Green Paper on Environmental Management Climate Adaptation and Sustainable Development for the Virgin Islands



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1. Executive Summary

The Green Paper on the Proposed Environmental Management and Climate Adaptation Bill outlines Government's approach to the establishment of overarching legislation to safeguard the environment in keeping with the constitutional right to a clean and healthy environment that should be afforded to every resident of the Virgin Islands. The Bill will address environmental management in its own right and further refines the framework that the Territory will employ to adapt to the impacts of climate change. Improved environmental management and greater awareness of the manner in which the Territory will preserve its valuable and fragile land and marine ecosystems and species while building resilience to climate-related hazards are critical outcomes which can be derived by the establishment of the proposed framework. As such, it is anticipated that the Bill will advance the implementation the following principles:

- Legal establishment of systems and a rationalized organizational structure will help to ensure that the natural environment is protected and serves its intended function;
- ii. Enhancement of our knowledge of the natural and physical attributes of the Virgin Islands is necessary to better understand, value and protect the environment; and
- iii. People today and future generations should enjoy the benefits that a clean and healthy environment can provide towards a high standard of living and economic prosperity.

Systems and a Rationalized Organizational Structure

A Council on Sustainable Development and Climate Adaptation will be formed, as an authority to vet policies which advance the United Nations Sustainable Development Goals, especially as they relate to the purposes of the Bill. The Council will serve as a coordinating body, which will facilitate interagency and inter-ministerial collaboration in the development and implementation of policies, such as the National Development Plan, the Climate Adaptation & Mitigation and other relevant policies and strategies formulated under this Bill. The work of the Council will be advanced by the Sustainable Development and Climate Adaptation Committee (currently the Climate Adaptation Committee) under various supporting sub-committees and technical bodies. An Environment Authority will be created to manage the review and approval of Certificates of Environmental Clearance for activities that may have an adverse developmental or ongoing impact on the environment.

The Bill seeks to rationalise the work of the Ministry of Natural Resources and Labour. A new Department will be formalised, namely the Department of Environment, Conservation and Climate Adaptation, which will be responsible for environmental and climate adaption matters, the performance of Natural Resource Inventories and the maintenance of an Environmental Sensitivity Index. The Department will be comprised of officers already within the Ministry.

The work of the Ministry will be guided by priorities articulated in distinct policies related to: (1) sustainable development; (2); environmental management and biodiversity conservation (3) climate adaptation (4) integrated coastal zone and ocean management; and (5) pollution and hazardous substances and waste. Moreover, the Department shall have the capacity to monitor, report and verify policies, strategies and work plans through its Policy Oversight and Monitoring, Reporting and Verification Unit. The Unit will be responsible for the determination

of various indicators, which will be reported against in a comprehensive State of the Environment Report issued on a periodic basis.

Enhanced knowledge and other measures to ensure a clean and healthy environment

An Environmental Registry, which will contain all completed EIAs, all permits and approvals issued under the proposed Bill and graphically-displayed information derived from the performance of Natural Resource Inventories shall be established.

The management of pollution shall provide focus. Point and non-point sources of pollution will be controlled for discharges into the air, waters and land within the Virgin Islands. The Ministry shall promulgate a list of pollutants and hazardous substances which will be regulated. The Bill shall provide for the management of marine pollution to comply with various international agreements to which the Territory is signatory. Pollution standards which shall regulate discharges of several types from vessels and land-based operations shall be established. Moreover, the Bill seeks to establish the requirement for the presence of pump out stations at marinas and ports, whilst prohibiting the discharge of sewage and other harmful substances into the Territorial Waters of the Virgin Islands. The establishment of a bond for the disposal of vessels in the event of disasters will be promoted.

Environmental Impact Assessments to understand likely environmental impacts and mitigation options and the issuance of Certificates of Environmental Clearance (CEC) shall be the principal mechanisms for considering and managing applications for development or business operations on land or in the seabed. Environmental audits, performed by independent individuals or firms, will be promoted to assess the environmental integrity of operations or the adherence to any conditions required by a CEC.

The Bill regularises the management of the Marine Estate by formally establishing guidelines, parameters and conditions for the issuance of licences and leases for the use of the seabed, which include the placement of moorings and jetties and the performance of reclamation. All beaches will be declared public assets under the Bill and it imposes conditions on the sustainable and rational use of the same under licence. An overall beach management framework will guide the use and conservation of beaches, which are precious assets to be safeguarded.

The value of the natural flora and fauna and special ecosystems shall be highlighted through the designation of Environmentally Sensitive Areas and Environmentally Sensitive Species. Areas and species so designated, such as mangroves, seagrasses, coral reefs, forests and other habitats of importance, will enable the Ministry to ensure their protection within the framework of rational and sustainable development, which affords maximum opportunities for economic growth compatible with the need to protect the environment and the tourism product. Moreover, the Bill affords the ability to minimise the impact of invasive species from adversely impacting the unique biodiversity of the Virgin Islands. It recognises that the natural capital has value for economic prospective purposes, such as the search for cures to diseases and other uses and establishes a framework to ensure that access and benefit sharing by all parties privy to any agreements is equitable and fair.

A class of Enforcement Officers derived from various agencies with a responsibility for the management of the environment will be created and the enforcement and penalties are outlined for the contravention of the provisions detailed in the Bill. An Environmental Tribunal, which shall be constituted by the jurisdictional expansion of the current Labour Tribunal, shall have authority to expeditiously settle disputes and claims brought under the Bill.

The human and financial resources to implement the Environmental Management and Climate Adaptation Bill shall be derived from the current resources allocated to the Ministry of Natural Resources and Labour and the Conservation and Fisheries Department, among others, at first instance.

The table below summarises the key issues that the Environmental Management and Climate Adaptation Bill addresses and the response that will improve the conservation of natural resources and the ability of the Territory to adapt to Climate Change.

Table 1: Manner in which key issues are addressed in the proposed Environmental Management and Climate Adaptation Bill

	Adaptation bill			
	Key Issue	Manner in which issue is to be addressed		
a)	Absence of mechanism for inter-agency collaboration, consultation, and coordination resulting in conflict between government agencies that operates in "silos.	Establishment of: Council on Sustainable Development and Climate Adaptation; Sustainable Development and Climate Adaptation Committee; Environment Authority. These entities are multi-agency and provide an integrated decision making space for environmental matters.		
b)	No government agency legally empowered to address environmental degradation in air, water, terrestrial and marine areas	Establishment of the Department of Environment, Conservation and Climate Adaptation within the Ministry of Natural Resources and Labour with the responsibility for the implementation and coordination of Government's policies and programs with respect to — • environmental management; • biodiversity conservation; • waste management; • pollution and hazardous substances; • climate change risk management and adaptation.		
c)	Lack of a legal framework that empowers the Ministry of Natural Resources and Labour to effectively manage the coastal zone, terrestrial areas outside of protected areas, the seabed and Territorial waters up to the 200 nautical mile zone.	Legal establishment of the ability by the Ministry of Natural Resources and Labour to regulate: • the seabed and the coastal zone; • terrestrial areas beyond protected area boundaries; and • the full extent of Territorial waters up to the 200 nautical mile zone beyond fisheries		

