

Environmental and Social Review Summary (ESRS) Guyana Shore Base Inc. (GYSBI) - GUYANA

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1. General Information of the Project and Overview of Scope of IDB Invest's Review

Guyana Shore Base Inc. ("GYSBI", the "Client" or the "Company"), located in Georgetown, Guyana, provides support for oil and gas operator companies in the country. It also offers services including waste management, chemical storage, warehousing, construction, berthing of supply vessels, cargo marshaling area, loading and offloading, supply chain management, expatriate management. GYSBI currently has over 390 employees and maintains an average of 92% of locals in its workforce.

As one of the main shore bases that serve as support for the rapidly expanding oil and gas industry in the country, and to comply with services required by Exxon Mobil (the Offtaker), GYSBI is making additional capital expenditures to expand its facilities (the "Project"), as follows: i) the construction of four new berth facilities at the Port (Berths 3, 4, 5 and 6) to accommodate an increased number of ships; ii) an increase in the size of the shore base logistics support area from 35 to 96 acres (GYSBI Industrial Estate - the Annex); iii) the expansion of other service capabilities to permit the Offtaker to operate five floating production storage and offload vessels; and iv) the implementation of an Integrated Waste Management Facility ("IWMF") to receive, treat, and dispose of waste (hazardous and non-hazardous) generated by its offshore operations.

The Project construction works have already begun with the dredging activities in the Demerara River to lodge Berths 3 and 4.

Due to travel restrictions imposed by the COVID-19 pandemic, the Environmental and Social Due Diligence was conducted remotely. It focused on a review of the Project's environmental and social ("E&S") and engineering documentation and included virtual meetings with GYSBI's management and operational teams to analyze, among other, the following subjects: i) shore base operations; ii) health, safety, and environment management; iii) labor and working conditions; iv) stakeholder engagement; v) engineering and construction; and vi) environmental permitting.

The ESDD process also included meetings with representatives of the Farm Supplies – FARMSUP (equipment sales and service business) and Pritipaul Singh Inc. – PSI (fish and seafood processing producer), both located in the southern side of the Project's premises; and of the Guyanese Environmental Protection Agency (EPA).

2. Environmental and Social Categorization and Rationale

The Project has been classified as a Category B operation according to IDB Invest's Environmental and Social Sustainability Policy since it will likely generate, among others, the following impacts: i) air emissions; ii) waste and wastewater; iii) alteration of water quality (surface and groundwater); iv) increase in health and safety risks due to the storage of large quantities of hazardous materials;

v) disturbance of the Demerara River bank as a result of dredging activities; and vi) noise. These impacts are deemed to be of medium intensity and are generally limited to the Project site, are largely reversible, and can be mitigated via measures that are readily available and feasible to implement in the context of the operation.

The Performance Standards ("PS") triggered by the Project are: i) PS1: Assessment and Management of Environmental and Social Risks and Impacts; ii) PS2: Labor and Working Conditions; iii) PS3: Resource Efficiency and Pollution Prevention; iv) PS4: Community Health, Safety, and Security; v) PS5: Land Acquisition and Involuntary Resettlement; and vi) PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources.

3. Environmental and Social Context

3.1 General characteristics of the Project's site

The Project site is located adjacent to the eastern bank of the Demerara River, close to the river mouth. The coastal plain is characterized by cultivated fields and secondary vegetation. Human activities, current and historic, have modified the primary ecological functions and species composition, resulting in fragmentation and loss of natural habitats. Only species that easily adapt and thrive successfully to rapidly changing environments are present within the modified coastal habitats.

The Demerara River is an important natural resource for potable water, recreation, water transportation, and fisheries. The riverine ecosystem comprises tidal wetlands that occur along riverbanks subject to periodic or continuous inundation. The river is prone to considerable tidal influence. Its narrow estuary and rapid flow carve a direct channel of five to six meters depth to the Atlantic Ocean.

The hydrology of the project area is largely controlled by its location on the low coastal plain and its proximity to the Demerara River. The soils in the area are clay-rich, with poor internal drainage. Much of the area can be described as highly developed with industrial activities and, as such, there is a network of drainage facilities.

Species such as the endangered tucuxi (*Sotalia fluviatilis*) and giant river otter (*Pteronura brasiliensis*), as well as the vulnerable west Indian manatee (*Trichechus manatus*), have been spotted along the Demerara River.

Terrestrial vegetation includes introduced species such as bamboo and Jamun (*Syzygium cumini*) and common broad-leaved sedges such as the Heliconia (*Heliconia psittacorum*) and wild eddo (*Caladium bicolor*), among others.

3.2 Contextual risks

Like many cities of the developing world, Georgetown faces several socio-economic problems, including widespread poverty, high unemployment, poor infrastructure, and a host of environmental predicaments relating to sanitation, garbage disposal, and flooding, with the latter

being far more threatening because of the city's physical environmental attributes (i.e., its proximity to the Demerara River and the ocean, coupled with its below-sea-level elevation).

Crime levels in the Project area are relatively high and police capacity is low. There are regular armed and violent robberies against businesses and individuals. The police tend to respond with firearms if shot at or threatened.

Many of the crimes in Guyana are common to countries with wide gaps in wealth and where the perception is that all foreigners are wealthy. Muggings have taken place in broad daylight, often at gun or knife point. Burglary and theft from cars are commonplace.

Although there is no recent history of terrorism in Guyana, attacks cannot be ruled out.

Demonstrations in Georgetown occur with relatively frequency and often turn violent, forcing the local police to use tear gas or even rubber bullets to disperse them. Protests usually begin by setting up roadblocks and causing major disruption to traffic.

4. Environmental Risks and Impacts and Proposed Mitigation and Compensation Measures

4.1 Assessment and Management of Environmental and Social Risks

4.1.a E&S Assessment and Management System

The Guyanese legislation that regulates the environmental licensing process does not require an environmental and social assessment for port expansion activities. However, as a requirement of IDB Invest, the Project's environmental and social assessment was carried out by means of an Environmental Analysis ("EA"). This analysis evaluated the following components: i) Physical Resources, which included climate, air quality, noise, geology and physiography, hydrology, and natural disasters and risks; ii) Biotic Resources and Biodiversity, which comprised an analysis of the Demerara River, special status species, areas of conservation, and ecosystem services; and iii) Socioeconomic and Cultural Resources, which included administrative structure, historical context, social and political context, population and demographics, land use, education, employment, socioeconomic activity and organization, services, facilities and infrastructure, cultural heritage, health context, and human rights. Impact assessment and management are also covered in the EA.

Following Guyanese legislation, the EPA issued the corresponding environmental license after having evaluated an Environmental Management Plan ("EMP") prepared by GYSBI. This plan was developed after having analyzed the following components: i) Physical Environment, which included soils and geology, hydrology and drainage, hydrogeology, climate, surface water quality, drainage canal water quality, the Demerara River, groundwater quality, and noise and air quality; ii) Biological Environment, which comprises aquatic and terrestrial fauna; and iii) Socio-Economic Environment, which included land use, population, livelihoods and services, utilities, and protected sites and buildings.

GYSBI currently has in place a Quality, Health, Safety, Service, and Environment ("QHSSE") Management System that encompasses the management and control of quality, health, safety,

security, and environmental issues. This system has the basic structure of well-known and commonly used environmental and social management systems ("ESMS"), including policies, management procedures, roles and responsibilities, and control of documents (codification and standardization) and records, among other important elements.

