## **Chapter 7: Environmental Monitoring Plan**

## 7.1 The Environmental Monitoring Process

The Environmental Monitoring Process is part of the Environmental Management Strategy that has been developed previously to ensure that the necessary environmental aims are achieved.

For the Environmental Management Plan, the Environmental Monitoring Process will ensure that

- The proposed mitigating measures under the Environmental Monitoring Plan are incorporated in the project engineering specifications and implemented later.
- Any unpredicted impact is addressed and mitigated by suitable measures.

The proponent or his nominated representative will be responsible for the execution of the Environmental Monitoring Process at all phases of the project.

## 7.2 Environmental Monitoring Process at Construction Phase

The Environmental Monitoring Process at the construction phase can be planned as in table 7.2.1.

## 7.3 Environmental Monitoring Process at Construction Phase

The Environmental Monitoring Process at the operation phase can be planned as in table 7.3.1.

**Table 7.2.1** 

ACTIVITY	REQUIREMENTS	PROCEDURE	RESPONSIBILITY
A. Site Establishment & Clearance	A.1. Site Plan	Following handing over, the Site Plan detailing the layout of Site facilities such as access points, temporary ablution and sanitaryfacilities, stockpiling areas, storage of hazardous materials if any,earthmoving equipment, temporary technical yard	Contractor's Representative
	A.2. Fencing	Site shall be properly fenced and its access controlled	-Ditto-
	A.3. Heavy vehicle routes	The heavy vehicle routes shall be identified. An estimate of daily potable and construction water requirements shall be provided for the duration of the Construction Period	-Ditto-
	A.4. Services provision	Likewise for electricity consumption. Temporary ablution and sanitary facilities, appropriate waste containers shall be provided	-Ditto-
	A.5. Vegetation clearance	Removal of tall canopy trees and other earmarked species shall be executed as per instructions of the Landscaping Engineer. Disposal of dried vegetal by burning on Site shall be strictly forbidden owing to the location of the Site amidst a touristic area whereby smoke emission and ash deposits are serious hindrances to humans and animals alike.	-Ditto-
B. Materials Management	B.1. Stockpiled Material	Areas for the stockpiling of imported materials such as coral sand, topsoil, basalt aggregates must be carefully chosen to avoid interfering with or contaminating Site drainage under rain storms. Stockpiled topsoil, sand a spoils shall not be taller than 6m, covered or regularly dampened to avoid nuisance from windborn dust	-Ditto-
	B.2. Hydrocarbon & Hazardous Wastes	Hazardous material shall be stored in a demarcated area, fenced and of restricted access. All hydrocarbon containers shall be stored within a suitable reinforced-concrete area surrounded by a containment (bunded) wall to a capacity of at least 110% of that of the containers.	-Ditto-

ACTIVITY	REQUIREMENTS	PROCEDURE	RESPONSIBILITY
C.3 Waste Management	C.1. Domestic and Construction Solid Waste	The Site is to be kept free of litter at all time. Food leftovers shall be packed in bins to be hauled by a nominated Solid Waste Operator. Construction wastes shall be stored in a demarcated area protected from rain to prevent leachate running pending haulage to an approved landfill.	-Ditto-
	C.2. Sanitary facilities	Adequate toilet facilities shall be provided and sited with the Engineers approval located more than 30m from HWM. The facilities shall imperatively be of the 'chemical type' to be emptied periodically by specialised effluent tankers and disposed at the St-Martin Treatment Plant. No leaching field or absorption pits to be allowed on Site.	-Ditto-
D. General	D.1. Equipment Servicing	Heavy earthmoving equipment shall be serviced on a suitable temporary RC platform to fall within a collecting sump, and all used hydrocarbons shall thus be retrieved and disposed of in a landfill or a bagasse furnace authorised for combustion of waste oils	-Ditto-
	D.2. EMP Reports	The nominated Representative of the Contractor shall submit monthly reports to the Engineer who will verify the information	-Ditto-
	D.3. Complaints received	Complaints received regarding the construction activities on Site that relate to the Environment shall be recorded in a special designated register and the response noted with the date and the action taken. This record shall be submitted with the monthly EMP report and be available for inspection by the regulatory authorities.	-Ditto-
	D.4. Mud Pollution of Public Roads	When heavy vehicles from Site have to access Public Roads, they shall not be allowed to spread mud from Site on the said Public Roads which shall be maintained free of mud at all times by a gang specially affected to that task	-Ditto-
	D.5. Baseline Data Acquisition	As soon as possible after the Contractor has taken possession of Site water samples shall be collected quarterly at same locations as adopted for the EIA Report for the purpose on quality analysis	-Ditto-

**Table 7.3.1** 

ACTIVITY	REQUIREMENTS	PROCEDURE	RESPONSIBILITY
A. Materials Management		Hazardous material such as lead accumulators for golf carts, generator engines, etc shall be stored	Hotel
		and serviced in a demarcated	Maintenance
	A.1. Hazardous Material	area, fenced and of restricted access.	Personnel
	A.2. Hydrocarbon	All hydrocarbon containers shall be stored within a suitable reinforced-concrete area surrounded	-Ditto-
		by a containment (bunded) wall to a capacity of at least 110% of that of the containers. A regular	
		hydrocarbon material balance shall be kept to equate supply to usage and detect all losses from the storage	
		tanks.	
	B.1. Domestic Waste	Domestic wastes from the Hotel shall be packed in bins to be hauled to sanitary landfill by a nominated	-Ditto-
		Solid Waste Operator. Fermentable wastes from the Hotel Restaurant and Kitchen shall be stored in a cold	
		room prior to safe disposal	
		(i) From the WWTP:	
		•Screenings from the WWTP will be packed in adequate containers to be hauled away to landfill	
B. Waste Management	B.2. Hazardous Wastes	• Sludge from the WWTP can either be dried and stabilised with lime as compost for landscaping	-Ditto-
		purposes, or pumped into a sludge tanker to be disposed of at St-Martin Treatment Plant	
		(ii) From the Technical Yard:	
		• A regular battery count shall be kept to equate operational units to discarded ones and ensure that the	
		totality of the latter are hauled to Mare Chicose landfill site under the operator's specifications	
		All hydrocarbon wastes - used oil from Generator Set, diesel tank sludge, 'oily waters', shall be	
		removed by the nominated Diesel Supplier team qualified for such tasks for safe disposal	
C. General	C.1. Water Quality	Water samples will be collected periodically at the same locations as for base-line data acquisition, for the	-Ditto-
		purpose of analysis, the results of which to be submitted to the relevant Authority	
	C.2. EMP Reports	The nominated Representative of the Contractor shall submit monthly reports to the Nominated	-Ditto-
		Representative who will verify the information	-D1110-