	matters.
 d) Lack of a legal framework for addressing climate change. e) Absence of legally established mechanism for monitoring, reporting 	 Establishment of a Sustainable Development and Climate Adaptation Committee; Legal requirement for a Climate Adaptation Policy; Establishment of linkages between Climate Adaptation Policy and financing through Virgin Islands Climate Change Trust Fund. Legal establishment of Policy Oversight and MRV Unit in the Ministry of Natural Resources and Labour.
and verification (MRV) to ensure that government budget allocations implement environmental policies.	
f) Lack of sound environmental information for informed decision making.	Requirement for the development of — ✓ Land Information System; ✓ Environment Registry; ✓ Natural Resource Inventory; ✓ State of Environment Reports; ✓ Environmental Sensitivity Index, which will be made available to the public and Government agencies.
g) Ongoing environmental degradation and pollution and suboptimal consideration of the environment in the development process.	 New processes to be established under Bill, including Certificate of Environmental Clearance (CEC) coordinated with the Environmental Impact Assessment (EIA) process; Designation of Environmentally Sensitive Areas (ESAs) + Environmentally Sensitive Species (ESSs) which ensure development is more carefully managed to protect the same; Establishment of procedures to manage hazardous substances and marine pollution from vessels and land based sources; Improved/coordinated enforcement ability by Environmental Inspectors from various line agencies; Penalty and enforcement provisions for environmental degradation and pollution.
h) International commitments under multi- lateral environmental agreements (MEAs)	Establishment of institutional structures and procedures to manage – • climate change impacts and risks; • marine pollution from yachts/vessels/land; • biodiversity conservation and regulation of genetically modified organisms; • harvesting of biological resources, including access and benefits sharing.
i) Inadequate Enforcement - overwhelmed	Establishment of Environmental Tribunal.

courts with limited understanding of complex environmental issues.

2. Background

Environmental law reform has been identified as a critical factor that will lead to improved sustainable development and climate change risk management in the Virgin Islands. Sound management of the environment is essential to maintain quality of life, to prevent human health impacts, and to support and sustain social and economic development. It is also a constitutional right of every citizen. In this regards, the *Virgin Islands Constitution Order, 2007*, section 29 addresses the protection of the environment and the achievement of sustainable development goals. In particular, it states that:

Every person has the right to an environment that is generally not harmful to his or her health and well-being and to have the environment protected, for the benefit of present and future generations, through such laws as may be enacted by the Legislature including laws to: (a) prevent pollution and ecological degradation; (b) promote conservation; and (c) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development

The presence of overarching environmental law to ensure the proper management of the Territory's environment has remained a major gap in the portfolio of laws governing the Virgin Islands.

This Green Paper provides the background and justification for the new legislation and outlines the key provisions of the proposed *Environmental Management and Climate Adaptation Bill*. It is expected that this much needed legislation will be approved early in 2019 and will establish key elements of the framework required to support recovery and build resilience in the Territory after the devastating 2017 Hurricane season.

3. What are key issues that the proposed Bill seeks to address?

The tourism and financial services sectors will undoubtedly continue to be the main pillars of the economy. With limited control over external forces that influence growth in the financial services sector, it is recognised that the Virgin Islands is now relying more heavily on natural resources to fuel and support growth in the tourism, agriculture and fisheries sectors. Environmental degradation continues to be a real risk to the sustainability of the natural resources sector of the Virgin Islands. Therefore, the protection of the environment is important for:

- i. Constitutional right to a healthy and clean environment;
- ii. Social, economic and cultural benefits;
- iii. Building resilience to impacts from climate change.

Ultimately, the social benefits of a clean environment will result in an increased quality of life, reduced health costs, cultural, recreational and aesthetic benefits, and a productive environment with enhanced food security.

The Bill, in particular, aims to:

- iv. Establish rules and an organizational structure that will legally ensure that the natural environment is protected and serves its intended function;
- v. Provide an avenue for the enhancement of our knowledge and monitoring of the natural and physical attributes of the Virgin Islands necessary to better understand, value and protect the environment; and
- vi. Ensure that people today and future generations enjoy the benefits that a clean and healthy environment can provide towards a high standard of living and economic prosperity.

At its core, it seeks to ensure that development proceeds is a sustainable way – that is in a responsible and environmentally sound manner which supports the social and economic aspirations of Virgin Islanders in the short and long term.

Detailed information concerning the provisions in the proposed *Environmental Management* and *Climate Adaptation Bill* is provided in the sections below.

INSTITUTIONAL STRUCTURES FOR IMPROVED ENVIRONMENTAL COORDINATION

4. Council on Sustainable Development and Climate Adaptation

- a) The Council on Sustainable Development and Climate Adaptation will be established as a highest authority on sustainable development and climate adaptation in the Territory of the Virgin Islands and will be comprised of the Premier and co-chaired by any other Subject Matter Minister with a matter ahead of the Council under whose portfolio may fall, Permanent Secretaries, the Chairs of all Statutory Bodies and various private sector representatives. The Premier's Office will serve as the Secretariat for the Council.
- b) The Council will serve as the main coordinating body on all matters pertaining to the sustainable development and climate adaptation within the Territory, facilitating interagency collaboration and reviewing *and recommending for approval by Cabinet* all plans, policies and work programs required under the Bill.
- c) The Council would meet at general assemblies, where draft policies, technical reports and papers would be presented by technical committees and experts. The proceedings (discussions and subsequent decisions) will be held publicly (attendance will be open to all) to ensure transparency of process and afford public awareness of the issues, although the public will be unable to participate. All reports of the Council will be lodged on the Environment Registry established under the proposed Bill, and will be made available to the public.

5. Sustainable Development and Climate Adaptation Committee

- a) The Sustainable Development and Climate Adaptation Committee (currently named the Climate Change Committee¹) will serve as a standing committee of the Council and provide technical support to the Council.
- b) The Committee will form various sub-committees where necessary, to assist with carrying out the work of the Council.
- c) The Sustainable Development and Climate Adaptation Committee will be co-chaired by the Permanent Secretaries of the Premier's Office and the Ministry of Natural Resources and Labour and will be comprised of senior technical and policy officers.
- d) The Committee will also be responsible for developing a five year strategy and implementation plan for the body of work to implement under the Act and moreover, develop or review environmental, climate Adaptation or sustainable development policies and strategies required under the Act.

6. Environment Authority

a) The Bill will establish the Environment Authority whose responsibilities would include, but not be limited to, setting the terms of reference for and evaluating Environmental Impact Assessments (EIAs) and making determinations on the issuance of Certificates of Environmental Clearance (CEC) for specified activities within the Territory having potential adverse environmental impacts.