GYSBI's QHSSE Management System has a well-defined documentation hierarchy, which includes the following 137 documents: 8 policies, 8 plans, 40 procedures, 3 standing instructions, and 78 forms. The QHSSE Management System contains a QHSSE Management Plan, which is an overarching document that provides a general overview of the system, the QHSSE organizational roles and responsibilities, applicable reference framework, communication procedures, and QHSSE performance management, among other topics.

GYSBI's environmental issues are mainly addressed in the Environmental Management Plan ("EMP") approved by the EPA. This plan provides an administrative structure and management processes through which GYSBI coordinates its environmental performance and compliance as well as that of its employees, contractors, and subcontractors.

4.1.b Policy

GYSBI has in place a QHSSE Policy that addresses environmental, social, and occupational health and safety issues. This document resulted from merging the former Environmental Policy, Health and Safety Policy, and the Quality Policy into a single document.

The QHSSE Policy expresses GYSBI's and its management's commitment to the protection of employees, the people involved in its operations, and the public, as well as its respect for the balanced environmental and economic needs of the communities in which GYSBI operates. It also sets out the Company's goals in key areas of safety management and highlights GYSBI's commitment to continuous efforts to identify and manage safety and health risks and improve environmental performance.

Besides the QHSSE Policy, GYSBI also has the following policies and policy-level procedures in place: Control of Work, Smoking Policy; QHSSE Document Retention Policy; Cellular and Wireless Devices in the Workplace Policy; Hazardous Substances Staging Policy; Drug and Alcohol Policy; Recruitment Procedure; Code of Conduct Policy; Career Progression Procedure; and Background Check Policy.

4.1.c Identification of Risks and Impacts

4.1.c.i Direct and indirect impacts and risks

The Project's main impacts identified in the EA include the following: i) potential contamination of soil and water; ii) atmospheric emissions, noise, vibrations, and dust generation during construction and thereafter during the operational phase of the port and of the IWMF; iii) generation of solid waste and wastewater; iv) increase in traffic congestion near the port facilities; v) potential discharges of sewage and ballast from ships; vi) storage and handling of dangerous substances (e.g., fuel and lubricants); vii) increase in accidents and spill risks; viii) increase in health and safety risks associated with the operation of heavy machinery; ix) potential impacts to marine life from dredging

and disposal of dredged material at sea; x) possible re-suspension of contaminants due to dredging activities; xi) security risks associated with transportation of cargo for export; xii) increase in particulate emissions (PM_{10} and $PM_{2.5}$) due to the IWMF operation; xiii) potential loss or degradation of vegetation; xiv) increase in surface water runoff from vegetation clearing; xv) potential degradation of aquatic habitat; and xvi) wildlife injury or mortality.

GYSBI's QHSSE Management System outlines the responsibilities and activities required to ensure the risk assessment process is to be carried out. Risk identification and assessment will be conducted at least once per calendar year or when there is a change in process or property, the occurrence of an incident, a change in legislation or industry best practice, or a change in key personnel.

The Client will develop and adopt an integrated risk assessment that will include Quantitative Risk Assessment (QRA) of fires and explosions to address potential accidents from one installation spreading to the others.

GYSBI has obtained 62 permits and licenses issued by the Sea and River Defense Board ("SEA"), the Maritime Administration Department ("MARAD"), the Central Housing and Planning Authority ("CH&PA"), and the Environmental Protection Agency ("EPA"). The environmental permits issued by EPA includes the following: i) GYSBI Operation Permit of the Port (20160307); ii) GYSBI Construction Permit to Berths 3 and 4 (20210304); iii) Muneshwers Limited Construction Permit for a Potable Water Well (20181101); iv) Tiger Tanks Waste Management Facilities Environmental Permit (20140506); and v) SES (c/o GAICO) Construction Permit for new Waste Management Facilities (20200615).

These permits include conditions for operation and construction activities, such as: i) the preparation and submission of an emergency preparedness plan; ii) the design and implementation of erosion prevention measures; iii) the design and implementation of dust prevention measures; iv) compliance with emission limits for noise, wastewater, and air; v) monitoring of noise, discharges, and air emissions; vi) appropriate management of hazardous waste and materials; and vii) submission of annual reports.

4.1.c.ii Analysis of alternatives

Given that the Project is brownfield and that its main objective is to expand GYSBI's operations within its own available (or adjacent) properties, no alternative analysis was undertaken other than those related to construction methods. The no action alternative was also considered but discarded as it would have left current conditions unchanged.

4.1.c.iii Cumulative impact analysis

The Project's EA has a chapter that deals with cumulative impacts, using the methodology described in the IFC's Cumulative Impact Assessment and Management: Guidance for the Private Sector in Emerging Markets.

Following this methodology, the valued ecosystem components ("VECs") were determined to be the environmental components that met the following criteria: i) valued by a group of stakeholders;

ii) reasonably expected to be impacted by the project (i.e., have at least one of the potential impacts of minor significance or above); and iii) prone to the effects generated by other projects or external agents. The VECs selected by this procedure were: i) river traffic; iii) land traffic; iii) aquatic flora and fauna; iv) community health and safety; and v) water quality.

The CIA assesses the cumulative impacts of the following undertakings on the VECs: i) the Tristar wharf, which is planned to be constructed across the river on the west bank of the Demerara River at Versailles Malgre Tout; ii) the Hilton Hotel, expected to begin in August 2021, which will be located between the Annex Area and GYSBI Port; iii) the improvement of the Tiger Tanks, which includes an incinerator and water discharges to the canal to the south of the site; iv) a water project sponsored by the Inter-American Development Bank ("IDB") to improve water treatment plants and potable water distribution system in Georgetown (to the north) and in the Diamond Area (to the south); v) a Road Network Upgrade and Improvement Program, sponsored by the IDB, that includes improvements to roads in Georgetown; and vi) a Flood Risk Management of the East Demerara River, sponsored by the World Bank.

The overall assessment concludes that the cumulative impacts generated by the selected activities or projects on the VECs are minor or negligible. Therefore, there is no need of a cumulative impact mitigation plan.

4.1.c.iv Gender risks

The socio-economic profile of Guyana highlights the vulnerabilities of both men and women. However, women are more at risk because of their lower social and economic status, lower rates of participation in the labor force, higher rates of unemployment, and lower wages, as well as their increased responsibilities for domestic work and care of children, the sick, the elderly, and the disabled.

The rate of poverty is higher among women, and since approximately 28% of households are headed by females, these families are at even greater risk. It should be noted that Amerindian women in rural areas are even more vulnerable than Afro- or Indo-Guyanese women.

Guyana's Household Income and Expenditure Survey indicates that public sector salaries are very low, and it classifies public sector workers as living in absolute poverty¹. Significantly, almost two thirds of public sector employees are women who work predominately in the service sector, particularly in education and health. Thus, despite generally high levels of education and professional status, they have relatively low incomes. In addition, while the public sector reform process has resulted in limited salary increases for employees, many public sector jobs have been at risk since the reform was accompanied by cuts in the public sector workforce – a high proportion of which were women.

Although the impact of disasters cuts across national, racial, ethnic, socio-economic, and sex and gender boundaries, their impact on women is generally greater than on men. Cultural norms generally exclude women from formal planning and decision making in their communities. Women

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¹ Source: World Bank.

generally do not have the flexible resources that could facilitate their recovery from disasters. In addition, women's position in the family puts a greater burden of work (e.g., household work, caring for the young and elderly) on them, which often reduces their ability to find safe shelter during disasters.

Despite their political, economic, and social subordinate positions, women are often more active in voluntary and informal community activities for disaster risk reduction. It is therefore important that women be recognized as important agents of change who can make a vital contribution to planning and managing disaster risks.

