

1.0 Legislative and Regulatory Considerations

This section describes the legislative and regulatory framework under which the proposed five hundred (500) room Hotel Project Development at Kilgwyn Bay, Environmental Impact Assessment (EIA) will operate. In order to be environmentally acceptable, the proposed project must be in compliance with international standards or guidelines (as per National Environment Policy, 2018) and pertinent local standards or guidelines. The policy, legal and administrative framework for this project will be shaped by the following:

1. International standards and guidelines;
2. Relevant local policies, regulations, standards and guidelines governing environmental quality, and health and safety that apply to the proposed project based on the laws of Trinidad and Tobago. This section will define the regulatory framework which governs the planning and implementation of this hotel project with reference to all applicable local laws, standards, licenses, permits and guidelines, including those related to land, water, noise and environmentally sensitive areas and species;
3. Regional and international accords to which Trinidad and Tobago is a party; and
4. Policy and practices of Apple Leisure Group and DSM Investments Limited (hereafter referred to as ALG and DSM respectively).

There are numerous national policies, laws and regulations that are applicable to the hotel project. These should be identified and used as guidelines in the development of the hotel project. This section highlights and discusses these policies and laws as well as their roles. Where local standards do not exist or have not been formalized, International Accords and Treaties signed by Trinidad and Tobago that are applicable to this project will be examined. Finally, the ALG's and DSM's Environmental Management strategy will be discussed.

Figures 1 - 1.1a and 2 - 1.1b provide illustrations of Trinidad and Tobago's legislative and regulatory framework under which the project will operate.

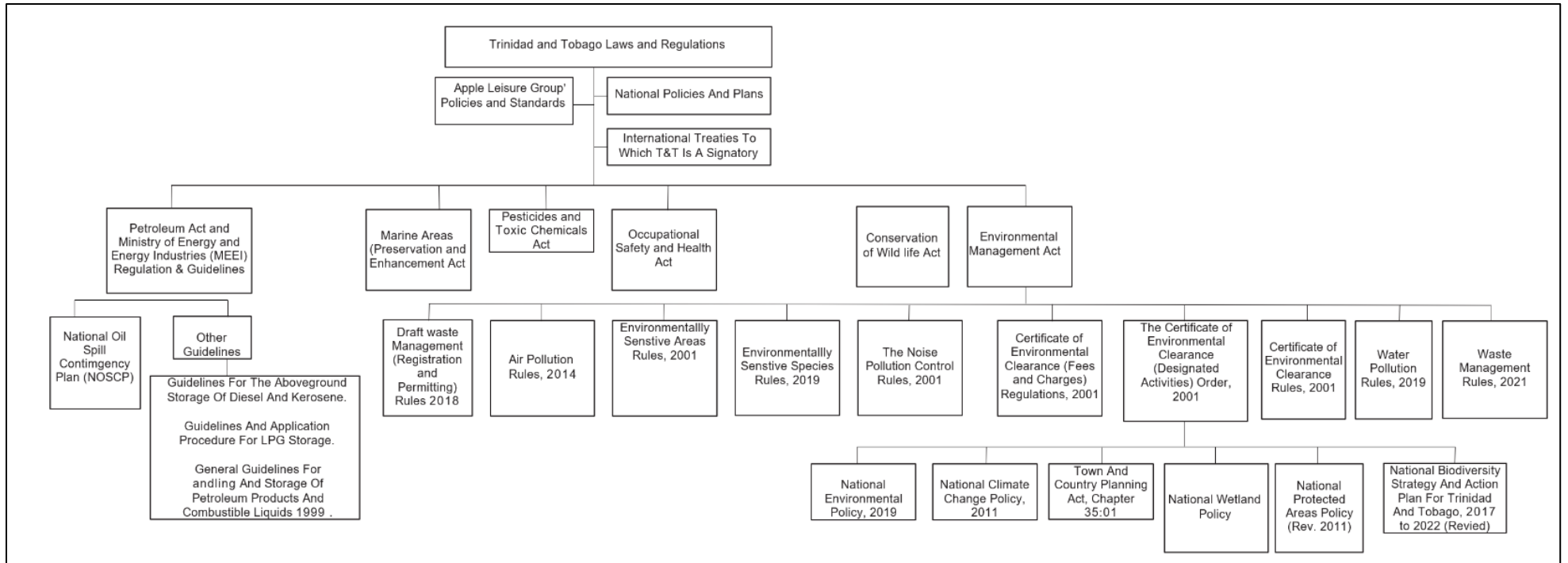


Figure 1 - 1.1a: Schematic illustrating Trinidad and Tobago’s Legislative and Regulatory Framework as it relates to the Environmental Impact Assessment for Hotel Development at Kilgwyn Bay, Tobago.

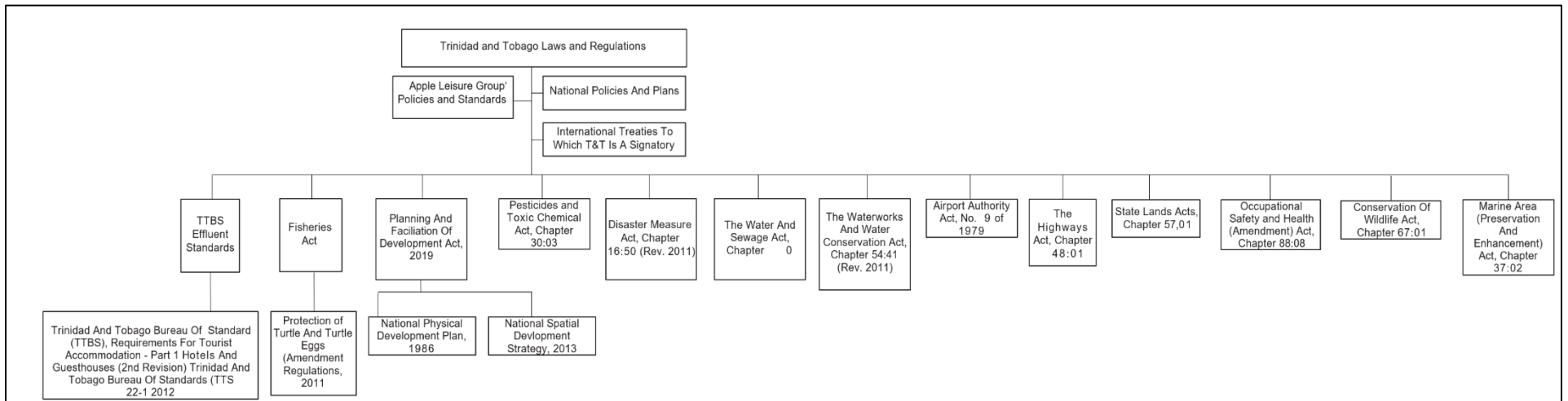


Figure 2 - 1.1b: Schematic illustrating Trinidad and Tobago’s Legislative and Regulatory Framework as it relates to the Environmental Impact Assessment for Hotel Development at Kilgwyn Bay, Tobago. Continued from Figure 1.1a

1.1 National Environmental Policies

There are four main national policies that are relevant to the hotel project. These policies are as follows:

- The National Environmental Policy (NEP);
- National Biodiversity Strategy and Action Plan (NBSAP);
- National Protected Areas Policy (NPAP); and
- National Climate Change Policy.

1.1.1 The National Environmental Policy, 2018 (NEP)

The NEP was created in accordance with Section 18 of the Environmental Management Act No. 3 of 1995 which was subsequently amended in 2000 (Chap. 35:05). This policy laid in Parliament in 1998 was subsequently revised in 2006. The 2018 NEP was prepared by the Board of Directors of the EMA after consideration of policy recommendations received from the Minister with the responsibility for the environment, governmental entities, non-governmental entities, private sector and the public. The document was approved by Cabinet on 25th October 2018 and subsequently laid in Parliament on 2nd November 2018.

The NEP provides the overarching framework for environmental management and seeks to:

- a) Provide direction to public, private, non-governmental and other national actors regarding environmental sustainability;
- b) Clearly articulate national environmental commitments and objectives in a transparent manner; and
- c) Provide a rational, practical and comprehensive framework for addressing the salient threats to environmental sustainability.

The NEP articulates the priorities determined by the people of Trinidad and Tobago as critical to achieving environmental sustainability and ultimately, sustainable development. Six priority areas are identified, and the NEP identifies actions to address each of these:

1. Protecting environmental and human health through pollution control
2. Sustainably managing natural assets
3. Improving the local environment
4. Evolving a greener economy
5. Fostering an environmentally responsible society
6. Addressing climate change and natural disasters

With respect to climate change, the NEP details the Government of the Republic of Trinidad and Tobago's (GoRTT) commitments towards climate change mitigation, adaptation as well as managing climate risks. The GoRTT has expressed its commitment to reducing the country's Greenhouse Gas (GHG) emissions through source reduction, avoidance and improved sequestration of GHGs. The NEP is committed to overall reduction of emissions from transport and other sectors and to ensuring that climate change vulnerability and adaptation are integrated into national and sectoral development planning.

The EMA is vested with the responsibility for development of an Action Plan and coordinating the mainstreaming of the NEP across all sectoral activity. A National Council for Sustainable Development (NCSD) will also be established to provide a forum for Government, business and civil society to have ongoing oversight with advisory functions to the Action Plan.

1.1.2 National Biodiversity Strategy and Action Plan (NBSAP), 2017-2022

The development of the NBSAP was instigated by Trinidad and Tobago signing the Convention on Biological Diversity (CBD) at Rio in 1992. The Trinidad and Tobago Government later ratified the convention in 1996. The first NBSAP was passed by Cabinet in 2001, and the revised NBSAP (2017 - 2022) was approved by Cabinet on April 26th, 2018.

The revised NBSAP provides an update on the status of biodiversity in Trinidad and Tobago taking into consideration the value of biodiversity and ecosystem services to human health and wellbeing; the threats to biodiversity and the legal and policy context in which this NBSAP will be implemented. The concept of ecosystem-based adaptation approaches is introduced as mechanisms for consideration in addressing the national response to Climate Change. The strategies and actions are centered on the 20 National Biodiversity Targets, which are aligned to the Aichi Biodiversity Targets. The revised NBSAP has prioritized seven national targets that the GORTT will focus on implementing. The revision of the NBSAP was also guided by the national obligations to implement the Sustainable Development Goals that define the Global Sustainability Agenda. The long-term vision and goal are that biodiversity and ecosystem services are mainstreamed into all areas of national development.

The actions and responsible implementing agencies are defined with the NBSAP. The Ministry of Planning and Development (MPD) as the focal point for the Convention on Biological Diversity will be responsible for overseeing the implementation of this NBSAP.

1.1.3 National Protected Areas Policy, 2011 (NPAP)

Protected Areas (PAs) are important management tools for protecting, conserving and managing natural and built heritage, and therefore critical to national sustainable development. They vary in intensity of human use from no entry areas in the case of strict nature reserves to sites that allow for multiple uses in different zones. They can be terrestrial, coastal, marine or a combination of these.

Currently, there are several categories of legally declared PAs in Trinidad and Tobago, established under various pieces of legislation. These PAs include Forest Reserves, Wildlife Sanctuaries, Prohibited Areas, Protected Marine Areas, Environmentally Sensitive Areas (ESAs) and cultural and heritage “properties of interest”.