7. The Ministry of Natural Resources and Labour

- The Bill will formalize environmental and climate adaptation matters under the Ministry of Natural Resources and Labour. The divisions within the Department of Environment, Conservation and Climate Adaptation responsible for environmental management and conservation matters will be subsumed within the Ministry of Natural Resources and Labour. The distinct entity shall be named the Department of Environment, Conservation and Climate Adaptation. The Ministry of Natural Resources, Environment and Labour will continue to have the responsibility for the development, implementation and coordination of government's policies and programs with respect to:
 - environmental management;
 - biodiversity conservation;
 - regulation of waste
 - regulation of pollution and hazardous substances; and
 - climate change risk management, mitigation and adaptation.
- The Department of Environment, Conservation and Climate Adaptation will be responsible for:

See - Climate Change Committee as mentioned in the *Virgin Islands Climate Change Trust Fund Act*, No. 12 of 2015.

- compliance and enforcement of the provisions contained in the proposed Bill.
 Personnel from other key agencies such as the National Parks Trust, Ports Authority, Environmental Health, Customs, and Town and Country Planning Department would be designated as authorized officers to enforce the proposed Bill.
- the development of various reports and policies based on specific indicators to be outlined in the proposed Bill alongside the functions of the Ministry. The Ministry will also be required to report on the implementation of multilateral environmental agreements in the Territory.
- conducting research on the status of the natural resources in the Territory and for developing the State of the Environment Report as required under the proposed Bill.
- The following Units and respective functions shall be established within the Department of Environment, Conservation and Climate Adaptation:
 - Management and Planning Unit
 The Unit will be responsible for undertaking and maintaining a Natural Resources
 Inventory in the Territory with the major output being the Environmental Sensitivity
 Index (ESI) and the Natural Resources Management Plan, including the integration
 of a Hazard and Vulnerability Index that shall be maintained by the Department of
 Disaster Management to inform the work of the Environment Authority.
 - Policy Oversight and Monitoring, Reporting and Verification (MRV) Unit (comprised of the current array of Desk Officers assigned to various Departments/Divisions within the Ministry).

The Unit will be responsible for:

- o supporting the work of the Sustainable Development and Climate Adaptation Committee and overseeing the work of the Department of Environment, Conservation and Climate Adaptation to ensure that government budget allocations implement environmental and climate Adaptation policies.
- developing and monitoring measurable indicators for policy performance, and reporting on these indicators in close consultation with the departments and units under the Ministry.
- b. The MRV Unit shall be responsible for the production of the State of the Environment Report, which shall be issued on a periodic basis, summarising the status of areas, species, natural resources and actions undertaken to adapt and mitigate against the impacts of Climate Change.

PUBLIC ACCESS TO ENVIRONMENTAL INFORMATION

The following sections outline mechanisms to facilitate and support improved access to environmental information that will be established in the proposed Bill.

8. Environment Registry

- a) The Environmental Registry will be established and is to be the repository of records pertaining to the environment that shall be available for free for viewing by the public in hard copy and online. Copies of documents can be provided to the public at cost.
- b) All permits and approvals issued under the proposed *Environmental Management and Climate Adaptation Bill* will be filed on the Environment Registry.

9. Natural Resources Inventory

- a) The *Natural Resources Inventory* (NRI) will be a geographically referenced inventory of all the natural resources of the Territory to include various geological formations, key soil types, ecosystem types and their description (including health, status and indicators of biodiversity among others), species of plants and animals including environmentally sensitive and invasive species.
- b) The *Natural Resource Inventory* will form part of the *Land Information System* managed by the Ministry of Natural Resources and Labour that will be made available to all government agencies and the public.

10. Hazard and Vulnerability Assessments

- a) The Hazard and Vulnerability Assessment process will be created and coordinated by the Department for Disaster Management (DDM) and will support a systematic evaluation of natural and manmade hazards throughout the Territory to inform the *Hazard and Vulnerability Index*. The Index will be an aggregation of data at the community and national levels.
- b) Site specific Hazard and Vulnerability Assessments together with the *Hazard and Vulnerability Index* (in GIS format) will be lodged on the *Land Information System* and will be made available to the public, the Department of Town and Country Planning and government agencies to inform planning decisions concerning parcels of land.

SUSTAINABLE DEVELOPMENT AND CLIMATE ADAPTATION

This part of the proposed Bill establishes the mechanisms for the transition to sustainable development while managing risks and impacts from climate change, which support the implementation of the *Virgin Islands Climate Change Trust Fund Act* 2015.

11. National Sustainable Development Strategy and Climate Adaptation & Mitigation Policy

- a) For the purposes of administering this Part, the functions of the Sustainable Development and Climate Adaptation Committee shall be:
 - developing, coordinating and monitoring the implementation of sustainable development polices, programs and projects to achieve the objectives of the Sustainable Development Goals (SDGs) provided in the 2030 Agenda for Sustainable Development that was adopted at the United Nations Summit in September 2015;

- (ii) coordinating the integration and mainstreaming of sustainable development and climate change considerations into the national development and budget processes;
- (iii) to coordinate The Virgin Islands response to climate change by monitoring and advising government on the impacts of climate change,
- (iv) developing climate adaptation and mitigation policies and strategies, leading efforts to implement and mainstream such policies and strategies in national development planning,
- (v) supporting the development of climate vulnerability assessments and atlases as part of the natural resource inventory and management plan,
- (vi) prioritizing sustainable development and climate change (adaptation and mitigation) actions for funding via the Climate Change Trust Fund,
- (vii) overseeing the Territory's involvement in regional sustainable development and climate Adaptation projects and establishing a local sustainable development and climate Adaptation programmes ensuring that all Territorial development plans are in keeping with the Territory developing along a sustainable and low-carbon climate resilient pathway.
- b) The proposed Bill shall define the purpose of the *Virgin Islands Climate Adaptation & Mitigation Policy* and its accompanying Strategy and Implementation Plan, namely to guide:
 - (i) the Territory's response to Climate Change through technically viable adaptation and mitigation actions; and
 - (ii) the formulation of funding priorities of the Climate Change Trust Fund established by the Virgin Islands Climate Change Trust Fund Act 2015;
- c) In relation to climate mitigation, the *Virgin Islands Climate Adaptation and Mitigation Policy* shall set targets for carbon emission reductions to be achieved by any Sustainable Energy Policy and provide high-level guidance on renewable energy and energy efficiency measures across all sectors (including the transportation sector).
- d) Proposed Bill shall require that the *National Sustainable Development Strategy* and *Virgin Islands Climate Change Policy* shall be updated by the Sustainable Development and Climate Adaptation Committee every 5 years through a combination of review of the current literature, best practices and local studies as well as a broad formal stakeholder consultation process. The consultation process should be reflective of all the sectors affected by climate change and inclusive of Government agencies, the private sector, non-governmental organizations, and the general public. The Policy shall be supported by a 5-year Implementation Strategy and Financing Plan.
- e) The proposed Bill shall provide that the conditions of any CECs issued and Natural Resource Management Plans developed pursuant to requirements of the Bill comply with the National Sustainable Development Strategy and the Virgin Islands Climate Adaptation & Mitigation Policy.