Given the latter, if women are at risk, the LGBTQ+ population is at a much higher risk as the Guyanese legal framework lacks anti-discrimination laws and criminalizes same-sex sexual activity. Even though the law specifies that women are entitled to the same legal status and rights as men, gender-related discrimination in employment in Guyana is widespread, both in hiring practices as well as incomes between men and women for equal work².

GYBSI, however, has adopted a Code of Conduct Policy that includes an anti-discrimination section that indicates that "employees shall not discriminate against each other on the basis of, inter alia, race, color, religion, sex, national origin, age, disability, [and] sexual orientation" and expressly prohibits and punishes any act of harassment. The observation of this code also includes the Project contractors, subcontractors, and tenants.

By the end of 2020, 12% of the Project workforce were women. During the first quarter of 2021, this number almost doubled, indicating the Company's commitment to balance its division of labor by gender.

The existing services at the port have proper rest and sanitary facilities segregated by gender.

4.1.c.v Climate change exposure

Guyana is highly vulnerable to the effects of climate change for many reasons, including: i) approximately 90% of the country's population resides on the Coastal Plain, which lies approximately 0.5 m to 1 m below mean sea level; ii) its coast is also relatively flat, which favors rapid accumulation of rainfall runoff and makes natural drainage into the ocean very difficult; iii) roughly 75% of its economic activities (agriculture, fisheries, and industries that are extremely sensitive to extreme weather events and sea-level rise) are located on the coastal area; and iv) the country has already suffered greatly over the last decade from weather related disasters³.

Over the last century, significant changes in Guyana's climate were observed. Records suggest an increase by 1.0°C in the mean annual temperature in Georgetown within the last century (1909-

 $^{^{2}}$ U.S. Department of State, 2017 Human Rights Report.

³ In December 2004 and January 2005, an unusual weather system produced heavy rains which led to major flooding resulting in severe physical damage and economic loss to the country, leading to the worst flooding event ever recorded in Guyana's history (ECLAC/UNDP, 2005). The 2005 flood was concentrated in the most heavily populated regions, thus 37% of the country's population was severely affected (34 lives were lost). The magnitude of the damage caused by the floods was estimated to be equivalent to 59% of current GDP for the year 2004.

1998). Recent⁴ tide gauge data in Guyana indicates a mean relative sea level rise of about 10 mm per year (more than five times the global average over a similar period).

The Project area is not alien to this situation. According to the ThinkHazard⁵ tool, the Project area has a high exposure to river and coastal flooding, which are likely to be exacerbated in the future due to climate change effects. Given the latter, the Project has adopted the following measures: i) the berths and staging area are elevated from the previous coastline level; ii) the GYSBI complex has sluice doors to drain floodwater from the installations during low tide; iii) there are two fixed submersible pumps that can be used to expedite the drainage of floodwater; and iv) Project height at the berths is about 1 m above the level of the highest tide on record.

4.1.d Management Programs

The Project EA presents a Construction Environmental Management Plan ("CEMP") that includes a series of monitoring measures for air quality and dust management, noise management, sediment and erosion control, water quality, oil and other noxious substances, housekeeping, and wastes. The CEMP includes the entire plan-do-check-adjust ("PDCA") cycle provided for management systems per the ISO⁶ standards. It also establishes responsibilities, parameters to be monitored, a system of audits and periodic checks, and training requirements.

The EA also provides working templates and guidelines for the development of the following plans: Construction Health and Safety Management Plan; Construction Contingency Plan; Stakeholder Engagement Plan; Grievance Mechanism; Compensation and Livelihood Restoration Plan; and Traffic and Pedestrian Management Plan.

For the operation phase (after expansion), the EA presents an Operations Environmental and Social Management Plan, which includes monitoring activities for soil and groundwater contamination from spills, fire and explosion, exposure to hazardous chemicals, changes to traffic patterns, increase in traffic flows, and an emergency plan.

The EMP for the IWMF also contains a set of monitoring activities for ambient air emissions, surface water, groundwater, soils, noise and vibrations, climate change, socioeconomic factors, traffic, health and safety, employment, resolution of complaints, emergency preparedness plan for fires, minor and major accidents, and unplanned emissions of hazardous materials or wastes into the environment.

The EMP states that each contractor is responsible and accountable for the environmental practices of their employees, as well as for complying with all applicable codes, standards, and applicable local and international regulations. The plan also includes procedures and guidelines to be observed

⁴ For the period between 1960 to 2000.

⁵ ThinkHazard (https://thinkhazard.org/en/) is a web-based tool to assess the impacts of natural disasters (river flood, earthquake, drought, cyclone, coastal flood, tsunami, volcano, and landslides) on development projects. The tool provides recommendations and guidance on how to reduce the risk from each hazard within the project area and highlights how each hazard may change in the future because of climate change.

⁶ International Organization for Standardization.

for the monitoring of the following aspects: waste, water, refueling, noise and vibration, light pollution, flora and fauna protection, marine environment, heritage, and community protection.

4.1.e Organizational Capacity and Competency

The Company has a QHSSE organizational structure that manages the Project's Environmental, Occupational Health and Safety, and Security issues, which is led by a QHSSE Manager. The latter is responsible for the provision of specialized advice on environmental issues and for the development or revision of the Environmental Management Plan, ensuring systems are implemented for employee and contractor awareness of environmental issues.

Besides the QHSSE Manager, the QHSSE Department currently has 8 members: 1 Lead-Officer (Supervisor) and 7 Officers. This team is responsible for the monitoring and auditing of QHSSE compliance of operations, the preparation of reports to be submitted to various regulatory agencies, and the execution of incident investigation, among other tasks. Most people within the QHSSE Department focus on Health and Safety issues and just one person, who has been recently recruited, deals with environmental issues. Considering the Project's current and future E&S impacts and risks, and the complexity of GYSBI's operations, the environmental team will be reinforced.

The QHSSE Management Plan establishes that every contractor and operator is responsible for the daily operation of the facility, the provision of training on the safe operation of equipment (in line with GYSBI's Training and Competency program), the implementation of measures outlined in the EMP, and the reporting of incidents and deficiencies during the facility operation. According to the QHSSE Management Plan, formal resource and development planning are performed on an annual basis to determine personnel requirements. Therefore, all staff undergoes annual staff appraisals in which their QHSSE performance is reviewed. Per contract requirements, third-party training is developed and approved by the Company in line with its requirements.

The identification of specific disciplines, QHSSE training requirements, and target audiences are established in the GYSBI Training Matrix. Some of the training subjects include: QHSSE Induction; Operations Awareness Training; Life Saving Rules; Working at Height; Control of Substances Hazardous to Health; Fire Awareness; Permit to Work & Job Safety Analysis; Personal Protection Equipment ("PPE") Awareness; Slip, Trip & Fall Prevention; and Hand Safety.

Considering the size and scope of the Project, the number of people working with Occupational Health and Safety issues is deemed adequate. However, the overall qualification and training of the QHSSE team should be more balanced among Environmental, H&S, and Social issues.

4.1.f Emergency Preparedness and Response

GYSBI has enforced an Emergency Response Plan ("ERP") that refers only to the Fuel Farm Facility. A wider and overarching Emergency Preparedness and Response Plan, which would consider all GYSBI's facilities, is currently under development.

The ERP for the Diesel Fuel Farm describes the procedures for the following emergency scenarios: i) fire or explosion; ii) person down and medical evacuation; iii) equipment failure; iv) person down

in a confined space; and v) oil spill or pollution. This ERP also includes provisions for emergency drills and trainings, emergency contact list, emergency response team, and roles and responsibilities.

