

## Environmental and Social Review Summary (ESRS) PROMARISCO - Ecuador

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### 1. General Information of the Project and Scope of IDB Invest's Environmental and Social Review

Promarisco (the “Company”, the “Client” or “Promarisco”) is a subsidiary of the Spanish multinational<sup>1</sup> Nueva Pescanova Group (NPVA), the leading company in seafood products. It integrates the entire value chain, specializing in the capture, farming, production, and marketing of various seafood products, in a wide range of species, formats, and shelf life (frozen, refrigerated, and fresh). The Client, with a track record of 30 years, is dedicated to the extensive farming<sup>2</sup> of the species *Litopenaeus vannamei*, commonly known as shrimp, which includes: i) reproduction, incubation, and larviculture; ii) pre-hatchery and fattening ponds; iii) packing plant, which includes selection, peeling, filleting, freezing, and packaging; and iv) export. This operation seeks to support Promarisco's capital investments for the 2022-2023 period, which focus on the technification of its processes through: i) implementation of new automatic feeders to improve energy efficiency; ii) implementation of aerators that will contribute to reducing water use; and iii) improvements to pumping stations, which will have a direct impact on improving energy efficiency and production.

The environmental and social due diligence (“ESDD”) process included a visit to the Company's facilities by the IDB Invest team, interviews and meetings with managers, directors, and workers and personnel from the communities in the direct area of influence of its farms (“farms” or “shrimp farms”). We visited the packing plant and the Quiñonez, Santa Cecilia, Bellavista, and Marfrisco shrimp farms. The ESDD process also included the documentary review of environmental, social, occupational health and safety, and labor information provided by the Client, which mainly included: i) permits, environmental licenses and certifications; ii) policies and procedures related to environmental and social (“E&S”) management; iii) labor aspects; iv) management of occupational health and safety programs; v) emergency plans; vi) supply chain; and vii) community relations. In addition, other E&S aspects were addressed as required by Ecuadorian legislation and international best practices with regard to: land use change, salinization, the possible introduction of alien species, impacts on neighboring communities, and supply chain risks.

### 2. Environmental and Social Categorization and Rationale

The Project has been classified as a Category B operation according with BID Invest’s Environmental and Social Sustainability Policy since it will likely generate the following impacts and risks among others: i) water use/depletion; ii) surface and groundwater pollution; iii) soil degradation; iv) air emissions generation (combustion gases and particulate matter); v) ambient noise generation; vi) hazardous and special waste generation; vii) energy consumption; viii) use of fertilizers,

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<sup>1</sup> With operations in the 4 continents of America, Europe, Africa, and Asia.

<sup>2</sup> This system has low densities of between 15,000 and 80,000 post larvae/ha.

agrochemicals, and veterinary products; ix) use of fossil fuels; x) impact on flora and fauna; xi) exposure of workers to chemical and ergonomic risks; xii) impact on community health and safety. These impacts and risks are estimated to be of medium intensity.

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; and v) PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources.

### 3. Environmental and Social Context

#### 3.1 General Characteristics of the Project's site

Shrimp is currently the second most important export product in Ecuador, after oil. Promarisco is dedicated exclusively to exporting this product and has 2,353 hectares for production, concentrated on the coast of the country, specifically in the Guayaquil canton, province of Guayas, but it also has operations in the Santa Elena canton, province of Santa Elena. Until 2021, its production was 42,000 Tn.

The Client's facilities include: i) a larvae hatchery laboratory located in Chanduy parish, Santa Elena canton, Santa Elena province; ii) another laboratory, San Pablo, located in the Santa Elena province, which is under lease; iii) 4 farms located on Quiñonez Island<sup>3</sup>, Bellavista Island<sup>4</sup>, in the Gulf of Guayaquil, and in the Naranjal canton<sup>5</sup>; and iv) a shrimp processing plant ("packing plant") located on the Durán Tambo<sup>6</sup> road, in a declared Industrial Zone. None of the company's production plants are classified under the "Convention on Wetlands" or "Ramsar" sites<sup>7</sup>, or within the National System of Protected Areas (SNAP), Protected Forests, and State Forest Heritage. At the social level, there are no human populations or settlements in the area of direct influence (ADI) and area of indirect influence (AII) of the farms; however, there are subsistence activities in the adjacent estuaries of people who belong to the crab farmers' association in the area.