ENVIRONMENTAL MANAGEMENT AND POLLUTION CONTROL

- The following policies will be advanced under the proposed Bill, to guide the work of environmental management and climate change response within the Territory;
 - Sustainable Development Policy;
 - Environmental Management and Biodiversity Conservation;
 - Climate Adaptation;
 - Integrated Coastal Zone and Ocean Management
 - Pollution and Hazardous Substances and Waste.

The Bill will seek to actively promote and advance the restoration of the natural environment through a myriad of various actions. A general provision for the restoration and remediation of degraded sites resulting from industrial and other types of commercial operations shall form part of the principles enshrined in the Bill. In particular, the polluter pays principle shall apply to damage and remediation work.

The management of pollution and environmental degradation will be achieved through the following mechanisms in the proposed Bill.

12. Environmental Management – General:

- (a) The proposed Bill will prohibit the discharge or release of substances on land, into any water or the atmosphere which may harm the environment or human health. Severe penalties will be imposed for the discharge or release of pollutants which harm or may cause harm to the environment or human health above established permitted values.
- (b) The proposed Bill will provide that the Minister, on the advice of the Director of the Department of Environment, Conservation and Climate Adaptation, may by Notice in the *Gazette*:
 - (i) prohibit the importation, sale or use of any substance that poses a threat of harm to human health or the environment;
 - (ii) impose a deposit fee for the disposal of cans and other recyclable materials to cover the cost of recycling and processing;
 - (iii) impose a bond or insurance for all vessels sailing within the Territory to cover disposal should such vessel become irreparably damaged and thus derelict or abandoned.

The Bill will provide that no order may be made under these provisions unless a public notice has been issued advising of the proposed action to be taken, and adequate opportunity has been provided for written comments to be made.

(c) The proposed Bill shall provide that Regulations may be promulgated to establish air pollution standards and empower the Director of the Department of Environment, Conservation and Climate Adaptation to enforce such standards. In the case of emissions from motor vehicles, the Director of the Department of Environment, Conservation and Climate Adaptation in collaboration with the Director responsible for Motor Vehicles and

- Vessels shall enforce such standards through the utilization of a process requiring regular vehicle inspections.
- (d) The proposed Bill shall provide that Regulations may be promulgated to establish water pollution standards and empower the Director of the Department of Environment, Conservation and Climate Adaptation to enforce such standards.
- (e) In cases where potential harm to human health or the environment could be caused from:
 - (i) any proposed development activity; or
 - (ii) the activities of any existing or proposed commercial facility,
- (f) the Bill will require, as applicable, an Environmental Impact Assessment and/or a Certificate of Environmental Clearance (CEC) to ensure that such impacts are managed during the construction, operation and abandonment stages of any development activity.

13. (e) Environmental Impact Assessments

a) An EIA is an evaluation tool used to determine likely environmental impacts of a project and potential mitigation measures. Environmental Impact Assessments (EIAs) are currently mandated as part of the development application process under the *Physical Planning Act*, 2004, but will be removed as the responsibility of the Planning Authority and mandated under the proposed Bill instead. The Environment Authority will be the official authority with the responsibility to require and review these assessments.

14. Certificates of Environmental Clearance

- a) A CEC is a *permitting tool* used to grant permission to proceed with a development or ongoing activity from an environmental perspective. Certificates of Environmental Clearance (CECs) will be required for listed activities (*see Annex*) that have the potential to cause adverse environmental impacts or harm to human health, or which generate significant amounts of waste or hazardous materials. The Environment Authority may require that an Environmental Impact Assessment (EIA) be undertaken to determine whether any adverse environmental impacts or harm to human health exists or may result from any proposed or existing listed activity.
- b) CECs will be granted only where the Environment Authority is satisfied that the activity proposed will not have significant adverse environmental impact during the development/construction and operational phases as evaluated against the Environmental Sensitivity Index (ESI).
- c) Conditions may be provided in any Certificate of Environmental Clearance that is issued, including the establishment and implementation of Environmental Management Plans (including facility waste management plans), compliance with Environmental Standards and Codes of Practice (tied to graduated penalties), the imposition of compliance bonds, record keeping, monitoring and auditing requirements.
- d) CEC compliance will be monitored through environmental audits undertaken by an independent auditor commissioned by the holder of the CEC, which will be undertaken to

- verify compliance with facility environmental management plans that will form part of the CEC compliance requirements.
- e) Renewal of the Certificate of Environmental Clearance is subject to the submission of an annual audit report prepared by a qualified environmental auditor who is registered with the Department of Environment, Conservation and Climate Adaptation and is not in a conflict of interest position in regards to the holder of the CEC, that attests to: (a) compliance with requirements of the CEC; or (b) where applicable, the adequacy of the environmental management system that is in place to address environmental, human health and climate change risks.
- f) A certification process for all individuals and entities conducting EIA or environmental audits in the Territory will be established.
- g) All Environmental Impact Assessments, Certificates of Environmental Clearance, and annual facility audit reports shall be lodged on the Environmental Registry.

15. Land Based Sources of Pollution

- a) The proposed Bill aims to manage point and non-point sources of pollution. It will impose the requirement for:
 - i. limits and controls for the use of various pesticides and fertilizers;
 - ii. properly sized and maintained septic tanks and the proper treatment of waste and gray water;
 - iii. sediment control measures, as part of development projects;
 - iv. oil and hazardous substance containment measures in commercial or private settings;
 - v. the lining and proper management of dump sites;
 - vi. proper sewage treatment and solid waste disposal; and
 - vii.

16. Management of Marine Pollution from Land-Based Sources

- a) The proposed Bill will prohibit the dumping of wastes and pollutants from land-based sources and establish procedures for the issue of special licences for reclamation and other permitted activities, thereby implementing the requirements of the *Convention on the Prevention of Marine Pollution by the Dumping of Wastes and Other Matter (London Dumping Convention)*.
- b) The proposed Bill will create an offence for any person or the owner or operator of any facility, to discharge any substance that poses a threat or harm to the environment or human health, or to fail to report any discharge or incident that poses a threat or causes harm to the environment or human health.

17. Management of Marine Pollution from Vessels

a) Provisions with the proposed Bill will regulate the manner of disposing of wastes generated by ships, ferries, and yachts and require the discharge of such waste into facilities provided

- at designated ports, marinas, or designated anchorages, thereby giving effect to the International Convention for the Prevention of Pollution from Ships and Related Protocols (MARPOL 73/78).
- b) The proposed Bill will establish powers for the Ministry of Natural Resources, Environment and Climate Adaptation working through designated Environmental Officers in Marine Police, Port Authority, National Parks Trust, or any other agencies to take such measures as may be necessary to prevent, mitigate or eliminate grave and immediate danger to the Territorial Waters from pollution, thereby giving effect to the MARPOL Convention and the International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969.
- c) The proposed Bill will establish liability for oil pollution damage from ships in accordance with provisions under the *International Convention on Civil Liability for Oil Pollution Damage, 1984* and the *International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1984*.
- d) The Minister, on the advice of the Director of the Department of Environment, Conservation and Climate Adaptation, may by Notice in the *Gazette*, designate any substance as a marine pollutant. The substance tributyltin (TBT) is declared to be a marine pollutant which may not be applied to any vessel in the form of anti-fouling paint.
- e) The proposed Bill will establish powers of enforcement in events of marine pollution incidents from vessels, and require various parties to report in the event of marine pollution incidents. The proposed Bill will create an offence for any ship or vessel master or owner to discharge waste and to fail to report any accident that causes harm to the environment.
- f) Standards will be established for the operation of marinas, including the requirement for the establishment of pump out facilities at marinas and the prohibition of the release of untreated sewage from charter vessels, and the proposed Bill will establish procedures for the adoption of standards for the placement of on-board waste containment and treatment devices for yachts and ferries under 400 gross tonnage.