To date, GYSBI has performed several routine and non-routine emergency drills for person down and first aid and medical evacuation ("MEDEVAC") scenarios. No environmental emergency drills (e.g., oil spill) information was available.

GYSBI's EMP also considers aspects related to emergency situations. It provides general guidelines, mainly focused on environmental actions and spill scenarios.

Currently, GYSBI's emergency response and preparedness are mainly focused on onshore activities. No support or coordination with off-takers, local authorities, or the community has yet been established to manage emergencies resulting, for instance, from incidental maneuvers of the vessels that enter the Demerara River that could lead to oil and fuel leaks in the water, fires and explosions on vessels, and vessel collisions, among other scenarios.

Due to the large quantity of diesel potentially to be stored in the Fuel Farm (approx. 3.5 million liters) and to the high catastrophic impacts that could happen should any of these risks materialize, GYSBI will develop a specific risk assessment for this facility compliant with the following National Fire Protection Association ("NFPA") Codes & Standards: i) NFPA 230: Standard for the Fire Protection of Storage; and ii) NFPA 231: Standard for General Storage.

4.1.g Monitoring and Review

The Project's EA describes monitoring measures for the main environmental impacts identified for the Project's construction and operations phase, such as air quality, noise, soil and water resources, waste, natural hazards and climate change, land and river traffic, biodiversity, and social issues.

The IWMF Environmental Management Plan includes an Environmental, Health and Safety Monitoring Plan that aims at ensuring that the recommended controls and management practices identified in the EMP are being implemented effectively. The Monitoring Plan for this facility comprises the monitoring of the following aspects: air quality, stack emissions, water quality, noise, and health and safety statistics.

EHS monitoring and supervision are conducted on a periodic basis within the shore base facilities. Monthly QHSSE Reports are produced after every supervision activity. These reports present the supervision findings and contain corrective action plans ("CAP") when needed, as well as a corrective actions tracker when a previous CAP has been issued.

The environmental monitoring required per the Project's environmental permits issued by the EPA are still to be implemented. Therefore, GYSBI's QHSSE Management System will develop monitoring programs for the following aspects: i) air quality (both occupational and community); ii) water quality; iii) sediment quality; iv) noise; v) groundwater; and vi) biodiversity (aquatic ecosystems). Additionally, GYSBI will establish procedures for closing non-conformities for its own activities, as well as for those of its contractors, subcontractors, and tenants.

4.1.h Stakeholder Engagement

The Project EA provides the framework for the development of a Project-specific Stakeholder Engagement Plan ("SEP") that will include: i) a stakeholder analysis; ii) stakeholder identification and mapping; iii) disclosure and engagement methods and materials; iv) a grievance mechanism; and v) monitoring and reporting activities. However, a formal SEP is still in the process of being developed.

The main stakeholders identified so far include: i) some artisanal and industrial fishers that use the Demerara River; ii) the Pritipaul Singh Company ("PSI"), which processes fish and shrimp; iii) the Guyana Fisheries, located to the north; iv) other private and artisanal fishermen that use a public fishery more to the north; and v) residents that live nearby the Project site.

The EMP for the IWMF contains stakeholder identification, analysis, mapping, and prioritization that includes land users located close to the Project site and national and local government authorities and institutions. However, it does not include members of the community or small-scale fishermen.

4.1.h.i Disclosure of Information

Apart from stakeholder meetings, GYSBI does not have a formal channel to disclose information about the Project to the external public. The Company's website⁷ only provides information on Company performance and activities and contains no specific details on the Project or its associated environmental and social situation.

4.1.h.ii Informed Consultation and Participation

In 2021, GYSBI held several virtual meetings with corporate neighbors, institutional bodies, and governmental representatives, as well as some community members that live and work around the Project's site, to: i) present details of the Project; ii) discuss the Project's potential impacts and associated opportunities; iii) disclose the results of the EA; iv) describe the management measures to avoid, mitigate, or compensate undesired impacts and to enhance positive impacts; v) divulge the grievance mechanisms; and, more importantly, vi) capture the community's reaction to the Project.

During this process, key issues and concerns expressed by the stakeholders revolved mainly around cumulative impacts, impacts to neighboring communities, impacts to the river flow due to the construction of the wharf, implementation of buffer zones around the Annex, and if the Project had foreseen a livelihood restoration plan.

The IWMF EMP also presents some results on a one-on-one meeting with delegates of neighbor companies. While no community representatives were considered in this meeting, critical concerns were related to potential impacts of the Project, especially regarding air quality.

⁷ http://www.gysbi.com/

4.1.h.iii Indigenous Peoples

The Project will not generate any impact on indigenous groups or traditional territories in its area of influence.

4.1.h.iv Private Sector Responsibilities Under Government-Led Stakeholder Engagement

The stakeholder engagement process is the Client's sole responsibility.

4.1.i External Communication and Grievance Mechanisms

4.1.i.i External communication

Despite GYSBI's efforts to engage with the community since the beginning of its operation in 2017, the Company does not yet have in place a formal external communication channel by which it can share with the community and other relevant stakeholder information related to the Project on a regular basis.

4.1.i.ii Community grievance mechanism

Even though, following the guidelines established in the Project's EA, GYSBI has communicated to its relevant stakeholders how and where to present any grievances or information requests and has told them, conceptually, how those claims are going to be treated, it has currently not yet adopted a formal grievance mechanism⁸.

Complaints received so far have been received through many channels, including verbally, in writing, and through third parties. Even though they seem to be properly treated, it is hard to verify this assertion since the actual procedure does not provide any specific information on the complaints and how they were managed. As ratified by EPA officials, most of the complaints received are related to the Tiger Tanks operation (principally air emissions).

4.1.i.iii Provisions for addressing vulnerable groups' grievances

Following the guidelines provided in the Project's EA, GYSBI will implement a formal Grievance Mechanism that will be publicized and implemented to capture complaints from the community and any vulnerable group⁹.

4.1.j Ongoing Reporting to Affected Communities

During stakeholder meetings, GYSBI has presented an overview of the Project and its impacts, disclosed the results of the EA, described the mitigation and management measures to be

⁸ This mechanism is expected to describe, at minimum, the means through which claims can be presented, including those appropriate for vulnerable groups; how claims are to be captured, registered, and processed; the maximum duration of each step in the process; how resolutions are to be communicated to the claimant; and the person or group of people responsible for each part of the process.

⁹ These groups will be pinpointed through the stakeholder identification and mapping process.

implemented, and allowed the community to express itself about the Project. Besides that, no formal reporting is being done.

4.2 Labor and Working Conditions

4.2.a Working Conditions and Management of Worker Relationships

4.2.a.i Human Resources Policies and Procedures

GYSBI's Human Resources ("HR") Policies and Procedures include: i) a Drug and Alcohol Policy that, among other aspects, establishes the need of conducting drug and alcohol testing at the workplace; ii) a Recruitment Procedure, which provides guidance to select the most suitable candidate for the job through a structured organizational procedure; iii) a Remuneration and Benefits Procedure, which defines employee remuneration and benefits and indicates their terms of employment; iv) a Career Progression Procedure, which includes a competency program and indicates how an employee can be promoted in the Company; and v) a Code of Conduct Policy that establishes a standard of conduct acceptable to the Company for its employees, vendors, clients, and customers when undertaking business on behalf of GYSBI. Per the HR Policy, a background check is performed for every new employee.

The Company is committed to hiring local labor. Currently about 92% of GYSBI's 397 employees are Guyanese.

4.2.a.ii Working Conditions and Terms of Employment

The Company's QHSSE Plan, applicable for contractors, vendors, and visitors, sets the main procedures to guarantee a safe and healthy workplace for its employees.