The land where the production plants operate is owned by the Company, which has the respective permits for the use of surface and groundwater and the use of electric power.

The Quiñonez, Santa Cecilia, and Bellavista shrimp farms, with areas of 779.7 ha, 103.82 ha, and 593.93 ha, respectively, are located in the highlands adjacent to the Quiñonez and Bellavista mangroves. Access to the shrimp farms is by water, through the Guayas River, approximately 70-80 minutes sailing from the Client's processing plant dock to the shrimp farm dock.

The Marfrisco shrimp farm, 817.8 ha large, is located in the highlands adjacent to the Balao Chico mangrove swamp. Access can be by water or land. By land, access is via a gravel road from the Jaime

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<sup>3</sup> Quiñonez shrimp farm (Robalo Guindado estuary) and Santa Cecilia shrimp farm (Las Canoas estuary).

<sup>4</sup> Bellavista shrimp farm (Chupadores Grande estuary).

<sup>5</sup> Marfrisco shrimp farm (Río Jagua or Siete estuary) located in the rural parish of Naranja, 3 km southeast of Bala Chico.

<sup>6</sup> Duran Canton, Guayas Province.

<sup>7</sup> <http://areasprotegidas.ambiente.gob.ec/es/content/sitios-ramsar>

Roldós parish, which runs through predominantly banana and cacao plantations and shrimp farms owned by third parties.

The larval hatchery laboratory is approximately 5 hectares in size. Here, integrated farming activities are mainly carried out in the phases of: i) maturation; ii) reproduction; iii) spawning; iv) hatching; v) nauplii production; vi) nursery breeding; vii) reception of *Litopenaeus vannamei* shrimp broodstock from its own farms through a mass genetic selection program to generate the best lines in each generation; and viii) marketing of its internal and external product.

### 3.2 Contextual Risks

According to CNA estimates, at the end of 2000, due to the white spot (WSSV) epidemic, there was a 70% drop in production and losses amounted to 1.2 billion dollars, 130,000 jobs were curtailed and only 46% of national production was active.

In Ecuador, crime increased significantly in 2022. Around 80% of crimes related to disputes between criminal groups for territorial control of drug trafficking on a micro and macro scale. If Ecuador continues on this trend, it will close the year 2022 with the highest number of homicides per 100,000 inhabitants (22.2 per 100,000 inhabitants) in its history, and would surpass the Latin American average of 17.2, according to the United Nations Office on Drugs and Crime (UNODC).

The shrimp industry has also been affected by the generalized unsafe conditions in the country, undergoing a major crisis in 2019 due to organized crime<sup>8</sup>, with losses of approximately US\$60 million (mainly in the provinces of Guayas and El Oro) attributed to assaults and theft of shrimp, balanced feed, inputs, equipment, vessels and their engines, etc., which has made it essential to hire private security and invest in surveillance systems and infrared technology, although this is still insufficient and has affected production costs.

It should be noted that the lack of: (i) patrols in georeferenced land and maritime areas considered to be dangerous; (ii) checkpoints at strategic points; (iii) operational and intelligence personnel; (iv) effective communication equipment; and (v) logistical resources to deal with emergencies, exacerbate the crisis currently caused by organized crime. It is worth mentioning that not only companies but also crab farmers' associations are directly affected, who have mangrove concessions to sustainably conduct their artisanal fishing activities, which are directly affected by the theft of their boats, outboard and inboard motors, and harvested product.

At a social level, the country's shrimp farming activities are carried out by remote communities experiencing high or extreme poverty, where access to education, health, and basic services is scarce or, in some cases, nonexistent. This may be exacerbated by the impacts and pressure for access to natural resources that shrimp farming operations may generate, as well as the presence of external personnel in these communities. In addition, there are considerable health and safety risks, and in some cases a lack of appropriate training, education, and personal protective equipment.

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<sup>8</sup> <https://www.cna-ecuador.com/sector-camaronero-en-crisis-por-delincuencia-organizada/>

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

### 4.1 Assessment and Management of Environmental and Social Risks and Impacts

#### 4.1.a Environmental and Social Management System

The Company has implemented sound E&S practices and is certified under multiple internationally recognized food safety and sustainability standards, such as: i) Good Agricultural Practices (Global GAP); ii) Aquaculture Stewardship Council (ASC); iii) Best Aquaculture Practices (BAP); iv) Marine Stewardship Council (MSC); v) International Food Standard (IFS) at its packing plant; and vi) Hazard Analysis and Critical Control Point (HACCP).

