

# **BELIZE SOLID WASTE MANAGEMENT PROJECT ENVIRONMENTAL IMPACT ASSESSMENT REVISED**

## **2.0 POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK**

### **2.1 BACKGROUND**

Current national environmental policies are based on the need to take an integrated approach to environmental management and the need to work towards the goal of sustainable development. Belize has developed a comprehensive set of legislation and regulations which address issues of environmental protection, natural resource development, wildlife conservation, preservation of historic and cultural resources, and solid waste management. In addition, Belize is a party to various international agreements aimed at protecting the environment and natural resources in the global commons. The Government of Belize through the Department of Environment, The solid waste management Authority, the Department of Fisheries, Forestry Department, Coastal Zone Management Authority and Institute and the other government institutions are the regulatory bodies of the various instruments. Of importance to the proposed development is the need to identify those legislations which will need compliance by the activities with respect to the implementation of the solid waste management plan.

In light of the fact that the proposed activities are within locations of significant importance in terms of its tourism and ecological importance, it is also of important that related activities are compatible with plans for these areas and are consistent with the desires of the local governments.

This section is aimed at reviewing relevant environmental resource and planning legislations and policies to ensure that the implementation of the project meets policy and legislative criteria, and that relevant requirements are built into project design and implementation. The policy review also outlines specific procedures and measures to be carried out before, during and after project implementation. It is noted that some of the major proposed activities are located in close proximity to two areas of conservation



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significance (i.e. Western Biological Corridor in the instance of the Mile22 Regional Sanitary Landfill and the Hol Chan Marine Reserve in the instance of the San Pedro Transfer / Recycling Facility).

## **2.2 POLICY FRAMEWORK FOR ENVIRONMENTAL PROTECTION AND RESOURCE CONSERVATION**

Belize's National Environmental Action Plan identifies improved solid waste management as the priority environmental need for the country. The World Bank's Belize Environmental Report (World Bank, 1996) also emphasizes the need for the development of a national solid waste management plan. An improved solid waste management system is seen as a critical component of sustainable economic development in Belize, on which strategies for tourism, agriculture, forestry, fishing and other economic sectors are based.

## **2.3 ENVIRONMENTAL PROTECTION LEGISLATION**

### **2.3.1 The Environmental Protection Act No. 22/1992 and 328/2003**

THE ENVIRONMENTAL PROTECTION ACT of 1992 legally established the Department of the Environment. Under section 3 (3) the Department has the responsibility to monitor the implementation of the Act and Regulations, and to take necessary actions to enforce the provisions of the Act and its Regulations. This enabling legislation provides the Government and the Department with the comprehensive environmental protection authority it needs in order to address modern environmental management issues. The ACT also grants the Department of Environment broad regulatory and enforcement authority for the prevention and control of environmental pollution, conservation and management of natural resources, and regulating environmental impact assessments (EIA). The Environmental Protection Act entrusted the Department of the Environment with a broad range of functions relating, but not limited to, the assessment of water pollution, the coordination of activities relating to the discharge of wastes, the



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licensing of activities that may cause water pollution, the registration of sources of pollution and the carrying out of research and investigations as to the causes, nature and extent of water pollution, and the necessary prevention and control measures (section 4). The Department is also empowered to require and approve EIAs.

The Environmental Protection Act Revised Edition 2003, also charges the Department Of the Environment with the responsibility for formulating environmental codes of practices, specifying procedures, practices or releases limits for pollution control relating to works, undertakings and activities during any phase of their development and operation, including the location, design, construction, start-up, closure, dismantling and clean-up phases and any subsequent monitoring activities . Under the Act, no person, installation, factory or plant shall, unless specifically permitted by the Department, emit, deposit or discharge or cause emission of any pollutant or contaminant into the atmosphere or environment in contravention of the permitted levels. Every person, installation, factory or plant emitting air pollutants is required to maintain and submit to the Department, records of the type, composition and quantity of pollutants emitted. Part V - 20 (4) of the Environmental Protection Act states that every project, programme or activity shall be assessed with a view of the need to protect and improve human health and living conditions and the need to preserve the reproductive capacity of ecosystems as well as the diversity of species. Under 20 (5) when making an environmental impact assessment, a proposed developer shall consult with public and other interested bodies or organizations and under 20 (7) a decision by the DOE to approve an environmental impact assessment may be subjected to conditions which are reasonably required for environmental purposes. Furthermore the EPA requires that any person or undertaking exploiting the land, water resources, seas or other natural resources shall ensure the protection of the environment against unnecessary damage or from pollution by harmful substances; and no person shall emit, import, discharge, deposit, dispose of or dump any waste



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that might directly or indirectly pollute water resources or damage or destroy marine life.