There have been several challenges to the establishment and management of a comprehensive system of protected areas including outdated legislation and policy, lack of a current national land use planning framework, multiple legal designations and multiple managers of a protected area.

The numerous attempts by the Government of Trinidad and Tobago to create a system of national parks and other protected areas in Trinidad and Tobago has been hampered by the absence of enabling legislation to implement a comprehensive systematic approach to wildlife, national parks and other protected areas management.

In the NPAP, the Government has stated its commitment to incorporating PAs management in national planning, to create a new PAs plan and the establishment of new PAs across the country.

While there are important elements of a PAs policy in existing national policies, there is no single comprehensive policy on PAs in Trinidad and Tobago. The existing policy environment is highly complex and fragmented, creating the need to harmonise and

rationalise the different categories of PAs, through a single unified policy. Such an approach will create an enabling environment for the effective and efficient management of a national system of PAs that addresses key issues such as:

- The existing complexity of designating and managing PAs;
- Gaps in the designation and management of PAs;
- Identifying and providing the environment for resolving conflicts among policies;
- Reducing the duplication of efforts in protecting individual areas; and
- Prompting the development of overarching land-use policies such as a National Land-use Policy.

The purpose of the NPAP is to establish an appropriate framework for the selection, legal designation and management of a national system of PAs. This includes the elaboration of a classification system for the designation of a comprehensive and rationalised system of PAs, the establishment of effective institutional arrangements for management, development of mechanisms for sustainable financing, identification of human resource capacity needs, resolution of policy conflicts, development of enabling legislation, and tools and guidelines for effective management.

According to the NPAP, the Government in collaboration with all stakeholders shall within five years of adoption of the Policy establish the under mentioned categories of PAs in order to accomplish the objectives of the NPAP, using the selection criteria outlined in the policy. The Policy directs the Government to transfer existing PAs to suitable categories in the new Classification System upon implementation of this new National Protected Areas Classification System:

- Scientific reserves;
- Special conservation reserves;
- National parks;
- Natural landmarks;
- Habitat or species management reserves;

- Protected landscape or seascape; and
- Sustainable use reserves.

The new National Protected Area Classification System is intended to provide for the adoption of the International Union for Conservation of Nature (IUCN) classification system within the context of the national circumstance.

1.1.4 National Protected Areas Systems Plan

In June 2019, Cabinet accepted a National Protected Areas Systems Plan (NPASP), proposing to protect approximately 20,000 km² of land and marine space making up a total of 136 protected areas (Espinet, 2019) consisting of:

- 92 terrestrial and freshwater areas, of which 79 are in Trinidad and 13 in Tobago;
- 40 coastal and marine areas, of which 18 are in Trinidad and 22 in Tobago; and
- four deep-sea marine areas.

The NPASP uses the seven categories of protection recommended under the NPAP, which are based on the internationally accepted standards of the IUCN (Dudley and Stolten, 2008). The NPASP was developed out of the project titled, 'Improving Forest and Protected Area Management in TT', which was co-ordinated by the Planning Ministry and administered by the Food and Agriculture Organisation of the UN (FAO/UN) on behalf of the Government.

The objective of the plan is *“to ensure the long-term conservation of biodiversity of the country, and so provide the people of Trinidad and Tobago with the opportunity to benefit from and enjoy that biodiversity.”* The successful implementation of the Plan requires legal establishment, financial considerations, local area management plans, stakeholder management teams and personnel, which will require a significant political commitment (FAO 2018).

1.1.5 National Climate Change Policy, 2011

The National Climate Change Policy aims to provide policy guidance for the development of an appropriate administrative and legislative framework, in harmony with other sectoral policies, for the pursuance of a low-carbon development path for Trinidad and Tobago. Suitable and relevant strategies and actions will be utilized to address climate change, including sectoral and cross – sectoral adaptation and mitigation measures.

The objectives of the policy are:

- (i) reducing or avoiding greenhouse gas emissions from all emitting sectors;
- (ii) enhancing carbon sinks;
- (iii) protection of the natural environment and human health;
- (iv) conserving and building resilience of human and natural systems to adapt to the adverse impacts of climate change, including through capacity building, the application of cleaner and energy efficient technologies, and relevant research and development;
- (v) enhanced agricultural production and food security;
- (vi) educating the wider public on the potential impacts of climate change and the recommended adaptation strategies; and
- (vii) conserving and guaranteeing a sustainable supply of potable water.

It is intended that the implementation of the policy shall be coordinated by the Multilateral Environmental Agreements Unit of the Ministry of Planning and Sustainable Development. It is envisaged that the implementation of this policy would be through the development of relevant strategies and action plans implementable over defined time periods.

In 2016, the World Bank reported a value of 31.8 for CO₂ emissions in metric tons per capita for Trinidad and Tobago which is the second highest value in the region of Latin

America and Caribbean (The World Bank, 2020). This is as a result of having a small population coupled with being the leading Caribbean producer of oil and gas.

Some measures proposed for mitigation and adaptation relevant to the project include:

- Increasing the use of solar technology and cleaner technology in all emissions-emitting phases of the project (power generation and generators etc.); and
- Assessing the project's vulnerability to climate change by conducting vulnerability analyses and formulating adaptation options, including technological application, in biophysical and socio-economic systems.

1.2 National Environmental Laws and Regulations

The following laws of Trinidad and Tobago are relevant to the proposed project:

- Environmental Management Act, 2000 Chap. 35:05;
 - The Certificate of Environmental Clearance (CEC) Rules, 2001;
 - The Certificate of Environmental Clearance (Designated Activities) Order, 2001 (as amended);
 - The Certificate of Environmental Clearance (Fees and Charges) Regulations, 2001
 - The Noise Pollution Control Rules, 2001;
 - Air Pollution Rules, 2014;
 - Water Pollution Rules, 2019. These rules supersede the following unrepealed effluent standards:
 - Trinidad and Tobago Standard Specification for liquid effluent from domestic wastewater (TTS417:1993);
 - Draft Waste Management (Registration and Permitting) Rules 2018;
 - The Environmentally Sensitive Species (ESS) Rules, 2001; and
 - The Environmentally Sensitive Areas (ESA) Rules, 2001;
- Ministry of Energy and Energy Industries (MEEI) Guidelines;
- Guidelines for Handling and Storage of Petroleum Products and Combustible Liquids;
- Pesticides and Toxic Chemicals Act Chap. 37:03;
- Occupational Safety and Health Act, Chap. 88:08, as amended (2006)
- Fisheries Act 1916, Chap. 67:51, as amended;
 - Protection of Turtle and Turtle Eggs (Amendment) Regulations, 2011.
- Marine Areas (Preservation and Enhancement) Act Chap. 37:02;
- Conservation of Wildlife Act Chap. 67:01;
- Waste Management Rules, 2021;
- Town and Country Planning Act, Chapter 35:01;

- Planning and Facilitation of Development Act, 2019;
- Disaster Measures Act, Chapter 16:50 (Rev.2011);
- The Water and Sewerage Act, Chapter 54:40;
- The Waterworks and Water Conservation Act, Chapter 54:41 (Rev. 2011);
- National Wetlands Policy
- Airport Authority Act, No. 49 of 1979
- The Highways Act, Chapter 48:01;
- State Lands Act, Chapter 57:01;
- The National Physical Development Plan, 1986;
- The National Spatial Development Strategy, 2013; and
- The Trinidad and Tobago Bureau of Standards (TTBS), Requirement for Tourist Accommodation- Part 1: Hotels and Guest Houses (2nd Revision) Trinidad and Tobago Bureau of Standards (TTS 22-1:2012)

DSM and ALG intends on complying with relevant rules and guidelines in the form existing at the time of the application. Acts and the responsible government agency that administer the national legislation are listed in **Table 1 - 1-1**.

Table 1 - 1-1: Authorities Responsible for Environmental Compliance.

Government Agencies	Local Standards/Regulations and National Legislation
Ministry of Energy and Energy Industries (MEEI)	<ul style="list-style-type: none"> • Guidelines for Handling and Storage of Petroleum Products and Combustible Liquids;
Ministry of Planning and Development: - Environmental Management Authority, Division of Infrastructure, Quarries and the Environment (DIQE, Tobago House of Assembly) and Forestry Division	<ul style="list-style-type: none"> • Environmental Management Act, 2000 Chap. 35:05; • The Certificate of Environmental Clearance Rules, 2001; • The Certificate of Environmental Clearance (Designated Activities) Order, 2001; • The Noise Pollution Control Rules, 2001; • Water Pollution Rules, 2019; • Air Quality Guidelines (Air Pollution Rules, 2014); • The Environmentally Sensitive Species Rules, 2001; • The Environmentally Sensitive Areas Rules, 2001; • National Environmental Policy (2018); • Draft Waste Management (Registration and Permitting) Rules 2018; • Conservation of Wildlife Act Chap. 67:01; • Marine Areas (Preservation and Enhancement) Act Chap. 37:02; and • National Biodiversity Strategy and Action Plan for Trinidad and Tobago. • Waste Management Rules, 2021; • Town and Country Planning Act, Chapter 35:01; • Planning and Facilitation of Development Act, 2019; • The National Physical Development Plan, 1986; • The National Spatial Development Strategy, 2013;
Ministry of Trade and Industry - Trinidad and Tobago Bureau of Standards	<ul style="list-style-type: none"> • Requirement for Tourist Accommodation- Part 1: Hotels and Guest Houses (2nd Revision) Trinidad and Tobago Bureau of Standards (TTS 22-1:2012)
Ministry of Health	<ul style="list-style-type: none"> • Pesticides and Toxic Chemicals Act Chap. 30:03
Ministry of Works and Transport - Maritime Services Division	<ul style="list-style-type: none"> • Airport Authority Act, No. 49 of 1979 • The Highways Act, Chapter 48:01;
Ministry of Labour and Small Enterprise Development - Occupational Safety and Health Authority	<ul style="list-style-type: none"> • Occupational Safety and Health Act 2004 Chap. 88:08 as amended (2006)
Ministry of Agriculture, Land and Fisheries: - Fisheries Division	<ul style="list-style-type: none"> • Fisheries Act Chap. 67:51; <ul style="list-style-type: none"> ◦ Protection of Turtle and Turtle Eggs (Amendment) Regulations (2011); • National Wetlands Policy • State Lands Act, Chapter 57:01
Ministry of Public Utilities	<ul style="list-style-type: none"> • The Water and Sewerage Act, Chapter 54:40; • The Waterworks and Water Conservation Act, Chapter 54:41 (Rev. 2011);
Ministry of Rural Development and Local Government	<ul style="list-style-type: none"> • Disaster Measures Act, Chapter 16:50 (Rev. 2011)

1.2.1 Environmental Management Act (EM Act), 2000 Chap. 35:05)

The aim of the EM Act (2000) is to provide a coordinated approach to environmental management through a NEP, environmental programmes, public awareness and development of subsidiary legislation.