No dormitories or collective transport will be needed to support the Project's construction activities as each contractor will provide the necessary support structure to its employees. As such, GYSBI has established specific contract clauses regarding support facilities, aiming to guarantee suitable work conditions for contractor employees. These clauses include provisions for the contractors to follow GYSBI's QHSSE Policies and Procedures, to maintain proper sanitary conditions in their work areas, and to conserve their vehicles and equipment in optimal working conditions.

GYSBI has a team of inspectors that ensure that all facilities operate under adequate conditions. Inspections occur daily and are focused on domestic and potable water, the conditions of lunchrooms, accommodations, toilets, and showers, and overall working conditions. Checklists are filled after every inspection.

GYSBI's Remuneration and Benefits Procedures establishes that employees have a benefit package that includes a group medical system. GYSBI employees have an on-site medic available 24 hours per day and a facility with medical first aid equipment such as stretchers, defibrillators, and eyewash stations.

All operational staff has a written contract. Shifts are usually for 14 days, with 12 working hours per day or night and a rest period of 7 days. Per local legislation, remuneration considers extra compensation for night shifts, overtime, and work on weekends and holidays. The Remuneration and Benefits Procedures also details, among other issues: i) the conditions for overtime payments; ii) the necessity of using swipe cards to register working hours; iii) the rules and conditions for vacation and leaves; and iv) payments forms.

4.2.a.iii Workers' Organizations

Even though GYSBI has no restrictions for its employees to constitute or join existing worker unions, there are currently no worker unions operating in the Project. Employee demands are therefore negotiated individually. No problems have arisen so far regarding this procedure.

4.2.a.iv Non-discrimination and Equal Opportunity

GYSBI's Code of Conduct Policy includes an anti-discrimination section that specifies that no employee shall be discriminated against based on the color of their skin, political affinity, religion, sex, origin, age, disability, and sexual orientation, among other characteristics. The code also prohibits any act of harassment regarding the latter.

Although the Company has very clear anti-discrimination rules and provides equal opportunities for its employees, current Guyanese legislation criminalizes homosexual relationships. Furthermore, even though the law specifies that women are entitled to the same legal status and rights as men, employment gender-related discrimination in Guyana is widespread, both in hiring practices as well as incomes between men and women for equal work.

4.2.a.v Retrenchment

GYSBI has no intention in reducing its workforce in the medium term. On the contrary, since the Company is under intensive expansion, its number of employees has grown from an average of 160 employees in 2020 to 397 that are currently employed. It is expected that this order of magnitude will either slightly increase or be maintained in the future.

Workers for the construction activities will be provided by the engineering, procurement, and construction ("EPC") contractors in charge of the civil works and the installation of the IWMF. Once those activities are finished, these workers are likely to be assigned by the EPC contractors to other projects.

4.2.a.vi Grievance Mechanism

In line with its QHSSE Plan, GYSBI promotes open communications between management and the workforce to discuss work-related issues on safety matters, and workers have full representation through an elected and nominated employee that meets monthly with GYBSI management to assess complaints and working conditions and ensures that grievance boxes have been placed in different points of its facilities and that through these boxes anonymous complaints can be captured. The

Company has no formal internal (workers) Grievance Mechanism in place yet, however, to capture, record, respond, and analyze complaints from its employees.

The procedure in place, which will be updated by GYSBI to transform it into an internal grievance mechanism, has so far been able to capture a few minor harassment complaints that were immediately resolved through a verbal warning to the employees that were involved in such cases.

4.2.b Protecting the Workforce

4.2.b.i Child labor

According to Guyanese legislation, the minimum age for employment is fifteen years. This threshold has been increased to eighteen years when the work to be performed is likely to jeopardize the health, safety, and morals of young persons. The legislation prohibits workers under eighteen years to be employed to perform any work during the night.

GYSBI and its contractors comply with national regulations that forbid child labor.

4.2.b.ii Forced Labor

Guyana has ratified the International Labor Organization's ("ILO") Convention No. 29 on Forced Labor and Convention No. 105 on Abolition of Forced Labor.

GYSBI and its contractors comply with national regulations that forbid forced or unpaid labor.

4.2.c Occupational Health and Safety

GYSBI's QHSSE Plan sets out the Company's priorities in key areas related to the health and safety ("H&S") of its workers. For that purpose, the main H&S components of the QHSSE Plan include, among others: i) QHSSE Policy; ii) commitment and motivation; iii) internal communication and consultation; iv) H&S communication with key stakeholders; v) management of change; vi) training and capacity building; vii) site safety induction; viii) controls and record keeping; ix) hazard identification, evaluation of hazard effects, and risk management; and x) risk prevention and mitigation.

The Project has a QHSSE Department, which is responsible for ensuring that occupational health and safety standards and requirements are adopted, and for producing monthly reports that are submitted to the local authorities. These reports include topics such as: i) fitness to work updates; ii) security updates; iii) statistics, which comprise total manhours, number of job safety analyses ("JSAS"), observation and intervention cards, first aid cases ("FAC"), environmental incidents, equipment damage, near miss incidents, kilometers driven, alcohol tests conducted and positive tests, and drug tests conducted and positive tests; iv) description of incidents, accidents and environmental issues breakdown; v) summary incidents such as reactive indicators of numbers of lost time incidents ("LTI"), work restricted incidents ("WRI"), medical treatment incidents ("MTI"), FACs, environmental incidents, road traffic accidents, and near misses; vi) inspections or monitoring

exercises including their results; vii) trainings; and viii) specific aspects requested by the authorities upon review of the previous report.

In the last six months, GYSBI has recorded 2,566 job safety analyses, 5 near miss incidents, 1 first aid case, 4 environmental incidents, 9 cases of equipment damage, and 0 LTIs during a total of 452,440 worked manhours. In addition, concerning COVID-19 testing, between January 2021 and May 2021 there were 118 tests performed, of which 22 were retests, 10 positive cases were recorded, 11 people were put in self isolation, and there were 9 recovered cases. Unfortunately, a fatal accident¹⁰ was registered on site in February 2021, during GAICO¹¹ activities in Berth 3 Barge.

The Project's EA contains a Construction Health and Safety Management Plan ("CHSP"), which provides a working template that will be used by the EPC to develop its own policies and procedures.

4.2.d Provisions for people with disabilities

The Project EA contains a list of measures¹² to facilitate the mobility of and access for people with disabilities. However, those measures have not yet been implemented.

4.2.e Workers Engaged by Third Parties

GYSBI's procurement process assesses every tender in a transparent way and following international standards. The terms and conditions state that potential vendors will need to provide to their employees "equal employment opportunity without regard to race, color, national origin, sex, age, religion or handicap situation" and that none of their employees will be "segregated based on race, color, religion or national origin."

The relations between GYSBI and its contractors regarding QHSSE is regulated by the Contractor Assessment and Management Protocol, which requires that all contractors and subcontractors follow the same conditions that GYSBI has for its workers. For this purpose, GYSBI has standard HSE clauses in every contract to be signed with any contractor that also entitles the Company to supervise the contractor's compliance with GYSBI's QHSSE requirements and to adopt any sanction or give any warning should a non-compliance be found.

4.2.f Supply Chain

Procurement clauses included in every contract require that GYSBI's suppliers comply with local labor laws and regulations.

¹⁰ The accident occurred in a site, which was not under GYSBI's control. After the corresponding investigation was conducted, it was clear that the fatal accident resulted due to an underestimation of the potential risks in the work front and a lack of safety measures adopted by the diseased worker. The accident cause-effect analysis results were used to improve the management of H&S issues with GYSBIS's contractors.