18. Management of Hazardous Substances

a) The proposed Bill will establish a life cycle approach and mechanisms for the management of hazardous substances and waste, which will include the declaration of the substances prior to entry followed by the approval of goods and materials that are potentially hazardous or are comprised of genetically modified organisms; inspection and regulation at the point of entry; internal transport movement of the substance within the Territory; the presence of a hazardous materials management framework, inclusive of the inspection of facilities, documentation, safe handling, emergency procedures and disposal; and, domestic and international disposal.

BIODIVERSITY CONSERVATION

The following section outlines the measures that will be established under the proposed Bill to conserve and protect the vulnerable biodiversity of the Virgin Islands. These provisions also serve to implement provisions under various international conventions dealing with the

conservation and sustainable use of biodiversity, fair and equitable sharing of the benefits arising from the use of genetic resources, and the control of invasive species and genetically modified organisms

19. Protection of Biodiversity

- a) The proposed Bill will prohibit
 - i. the reclamation/filling or draining of any wetland;
 - ii. the placement, construction, alteration, extension, removal or demolition of any structure that is fixed in, on, under or over any wetland, beach or coral reef;
 - iii. disturbing any wetland, beach or coral reef by drilling, tunnelling, excavating or any other act in a manner that has or is likely to have an adverse effect on the wetland, beach or coral reef;
 - iv. deposit in, on or under any wetland, beach or coral reef any substance in a manner that has or is likely to have an adverse effect on the wetland, beach or coral reef;
 - v. destroying, damaging or disturbing any vegetation, including but not limited to, mangroves and seagrasses within a wetland or beach, or any part of coral reef in a manner that has or is likely to have an adverse effect on any plant or animal or its habitat;
 - vi. introducing or planting any exotic or introduced plant or animal in a wetland, beach or coral reef;
 - vii. sand mining the removal of any natural barrier or any other beach material, as described in the Beach Protection Ordinance, 1985.

without written approval granted through a Certificate of Environmental Clearance from the Director of the Department of Environment, Conservation and Climate Adaptation.

b) The proposed Bill will provide that the Director of the Department of Environment, Conservation and Climate Adaptation may upon receipt of an application to carry on any activity requiring a CEC or EIA, require any investigation it considers necessary, to determine the effect of that activity on the wetland, beach or coral reef and the environment in general.

20. Environmentally Sensitive Areas (ESAs) and Environmentally Sensitive Species (ESSs)

- a) The proposed Bill will provide for the designation of Environmentally Sensitive Areas (ESAs) and Sensitive Species (SSs), being ecosystems and species that are threatened or endangered and require careful management.
- b) The proposed Bill will expressly state the process for designation of the ESAs and ESSs.
- c) The public will be given the opportunity to provide input into the designation of any proposed ESAs and ESSs.
- d) The designation of ESSs will be undertaken through a process of public consultation after: (a) a public notice has been published advising of the intent to designate certain species; (b) a management plan has been developed for the proposed ESS. Recovery plans will be mandated in the proposed Bill for all ESSs.

e) Handling of designated ESSs and carrying out activities within a designated ESA would require a CEC.

21. Invasive Species

- a) The proposed Bill will establish the Invasive Species Response Group comprising representatives from the Department of Agriculture and Fisheries, the Ministry of Health, the Ministry Natural Resources, Environment and Labour, the Virgin Islands National Parks Trust, and the Customs Department.
- b) The Environmental Response Unit within the Ministry of Natural Resources, Environment and Labour shall support the activities of the Invasive Species Response Group. The functions and responsibility of the Group will be to provide advice to the Minister and coordinate all management and response measures concerning invasive species that threaten the Territory. The Group, in collaboration with the Department of Environment, Conservation and Climate Adaptation, will coordinate all risk management measures, and manage the response, containment, removal, eradication and in-situ destruction of any invasive species that is introduced into the Territory. The Invasive Species Response Group shall also be responsible for coordinating any damage assessment that may be required after the release into the environment of any invasive species. Members of the Groups shall be appointed as Environment Officers under the Bill and shall have all the powers conferred upon such officers.
- c) The proposed Bill will include a list of species (to be contained in a Schedule to the Environmental Management and Climate Adaptation Bill that are declared to be invasive species that present a threat to biodiversity, human health or the economy of the Territory.

22. Biodiversity Prospecting

- a) The proposed Bill shall provide that the Government of The Virgin Islands exercises rights over the biological resources existing in the Territory and recognizes that it is the duty of the state and its citizens to regulate the access to biological resources as well as related use of community knowledge and technologies.
- b) The proposed Bill shall establish the requirement for permits to access genetic resources, to undertake scientific study, research and trade of species within the Territory, and shall define the access and benefits sharing² process in a Schedule. A Model Access and Benefits Sharing Agreement shall be included in a Schedule to the proposed Bill.
- c) Measures established under the proposed Bill shall regulate biodiversity prospecting and shall include the operation of a permitting process, the promotion and support of indigenous and traditional technologies, and implementation of relevant provisions of the Convention of Biodiversity.

² The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity is an international agreement which aims at sharing the benefits arising from the utilization of genetic resources in a fair and equitable way.

- d) Amongst other measures, any bioprospecting agreement that is issued shall prohibit: (a) the harvesting of corals; and (b) causing damage to marine ecosystems or species by the use of explosives or poison or by anchor damage or other means.
- e) Licences may be given authorizing the holder to engage in any activity that may otherwise be prohibited or restricted for the following reasons;
 - (i) Scientific research relevant to the conservation and survival of the particular protected species, medical research or any other reasonable purpose;
 - (ii) Establishing or maintaining a population of protected species for exhibition to the public at a recognized institution, museum or protected area;
 - (iii) Conducting an aquaculture programme or project;
 - (iv) Conducting a horticultural programme or a species enhancement programme;
 - (v) Rehabilitation of injured protected species;
 - (vi) Establishing a rehabilitation programme for injured protected species;
 - (vii) Establishing a captive breeding or rearing programme to introduce or reintroduce protected species into the wild.

Any license issued under this provision shall specify the terms and conditions that are to be observed to comply with any otherwise prohibited/restricted activity or use.

- f) Licenses may be given for the following:
 - (i) Relocation of a protected species to assist with propagation or safeguarding anywhere within the Territory;
 - (ii) Restoration or maintenance;
 - (iii) Destruction of protected species to protect human safety and health;
 - (iv) Where necessary to manage natural hazard or some other compelling reason, the installation of utilities, erecting fences, walls etc. when protected species or their habitat would be affected;
 - (v) Developing or maintaining land when reasonable when protected species or their habitat would be affected;
- g) Mitigation action to be taken if a protected species or its habitat would be negatively impacted by issuing a licence or permit.