The EM Act was formally established under Section 6 by the EMA, including the Environmental Trust Fund and Environmental Commission of Trinidad and Tobago. The EMA is the governing body responsible for enforcing these laws and regulations as well as managing and effecting new laws and developing subsidiary legislation. Subsidiary legislation that has been introduced includes:

- The Certificate of Environmental Clearance (Designated Activities) Order, 2001 (as amended) identifies the specific activities that will require a CEC;
- The Certificate of Environmental Clearance Rules, 2001 (L.N. 104 of 2001) establishes the procedure for obtaining a CEC;
- The Certificate of Environmental Clearance (Fees and Charges) Regulations, 2001;
- Noise Pollution Control Rules, 2001 (L.N. 60 of 2001);
- Air Pollution Rules, 2014 (L.N. 12 of 2015);
- Water Pollution Rules, 2019 (L.N. 312 of 2019);
- Draft Waste Management (Registration and Permitting) Rules 2018
- Environmental Sensitive Species Rules, 2001 (L.N. 63 of 2001); and
- Environmental Sensitive Areas Rules, 2001 (L.N. 64 of 2001);

1.2.2 Certificate of Environmental Clearance (CEC)

The CEC Rules, 2001 were made under Section 26(h) of the EM Act, 2000 and came into effect on 7th July 2001. These Rules require that the proponent of any new or significantly modified development applies for and receives a CEC from the EMA before other planning approvals are finalised. The CEC (Designated Activities) Order, 2001 (as amended) identifies Designated Activities of development that potentially require environmental clearance and thus for which a CEC Application is required from the EMA before such activities can commence. The proposed activities of the Project are consistent with the following designated activities that require a CEC as listed in **Table 2 - 1-2** below:

Table 2 - 1-2: Kilgwyn Bay Hotel Development Project activities requiring a CEC.

Activity		Definition
8	Clearing, excavation, grading and land filling	Except for the purposes of mining, processing or storage of clay, andesite, porcellanite, limestone, oil sand, sand(s), gravel or other non-metallic minerals in respect of an area of less than one hundred and fifty acres— (a) the clearing, excavation, grading or land filling of an area of more than 2 hectares during a two-year period; (b) the clearing of more than one-half a hectare of a forested area during a two-year period; or (c) the clearing, excavation, grading or land filling of any area with a gradient of 1:4 or more.
9	Waterproofing/caulking/paving	The establishment of a paved area (inclusive of associated works) of more than 4, 500 square metres during a two-year period.
11	Establishment of hotels, guesthouses, etc.	The establishment, modification, expansion, or decommissioning or abandonment (inclusive of associated works) of a hotel, inn, etc., with a capacity of 30 rooms or more.
31	Establishment of parks, nature trails and other recreational areas	(a) The establishment, modification, expansion, decommissioning or abandonment (inclusive of associated works) of a park, nature trail, board walk or other recreational facility supporting a potential visitor use 500 or more individuals per day; (b) The establishment, modification, expansion, decommissioning or abandonment (inclusive of associated works) of a golf course.
33	Establishment of infrastructure for land transportation	(a) The establishment (inclusive of associated works) of a road of more than 1 kilometer in length;

		(b) The extension/expansion (inclusive of associated works) of a road by more than 1 km or by 35% or more of its length or width.
40	Establishment of water distribution systems	(a) The establishment, modification, expansion, decommissioning or abandonment (inclusive of associated works) of pipeline distribution systems for the delivery of potable, process water or sewage; (b) The laying of water and sewage mains (inclusive of associated works) along an existing or a new right of way for distances of more than 1 kilometer during a two-year period.
41	Establishment of land drainage and irrigation schemes	(a) The establishment, modification, or expansion (inclusive of associated works) of a land drainage or irrigation scheme for a parcel of land or more than 1 hectare during a two-year period; (b) The establishment of a flood control system or a water supply impoundment for a parcel of land of more than 1 hectare during a two-year period; (c) The realignment or modification of drainage or river systems.
42	Establishment of waste water or sewage treatment facilities	The establishment, modification, expansion, decommissioning or abandonment (inclusive of associated works) of a waste water or sewage treatment facility.
43	Provision of other service-oriented activities	(a) The establishment, modification, expansion, decommissioning or abandonment (inclusive of associated works) of an automotive repair garage, autobody shops, gasoline/service stations or vehicle inspection stations; (b) The establishment, modification, expansion, decommissioning or abandonment of a laundry (wet or dry cleaning); (c) The establishment, modification, decommissioning or abandonment (inclusive of associated works) of a commercial kitchen with a water consumption of 9 cubic metres or more per day; (d) The establishment, modification, expansion, decommissioning or abandonment (inclusive of associated works) of chemical or medical or other scientific research laboratories.

1.2.3 The CEC Rules, 2001

Pursuant to the CEC Rules (2001), an application for a CEC (Form A) (prepared in triplicate) was duly prepared and submitted on November 06th, 2020 and received by the Authority on November 06th, 2020 together with the prescribed fee of \$500.00 (pursuant to Section 35(2) and (3) of the EM Act and The CEC (Fees and Charges) Regulations, 2001), CEC Reference No. **6143/2020**. (*Refer to **Appendix A1 – Acknowledgement of CEC Application***)

Acknowledgement of application and request for additional information by the Environmental Management Authority (EMA) dated December 16th, 2020. The additional information was prepared and submitted to the EMA 19th October 2021 (*Refer to **Appendices A1 and A2 – Acknowledgement of CEC Application and RCFT Concerning CEC Application** respectively*)

The EMA determined that the application requires a CEC and furthermore, that there could be significant environmental impacts arising from the proposed project's activities and requested that an EIA be conducted in compliance with a Terms of Reference (TOR). These standards of preparation and final TOR have guided the preparation of the EIA for the project.

Upon receiving the draft Final TOR and pursuant to the CEC Rules 2001, DSM and ALG consulted with relevant agencies, non-governmental organisations (NGOs) and members of the public on the draft TOR to determine if there were any concerns on the draft TOR and whether they have suggested modifications. This process provided an opportunity for the applicant to propose modifications to the TOR with stated justifications. Feedback on the draft TOR was submitted to the EMA. The EMA provided a Final Terms of Reference (TOR) with accepted modifications on September 15th 2022 (*Refer to **Appendix A3 – Final TOR***)

Optimal Geoscience and Engineering Solutions Limited (OptimalGESL) was retained to prepare the EIA Report. Rule 10 of the CEC Rules, 2001 establishes the standards of preparation for an EIA (**Table 3 - 1-3**). The EIA considers social involvement as an

important part of the study. These standards of preparation and final TOR have guided the preparation of the EIA for the project.

Table 3 - 1-3: CEC Rule 10 Standards for Preparation of EIA.

CEC Rule	Description	Requirement of standard
10 (a)	Non-Technical Summary	A non-technical summary of the findings of the assessment comprising the key issues, a brief evaluation of the potential effects and hazards of the proposed activity and the measures and recommendations proposed for addressing the findings of the evaluation.
10 (b)	Baseline Characterisation of Site and Environment	A description of the existing ecological and other characteristics and conditions of the site and areas likely to be affected by the proposed activity, with relevant information about the land use requirements during the various phases of the activity.
10 (c)	Illustrative Materials	Illustrative materials where appropriate, including maps and photographs.
10 (d)	Project Description: Processes, Inputs, Outputs and Wastes	A description of the activity, giving adequate and concise information on: <ul style="list-style-type: none"> • Characteristics of processes and methods proposed; • The design, size, scale and capacity; • Equipment and machinery to be involved; • Source, nature and quantity of materials to be used; • Rates of extraction; • The estimated type and quantities of expected emissions, residues, wastes, noise, light, vibrations, heat and radiation to air, water and soil during the various phases of the activity.
10 (e)	Environmental and Social Impact Analysis	Identification and assessment of the main effects that the activity is likely to have on the components of the environment, including: <ul style="list-style-type: none"> • Human beings; Fauna; Flora; Soil; Water – surface and ground; Air; The coast and sea; Weather and climate; The landscape; The interaction between any of the foregoing; Material assets; The cultural heritage.
10 (f)	Analysis of Alternatives	An evaluation of the alternatives to the activity, giving consideration to concerns of environment, alternative sites, designs, approaches and processes.
10 (g)	Reliability, QA/QC and Uncertainty	An account of the assessment of the methods used and the level of uncertainty of any predictions.
10 (h)	Impact Mitigation	An account of the measures proposed to avoid, reduce mitigate or remedy any of the significant adverse effects identified.
10 (i)	Risk Assessment and Emergency Response	An identification of the potential hazards and an assessment of the level of risk that may be caused by the proposed activity and an account of the measures envisaged to address any environmental emergencies that may result from the activity.
10 (j)	Environmental Monitoring	A description of the programme proposed for monitoring actual impacts and the effects of the mitigation measures at the various stages of the activity.

CEC Rule	Description	Requirement of standard
10 (k)	Data and Analytical Methodologies	The data and methods used to obtain the information in the rule (e) above.

The EIA report is submitted to the EMA for an 80-working day review period in order to consider all relevant issues (including public comments). Upon submission of the EIA Report, an administrative record is prepared by the EMA which is submitted for public comment for a minimum of 30 calendar days from the date of publication of a Notice in the Gazette. This administrative record may be viewed at locations throughout Trinidad and Tobago which will be advertised by the EMA.

The EIA Report will be reviewed and evaluated by the EMA with inputs from relevant agencies and with consideration of the public comments received. In fulfilling its statutory mandate to coordinate and oversee environmental management functions performed by persons in Trinidad and Tobago, the EMA entered into Memoranda of Understanding (MOUs) with 34 participating agencies which had traditionally dealt with one aspect or another of environmental management before 1995. These MOUs are intended to facilitate a collaborative and coordinated approach to dealing with the country's environmental problems. These agencies will also advise the EMA during the CEC application procedure.

A decision to permit or not to permit the issue of a CEC for the proposed activity is determined at the end of the process. If the EMA grants the CEC, then there usually are terms and conditions applied to the CEC including mandatory monitoring of the development activity. **Figure 3 - 1.2** outlines the approval process.

If the EMA cannot make a determination within the specified time-frame, the applicant will be notified in writing of the reasons and an extended date by which a decision will be made. This notification will be served to the applicant before the expiration of the original

time-frame assigned for rendering a decision - **Rule 6(2) CEC Rules, 2001**. It is important to note that once a CEC has been granted by the EMA, the EMA has no inherent power to amend/vary same. Application for variation/modification/amendment must be made to the Environmental Commission by way of a Notice of Appeal supported by affidavit.

- Under the Environmental Management Act of Trinidad and Tobago, a Certificate of Environmental Clearance (CEC) is required for certain designated projects or activities including (but not limited to) construction; exploration for oil and gas; establishment of production platforms, establishment of storage facilities for hydrocarbons, laying of pipelines, establishment of marine facilities; land reclamation; excavation; dredging; plus modification and expansion of the afore-mentioned activities.
- Contact Law Department for guidance as to whether your specific project requires a CEC.
- The CEC must be obtained prior to the commencement of the project or activity.
- The process of obtaining a CEC is described in this Flowchart.