## **2.3.2 Effluent Limitation Regulations SI 94/1995 Revised Edition 2003**

THE ENVIRONMENTAL PROTECTION EFFLUENT LIMITATION REGULATIONS came into force in 1996, at which time the Department of the Environment commenced enforcing the Regulations. The Regulations are intended to control and monitor discharges of effluent into any inland waters or the marine environment of Belize.

Under the Effluent Limit Regulations , DOE may require the owner or operator of a waste disposal facility to report on the performance of the facility, the effluent discharged, the area affected by the discharge, and the control measures being undertaken for the discharge. Surface water, however, is not considered an effluent in this respect.

## **2.3.3 Pollution Regulations SI 56/1996 revised Edition 2003**

The Pollution Regulations of 1996 addresses issues of air, water and soil pollution, including noise pollution. Part III – 6 (1) deals generally with the emission of contaminants into the air where no person shall cause, allow or permit contaminants to be emitted or discharged either directly or indirectly into the air from any source. Regulation 31 of the Pollution Regulations (1996) provides that a person shall not pollute the land so that the condition of the land is so changed as to be capable of making the land noxious or harmful to animals. Regulation 32 provides that no person shall cause any seepage or leaching contamination of the adjacent soil, groundwater or surface water. Regulation 33 empowers DOE to issue directions to persons operating a site for the elimination of waste or a solid waste treatment plant and disposal system. Regulation 35 prohibits the deposition



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of waste in a place other than a site approved by DOE for the storage or elimination of waste or operation of a waste treatment plant or waste management system.

### **2.3.4 Environmental Impact Assessment Regulations SI 107/1995 and 24/2007**

The Environmental Impact Assessment (1995) regulations describe in detail the processes involved in the preparation and evaluation of environmental impact assessments. The regulations divide projects or activities into three categories. The first category consists of those projects that automatically require an environmental assessment based on the sensitivity of the surroundings or the nature of the undertaking. The second category comprises those projects that may require an assessment to be carried out, but with some modifications based on the location and size of a project. The third category encompasses activities or programs that do not require an assessment to be conducted which may not have significant impacts on the environment. In March of 2007, amendments to the regulations were published. These amendments allow the Department to charge an application and processing fee for projects, programmes or activities requiring environmental clearance, streamlined project schedules and allowed for greater public participation. In addition it also allows for a monitoring fee to be charged to ensure follow up during project implementation and operation.

The EIA is normally prepared by the proponent and submitted for review by the National Environmental Appraisal Committee (NEAC), whose function it is to ensure that the proposed undertaking takes into account all of the requirements, policies and regulations for protection of the environment, natural resources and socio-economic conditions, and is consistent with other land use in the area. Following review by NEAC, if the project is allowed to proceed, a Compliance Plan for the development and operation of the proposed works or activities is agreed between the proponent and DOE. Essentially, the Compliance Plan



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constitutes an approval to proceed with the project, provided the agreed mitigation, monitoring and other conditions specified within the Plan are implemented. Operators that do not comply with the terms of the Compliance Plan may be subject to a Stop Order issued by DOE.

## **2.3.2 Solid Waste Management Authority**

The Solid Waste Management Authority Act (1991) provides for the formation of an independent Solid Waste Management Authority (SWMA) with broad powers to provide for the collection and disposal of waste in accordance with regulations issued under the Act. The SWMA has the authority to declare “service areas”, arrange for collection and disposal services (including the use of contractors) for those areas, and explore available recycling alternatives. The Act also authorizes and directs the SWMA to devise methods for the efficient disposal of solid waste, employing modern methods and techniques. In essence, SWMA will be the operator of the SWM system, including collection, transportation, treatment and disposal. DOE, on the other hand, would act as regulator, and would have a monitoring and enforcement role to ensure that the development and implementation of the Program is environmentally acceptable and that the regulations under DOE’s mandate are being adhered to. Following review of this EIA for the proposed Mile 27 Sanitary Landfill, the Compliance Plan would be signed by SWMA (as operator) and approved by DOE (as regulator) as a commitment to build and operate the facility in an environmentally sound manner.

## **2.3.3 Land Use Regulations And Policies**

Under the Housing and Town Planning Act, the Housing and Planning Department has legal authority to execute planning schemes within Belize. While this process is not being fully implemented at the present time, it is important that the Housing



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and Planning Department and the Land Utilization Authority be involved at an early stage with the approval process for any sites involved in the SWM Program. Both the Housing and Planning Department and the Land Utilization Authority are represented on the National Environmental Appraisal Committee. Review of the SWMP component such as the Mile 22 Sanitary Landfill facility by NEAC, should accommodate the opportunity for input by these agencies.