23. Biosafety

- a) The Invasive Species Response Group will be mandated to regulate the importation of genetically modified organisms (GMOs) and living modified organisms (LMOs) in compliance with requirements of the *Cartagena Protocol*.
- b) There shall be established in a schedule to the proposed Bill the risk management framework for the control of genetically modified organisms (GMOs) and living modified organisms (LMOs) in compliance with requirements of the *Cartagena Protocol*.

MARINE ESTATE AND COASTAL ZONE MANAGEMENT

24. Administration of the Marine Estate

- (a) The proposed Bill will establish the legal and institutional framework to implement and give effect to the *Virgin Islands Marine Estate Administration Policy* and *Virgin Islands Beach Use Policy*. The Bill will provide for a number of definitions, including "Marine Estate" which comprises the territorial waters and seabed, and which are vested in the Crown and are regarded as a public asset to be managed in trust by the Ministry of Natural Resources and Labour for public benefit. In the exercise of this responsibility, the Ministry of Natural Resources and Labour has a duty to conserve, maintain and enhance the value of the Marine Estate and the return obtained from it with due regard to the requirements of good management, and shall ensure the sustainable development of its assets to generate revenue and facilitate economic development. The Ministry shall ensure that the *Virgin Islands Marine Estate Administration Policy* and *Virgin Islands Beach Use Policy* are regularly reviewed and updated through a broadbased consultative process.
- (b) The proposed Bill shall repeal and replace the *Beach Protection Ordinance 1985*, but shall maintain key provisions of the Ordinance, including the prohibition on sand mining and the removal of natural coastal defences. New provisions will be included, including declaring all beaches as public assets, and measures to control noise pollution at beaches which is becoming a major nuisance.
- (c) In exercising their responsibilities under the proposed Bill, the Ministry of Natural Resources and Labour shall ensure that proposed developments within the Marine Estate do not lead to unacceptable changes to these natural systems, which in turn will affect their social and economic value to be quantified over time.
- (d) The proposed Bill shall require the Ministry of Natural Resources and Labour to undertake and regularly update the natural resource inventory of the Marine Estate which catalogues key habitats of national importance to the fisheries, biodiversity conservation and tourism sectors. The Ministry shall establish a framework for monitoring of ecosystem assets, services and values within the Marine Estate, as well as environmental change. All structures residing on the seabed shall be surveyed and included in National Geographic Information Systems (NGIS). Reclamations, in addition to their inclusion into the NGIS framework, shall form part of the cadastre after the lands are surveyed.
- (e) The Bill shall require the Ministry to prepare and maintain a Marine Spatial Plan based on natural resource inventories and environmental sensitivity to guide decision making regarding development within the Marine Estate. Synergy should also be sought with other important national planning processes and documents, such as the National Physical Development Plan and National Disaster Plan. Additionally, the Ministry shall undertake the preparation of Special Area Precautionary Plans for Specially Vulnerable Areas in the Marine Estate that are vulnerable to natural or manmade disasters/events which would need declaration and delimitation. The Ministry has the duty to ensure that assets residing on the seabed proposed or existing in such areas shall adhere to the

Special Area Precautionary Plans, which may include strategies, policies and standards for development and maintenance of structures. The Ministry shall prepare marine habitat restoration plans in order to improve the manner in which the aftermath of a disaster is addressed in the Marine Estate as part of the Disaster Risk Reduction framework for the Territory.

25. Marine Estate Leases, License, Easements and Permits

- (a) In the exercise of their responsibilities under the proposed Bill, the Ministry of Natural Resources and Labour shall establish and administer a system of leases, licenses and easements to regulate the use of assets in the Marine Estate.
- (b) Seabed licenses and leases may attract a development fee and an embedded environmental fee fees assessed in relation to the use of the marine estate will be based on the area affected by the use and not strictly the built footprint of the use only.
- (c) In addition to the system of leases, licenses and easements, the proposed Bill shall establish a permit system to install moorings and jetties, and to deposit any substance or object within the Territorial waters, either in the sea or on or under the sea bed, from
 - i. any vehicle, vessel, aircraft or marine structure,
 - ii. any container floating in the sea, or
 - iii. any equipment or structure on land constructed or adapted wholly or mainly for the purpose of depositing solids in the sea.

Sinking of any vessel or floating container shall also require a permit.

- (d) Generally, an applicant seeking use of the seabed must be able to prove ownership or consent of the landowner(s) of the dry land parcel(s) adjacent to or from which a structure or asset is to be established on the basis of full disclosure of the planned development. Adjacent landowners have the right of first refusal for any development along the shore next to their property. When there is a shared water frontage, various mechanisms for conflict or negotiated solutions should be exhausted between the interested parties (joint ventures, swapping of development rights, and creation of easements and/or establishment of covenants). Additional allocation of seabed rights, which could conflict with existing allocated rights or use permissions of the seabed, should be avoided.
- (e) In regards to applications for any lease or license, for the avoidance of speculative reclamation which can result in adverse environmental and social impacts, applicants must provide not only plans for the reclamation but also plans for the development on the reclamation which have at least received approval in principle by the Planning Authority.
- (f) The proposed Bill will establish penalties for the unlawful use of the Marine Estate without a permit/lease/license. In addition to any criminal penalty, the proposed Bill will establish other civil remedies, including the replenishment of damaged or lost marine habitats, such as coastal vegetation, mangroves, seagrasses, eroded dry land, sand dunes, etc.

26. Beach Management

(a) The proposed Bill will establish the definition for a beach, namely:

"the area from the seaward limit of the foreshore running inland to the vegetation line or other natural barrier whichever is closer to the landward limit of the foreshore, including any sand, stones, gravel, shingle, coral fragments or boulders contained therein".

- (b) The proposed Bill shall require that the Ministry of Natural Resources and Labour establish and maintain the policy, legal and administrative framework related to the sustainable development of beaches.
- (c) The proposed Bill will require the Ministry of Natural Resources and Labour to establish and maintain the *Virgin Islands Beach Management Framework* that shall take into account current and future activities which may be fostered. The following decision support tools will comprise the *Virgin Islands Beach Management Framework*:
 - (i) <u>Beach Classification System</u> based on physical, ecological and socioeconomic characteristics. Permitted and recommended activities within the beach zone will be guided by an understanding of geomorphological, ecological and socioeconomic dimensions. Key attributes to describe beaches will form part of the mechanisms for allocating use and grant permission under the proposed Bill for activities to be undertaken at beaches throughout the Territory.
 - (ii) A Comprehensive Territory level Beach Management Plan (BMP), inclusive of a spatial plan, to guide the rationale use and development of beaches and shorelines based on the beach classification. The BMP will decide which beaches are best managed or developed for which purposes and determine the best beaches at which to promote various activities. The proposed Bill will provide that the development of the BMP will be through a broad-based consultation process.
 - (iii) Beach management plans at the level of individual beach classes or individual beaches including beach use criteria, standards and guidelines to guide decision making about activities at specific beaches along with the assessment of relative safety of use and measures to be applied.