 $^{^{11}}$ GAICO is the contractor responsible for the construction works on berths 3 and 4, and the IWMF.

¹² Such as railings, ramps, and toilets for handicapped people.

4.3 Resource Efficiency and Pollution Prevention

4.3.a Resource Efficiency

4.3.a.i Greenhouse Gases

The Project has not yet performed a Greenhouse Gas ("GHG") inventory.

4.3.a.ii Water Consumption

At present, water for the Project is being supplied from an onsite water well¹³ and a water treatment plant ("WTP") that also supplies the berths. However, the Project is currently increasing the capacity of the water treatment facility as well as its storage capacity, to be able to treat up to 70 cubic meters (m³) of water per hour (m³/h) and store 1,440 m³ of treated water. Water at the Annex site will be supplied by the local utility company.

The Project's annual current and future water uses are, respectively, the following: i) outbound water to vessels, 38,870 m³ and 97,175 m³; and ii) pipe washing water at wash bay, 733 m³ and 1,832.5 m³. No industrial wastewater effluents are anticipated during construction activities. Equipment will not be washed on site.

GYSBI will promote campaigns to reduce water consumption.

4.3.b Pollution Prevention

4.3.b.i Wastes

Even though the site visit to GYSBI's facilities indicated good housekeeping procedures and sound management of solid wastes, no information was provided concerning solid waste volumes, types, transit times, controls, final destinations, and disposal certificates.

GYSBI's current waste management system focuses on its own activities and does not consider those performed by contractors, subcontractors, and tenants. However, the Project EMP contains a Site Waste Management Plan ("SWMP") that regulates the collection, sorting, and transportation to the designated disposal facilities of all wastes and requires the Project to maintain updated logs and manifests of the quantity, type, and final disposal of all wastes. Waste reduction opportunities will be enforced by GYSBI, including activities to reuse, recycle, and sell some discarded products in strict adherence to local and international regulations.

The SWMP also has provisions for hazardous wastes management, such as: i) the use of appropriate containers to store it; ii) the need to train all staff in its handling and to respond to an emergency; iii) ways to load and unload the wastes; iv) housekeeping procedures; v) promoting and maintaining staff awareness in waste management matters; vi) disposing of the wastes in EPA-licensed facilities;

 $^{^{13}}$ Ground water use was authorized by the Ministry of Agriculture and the EPA.

and vii) periodically reporting on the types and volumes of waste, its handling, final disposal, and the status of corresponding licenses, among other issues.

4.3.b.ii Hazardous Materials Management

GYSBI has in place a Chemicals and Hazardous Substances Procedure that includes contractors and subcontractors, to manage hazardous products and minimize its potential harm to human health or the environment. This procedure establishes the general requirements to manage these types of materials, which include its classification, transportation, handling, and identification, as well as signaling, staff training, use of PPE, and overall responsibilities that each worker must observe in dealing with these materials. It also defines how and when routine and non-routine inspections must be undertaken to verify if chemicals and other hazardous substances are well stored and managed.

4.3.b.iii Pesticide Use and Management

The Project is not expected to use any type of pesticides.

4.3.b.iv Water and Wastewater Management

GYSBI does not allow foreign materials (e.g., wastes, sediment, aggregates, fuel, oil) or untreated discharges or effluents (e.g., sewage, grey water, cement wash) resulting from its operations or those from its contractor and subcontractors to be released into watercourses. Following GYSBI's QHSSE, if an undesired discharge occurs the EPA will be immediately informed and the Project's Emergency Preparedness and Response Plan will be triggered to control the discharge and mitigate any subsequent impact on the environment, including to the community.

The Project foresees, besides the current effluent treatment plant, two additional wastewater treatment units: one in the IWMF and the other in the wash bay.

Wastewater generated during construction activities will generally consist of sanitary sewage. The EPC will provide sufficient portable restroom facilities to accommodate construction staff. Waste accumulated in these portable facilities will be disposed of by an approved contractor off site. Stormwater on site will be managed through the existing stormwater management features. Materials that could potentially contaminate stormwater will not be left exposed to prevent any stormwater contamination. No industrial wastewater effluents are anticipated during construction activities. Equipment will not be washed on site.

A simplified dredging plan was presented, but it does not provide enough detail on the process. Two types of dredging are currently performed: hopper and barge/excavator. Final deposit areas were determined by MARAD and are located approximately 3.5 km north of the Demerara River mouth. These areas have already been in use for several years to deposit sediments from other dredging operations along the river. Dredging for Berths 1 and 2 has been completed while dredging for Berths 3, 4, 5 and 6 will be carried out when the construction of these facilities is finalized.

No sediment quality assessment has yet been performed. Moreover, no sampling of water quality was required due to the high turbidity already characteristic of the Demerara River.

For the IWMF works, the EMP presents a baseline of the water quality of the tributary channel (trench) of the Demerara River. The following parameters were analyzed: pH; temperature; turbidity; total suspended solids ("TSS"); dissolved oxygen ("DO"); biological oxygen demand ("BOD"); total dissolved solids ("TDS"); conductivity; oil and grease concentration; chemical oxygen demand ("COD"); Zinc (Zn); Iron (Fe); Copper (Cu); Aluminum (Al); and Lead (Pb).

The results for the water quality analysis were compared to the limits prescribed in the Guyana National Bureau Standards ("GNBS") Interim Guidelines for Industrial Effluent Discharge into the Environment for pH, temperature, TSS, BOD, COD, and oil and grease. Turbidity levels were compared with the limits included in the Guyanese Mining (Amendment) Regulation 2005. TDS and Cu levels were compared to the limits set by the National Recommended Water Quality Criteria – Human Health Criteria Table of the United States Environmental Protection Agency (US EPA). The levels of Zn, Fe, and Pd were compared to the limits for freshwater established by the US EPA. Finally, the Al levels were compared to those contained in the Notice for Ambient Water Quality Criteria for Aluminum in Freshwater of the US EPA.

Most of the parameters were either not detected or within acceptable limits. Turbidity and TSS levels were high, which indicates the presence of sediments, and DO levels were a bit low.

The IMF will have an automated effluent treatment plant ("AWT") designed to treat water with high concentrations of oil. This facility has the capacity of automatically adjusting itself according to the oil concentration of the water at the intake. Removed oil can be recycled or used for other purposes. The predicted post-treatment quality of the water is expected to meet the IFC General Guidelines and the IFC Guidelines for Wastewater and Ambient Water Quality.

Stormwater at the port and berths will be collected through a series of trenches, conveyed to an oil water separator, and discharged into the existing drainage facilities after having verified that it complies with the applicable water standards. Stormwater at the Annex will be collected through a series of drainage systems and discharged to the stormwater canal located to the north of the property.

4.3.b.v Groundwater

Groundwater supplied to Georgetown and Greater Georgetown is obtained principally from the "A" and "B" sands aquifers¹⁴. The untreated groundwater is slightly acidic with a pH range of 6.5 to 8.5. The water contains a low chloride content and low alkalinity and hardness, but high levels of iron. Water from the "B" sands has a higher temperature and chloride content and contains hydrogen sulfide.

¹⁴ Water from "A" sand aquifer, is typically located between 200 and 300m below the surface with thickness ranging from 15 to 60m, requires treatment for the removal of iron. Water from the "B" sand aquifer, usually found at about 300 to 400m below the surface with thickness of between 350 and 800m, has very little iron, a high temperature and a trace of hydrogen sulfide which can be treated with aeration.

At present, water for the Project is being supplied from an onsite water well. The Project's annual current and future water uses are, respectively, the following: i) outbound water to vessels, 38,870 m³ and 97,175 m³; and ii) pipe washing water at wash bay, 733 m³ and 1,832.5 m³.