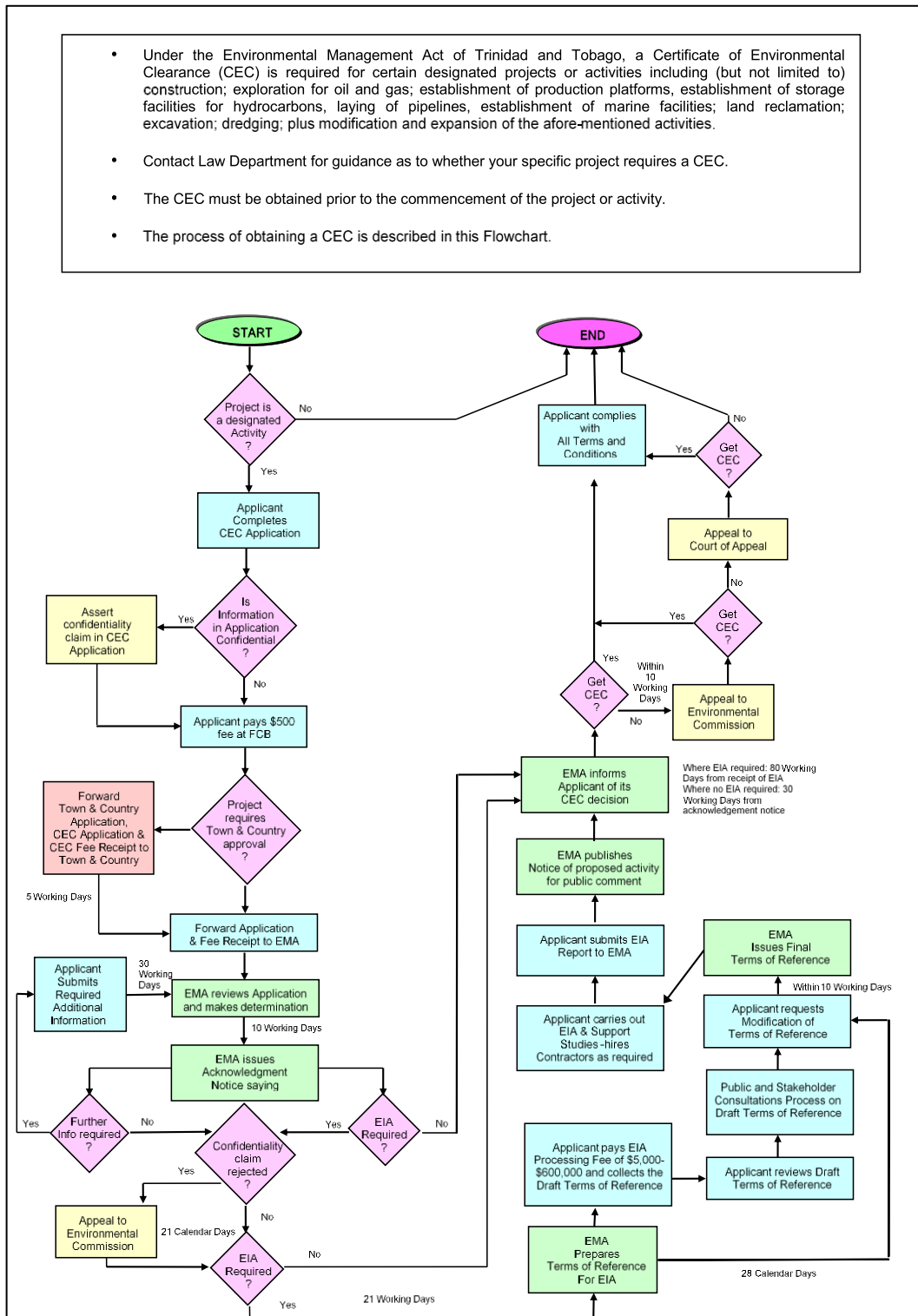


Figure 3 - 1.2: Certificate of Environmental Clearance Approval Process.

1.2.4 The Noise Pollution Control Rules, 2001 (updated 2006)

The Noise Pollution Control Rules, 2001 became law on 19th April 2001. Pursuant to Rule 5(2) of The Noise Pollution Control Rules, 2001 - "*no person shall emit or cause to be emitted any sound that causes the sound pressure levels to be greater than the prescribed standard,*" i.e., the maximum permissible sound pressure level within the designated noise zones in Trinidad and Tobago:

- **Zone I: Industrial Areas** (This is classified as an area expressly approved for industry by a competent governmental entity);
- **Zone II: Environmentally Sensitive Areas**; and
- **Zone III: The General Area** (This is classified as all of Trinidad and Tobago not covered by the other two zones).

The hotel project at Kilgwyn Bay falls under Zone II - Environmentally Sensitive Areas. The Noise Pollution Control Rules, 2006 that apply to the Project area are as follows for Zone II:

Daytime Limits - *On Mondays to Sundays of every week from 8:00 am to 8:00 pm on each day:*

- (a) the sound pressure level when measured as equivalent continuous sound pressure level shall not be more than 3 dBA above the background sound pressure level; and*
- (b) the sound pressure level when measured as instantaneous unweighted peak sound pressure level shall not exceed 120 dB (peak).*

Notwithstanding the above, no person shall emit or cause to be emitted any sound that causes the sound pressure level when measured as the equivalent continuous sound pressure level to exceed 60 dBA.

Night-time Limits - *On Mondays to Sundays of every week from 8:00 pm to 8:00 am on each day:*

- (a) the sound pressure level when measured as equivalent continuous sound pressure level shall not be more than 3 dBA above the background sound pressure level;*

and

(b) the sound pressure level when measured as instantaneous unweighted peak sound pressure level shall not exceed 115 dB (peak).

Notwithstanding the above, no person shall emit or cause to be emitted any sound that causes the sound pressure level when measured as the equivalent continuous sound pressure level to exceed 60 dBA.

It should be noted that Section 7(k) of the Noise Pollution Control Rules states that construction activity when conducted on a construction site between the hours of 7:00 am and 7:00 pm on the same day is exempt from the prescribed standards.

Under the Rules, if a person or an operator of a facility is to conduct an activity or an event that will cause sound in excess of the prescribed standards, an application has to be made for a variation to the EMA before the date of the event or the activity.

The granting of a variation is made by the EMA based on the advice of the Noise Advisory Council (appointed by the Board of the EMA) and the variation will be valid for a fixed period. The EMA may establish maximum permissible sound pressure levels and conditions as required (which could include measures to minimize environmental impact and a monitoring program).

1.2.5 The Air Pollution Rules, 2014

The rules set the air quality standards and emission standards for air pollutants emitted from combustion plants and industrial processes. These rules came into effect in Trinidad and Tobago on the 23rd January 2015.

The Air Pollution Rules (APR) are administered by two major processes:

1. Source Registration - the process whereby the owner/operator of a facility emitting or intending to emit air pollutants submits an application for the facility to be registered with the EMA and pays the prescribed fee. Details of the facility's operation, including the location and characteristics of the air pollutants being or anticipated to be emitted, are required in the application, among other things. The Registrant is issued with a Source Emitter Registration Certificate.
2. Permitting - after a Source Emitter Registration Certificate has been issued, the EMA may notify a Registrant to apply for an Air Pollution Permit (APP). The purpose of the APP is to control the types and quantity of air pollutants emitted into the atmosphere, with the purpose of protecting ambient air quality. A permit is valid for a period of up to five years and requires the holder of the permit to implement measures to reduce the impact of their emissions and monitor such emissions for compliance with Schedule 1 and/or Schedule 2 of the APR.

The limits in the Rules as stated in Schedule 1 and Schedule 2 provide useful indicators of national priorities regarding pollutants from emission sources. Exceptions can be made to the rules if the person applies for a permit. Those specifications relevant to this study are listed in **Table 4 - 1-4** and **Table 5 - 1-5** respectively.

Table 4 - 1-4: First Schedule – Maximum Permissible Levels for Ambient Air.

COMPOUND/ SUBSTANCE	SHORT TERM LIMITS		LONG TERM LIMITS	
	MPL ($\mu\text{g}/\text{m}^3$)	Averaging Time	MPL ($\mu\text{g}/\text{m}^3$)	Averaging Time
Particulates				
Total Suspended Particulate (TSP)	150	24 hours		
Particulate Matter (PM10)	75	24	50	1 year
Particulate Matter (PM 2.5)	65	24	15	1 year
Non-metallic Inorganic Substances				
Carbon Monoxide (CO)	100,000	15 minutes		
	60,000	30 minutes		
	30,000	1 hour		
	10,000	8 hours		
Nitrogen Dioxide (NO ₂)	200	1 hour	40	1 year
Sulphur Dioxide (SO ₂)	500	10 minutes	50	1 year
	125	24 hours		
Ozone	120	8 hours		
Sulphuric Acid	100	30 minutes		
Hydrogen Sulphide	30	30 minutes		
Ammonia	3,600	30 minutes		
Total Fluoride	1.0	24	0.4	90 days
Hydrogen Chloride	100	30 minutes		
Chlorine (Cl) and its compounds	300	30 minutes		
Asbestos (fibres > 5 μm in length)	0.04 fibres/cm ³	24 hours		
Asbestos (total)	5	30 minutes		
Metallic Substances				
Antimony (Sb) and its compounds	75 $\mu\text{g}/\text{m}^3$ of total antimony in free and combined form	30 minutes	Antimony and its compounds	75 $\mu\text{g}/\text{m}^3$ of total antimony in free & combined form
Cadmium and its compounds	5.0 μg of total cadmium in free and combined form per m ³ of air	30 minutes		
Lead	10 $\mu\text{g}/\text{m}^3$ of total lead in free and combined form per cubic meter (m ³) of air	30 minutes	1.5 0.5	3 months 1 year
Mercury (Hg) and its compounds	1.5 $\mu\text{g}/\text{m}^3$ of total alkyl mercury compounds	30 minutes		
	5.0 $\mu\text{g}/\text{m}^3$ of total mercury in free and combined form	30 minutes		
Beryllium (Be) Compounds	0.01	24 hours		
Organic Substances				
Biphenyl (C ₆ H ₅) ₂)	60	1 hour		

COMPOUND/ SUBSTANCE	SHORT TERM LIMITS		LONG TERM LIMITS	
	MPL ($\mu\text{g}/\text{m}^3$)	Averaging Time	MPL ($\mu\text{g}/\text{m}^3$)	Averaging Time
Carbon disulfide (CS_2)	330	24 hours		
Ethylbenzene ($\text{C}_6\text{H}_5\text{C}_2\text{H}_5$)	1,000	24 hours		
Formaldehyde (CH_2O)	65	24 hours		
Mercaptan (as Methyl Mercaptan- CH_3SH)	20	1 hour		
Polychlorinated Biphenyls (PCBs)	0.15	24 hours	0.035	1 year
Xylenes ($\text{C}_6\text{H}_4(\text{CH}_3)_2$) (isomers and mixture)	2,300	24 hours		
Total Dioxin and Furans	0.5 pg TEQ/ m^3	24 hours		

PM10 Particulate Matter with an aerodynamic diameter of less than 10 μm
 PM2.5 Particulate Matter with an aerodynamic diameter of less than 2.5 μm
 ng nanogram or one-billionth of a gram which is expressed as 1×10^{-9} grams in scientific notation
 pg picogram or one-trillionth of a gram which is expressed as 1×10^{-12} in scientific notation

Table 5 - 1-5: Second Schedule - Stack Release Limits.