ENFORCEMENT AND PENALTIES

The following section outlines provisions in the proposed Bill dealing with enforcement mechanisms and penalties to be imposed for various offences.

27. Environmental Tribunal

- a) In keeping with international best practices, an Environmental Tribunal will be established with jurisdiction to adjudicate environmental matters under the proposed *Environmental Management and Climate Adaptation Bill* and the *Physical Planning Act*, 2004.
- b) The Environmental Tribunal will have both criminal and civil jurisdiction and will be chaired by a lawyer of at least 10 years standing who is qualified to be appointed as a High Court

- Judge or Senior Magistrate. The Chair of the Environmental Tribunal will be assisted by two Assessors who have at least 10 years' experience dealing with environmental matters.
- c) The Environmental Tribunal will promote alternate dispute resolution (ADR) amongst parties in order to avoid costly and adversarial litigation. In the event that the parties are unable to come to a mutually agreeable agreement or are unwilling to use ADR, the Environmental Tribunal will be empowered to arbitrate the matter and render a decision which will be legally binding and enforceable. The Tribunal will have the jurisdiction to preside over both criminal and civil matters under the Bill, including con-compliance with the requirements of any CEC, license, lease, easements or permit.
- d) The Environmental Tribunal will be empowered to issue stop work and other enforcement notices under the proposed *Environmental Management and Climate Adaptation Bill,* including the power to suspend any business activity in the event of any offence causing death, serious injury or damage to the environment.
- e) To reduce administrative costs and to avoid delays in start-up, the *Environmental Tribunal* may seek to extend the jurisdiction of the current Labour Tribunal to hear matters under the Bill and use its existing support staff, administrative processes and office space.

28. Enforcement Officers and Process

- a) Technical Officers within defined line agencies will be appointed as an *Environmental Officer* with powers of search and seizure, and the power to issue spot fines. The Ministry of Natural Resources and Labour will be mandated to ensure that such Environmental Officers receive the necessary training to undertake responsibilities under the Bill. It will be an offence to hinder or obstruct such officers, or to make false reports. The proposed Bill will require that a warrant be issued to enter private residences where entry has been refused by the owner. Search warrants will be issued by the Environmental Tribunal.
- b) Enforcement will be coordinated by the *Environmental Enforcement Officer* in the Ministry of Natural Resources, Environment and Labour using powers conferred under the Bill.
- c) The proposed Bill will establish an expedited processing whereby cases will be sent for adjudication (or mediation) by the Environmental Tribunal. Cases will be prepared by Technical Officers in line agencies who will be appointed as Environmental Officers and coordinated by the Environmental Enforcement Officer and Environmental Lawyer within the Ministry of Natural Resources, Environment and Labour.
- d) The proposed Bill will establish whistle-blower protection, and provisions permitting direct private party actions including intervener status and legal standing to enable the introduction of civil action in the event of environmental damage or if government agencies fail to comply with the requirements of the Act. The offending party may be required to cover the legal costs of the person or organisation that has been granted intervener status. However, the Environmental Tribunal may refuse to award these costs if the suite by the interveners was found to be malicious or without merit. Any private party may institute a civil action before the Environmental Tribunal against any other person for a claimed violation of any of the specified environmental requirements identified in the Bill.

e) To facilitate the presentation of technical evidence before the Environmental Tribunal, the proposed Bill will also establish a presumption clause pertaining to statements of a technical nature made by an Environmental Officer whereby the facts contained in such statements will be *prima facie* proof of such matters, and the onus of disproving scientific facts will be on the accused person or company.

29. Offences

- a) The proposed Bill shall establish a range of offences and penalties that may be imposed by the Environmental Tribunal against individuals or corporations causing harm or damage to the environment. Offences may include:
 - i. The commencement of development that requires a Certificate of Environmental Clearance without permission;
 - ii. Development or business operations that may require a Certificate of Environmental Clearance, which are in contravention of the standards, guidelines and conditions contained therein;
 - iii. Development not in conformity and compliance with an approved Environmental Management Plan;
 - iv. The accidental or wilful discharge or release of pollutants which harm or may cause harm to the environment or human health;
 - v. The importation, sale or use of any substance that poses a threat of harm to human health or the environment, which has been prohibited on the advice of the Director of the Department of Environment, Conservation and Climate Adaptation;
 - vi. A vessel lacking a required bond under the Act, which may become irreparably damaged and thus derelict or abandoned and which may so cause damage to the environment;
 - vii. Operations within the Virgin Islands which may exceed legally promulgated pollution standards;
 - viii. The dumping of waste from land-based sources in the marine environment;
 - ix. Littering in an ESA, as well as beaches, wetlands (mangroves, salt ponds and ghuts), forested areas and the Territorial waters;
 - x. The dumping of soil or other aggregate material or rocks/boulders for the purposes of reclamation or other coastal works without a valid Certificate of Environmental Clearance;
 - xi. The dumping of soil or other aggregate material contrary to the conditions specified in any valid Certificate of Environmental Clearance for the purpose of reclamation;
 - xii. Failure to report any discharge or dumping that poses a threat or causes harm to the environment or human health;
 - xiii. Discharge of ballast and bilge water in the Territorial waters.
 - xiv. Discharge of grey water from cleaning vessels within ports and marinas or the wider Territorial waters;

- xv. Discharges of sewage, waste or garbage from vessels within the Territorial Waters of the Virgin Islands, unless into a facility provided at designated ports, marinas or designated anchorages;
- xvi. The discharge of oil or other hydrocarbons, which may result in the pollution of the terrestrial, coastal or marine environment;
- xvii. The discharge of any substance which is designated as a marine pollutant by the Director of the Department of Environment, Conservation and Climate Adaptation;
- xviii. The failure of the Master or Owner of any ship or vessel to report any event of marine pollution incidents from vessels;
- xix. Damage to biodiversity through:
 - 1. the reclamation or draining of any wetland, including salt ponds, mangrove areas and ghuts;
 - 2. encroachment or dumping in a wetland;
 - 3. the placement, construction, alteration, extension removal or demolition of any structure that is fixed in, on, under or over any wetland, beach or coral reef;
 - 4. disturbing any wetland, beach or coral reef by drilling or tunnelling in a manner that has or is likely to have an adverse effect on the wetland, beach or coral reef;
 - 5. deposit in, on or under any wetland, beach or coral reef any substance in a manner that has or is likely to have an adverse effect on the wetland, beach or coral reef;
 - 6. destroy, damage or disturb any wetland, beach or coral reef in a manner that has or is likely to have an adverse effect on any plant or animal or its habitat;
 - 7. introduce or plant any exotic or introduced plant or animal in a wetland, beach or coral reef,
 - 8. Cutting, uprooting, pruning or otherwise disturbing a mangrove without approval by the Environment Authority;
 - 9. Cutting trees greater than a certain diameter trunk without approval by the Environment Authority;

10. Starting a wildfire

without written approval from the Director of the Department of Environment, Conservation and Climate Adaptation.

