Response Plan to address, among others, the following issues:

- 3.10.1 A comprehensive Hurricane Preparedness Plan shall be developed by the Developer to address the necessary preparations required to safely warn and/or evacuate the guests and employees of an incoming hurricane. This will include the response required for the marina component.
- 3.10.2 A comprehensive Oil Spill and Fire Response Plan shall be developed in response to spills, leaks and fire outbreak. The plan should include evacuation routes, notification mediums, and response actions. This plan should also include the use of appropriate extinguishing mediums and training required by staff and on site workers.
- 3.10.3 These Emergency Management and Response Plans (hurricane, oil spills, accidents, medical and fire plans) shall be submitted to the DOE within six (6) months of the signing of this ECP.
- 3.10.4 Personnel working for the Developer will be responsible to conduct proper maintenance to ensure a safe, clean, healthy and environmentally friendly operation.

The Developers will apply to the Department of the Environment (DOE) for environmental clearance for all other developmental activities taking place outside of what is agreed upon in this compliance plan, which has been based on the information submitted and those gathered by the DOE. Furthermore, it is understood, as described elsewhere in this document, that restrictions to this proposal will apply.

4.0 ENVIRONMENTAL MONITORING AND ENFORCEMENT

The implementation of this Environmental Compliance Plan (ECP) will be the direct responsibility of the Developer, Developer and/or its servants, successors or assigns. The Department of the Environment (DOE), in conjunction with other relevant agencies, will carry out compliance monitoring to ensure that this Environmental Compliance Plan is being adhered to. During development, measures taken to mitigate negative environmental impacts will be reviewed to assure compliance with the objectives of the plan. As development continues, the adequacy of mitigation measures will be assessed and where necessary revised in consultation with the Developer.

- 4.01 As further information becomes available, additional environmental protection measures will be incorporated at the detailed engineering stage to ensure the mitigation of any issue not addressed in this ECP.
- 4.02 The Developer will ensure that other requirements, which are contained as conditions of local licenses/permits or environmental legislation, are stipulated in contracts and sub-contracts.
- 4.03 The Developer shall analyze all plans and specifications to make sure that specifications for any given component are in line with requirements and conditions of performance contained in this ECP, local sector licenses/permits, Belize laws, and standards and regulations with regard to environmental protection and conservation.

- 4.04 The Developer will appoint one on-site liaison/person responsible for environmental protection in work areas, for distributing information pertaining to environmental protection to design engineers/architects, to construction supervision engineers/architects/technicians, contractors and sub-contractors and all employees, and for reporting on behalf of the Developer to DOE on environmental issues.
- 4.05 To ensure that compliance monitoring is conducted by the Department with respect to this environmental compliance plan and to assist in defraying expenses associated with monitoring by the Department, The Developer, its servants or agents, successors, or assigns will pay an annual monitoring fee of [REDACTED] to the Department of the Environment/Government of Belize. This fee will be paid to the Department of the Environment and the first payment shall be made within three (3) months of signing this ECP. Thereafter the monitoring fee is due on the same date clearance was granted on every successive year of the Project.

Reporting Requirements

- 4.06 The developer will comply with all of the reporting requirements specified in this Environmental Compliance Plan.
- 4.07 The developer will also hold periodic meetings with its contractor(s) regarding the implementation of ongoing environmental considerations.
- 4.08 Updated licenses and permits for all relevant activities will be kept at all times. The developers will assist duly authorized officers in the performance of their duties during site visits, which are in connection with the project's development.
- 4.09 It is the responsibility of the developers to immediately report any activity that has the potential to negatively impact or may damage or has damaged the environment, whether accidentally or intentionally, to the Department of the Environment and all other relevant agencies.

Post Development Review

- 4.10 After the construction period, the exercising of sound environmental ethics shall not end, but rather provisions shall be made for the monitoring of all facilities in the post-construction period. A system shall be put in place for reporting negative impacts as well as a means of continually implementing corrective mitigation measures where the need arises.
- 4.11 Additional monitoring will be carried out to ensure that the various pollution control features and facilities installed are functioning and maintained properly.

MAYA ISLAND RESORT PROPERTIES LTD. herein agrees to comply with this Environmental Compliance Plan (ECP) and to commence the implementation of the conditions stipulated in this ECP. If this project does not commence within one year from the date of signing this ECP, this document will be null and void. Should this happen, MAYA ISLAND RESORT PROPERTIES LTD. will need to re-apply for Environmental Clearance and a new ECP may be prepared.

SIGNED ON BEHALF OF
MAYA ISLAND RESORT PROPERTIES LTD.

) *Eugene Zabaneh*
) Mr. Eugene Zabaneh
) Developer

I, JOSE GARCIA, am the attesting witness to the due execution of the said instrument and the signature hereto subscribed as that of such attesting witness is in the proper handwriting of the said deponent.

Sworn at the Department of the Environment, Belmopan, on

The 29th day of July 2008.

[Signature]
(Witness)

SIGNED ON BEHALF OF
THE DEPARTMENT OF ENVIRONMENT:

) *M. Alegria*
) Martin Alegria
) Ag. Chief Environmental Officer

I, Aldo Casiro, am the attesting witness to the due execution of the said instrument and the signature hereto subscribed as that of such attesting witness is in the proper handwriting of the said deponent.

Sworn at the Department of the Environment, Belmopan, on

The 29 day of July 2008.

[Signature]
(Witness)