Substance	Maximum Permissible Limit (mg/Nm^3 - milligram of substance per normal cubic metre)
Particulate Substance	
Particulate Matter	100 mg of particulate matter in each normal cubic metre of residual gases (adjusted to a basis of 12% CO_2 for air emissions from fuel-burning equipment, if required by the specified test method)
Physical Parameter	
Opacity	20%
Non-Metallic Inorganic Substances	
Sulphur dioxide (SO_2)	1,000
Sulphuric acid (H_2SO_4) mist or sulphur trioxide (SO_3)	100 as SO_3
Oxides of Nitrogen (NO_2)	500 as NO_2
Carbon monoxide	1,000
Hydrogen sulphide (H_2S)	15
Ammonia (NH_3)	50
Fluorine (F) and its compounds	5 as hydrogen fluoride (HF); or 5 as total fluoride
Acids and acid gases, as hydrogen chloride (HCl)	10 as HCl
Chlorine (Cl) and its compounds	5 as Cl

Substance	Maximum Permissible Limit (mg/Nm ³ - milligram of substance per normal cubic metre)
Metallic Inorganic Substances	
Antimony (Sb) and its compounds	5 as Sb
Arsenic (As) and its compounds	0.8 as As
Cadmium (Cd) and its compounds	0.05 as Cd
Lead (Pb) and its compounds	0.5 as Pb
Mercury (Hg) and its compounds	0.05 as Hg
Heavy metals (other)	5 as heavy metals (other)
Organic Substances	
Dioxins	0.2 ng TEQ/Nm ³
Furans	0.2 ng TEQ/Nm ³
Volatile Organic Compounds (VOCs)	20 as VOCs

- Toxic Equivalency (TEQ)

1.2.6 The Water Pollution Rules, 2019

The Water Pollution Rules were formulated under the EMA Act and apply to activities which can negatively affect the quality of rivers and beaches, groundwater, coastal and marine environments and ESAs. The Water Pollution Rules set out a legal procedure for the application for and grant of permits for the discharge of process effluent, sanitary wastewater and contaminated stormwater runoff from a facility. The Water Pollution Rules imposes controls on these types of discharges at the end-of-pipe and at the property boundary from distinct drains on the basis of the type of receiving environment into which the discharge occurs and on a maximum permissible limit at the point of discharge.

The Water Pollution Rules (WPR), 2001 as amended in Water Pollution (Amendment) Rules, 2006 (by Legal Notice No. 230) became law on 27th April 2007. The WPR were revised in November 2019, towards better alignment with the Polluter Pays Principle. The previous fixed fee paid to discharge (regardless of volumes and parameters non-compliant with the WPR) has been replaced with discharge fees based on a total annual load calculation, which takes into account both concentration and volume discharged, as outlined under the associated Water Pollution (Fees) Regulations, 2019.

The Water Pollution Rules establishes the maximum permissible discharge limits for various water pollutants into four categories of receiving environments:

- Inland Surface Waters - Inland Surface Waters are typically rivers, streams or other natural and man-made water courses
- Coastal Nearshore Waters - Coastal Nearshore Waters include areas from the mean high-water mark to a distance from shore at which point the depth of water is less than or equal to 20 meters.
- Marine Offshore Areas - Marine Offshore Waters extend from the outer boundary of the Coastal Nearshore Waters to the limit of the 19.2 km Territorial Waters and the 320 km Exclusive Economic Zone of Trinidad and Tobago.
- Environmentally Sensitive Areas and/or Groundwater.

The EMA has advised that all persons or enterprises engaged in any activity which discharges water pollutants from a registrable facility, that is likely to cause harm to human health or to the environment are required to submit a permit application to the EMA.

The parameters or substances at the quantity, condition or concentration mentioned in Schedule I are defined as water pollutants (**Table 6 - 1-6**). Where a person is releasing a parameter or substance listed in Schedule I into a receiving environment, he shall apply to the Authority for a permit (for each facility), and pay the prescribed fee. An application for a permit should be submitted no later than 45 working days from the commencement of these rules or otherwise guided by the Authority. Unless previously revoked, varied or suspended by the Authority, a permit is effective until a fixed date specified in the permit, which date shall not be more than five years from the date on which the permit was granted. The Authority shall establish in each permit: (a) the water pollutants authorized to be released; (b) the quantity, conditions and concentrations the permittee may release; (c) the exact location where the sampling of the release shall be performed and frequency of sampling; and (d) reporting requirements. Furthermore, the Authority may establish in

each permit, specific conditions as required in the case of each facility. Where a person is not granted a permit by the Authority, that person may be required to participate in a Watershed Improvement Plan.

The parameters or substances at the quantity, condition or concentration mentioned in Schedule II (**Table 7 - 1-7**) are end of pipe Standards specific to Trinidad and Tobago, and vary according to the receiving environment. The receiving environment applicable to the Kilgwyn Bay Hotel Project is the terrestrial and coastal nearshore environment based on the definitions under the Water Pollution Rules. Waste water will be piped from the hotel to the back of the house water treatment facility, treated and discharged via an outfall line into the eastern sluice canal. The CEC process incorporates the standards legislated in the WPR. At this time, once a facility has been issued a CEC which regulates the discharges from a facility with conditions requiring compliance with the WPR, an application for a permit may not be required.

The parameters or substances at the quantity, condition or concentration mentioned in Schedule III are Ambient Water Quality Standards specific to Trinidad and Tobago, for freshwater and marine environments. Once an entity achieves compliance with Schedule II, the Authority may require the development and implementation of a Watershed Improvement Plan, which shall address a set of specific pollutant reduction targets and load reductions based on Total Maximum Daily Loads for that particular Watershed towards meeting the ambient water quality standards.

Table 6 - 1-6: Water Pollutants (Schedule I, Water Pollution Rules).

No.	Parameters or Substances	Quantity, Condition or Concentration at which substance or parameter is defined as a pollutant ^a
1	Temperature (°C)	Maximum variation of 3°C from ambient
2	Hydrogen ion (pH)	Less than 6 or greater than 9
3	Dissolved Oxygen Content (DO)	<4
4	5 Day Biological Oxygen Demand (BOD ₅ at 20°C)	>10
5	Chemical Oxygen Demand (COD)	>60
6	Total Suspended Solids (TSS)	>15
7	Total Oil and Grease (TO&G) or n- Hexane Extractable Material (HEM)	>10
8	Ammoniacal Nitrogen (as NH ₃ -N)	>0.01
9	Total Phosphorus (as P)	>0.1
10	Sulphide (as H ₂ S)	>0.2
11	Chloride (as Cl ⁻)	>250
12	Total Residual Chlorine (as Cl ₂)	0.2
13	Dissolved Hexavalent Chromium (Cr ⁶⁺)	>0.1
14	Total Chromium (Cr)	>0.1
15	Dissolved Iron (Fe)	>1.0
16	Total Petroleum Hydrocarbons (TPH)	NIAA
17	Total Nickel (Ni)	>0.5
18	Total Copper (Cu)	>0.01
19	Total Zinc (Zn)	>0.1
20	Total Arsenic (As)	>0.01
21	Total Cadmium (Cd)	>0.01
22	Total Mercury (Hg)	>0.005
23	Total Lead (Pb)	>0.05
24	Total Cyanide (as CN ⁻)	>0.01
25	Phenolic compounds (as phenol)	>0.1
26	Radioactivity (Bg/L)	NIAA
27	Toxicity (toxic units)	NATE
28	Faecal Coliforms (counts/100 ml)	>100
29	Solid Waste	NSD

^a All units are in milligrams per litre (mg/L) except for temperature (°C), pH (pH units), faecal coliforms (counts per 100 ml), radioactivity (Bg/L) and toxicity (toxic units)

NIAA No increase above ambient

NATE No acute toxic effects

NSD No solid debris

> Greater than

< Less than

Table 7 - 1-7: Permissible levels of Water Pollutants (Schedule II, Water Pollution Rules).

Water Pollutant		Receiving Environment			
#	Parameter ^a	Inland surface water	Coastal Nearshore	Marine Offshore	Environmentally Sensitive Areas and/or Groundwater
1	Temperature (°C)	35	40	45	NIAA
2	Dissolved Oxygen	>4	>4	>4	>4
3	Hydrogen ion (pH)	6 - 9	6 - 9	6 - 9	6 - 9
4	Five-day biological oxygen demand (BOD ₅ at 20 °C)	30	50	100	10
5	Chemical oxygen demand (COD)	250	250	250	60
6	Total suspended solids	50	150	200	15
7	Total oil and grease (TO&G) or n-hexane extractable material (HEM)	10	15	100	No release
8	Ammoniacal nitrogen (as NH ₃ -N)	10	10	10	0.1
9	Total phosphorous (as P)	5	5	5	0.1
10	Sulphide (as S)	1	1	1	0.2
11	Chloride (as Cl ⁻)	250	NIAA	NIAA	NIAA
12	Total residual chlorine (as Cl ₂)	1	2	2	0.2
13	Dissolved hexavalent chromium, Cr ⁶⁺	0.1	0.1	0.1	0.01
14	Total chromium, Cr	0.5	0.5	0.5	0.1
15	Dissolved iron, Fe	3.5	3.5	3.5	0.1
16	Total Petroleum Hydrocarbons (TPH)	25	40	80	No release
17	Total Nickel, Ni	0.5	0.5	0.5	0.5
18	Total Copper, Cu	3.5	3.5	3.5	0.01
19	Total Zinc, Zn	2	2	2	0.1
20	Total Arsenic, As	0.1	0.1	0.1	0.01
21	Total Cadmium, Cd	0.1	0.1	0.1	0.01
22	Total Mercury, Hg	0.01	0.01	0.01	0.005
23	Total Lead, Pb	0.1	0.1	0.1	0.05
24	Total Cyanide (as CN ⁻)	0.1	0.1	0.1	0.01
25	Phenolic compounds (as phenol)	0.5	0.5	0.5	0.1
26	Radioactivity (Bq/L)	NIAA	NIAA	NIAA	NIAA
27	Toxicity (toxic units)	NATE	NATE	NATE	NATE
28	Faecal coliforms (counts/100 ml)	400	400	400	100
29	Solid waste	NSD	NSD	NSD	NSD

^a All units are in milligrams per litre (mg/L) except for temperature (°C), pH (pH units), faecal coliforms (counts per 100 ml), radioactivity (Bq/L) and toxicity (toxic units)

NIAA No increase above ambient

NATE No acute toxic effects

NSD No solid debris

> Greater than

1.2.7 Water Pollution (Fees) Regulations, 2019

The Water Pollution (Fees) Regulations outlines the fees payable to the EMA as follows:

- Schedule I - the initial and renewal application fees;
- Schedule II - the calculation for the annual discharge fee;
- Schedule III - all other fees payable.

The application fees vary according to the Effluent Discharge Volume (m³/day) (see Schedule I).

The annual discharge fee is calculated according to the formulae and the set fees and rates provided in Schedule II. It includes the following:

- Monitoring and Inspection fee (**MI**) – fee varies according to the Effluent Discharge Volume (m³/day) as set out in Schedule III
- The Pollutant load (**L_p**) for the calendar year for each parameter (calculated from average concentration multiplied by Total Volume Discharged per year)
- A Discharge Fee Rate (**R_p**) (TT\$ per tonne or per million litres) which is set for each parameter as provided in Schedule III.

The base pollutant discharge fee (**B**) is calculated by multiplying L_p and R_p for each parameter, and calculating the sum for all parameters. $B = \sum L_p R_p$

$$\text{The Annual Discharge Fee, } \mathbf{DF} = \mathbf{MI} + \mathbf{B} - \mathbf{U}$$

(where U is the savings fee from the beneficial use of effluent)

1.2.8 Domestic Effluent Standards

The Trinidad and Tobago Bureau of Standards (TTBS) and the EMA have developed domestic effluent standards such as:

1. **TTS 417:1993** (Specification for Liquid Effluent from Domestic Wastewater Treatment Plants)

Although the Water Pollution Rules supersedes TTS 417:1993, bear in mind that TTS 417:1993 has not yet been repealed. The requirements of the above standard will be

enforced by the EMA in the context of the Water Pollution Rules which will have legal precedence.