### **2.3.4 Coastal Zone Management Strategy Chap. 329 2000 Revised Edition**

The Coastal Zone Management was legally established in 1998 with the passage of the Coastal Zone Management Authority Act (Act # 5 of 1998). Under section 5 (1), the main functions of the Authority include (i) to advise Government on Matters related to development and use of resources in the coastal zone in an orderly and sustainable manner; (ii) formulation of policies on coastal zone management; (iii) development of a coastal zone management plan and revise it as needed; (iv) commission monitoring and research of coastal areas; (v) promote public awareness and (vi) prepare guidelines for developers. The Coastal Zone Management Strategy seeks to facilitate improved management of coastal resources, to ensure economic growth is balanced with sound environmental management practices. The Strategy seeks to review and “enhance existing laws, regulations, ‘policies’ and guidelines relating to conservation, resource management and development controls in the coastal zone are.” These support a coastal area management framework that addresses the need for management approaches in location between, as well as within, Coastal and Marine Protected Areas, and special requirements for management development and conservation in the barrier reef region, particularly the Cayes.



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## **2.3.5 Mines and Minerals Act Chap. 226 of 2000**

The Mines and Minerals (General) Regulations provide a general framework for the implementation of the Mines and Minerals Act. These Regulations cover a range of topics such as application, duties, terms and conditions and failure to comply with the conditions of a mining license. Under the Act "land" includes land beneath water. The Act also addresses dredging and sand mining, which is essential in avoiding destruction to coastal habitats such as seagrass beds and the coral reef.

## **2.3.6 The Forest Act No.213/2000 & Forests (Mangrove Protection) Reg. SI No. 52 of 1989**

The protection of all mangroves fall under this Act via the Forest (Protection of Mangrove) Regulations. Mangrove clearance may be permitted under this Act. In most cases a permit to clear mangroves is issued after a multi-agency assessment is conducted. This Act includes the establishment of Forest Reserves which may include mangroves, littoral forests and water bodies. However, no specific regulations exist under this Act that address littoral forests. The Forest Act is currently being revised. The legislative basis for conservation of national lands within BCNP is defined by the Forest and Wildlife Conservation Acts. The Forest Act provides for the protection and conservation of all mangrove forests on both private and national lands, any alterations to which require evaluation and permit by the Forestry Department. The Forests (Protection of Mangrove) Regulations, 1989, prohibit any "alteration" (which includes cutting and defoliating, but does not include "selective trimming") of mangroves on any land except with a permit (reg. 4). Alterations which involve dredging or filling can be authorized only in "exceptional circumstances." Factors considered for issuing or denying permits include the proximity of the proposed project to coastal and reef areas known to be of outstandingly high ecological value (reg. 5(2) (i)), and the existing or proposed plans such as the barrier reef regional management and development plan. The





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## **2.3.7 Other Pertinent Legislation**

### **2.3.7.1 The Removal of Refuse By-Laws**

The Removal of Refuse By-Laws prohibit littering and indiscriminate deposit of waste in public places. These regulations require, among other things, the occupier of each premise to provide himself with a suitable receptacle for containing household refuse.

### **2.3.7.2 The Public Health Act**

The Public Health Act covers liquid and solid waste disposal and issues relating to general public health. The Ministry of Health is given a mandate for addressing public health issues and related complaints, monitoring of sewage and solid waste, and prosecution of public health offenders. Town Boards are generally responsible for carrying out solid waste management functions within their jurisdictional areas.



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## **2.3.7.3 The Village Council Act**

The Village Council Act empowers Village Councils to deal with solid waste matters within their respective villages.

## **2.4 GOVERNMENT OF BELIZE POLICY AND APPROVAL**

In mid-1999, the Belize Cabinet supported the recommendation that the GOB endorse the conceptual plan for the implementation of the Belize SWM Project, and grant permission to the Ministry of Natural Resources and the Environment to take the necessary steps to secure possession of the land required for the proposed national sanitary landfill facility. Included in this approval were the commencement of Phase III of the SWM Program including site design for the landfill and associated facilities, EIA development, and the start of an overall public awareness program. This recommendation is shown in Appendix E, and the basic elements of the program are given in Section 3.0. The land required (approximately 140 ha) for the proposed sanitary landfill (at Mile 22 on the Western Highway) is located in private lands. It is owned by two separate parties, and the present landowners have expressed willingness to sell the land to the GOB for the purposes of developing the proposed landfill.