GYSBI will monitor the well behavior to ensure that the aquifer is not exhausted.

4.3.b.vi Noise

Baseline studies contain daytime and nighttime noise measurements at four locations around GYSBI's facilities. The results obtained for the maximum daytime (around noon) noise levels at the four locations were 74.9 dB, 80.5 dB, 77.3 dB, and 72.1 dB. The maximum noise levels for nighttime (around 8:00 pm) were 78.1 dB, 77.1 dB, 80.6 dB, and 70.1 dB.

The GNBS Noise Guidelines stipulate daytime limits of 90 dB and nighttime limits of 75 dB for construction sites. All daytime noise measurements were well within this limit. Even though most of the nighttime measurements were within the permissible limits, the survey registered some minor exceedances for nighttime measurements at three points. However, since the Project site is an industrial area in which noise is also generated by other activities, such as in the Prittipaul Singh Investments Inc. (PSI) and the Tiger Rentals complexes, it is very difficult to establish what share of that noise is being produced by GYSBI.

Is important to observe that although the noise levels that were registered at the Project site are substantially in compliance with national legislation, they exceed the 70 dB limit required by the IFC Guidelines for noise levels in industrial settings for daytime and nighttime.

4.3.b.vii Air Emissions

The actual main source of GYSBI's air emissions is the waste incinerator currently managed by Tiger Tanks. Once in operation, the Integrated Waste Management Facility (IWMF) will also be a source of air emissions.

An air quality assessment was conducted downwind of the new incinerator site. Particulate matter ($PM_{2.5}$ and PM_{10}) and total suspended particulates ("TSP") were assessed over 24 hours. Sulfur dioxide (SO_2), nitrogen dioxide (NO_2), carbon monoxide (NO_2), volatile organic compounds ("VOCs"), and methane (NO_2), carbon monoxide (NO_2), and methane (NO_2), carbon monoxide (NO_2), volatile organic compounds ("VOCs"), and methane (NO_2), since those assessed for 15 minutes each during the day and nighttime. Results of those measures were compared to the guidelines set by the World Health Organization ("WHO"), since those standards are referenced in the Port Operation Permit (especially VOC emissions limits) issued by the EPA, as well as to the Alberta Government (Canada) and EPA Victoria (Australia) standards. Current values for NO_2 0, and NO_3 10 exceeded three reference standards.

To mitigate this condition, GYSBI has shifted the operation hours of the existing incinerator to the nighttime and is adopting some additional measures (e.g., filters, sweeteners, higher stack) to reduce air quality impacts, as well as installing equipment to measure wind direction to avoid incineration during periods when wind flows towards neighbors at GYSBI's southern boundary.

The new incinerator has been engineered to include mitigation measures and will also deploy more effective waste management technologies. However, no plume dispersion analysis was available during the ESDD.

4.4 Community Health, Safety and Security

4.4.a Community Health and Safety

4.4.a.i Infrastructure and Equipment Design and Safety

Community safety can be affected by vessel and road traffic that will significantly increase after expansion works are concluded. Vessel traffic is expected to increase 2.5 times by 2022 (GYSBI currently berths approximately 1,835 vessels every year) and road traffic will increase considering that there will be material transportation between the shore base and the Annex via the Vieira Estates Access Road and the improved GYSBI Southern Access.

To prevent road accidents and run overs, GYSBI will install in coordination with the traffic authorities a small bridge crossing the canal near the Annex and a traffic light on Demerara East Bank Road, which will lead to enhanced safety along the corridor (traffic accidents due to the uncontrolled crossing of trucks are expected to decrease).

The Traffic and Pedestrian Management Plan included in the EA contains guidelines for contractors to, wherever possible, minimize the interface between the public (e.g., pedestrians, visitors, tourists, residents) and site- and project-related traffic.

MARAD regulations will be followed to ensure vessel traffic safety. Therefore, all vessels attended by GYSBI will always respect the "MARAD pilot's" instructions to navigate in the Demerara River. Additionally, platform supply vessels ("PSVs") will always approach GYSBI's berths from the north, away from the river margin, and perform docking facing north, thus avoiding conflict with small fishing vessels using the berthing facilities at the Guyana Fisheries¹⁵.

4.4.a.ii Hazardous Materials Management and Safety

The main hazardous products to be handled by GYSBI include diesel oil and hazardous waste from offshore oil and gas activities.

The fuel farm will hold up to 3.5 million liters of diesel. The fuel storage tanks will be fed by a pipeline and diesel will be dispensed through secondary pipelines that will connect the fuel farm with the berths. Each tank is double walled and can be individually operated (although they are manifolded). The system currently includes fire extinguishers and a manual shut down mechanism. An automated fire response system, currently being installed, includes piping for a foam system that will blanket the entire fuel system in case of a fire. Foam will be produced as needed by mixing a dry product into the high-pressure water system. The entire fuel system is inside a contained, bunded system,

¹⁵ So far, there are no records of accidents involving PSV and fishing boats.

as required by the EPA. The fuel farm has already received a fire service license from the fire department.

During operations, other than the materials at the Tiger Tanks Treatment Facility, the IWMF, and the chemicals used at the WTP, only minor quantities of hazardous materials will be generated or stored at the GYSBI facilities. Hazardous materials such as drilling liquids and fuels will be transported to the Floating Production Storage and Offloading ("FPSO") facilities via supply vessels.

Minor quantities of industrial waste will be generated from maintenance activities including oily rags, lubes, and paints. These materials will be disposed of on site by the Tiger Tanks Company via incineration. A water oil separator, which will be monitored and maintained daily, will be installed as part of construction activities for the berths. Oily sludge from the oil water separator will be taken to Tiger Tanks for recycling or disposal. Onsite wash bays (used for washing lube from pipes) also generate oily sludge that will be drummed and transferred to Tiger Tanks for their final disposal (incineration).

Waste from minor maintenance operations and the wash bays will be drummed in 55 gallon containers and transferred to Tiger Tanks for incineration (typically a couple of 55 gallon drums per week). There are no industrial processes performed at the Annex area. Materials at the Tiger Tanks Treatment Facility and IWMF will be stored inside in secondary containment while awaiting classification, treatment, and disposal. Chemicals (including chlorine) used during the water treatment process with be stored in a bunded shed immediately adjacent to the WTP. It is anticipated that the IWMF facility will handle over 2,500 metric tons of total waste.

Some of the waste to be received will likely contain Naturally Occurring Radioactive Material¹⁶ ("NORM"). Since the IWMF facility does not have the capacity to treat these materials, they will be detected, segregated, and transported to a licensed third-party facility for their final disposal.

Treated waste from the Tiger Tanks and the IWMF will be transported and disposed of in a local landfill.

GYSBI will prepare an Integrated Waste Management Plan covering all facilities to ensure appropriate storage, reuse, recycling, treatment, and waste disposal. In addition, a Quantitative Risk Assessment ("QRA") will be performed to ensure adequate risk mitigation is in place. An Integrated Emergency Preparedness and Response Plan ("EPRP") to deal with emergencies is currently under preparation.

4.4.a.iii Ecosystem Services

The Project's EA contains a brief ecosystem services analysis, which finds that: i) fish and shellfish are an important source of protein and income for many coastal communities; ii) the nearshore environment, including mangroves, are important as nursery areas for commercially important fish and shellfish species, and some areas are also used for crabbing and collection of snails at specific times of the year; iii) mangrove wood is often used for firewood, building material, and fishing poles;

¹⁶ Often associated with the offshore exploration and production industry

iv) mangrove forests give protection to the coastline by dampening wave energy and stabilizing shoreline substrate; v) mangroves also play an important role in carbon sequestration and nutrient cycling and provide habitat for a diversity of flora and fauna; and vi) agriculture is important since it provides services for rice, sugar and coconut activities, and livestock raising.