This standard specifies the maximum permissible levels of the 5-day Biochemical Oxygen Demand (BOD5), Suspended Solids, Total Residual Chlorine and Faecal Coliforms, for the liquid effluent from domestic wastewater treatment plants into various points of the environment.

1.2.9 Draft Waste Management (Registration and Permitting) Rules 2018

The Draft Waste Management Rules were cited in 2001 under the EM Act. At the time of submitting this EIA, the EMA has prepared new legislation, currently titled the draft "Draft Waste Management (Registration and Permitting) Rules 2018" intended to regulate both hazardous and non-hazardous wastes. The draft legislation has been reviewed by the line minister and was open to public comment between November 2018 and February 2019 in accordance with Section 28 of the EM Act, but remains in draft form. The revisions propose a revamped system and a new fee structure. As a result, it is currently unclear how these revisions may affect activities, project costs, mitigation measures, choice of approved waste management contractors, disposal measures and DSM and ALG 's Waste Management presented within this EIA.

1.2.10 Environmentally Sensitive Areas and Species Rules, 2001

The Environmentally Sensitive Areas (ESA) and Environmentally Sensitive Species (ESS) Rules were prepared in accordance with the EM Act and formalised in May 2001. These Rules pertain to any area or species declared by the EMA as an ESA or an ESS. The Rules indicate the objectives and selection criteria for designated areas or species, and regulate activities in that regard. ESSs and ESAs are designated under these rules by legal notice. The main objectives of the Government of Trinidad and Tobago by designating an area or species as 'environmentally sensitive' are as follows:

- Conservation of natural resources and protection of the environment;

- Sustainable economic and human development and
- Logistic support such as environmental education and information sharing.
- Environmentally Sensitive Areas (ESAs)

To date, only three ESAs have been designated. Each of the designated ESAs is located in Trinidad:

- Aripo Savannas Strict Nature Reserve;
- Nariva Swamp Managed Resource Protected Area; and
- Matura National Park.

Other Environmentally sensitive non-designated areas as it relates to Tobago and the Project;

- Main Ridge Forest Reserve
- Buccoo Reef National Park

1.2.11 Environmentally Sensitive Species (ESSs)

Eleven ESSs have been designated to date:

- the Scarlet Ibis which is found in wetlands and on mudflats particularly along the west coast of Trinidad;
- the Trinidad Piping Guan or Pawi which is restricted to rainforests in northeast Trinidad;
- the White-tailed Sabrewing hummingbird restricted to Tobago;
- the West Indian Manatee which is restricted to the east coast of Trinidad;
- the Golden Tree Frog found only in three areas: the summits of El Tucuche, Aripo and Morne Bleu Ridge, where montane forest and elfin woodland exist;
- the Ocelot which is observed in the forested areas of Trinidad; and
- the five marine turtle species (Leatherback, Loggerhead, Green, Hawksbill and the Olive Ridley) which have been reported in Trinidad and Tobago's waters (**Refer to Chapter 5.0: Description of the Environment Section 5.1.11: Biological Environment**).

The Environmental Management Authority (EMA) is presently pursuing the designation of the two species of monkey native to Trinidad's forests as ESSs – the Red Howley Monkey (*Alouatta macconnelli*) and the White Fronted Capuchin (*Cebus albifrons trinitatis*). The draft Legal Notices are open for public comment until November 13, 2020. As discussed in **Section 5.1.11: Biological Environment**, the marine turtle species may be found in the study area.

1.3 Ministry of Energy and Energy Industries (MEEI) Regulations

The Ministry of Energy and Energy Industries has provided guidelines for activities of energy and energy related industries. Regulations that apply to the Project include:

- Guidelines and Application Procedure for LPG Storage;
- Guidelines for Handling and Storage of Petroleum Products and Combustible Liquids 1994 (covered in Section 1.3.2 below)

1.3.1 Guidelines and Application Procedure for LPG Storage

Sourced from the MEEI website, the following documents will be perused and completed as deemed necessary throughout the life of the hotel project:

- LPG Installation Checklist
- LPG Storage Application Form – Instructions
- LPG Storage Application Form

1.3.2 Guidelines for Handling and Storage of Petroleum Products and Combustible Liquids

The Ministry of Energy and Energy and Energy Industries has provided guidelines for the Handling and Storage of Petroleum Products and Combustible Liquids. The following may be applicable to the Project:

- Section 4.0 of the guideline provides equivalent specifications for Containers required to hold Petroleum Products and combustible liquids. Requirements include the following:
 - Every container in which dangerous petroleum is kept shall have the nature of the contents and the words 'highly flammable' distinctly marked thereon. Such container shall be painted, at both ends thereof, with red paint. Such container shall be properly secured and stored and at all times kept in good order and repair so that no leakage of either spirit or vapour can take place.
- Section 6.0 provides pollution controls which the MEEI would expect all industries to follow. It states that:

- No crude petroleum, petroleum or dangerous petroleum product shall be allowed to leak or escape into an inlet or drain communicating with a public drain or sewer.
- A sufficient quantity of clean sand shall always be kept at every warehouse for the purpose of absorbing any petroleum which may leak from any receptacle.
- All pipes or openings for draining out water from enclosures shall be constructed so that they are capable of being closed, and they shall only be kept open when actually necessary for drainage purposes.

1.3.3 Pesticides and Toxic Chemicals Act, 1979 Chap. 37:03

The Pesticides and Toxic Chemicals Act regulates the importation, storage, manufacture, sale, use and transportation of pesticides and toxic chemicals. There are Pesticides Regulations and Toxic Regulations made pursuant to the Pesticides and Toxic Chemicals Act. The project requires the use of toxic chemicals and thus falls under the Toxic Chemicals Regulations 2007. These regulations regulate the import, export, manufacture, storage, transport, labelling, sale, distribution or otherwise disposal of any toxic chemicals.

Toxic chemicals are defined as any chemical (other than a pesticide, drug, antiseptic, disinfectant or preservative) which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals and includes all such chemicals irrespective of their origin or method of production or use. Schedules attached to the regulations list a variety of chemicals. If a company wants to import a toxic chemical, it will have to apply to the Pesticides, and Toxic Chemicals Control Board for registration of that toxic chemical and also apply to the Registrar of Pesticides and Toxic Chemicals Control. In addition, it will have to apply for a licence to import the toxic chemical.

The chemicals associated with the Hotel Project are identified in **Chapter 5.0 - Description of the Environment.**

1.3.4 The Occupational Safety and Health Act, 2004, and Amendment Act of 2006

Chap. 88:08

The Occupational Safety and Health Act (OSHA) No. 1 of 2004 was amended by Act No.3 of 2006 and this amended Act was proclaimed on February 17, 2006.

The Act provides for the establishment of an OSH Authority as the regulatory body directly responsible for occupational safety and health in Trinidad and Tobago. The OSH Authority which was established under the OSH Act is a multi-stakeholder advisory body to the Ministry of Labour and Small Enterprise Development (MOLSED). The Authority comprises 17 members and is led by a Chairman. The core task of the Authority is to encourage the enforcement of the OSH Act, to promote training and research, provide information and to develop Regulations and Approved Codes of Practice (A.C.O.P.). The OSH Agency is the enforcement arm of the OSH Authority. The Agency is led by an Executive Director.

There are operational units within the Inspectorate comprised of Safety and Health Inspector Is, Safety and Health Inspectors IIs, Senior Inspectors and the Chief Inspector who is the head of the Inspectorate. Inspectors are empowered under the OSH Act to access all industrial establishments, acquire any information needed to carry out investigations and to use its legal powers.

DSM and ALG must be OSHA compliant while undertaking and operating the development of the project. DSM and ALG will be required under OSHA to adopt and maintain certain standards, practices, methods or processes in order to provide a safe and healthy workplace to protect its employees involved in the project.

1.3.5 Fisheries Act, 1916 and Amendment Act of 2011 Chap. 67:51

The legislative basis for management of domestic fishing is the Fisheries Act of 1916, and the subsequent amendments to the Act, the Fisheries (Amendment) Act 1966, and the Fisheries (Amendment) Act 1975. The Act applies to all rivers and tidal waters in Trinidad and Tobago and to the 12 nautical mile territorial sea. It does not apply to the Exclusive Economic Zone (EEZ).

The subsidiary regulations adopted under the Fisheries Act include the Fisheries Regulations, which list the types and dimensions of nets permitted for use in the territorial waters, prescribe minimum sizes for various species of fish, and declare certain prohibited fishing areas.

The Fisheries Act regulates the exploitation of fish and includes oysters, crabs, shrimps, turtle, turtle eggs, corals and any species of other marine fauna. The Fisheries Act is implemented through the Fisheries Division of the Ministry of Agriculture, Land and Fisheries.

DSM and ALG must notify the Fisheries Division of its intended transportation program along with the duration of the events; pre-construction, during construction and post-construction/operations activities. Additionally, as fishing is an economic activity and means of livelihood for many villages along the southwest coast of Tobago, Advisory Notices and/or Posters developed in collaboration with the Fisheries Division should be posted at all landing sites as there is the potential for landing sites to be impacted along the Kilgwyn Bay coastline (see **Chapter 5: Description of the Environment**).

1.3.6 Protection of Turtle and Turtle Eggs (Amendment) Regulations (2011)

The Act makes special provision under Section 4 for Regulations that govern the protection of turtles and turtle eggs. These regulations were amended by the Minister

(Protection of Turtle and Turtle Eggs (Amendment) Regulations, (**Legal Notice no. 201; 2011**) to give complete protection to all species of sea turtles and their eggs.

1.3.7 Marine Areas (Preservation and Enhancement) Act Chap. 37:02

The Marine Areas (Preservation and Enhancement) Act, **Chapter 37:02** provides for the designation of restricted areas for biodiversity protection, recreation or research for both marine flora and fauna. However, it has been mandated for the protection of only one area to date — the Buccoo Reef in Tobago. The regulations under this act prevent entry into the area without permission.

1.3.8 Conservation of Wildlife Act Chap. 67:01

The Conservation of Wildlife Act (67:01) was enacted in 1953 with the aim of protecting the wildlife of Trinidad and Tobago. Its basis lies in the regulation of game species using a permit system, gaming seasons and wildlife refuges.

Section 3 of the Conservation of Wildlife Act provides for the establishment of Game Sanctuaries in which it is illegal to hunt. Twelve Game Sanctuaries have been established to date. No Game Sanctuaries are located within the study area.

1.3.9 Waste Management Rules, 2021

The Waste Management Rules, 2021 aim to establish a legal framework to improve national waste management, including hazardous and non-hazardous waste, by requiring generators and handlers of waste to apply for and obtain permits prior to carrying out their waste related activities.

The objective is, through a permitting regime, to regulate activities related to the management of waste such as generation, processing, treatment, packaging, storage, transportation, collection, disposal, recovery, and recycling where:

- Generators are permit holders (holders of a Waste Generation Permit) who produce non-hazardous wastes at or above specified quantities or hazardous waste at any quantity.
- Handlers are permit holders (holders of a Waste Handling Permit) who receive waste from another person for collection, storage, processing, treatment, recovery, recycling, or disposal.