- xx. Any development within an Environmentally Sensitive Area without a Certificate of Environmental Clearance or contrary to any provisions afforded within a Certificate of Environmental Clearance;
- xxi. Any harm or destruction of an Environmentally Sensitive Species, including disturbing it's habitat without permission from the Environment Authority;
- xxii. Import, keep, sell or release any invasive species listed in the Schedule or failure to report any release of such species;

- xxiii. Taking a threatened, endangered or endemic species from their natural habitat without the approval of the Environment Authority
- xxiv. Exporting a threatened, endangered or endemic species from the Territory without the approval of the Environment Authority
- xxv. Exporting an endemic species from the Territory without permission from the Environment Authority
- xxvi. Obstruct, threaten or refuse to cooperate with the Invasive Species Response Group officer when undertaking any risk management measure mentioned in the relevant section;
- xxvii. Biodiversity prospecting activities taking place without a permit affording access to genetic resources or undertaking research, scientific study or trade of species within the Territory;
- xxviii. Harvesting of coral, causing damage to marine ecosystems or species by the use of explosives or poison or by anchor damage or other means;
 - xxix. Contravening the provisions related to any biodiversity prospecting licence;
 - xxx. The removal of sand from the foreshore or any sand mining or any other provisions, as detailed in the Beach Protection Ordinance;
 - xxxi. The contravention of any conditions specified in a lease, permit, easement or licence for the use of the seabed or any associated Risk Management Plan specified for the performance of projects within the seabed;
- xxxii. Any development within a beach contrary to the conditions provided for use granted through a CEC and a licence,
- xxxiii. the operation of any concession or business activity within the foreshore without the express authority of the Environment Authority and as defined within a CEC;
- xxxiv. Falsifying documents or data and information required for the processes;
- xxxv. Falsifying environmental audits or any information or findings within an EIA.
- b) The most serious penalty will be for the wilful or intentional release of a hazardous substance or hazardous waste that causes death or harm to human health, or serious environmental damage, which will be liable to a fine of up to \$10 million or 10 years imprisonment, in addition to an award for civil damages and clean-up costs based on precedence established under similar cases in other jurisdictions. Such matters may be referred to the High Court due to the serious nature of such case.
- c) Lesser penalties will be established for offences prescribed in the Bill that do not result in death, harm to human health or serious environmental damage. Such offences are outlined above.
- d) As a deterrent, the proposed Bill will also impose continuing offences which may be imposed for each and every day that pollution resulting in environmental damage occurs or any offending activity persists. Periods of imprisonment will be imposed as an alternative to the imposition of fines to ensure payment.

- e) The proposed Bill will also provide that the Environmental Tribunal may impose civil liability for environmental damages, including clean-up costs, restoration costs, and for loss of ecosystem services. Cleanup and restoration costs and value of loss are to be as determined by the Ministry of Natural Resources, Environment and Labour in accordance with acceptable international practices, with all costs of such determination being levied against the offender.
- f) In keeping with international best practices, the proposed Bill will also establish:
 - (i) increased penalties for second and subsequent offences;
 - (ii) personal liability for owners, directors, managers, supervisors, partners or other similar officer or responsible individual, who was acting in such capacity, when any pollution incident or offence under the Bill was caused by a company;
 - (iii) offences and penalties for failing to report a spill of hazardous substances;
 - lesser offences and penalties for obstructing or threatening an Environment Officer, for failing to render reasonable assistance to such Officer when requested, and for impersonating such an Officer;
 - (v) offences and penalties for failing to appear before the Environmental Tribunal and for failing to comply with an order of the Tribunal;
 - (vi) provisions relating to the disposal or return of any articles, goods specimen or evidence that has been seized;
 - (vii) that a second or subsequent conviction by a company within one year may result in the cancellation or suspension for a specific period of time of any Certificate of Environmental Clearance that has been issued to such company;
 - (viii) offences and penalties for noise and air pollution (including offensive or obscene music) in public places including parks, beaches, natural spaces, anchorages, nesting habitats, unless a permit has been issued for the function;
 - (ix) evidentiary clauses that will permit the presentation of electronic surveillance and evidence generated by drones in any criminal or civil matter under the Bill;
 - (x) the requirement for vessel and yacht owners to have on-board log books to record discharges of oil, sewage, garbage and other pollutants and establish offences and penalties for falsifying or failing to accurately maintain such log books;
 - (xi) the requirement that all vessels and yachts operating in the water of the Territory must lodge a bond or insurance to cover recovery and disposal costs in the event of damage or total loss;
 - (xii) powers to seize and dispose of vessels that have been abandoned for a period of no less than 6 months after due notice has been served upon the owner or agent;
 - (xiii) that awards for clean-up costs may be imposed for incidents of pollution that have occurred prior to the enactment of the proposed Bill, and which continue to cause harm to human health or the environment.

30. Human Resource and Financial Implications

The proposed Bill will rationalise the role and functions of the Ministry of Natural Resources, Environment and Labour and will require no additional human resources. Additional financial resources would be needed for the effective and timely implementation of measures established within the proposed Bill, and for the administration of the Department of Environment, Conservation and Climate Adaptation and the Environmental Tribunal being established.

Annex: Scope of Activities that Require and Environmental Impact Assessment (EIA) and Certificate of Environmental Clearance (CEC)

- 1. Hotels, guest houses or resort complex of more than 12 rooms (Note: check number of rooms)
- 2. Sub-divisions of more than 10 acres
- 3. Residential development of more than 12 units
- 4. Drilling, quarrying, sand mining and other mining activities
- 5. Marinas, small craft harbours and any activity requiring a seabed lease or license with the exception of the placement of individual mooring buoys
- 6. Land reclamation, dredging, breakwaters, and coastal defences
- 7. Airports, ports and commercial harbours
- 8. Dams, reservoirs and large-scale drainage systems serving 10 acres or more
- 9. Hydro-electric projects of 100 kW or more
- Sanitary landfill operations, incinerator sites, sewage treatment plants serving more than 12 households, solid waste disposal sites, sludge disposal sites, toxic waste disposal sites and other similar sites
- 11. A power plant, wind turbine or solar electricity facility of 100 kW or more
- 12. Petroleum pipeline installations serving more than 12 households
- 13. Communication towers, in particular to consider human health impacts
- 14. Any development project generating or potentially generating emissions, aqueous effluent, sedimentation, solid waste, noise, vibration, radioactive discharges, or other source of impact either during development and construction or during operation, that is:

 (a) is likely to exceed the water quality, air quality and indoor air emission standards included in the Act; or (b) causes harm to human health or the environment.
- 15. Any development involving the storage and use of hazardous materials
- 16. Any coastal zone development likely to have an adverse impact on the coastal or marine environment.
- 17. Any development in or situated within 100m of the boundary of any wetlands, marine parks, national parks, conservation areas, environmental protection areas or within Environmentally Sensitive Areas or areas possessing Sensitive Species; and
- 18. Any other projects identified by the Authority.