Even though the Project is not likely to generate any material impact to the above-mentioned ecosystem services, GYSBI will update its risk and impact identification and assessment matrix constantly to include any impact on ecosystem services.

4.4.a.iv Community Exposure to Disease

Most of the workers needed for the Project will be Guyanese nationals (92% as of 2021). As such, the likelihood of the community's exposure to foreign diseases is low.

Neighboring communities are likely to be potentially exposed to noise, air emissions, COVID-19, and both terrestrial and maritime traffic accidents. Community exposure to noise and air contaminants will be addressed by means of technical systems to control emissions (including filters, sweeteners, stack height definition, and wind measurements) and noise attenuation systems will be used for the control of noise levels. GYSBI will therefore perform air quality modelling in addition to air quality and noise monitoring under the terms defined by the IFC Environmental, Health and Safety Guidelines and Standards.

Regarding COVID-19, GYSBI has a solid COVID-19 control procedure that temporarily prevents any worker with symptoms from entering its premises, forcing such worker to take leave with payment, and provides transportation to hospital facilities for disembarking crew members that need to be quarantined. Since October 2020, only 13 positive cases have been reported in GYSBI.

4.4.a.v Emergency Preparedness and Response

The Fuel Farm Emergency Response Plan considers onsite emergency situations such as explosions and spills but does not include a community safety condition analysis. Even though GYSBI has performed several drills to test the ERP, the surrounding community was not involved in any of them. GYSBI is therefore currently preparing an Integrated Emergency Preparedness and Response Plan that will include all operations and provide due consideration of community impacts and involvement of neighboring communities in simulations.

4.4.b Security Personnel

Contractors will provide their own security during construction. The berths and GYSBI Port are located inside the fenced GYSBI complex and additional security will be required for the construction of Berths 5 and 6 at GYSBI-3 site¹⁷, including fences and video monitoring. GYSBY's facilities will all be fenced. Entrances to the complex will be through guardhouses that operate 24/7. The Annex

 $^{^{17}}$ The GYSBI-3 Site corresponds to the area leased from Pritipaul Singh Inc. to build berths 5 and 6 as well as a bridge linking the area to the existing GYSBI Shore Base.

will be fenced, and no additional security will be provided. Security personnel is provided by a third party and all guards are required to be unarmed.

4.5 Land Acquisition and Involuntary Resettlement

4.5.a General

The Project will not require involuntary resettlement. The construction of Berths 3 and 4 will take place in the northwestern portion of Shore Base, which was previously acquired. The construction of Berths 5 and 6 will take place at the former area used by Pritipaul Singh Inc. food processing unit, under a lease agreement¹⁸. The Annex area (GYSBI Industrial Estate) of approximately 100 acres is currently leased with the option to buy it. The IWMF will be installed within the Shore Base area.

GYSBI will carry out a supplementary socioeconomic assessment and revise the existing E&S and OHS Risk and Impact Identification and Assessment Matrix to determine if the Project has resulted in any economic displacement of the surrounding community. If so, a Livelihood Restoration Plan will be developed and implemented.

4.6 Biodiversity Conservation and Natural Habitats

4.6.a General

The Project is located within the East Demerara River of the East Demerara Coastal Plain, a place deemed to be highly polluted by garbage and raw sewage. However, at least six IUCN Red List¹⁹ species are known to be hosted within wetlands of the East Demerara River, including: the Giant River Otter (*Pteronura brasiliensis*), considered as endangered; the Blue-cheeked Parrot (*Amazona dufresniana*), which has a condition of near threatened; the Brazilian Tapir (*Tapirus terrestris*), which is defined as vulnerable; the Tucuxi Dolphin (*Sotalia fluviatilis*), classified as endangered; the West Indian Manatee (*Trichechus manatus*), catalogued as vulnerable; and the Jewfish (*Epinephelus itajara*), also classified as vulnerable.

4.6.b Protection and Conservation of Biodiversity

4.6.b.i Modified habitat

The Port site and Annex lie on a highly disturbed and degraded area that includes the terrestrial part, the coastline, and adjacent aquatic environment.

¹⁸ The food processing unit at Prittipaul Singh Inc. is currently being moved to the Providence Area in Georgetown, so that the company will continue active and maintain the current employees that worked at the McDoom's processing unit, leased by GYSBI to build Berths 5 and 6, also known as GYSBI-3 area.

¹⁹ The International Union for Conservation of Nature's ("UICN") Red List of Threatened Species is the world's most comprehensive information source on the global extinction risk status of animal, fungus and plant species.

The area around the berths is likely to have low benthic and fish diversity due to the constant disturbance of ships, regular maintenance dredging, and the discharge of contaminated water from the existing drainage canals. The dredging material disposal site has been used regularly as a dumping place for other dredging operations in the area. This area is therefore also considered to be modified habitat.

Despite the degraded state of estuarine habitats, GYSBI will carry out an additional survey and regular monitoring of aquatic ecosystems in the Project's area of direct influence.

4.6.b.ii Natural Habitat

The only natural area located near the Project site is mangrove fringe forest situated approximately 1.3 kilometers km to the west, on the opposite bank of the Demerara River. Even though it is unlikely that the Project will cause any impact to this area, GYSBI will monitor impacts on mangroves to determine if any additional management measures will be needed to protect this habitat.

4.6.b.iii Critical Habitat

The Project will not impact any critical habitat.

4.6.b.iv Legally Protected Areas and Internationally Recognized Areas

The Project area does not overlap with any legally protected area or any other area of biological interest. The closest conservation area (Durban Park) is in Georgetown, approximately 3 km away from the project site.

4.6.b.v Invasive Alien Species

The Project will not use or introduce any invasive exotic species, either plant or animal. Given that most introductions of alien species are unintentional²⁰, GYSBI will implement a regular monitoring of aquatic biodiversity to check the occurrence of alien species in their premises. If detected, these will be the subject of appropriate eradication protocols.

4.6.c Management of Ecosystem Services

The only ecosystem service likely to be directly affected by the project is groundwater production. In addition, during emergency scenarios involving fuel and oil spills, the mangrove strip located on the western shore of the Demerara River, opposite to the Project site, could be impacted.

To manage these potential impacts, GYSBI will assess aquifer conditions and the potential impact of water abstraction and will regularly monitor groundwater to adopt management measures, if needed. Potential impacts on mangroves will be assessed as part of the EPR.

²⁰ The Sun Coral (Genus *Tubastraea*) and the Golden Mussels (*Limnoperma fortune*) are examples of marine alien species that have been unintentionally introduced by vessels in South America.

4.6.d Sustainable Management of Living Natural Resources

The Project does not involve the primary production of living natural resources.

4.6.d.i Supply chain

The Project does not foresee significant procurement of primary products, especially food commodities and natural fibers.

4.7 Indigenous Peoples

The Project will not interfere with indigenous territories or generate impacts to indigenous groups.

4.8 Cultural Heritage

4.8.a Protection of Cultural Heritage in Project Design and Execution

The Project will not impact any cultural or archaeological heritage.

4.8.a.i Chance Find Procedures

The Project's potential impact on undiscovered archaeological sites due to construction is practically negligible. However, a Project Chance Finds Procedure ("CFP") will be prepared and adopted for the Project to address any potential archaeological finds during construction.

5. Local Access of Project Documentation

The documentation relating to the project can be accessed at the following link: www.gysbi.com.