Section 3, Part I of the EM Act covers the obligations of generators and handlers whereby:

A generator or handler shall—

- (a) comply with the provisions of the Act;*
- (b) implement measures to ensure the environmentally sound management of waste;*
- (c) implement measures to reduce the generation of waste;*
- (d) ensure that the treatment, recovery or disposal of waste is conducted at a facility in accordance with these Rules;*
- (e) prevent the dilution of waste as a substitute for its treatment;*
- (f) ensure that hazardous waste is segregated from non-hazardous waste to facilitate the safe handling of the waste; and*
- (g) take such other measures as the Authority may determine.*

1.3.10 Town and Country Planning Act, Chapter 35:01

The Town and Country Planning Act (No. 21 of 1990) of Trinidad and Tobago makes provision for the orderly and progressive development of land in both urban and rural areas and it aims to preserve and improve the amenities thereof.

This Act establishes responsibilities for the process of development and use of the land. In this way, it corresponds to the Minister to ensure consistency and continuity in the framing and execution of a comprehensive policy in this subject. The law also dictates that the development plan is the main instrument to guide land use and development.

According to the Town and Country Planning Act, the development plan should:

- (a) define the sites of proposed roads, public and other buildings and works, airfields, parks, pleasure grounds, nature reserves and other open spaces;*
- (b) allocate areas of land for use for agricultural, residential, industrial or other purposes of any class specified in the plan;*
- (c) designate, as land subject to compulsory acquisition by the Minister*

1.3.11 Planning and Facilitation of Development Act, 2019

The Planning and Facilitation of Development Act (PAFD) was assented to on October 1st 2014 and amended by Act No 1 of 2019. It will repeal and replace the Town and Country Planning Act, Chap. 35:01 upon its full proclamation.

The objects and purposes of this Act are to:

- (a) provide the framework whereby plans and related measures may be prepared and adopted;*
- (b) foster awareness that persons owning, occupying and developing land are under a duty to use the land with due regard for the wider interests, both present and future, of society as a whole;*
- (c) assist in the orderly, efficient and equitable planning, allocation and development of the resources of Trinidad and Tobago, taking account of all relevant social, economic, ecological and cultural factors so as to ensure that the most efficient, equitable and environmentally sustainable use is made of land in the interests of all people of Trinidad and Tobago;*

(d) maintain and improve the quality of the physical environment, to improve the aesthetic quality of the built environment Objects and purposes of the Act 210 No. 10 Planning and Facilitation of Development 2014 and to protect, conserve and promote the diverse cultural heritage of Trinidad and Tobago as it finds expression in both the natural and built environments;

(e) provide for the orderly subdivision of land for residential as well as non-residential purposes in order to facilitate timely and efficient provision of infrastructure, works and public services, including transportation and utilities, and to ensure that parcels of land are not divided into under-sized or inappropriately shaped units that are unfit for rational development;

(f) provide for the structural and fire safety of buildings and the safety, health and general welfare of persons occupying buildings or using land in proximity thereto;

(g) provide for planning processes that are fair by making them open, accessible, timely and efficient; and

(h) encourage cooperation and coordination among various interests for the purpose of achieving the foregoing objects and purposes.

1.3.12 Disaster Measures Act, Chapter 16:50 (Rev.2011)

This Act grants the power to the President to, by Proclamation, declare that area a disaster area, where such area in Trinidad and Tobago is affected or is imminently likely to be affected by any fire, flood, landslide, hurricane, earthquake, disease or other calamity.

Sections 2 and 3 of this Act state as follows:

2. (1) Where any area in Trinidad and Tobago is affected or is imminently likely to be affected by any fire, flood, landslide, hurricane, earthquake, disease or other calamity, the President may by Proclamation declare that area a disaster area. (2) A

Proclamation referred to in subsection (1) shall define the disaster area and specify the circumstances giving rise to the area being declared a disaster area

3. For so long as an area is a disaster area, the President or any person duly authorized by him may in that area— (a) assume control of and regulate— (i) all means of communication and transport; (ii) all supplies of food and other necessities; (iii) all water, fuel and power installations; (b) enter into and take possession of any building; (c) prohibit or restrict the possession or use by any person of any specified articles or commodities; (d) impose restrictions on persons leaving or entering the disaster area; (e) take all other measures which are reasonably necessary to mitigate the effects of the disaster.

The proposed hotel location has not been declared a disaster area.

1.3.13 The Water and Sewerage Act, Chapter 54:40

This Act provides for the development and control of water supply and sewerage facilities in Trinidad and Tobago and matters of sanitation incidental thereto; the promotion of the conservation and proper use of water resources; and for the establishment of an Authority to administer the several purposes contained within the Act.

1.3.14 The Waterworks and Water Conservation Act, Chapter 54:41 (Rev. 2011)

An Act to provide for various matters relating to the control and use of water in Trinidad and Tobago. An Act makes provision for powers of competent authorities (as designated by the Minister) in respect to irrigation works and other waterworks in water improvement areas and provides in general for the use of conservation of water and related matters.

1.3.15 National Wetlands Policy

The National Wetlands Policy was developed to help manage the threats to wetlands and states that wetlands of Trinidad and Tobago will be protected, managed and restored in order to sustain and enhance their ecological and socio-economic values and function for current and future generations.

The major objectives related to protected areas include the:

- 1. Encouragement of public protection of outstanding examples of wetlands in private ownership*
- 2. Inclusion of outstanding examples of each type of wetland in the national system of national parks and other protected areas*
- 3. Encouragement of the management of all privately owned wetlands to promote the protection of their functions*
- 4. Promotion of the use of publicly protected wetlands as demonstration examples for science, education and awareness*
- 5. Integration of management of wetlands with watershed and catchment area management.*

1.3.16 Airport Authority Act, No. 49 of 1979

This Act provides for the establishment, incorporation and management of an Airports Authority of Trinidad and Tobago, so as to ensure the provision of efficient, secure and safe aviation services. Since the hotel project is located less than 1km away from the Crown Point International airport, it is important to note Section 34 (b) within the Miscellaneous portion of the Act which states “*No person shall by day or by night loiter within fifty feet of the fence of an airport.*”

1.3.17 The Highways Act, Chapter 48:01

This Act consolidates with amendments certain written laws relating to highways, streets and bridges in Trinidad and Tobago. Since access to the proposed hotel location will require an updated road network connection, it is important to note Section 6 (3A) within the Act:

The Tobago House of Assembly is the highway authority for all highways within Tobago classified by Order under section 3 as local roads, streets and development roads whether highways maintainable at the public expense or not, not being highways for which the Minister is the highway authority.

1.3.18 State Lands Act, Chapter 57:01

The State Lands Act states that *“Every grant of State Lands shall be issued under the Public Seal of Trinidad and Tobago, and shall be registered by the Registrar General under the provisions of the Real Property Act, on being tendered to him for that purpose.”*

1.3.19 The National Physical Development Plan, 1986

Under Section 26, Tourism of this Development Plan, it is mentioned that the Tourism sector incorporates both intensive and extensive leisure-based development such as beach resorts and national parks respectively. It is also noted in Section 26.1 that *“The foreign market has been the basis of development of two types of facilities – urban high-rise hotels in Trinidad, and beach hotels in South West Tobago, both along the capital-intensive lines of the international model of the hotel industry.”*

In Section 26.5 under Spatial Provision, Tobago is mentioned as one of the seven principal areas in which the development of desired resort complexes of recreational and supporting supply and service activities will take place. It is additionally stated that *“Taking*

existing developments and proposals (particularly infrastructure) into account, Tobago will be the first region in which active encouragement of growth in this sector begins.”

1.3.20 The National Spatial Development Strategy, 2013

The National Spatial Development Strategy or NSDS is the overarching framework that will spatially represent the socio-cultural, economic and environmental development priorities for Trinidad and Tobago. Its strategies and policies articulate the Government’s vision of sustainable development.

Critically, the document builds on the 1984 National Physical Development Plan (NPDP) and is an attempt to renew the relevance of ‘planning’ to a generation.

In essence, it aims to sketch broadly the where and how of development in the country over the next 20 years.

The process has emerged out of a need for direction and clarity in coordinating development in the country and prioritizing and rationalizing land dependent decisions. It is intended that this document will provide authoritative guidance and more specifically:

- articulate a long-term vision for the future of development in Trinidad and Tobago
- enunciate the spatial allocations of major land uses
- present sectoral development priorities in a holistic fashion
- suggest a framework for the coordination of an integrated planning system that involves all levels of governance.

1.3.21 The Trinidad and Tobago Bureau of Standards (TTBS), Requirement for Tourist Accommodation- Part 1: Hotels and Guest Houses (2nd Revision) Trinidad and Tobago Bureau of Standards (TTS 22-1:2012)

This National Standard specifies the minimum requirements for hotels and guesthouses operating in Trinidad and Tobago. This standard includes requirements for:

1. guest facilities;
2. public areas;
3. food and beverage preparation and service area;
4. staff break areas; and
5. safety and security.

This standard does not apply to:

1. bed and breakfast establishments;
2. self-catering units;

1.4 Project Permits, Approvals and Notifications

Besides the application to the EMA for a Certificate of Environmental Clearance (CEC), the Project may require other permits for various activities. A breakdown of the possible permits and relevant statutory entities for the Project are provided in **Table 8 - 1-8**.

Table 8 - 1-8 Project Permits, Approvals and Notifications.

(Next page)

Phase	Activity	Legislation/ Guideline	Approval/ Notification/ Legislative Compliance	Other	Agency
Planning	Hotel Engineering design, Planning and Pre-Construction Operations	Not applicable	Plan drawings of the various facilities to be submitted Emergency Response Plan for the project to be submitted		<ul style="list-style-type: none"> • Fire Prevention Administration of the Trinidad and Tobago Fire Service • Ministry of Health • TCPD • THA
All phases of Construction	Hotel Pre-Construction	Certificate of Environmental Clearance (CEC) Source registration Permits (if applicable)	Notifications in accordance with the CEC Notification Town and Country		<ul style="list-style-type: none"> • Commissioner of State Lands • Lands and Surveys Division • Ministry of Agriculture, Land and Fisheries • Environmental Management Authority • AATT
Operations	Hotel Operations	Approvals Required for construction of Facility.	Notification of Activity Notification of significant health and safety incidents	Under OSHA, ALG and DSM is required to adopt certain standards, practices, methods or processes for a safe and healthy workspace for the protection of its employees.	<ul style="list-style-type: none"> • Occupational Safety and Health Authority • Environmental Management Authority • AATT

Phase	Activity	Legislation/ Guideline	Approval/ Notification/ Legislative Compliance	Other	Agency
Construction	Construction and Pre-Operations	No Approvals Required	Notification of movement of Heavy Equipment to site Notification of activity	Provision of information related to project area, construction site. Allow for safety during construction activities	<ul style="list-style-type: none"> • T&TEC • AATT • TEMA • WASA • MEEI • EMA
All phases	Operations	Work permits for international employees			Ministry of National Security, Port Authority and Customs and Excise

1.5 International Environmental Accords and Treaties

The Government of Trinidad and Tobago has recognized and ratified with several international and regional treaties and accords, which formalize cooperation on regional and global environmental protection strategies. While these are not enacted as law in Trinidad and Tobago, DSM and ALG is committed to the adherence to these accords and treaties.

The main international and regional accords, treaties and conventions that are relevant to the proposed project are highlighted in **Table 9 - 1-9**.

Table 9 - 1 9: International and Regional Conventions relevant to the Project.

(Next page)

CONVENTION	OBLIGATIONS
<p>United Nations Framework Convention on Climate Change 1992 (UNFCCC)</p>	<p>This Convention was entered into force 21 March 1994. Trinidad and Tobago is party to this Convention. The agreement was signed 11 June 1992; the year of enforcement or year of ratification is 24 June 1994. Pursuant to this Convention, governments agreed to tackle the problem of global warming. Under the Convention, governments gather and share information on greenhouse gas emissions, national policies and best practices, launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries and cooperate in preparing for adaptation to the impacts of climate change.</p>
<p>The Kyoto Protocol</p>	<p>The Kyoto Protocol entered into force on 16 February 2005, and it consists of a general obligation on behalf of States to reduce Greenhouse Gas Emissions and to achieve stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Trinidad and Tobago is party to this Convention. The agreement was signed 07 January 1999; the year of enforcement or year of ratification is 28 January 1999.</p>
<p>Protocol Concerning Specially Protected Area and Wildlife to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (SPAW)</p>	<p>This Convention came into force on 18 June 2000. Trinidad and Tobago are a Contracting Party to the SPAW Protocol (18 January 1990), and consequently, it is generally obliged to take necessary measures to protect, preserve and manage in a sustainable way, areas within its jurisdiction that require protection to safeguard their special value and threatened and endangered species of flora and fauna. The Protocol requires that specially protected areas be established in order to conserve, maintain and restore (a) areas of special biological, ecological, educational, scientific, historic, cultural, archaeological, aesthetic or economic value, including in particular areas whose ecological and biological processes are essential to the function of the Wider Caribbean Ecosystem (b) coastal and marine ecosystems to ensure long-term viability and to maintain biological and genetic diversity (c) endangered, threatened or endemic species of flora or fauna (d) productivity of ecosystems and natural resources that provide economic or social benefits and upon which the welfare of local inhabitants is dependent.</p> <p>The Protocol concerning Specially Protected Areas and Wildlife to the Cartagena Convention (the SPAW Protocol) was formulated to provide protection to particular habitats and threatened species. It entered into force in Trinidad and Tobago in August 1999. It is a regional agreement that includes countries located in the Gulf of Mexico, the Caribbean Sea and the adjacent Atlantic Ocean. This Protocol specifies the protection of threatened and endangered wildlife species, the establishment and management of protected areas, and species conservation through national, co-operative processes.</p> <p>As a contracting party to the SPAW Protocol, the Government is obligated to protect areas of the country under its jurisdiction as specified by Article 4 and to enact national legislation to do so. There is also a mandate to prevent the trade in species that are included in its listing of threatened or endangered species, complementing the</p>

CONVENTION	OBLIGATIONS
	<p>Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) agreement.</p> <p>Under Article 11 of the Protocol, there were three species Annexes, and the contracting parties are to adopt all necessary measures to protect and recover species listed in Annexes I, II and III. The Annexes are:</p> <ul style="list-style-type: none"> • Annex I: includes floral species as identified by SPAW as requiring total protection and recovery; • Annex II: includes faunal species as identified by SPAW as requiring total protection and recovery; and • Annex III includes faunal and floral species whose usage must be regulated.
<p>Montreal Protocol on substances that deplete the Ozone layer agreed on 16 September 1987 and entered into force on 1 January 1989.</p>	<p>The Montreal Protocol on substances that deplete the ozone layer is an international treaty designed to protect the ozone layer by phasing out the production of a number of substances believed to be responsible for ozone depletion. Trinidad and Tobago is party to this Convention; the year of accession or adherence being 28 August 1989.</p>
<p>United Nations Convention on Biological Diversity, 1992 (ratified 1993) – entered into force 29 December 1993 (CBD)</p>	<p>This Convention came into force 29 December 1993. Trinidad and Tobago is a signatory to this Convention from 11 June 1992. It has 3 main objectives:</p> <ul style="list-style-type: none"> • The conservation of biological diversity; • The sustainable use of the components of biological diversity; and • The fair and equitable sharing of the benefits arising out of the utilization of genetic resources. <p>Each Party has the sovereign right to exploit its own resources pursuant to its own environmental policies and to ensure that activities within their control do not cause damage to the environment of other States. Each State is encouraged to develop national strategies for conservation and sustainable use of biological diversity.</p> <p>As a signatory Government, Trinidad and Tobago formulated the National Biodiversity Strategy and Action Plan (NBSAP) in 2001, in keeping with Article 6 of the convention. The NBSAP was adopted by the country's Cabinet.</p>
<p>International Convention for the Protection of Wetlands of International Importance, especially as a Waterfowl Habitat (RAMSAR)</p>	<p>Conservation of wetlands and birds protection (waterfowl). The Nariva Swamp located on the east coast of Trinidad has been designated a wetland of international importance.</p>
<p>Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena) – entered into force 11 October 1986</p>	<p>Trinidad and Tobago as a contracting party (24 March 1983) are required to take measures to prevent pollution of the Caribbean Sea and areas of the Atlantic Ocean by using the best practicable means at its disposal. The framework provision on the prevention of pollution from ships mandates that the contracting parties take all appropriate measures to prevent, reduce and control pollution of the convention area caused by discharges from ships. For this purpose, the parties are obliged to ensure the effective implementation of the applicable international rules and standards established by the competent international organization.</p>

CONVENTION	OBLIGATIONS
	<p>In addition, parties must reduce pollution caused by coastal disposal and pollution resulting from exploration and exploitation of the seabed and its subsoil and airborne pollution.</p>
<p>Stockholm Convention on Persistent Organic Pollutants is an international environmental treaty, - entered into force on 17 May 2004 with ratification by an initial 128 parties and 151 signatories.</p>	<p>The main objective of the Stockholm Convention is to protect human health and the environment from persistent organic pollutants. The convention is a global treaty to protect human health and the environment from chemicals that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of humans and wildlife, and have harmful impacts on human health or on the environment. Trinidad and Tobago acceded to the Stockholm Convention on 13th December 2002.</p>
<p>Rotterdam Convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals - entered into force on 24 February 2004. As of January 2019, it has 72 signatories and 161 Parties.</p>	<p>The Rotterdam PIC Convention is a means for formally obtaining and disseminating information so that decisions can be made by importing countries as to whether they wish to receive future shipments of certain chemicals and for ensuring compliance with these decisions by exporting countries. The Convention promotes shared responsibility between exporting and importing countries in protecting human health and the environment from the harmful effects of such chemicals and provides for the exchange of information about potentially hazardous chemicals that may be exported and imported. A key goal of the Rotterdam PIC Convention is to provide technical assistance for developing countries and countries with economies in transition to develop the infrastructure and capacity necessary to implement the provisions of the Convention. The year of accession for Trinidad and Tobago is 16th December 2009</p>
<p>The Minamata Convention on Mercury entered into force on 16 August 2017 and currently has 128 total signatories and 101 Parties.</p>	<p>The Minamata Convention on Mercury is a global legally binding instrument with the objective of protecting human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds. All stages of the life cycle of mercury, including supply, trade, use, waste and contaminated sites, contain obligations relating to the emissions and release of mercury and mercury compounds. The direct mining, export and import of mercury is also addressed as well as the safe storage and disposal of mercury and mercury compounds. In the text provision is made for financial and technical support for developing countries and countries with economic transition and financial mechanisms for the provision of adequate, predictable and timely financial resources are defined. Trinidad is currently not a Party to the Minamata Convention; however, the government is actively considering becoming a Party upon completion of the Minamata Initial Assessment Project.</p>

CONVENTION	OBLIGATIONS
<p>Paris Agreement under the United Nations Framework Convention on Climate Change, ratified 22 February 2018</p>	<p>The Paris Agreement is an agreement within the United Nations Framework Convention on Climate Change (UNFCCC), dealing with greenhouse-gas-emissions mitigation, adaptation, and finance, starting in the year 2020. The Paris Agreement's long-term goal is to keep the increase in global average temperature to well below 2 °C above pre-industrial levels; and to limit the increase to 1.5 °C, since this would substantially reduce the risks and effects of climate change. Under the Paris Agreement, each country must determine, plan, and regularly report on the contribution that it undertakes to mitigate global warming.</p> <p>The Ministry of Planning and Development, as the National Focal Point within Trinidad and Tobago for the UN Framework Convention on Climate Change and the Paris Agreement has already begun preparatory work in anticipation of ratification which includes:</p> <ul style="list-style-type: none"> • Development of a Nationally Determined Contribution (NDC) Implementation Plan; • Design of a Monitoring, Reporting and Verification (MRV) system to track the implementation of the NDC and by extension the Paris Agreement; • Examining the legal underpinnings of the MRV system with a view to mainstreaming the process while addressing any gaps; • Preparing a financial investment plan for the NDC as implementation will also be contingent on external provision of finance through bilateral and multilateral donors and organizations such as the Green Climate Fund (GCF); • Emissions reductions are already accruing under the Compressed Natural Gas (CNG) fuel-switching programme of the CNGC of the National Gas Company, as emissions reductions from the transportation sector, including through fuel switching forms part of the NDC. This represents emissions reductions which will be put into effect domestically and without external financing, as part of the NDC commitment.

1.6 International Standards and Guidelines

In the absence of local guidelines for assessing environmental quality, international ones are used to allow the data to be viewed in context. Recognising that the criteria used to develop these guidelines are not indigenous to Trinidad and Tobago, the application of these guidelines to local datasets are used more as a first approximation in assessing whether organisms are at risk from water or sediment concentrations of toxic substances, rather than as a strict regulatory standard.

The following guidelines have been used in this study as appropriate:

- United States Environmental Protection Agency (USEPA) National Recommended Water Quality Criteria for Marine Water (2017) - Criteria Maximum Concentration (CMC) and Criteria Continuous Concentration (CCC);
- Canadian Council of Ministers of the Environment (CCME) water quality guidelines (2014) and sediment guidelines (2014)
- CCME sediment quality guidelines (2014) – ISQG and Probable Effect Level (PEL)

1.7 DSM and ALG's Environmental Management Strategy

1.7.1 Environmental Policy

ALG and DSM is committed to conducting its activities in compliance with all applicable legislative requirements, and in a manner, which contributes to the company's stated goals. In order to achieve this, a hierarchy of common policies, commitments and expectations exists, which identify policy and regulatory requirements, and provide tools to assist in compliance and performance improvement throughout the business. ALG's and DSM's Health, Safety, Security and Environment (HSSE) Policy illustrates the company's commitment (*Refer to **Appendix A4 - Environmental Sustainability Statements***).

ALG and DSM will make available appropriate resources to develop and implement its environmental policies and will take all necessary steps, including auditing compliance, to ensure that the policy is understood and is being implemented and maintain at all levels.

1.7.2 Institutional and Financial Mechanisms

This section examines the mechanisms that will be utilized to address any impacts resulting from pre-construction, during construction and subsequent operations of the hotel. These will also address any unexpected health and environmental consequences arising out of upset conditions or other unforeseen circumstances during the life of the Hotel Project.

ALG's and DSM's preparedness, evaluation and response to incidents and emergencies is based on a tiered approach. The Company is committed to the protection of its employees, the environment, the community and any other stakeholder that may be impacted by the Company's business by complying with all company policy documents as well as all relevant legislation.

ALG's and DSM's Institutional and Financial Mechanisms outlines mitigation measures for any hazard that may present risks to the operations. This is discussed further in **Section 2.0 – Institutional and Financial Mechanisms.**