Promarisco is part of the National Chamber of Aquaculture (CNA, for its acronym in Spanish) and Sustainable Shrimp Production (SSP) which aims to produce the best quality shrimp globally through responsible and sustainable production, taking care of the environment, ecosystems, biodiversity, and the safety and health of its workers, ensuring fair working conditions, responsibility with small producers, food safety, and a particular focus on the use of zero antibiotics and neutralizing the impact on water through traceability from the farm to the table, making information transparent and accessible at every stage of production to ensure the quality of the product to the final consumer. To this end, SSP has joined the IBM Food Trust™, a blockchain-based system that enables the digitization of transactions and data, providing a more efficient way of working throughout the supply chain, including producers, processors, transporters, retailers, regulators, and consumers.

Despite having specific procedures in place for the breeding and maturation laboratory, shrimp farms, and the packing plant, the Company will develop an Environmental and Social Management System ("ESMS") and implement it company-wide. The ESMS will incorporate the following elements: i) policy; ii) identification of risks and impacts; iii) management programs; iv) organizational capacity and competency; v) emergency preparedness and response; vi) stakeholder engagement, and vii) monitoring and review.

#### 4.1.b Policy

Promarisco has a Quality, Food Safety, Occupational Health and Safety (OHS), and Environmental Policy in which it undertakes to provide its employees with appropriate working conditions to prevent accidents and occupational diseases, minimize the environmental impact of its operations, and raise awareness among its suppliers and customers of the need to protect the environment, biodiversity, OHS, and food safety; finally, it undertakes to promote equal opportunities and prohibit discriminatory practices.

Nevertheless, the Company will develop a Community Health and Safety policy applicable to all operations that references the Company's intention to: i) support its commitments to manage external interactions through stakeholder engagement; ii) include a documented process to periodically review policies; and iii) include a sustainable corporate sourcing policy. Once approved, the policy will be communicated to contractors, suppliers, and the affected communities.

#### 4.1.c Identification of Risks and Impacts

As required by national regulations, the Company has obtained the corresponding environmental permits<sup>9</sup> to operate its laboratory, shrimp farms, and packing plant, which included an environmental and social impact evaluation of its operations as part of its environmental impact assessment (“EIA-Expost”)<sup>10</sup>. The Company also has permits for groundwater use and consumption in the packing plant.

Nevertheless, Promarisco will: i) develop a Procedure for the Identification and Evaluation of Environmental Risks and Impacts and implement a general matrix of environmental risks and impacts for each of its production plants (laboratory, farms, and packing plant); and ii) update the E&S and OHS risk matrix every 2 years, or when expansions, operational changes, or contingencies occur (e.g., environmental accidents, social disturbances, etc.).

To identify risks to its workers, the Company has a Hazard Identification and Risk Evaluation Procedure (HIREP) and HIREP matrices for each job position, which are submitted to the competent national authority; matrices are currently available for the packing plant and shrimp farms. The Company will, however, develop the HIREP matrix for its laboratory located in Chanduy.

Regarding social risk assessment, the Company will develop a procedure to identify and assess the risks and impacts on the community generated by its operational activities at all levels of production (laboratory, farms, and packing plant), which will include, at a minimum, the following: i) an assessment of the social risks inherent to each operation; ii) a mapping of social stakeholders in its Area of Direct Social Influence (ADSI); and iii) a cartographic map of the critical points of the operation (discharges, noise, odors, emissions) with their corresponding ADSI.

##### 4.1.c.i Direct and Indirect Impacts and Risks

Indirect risks are associated with the supply chain, for which the Client has a Supplier Ethics and Social Charter, which is signed by the legal representatives of each of its suppliers, in which they commit to comply with its Code of Ethics, which defines the guidelines for compliance in labor, E&S, and OHS matters. Likewise, all Promarisco's feed suppliers<sup>11</sup> hold BAP and Global GAP certifications, and have sustainability reports published on their websites<sup>12</sup>.

##### 4.1.c.ii Gender Risks

Over the years, the shrimp industry has been dominated by men, as it involves physically strenuous activities such as manual lifting of loads, cleaning of gates, among others. Because of this, women have been overlooked and companies have failed to promote job opportunities aimed at women, which in principle defines gender discrimination.

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<sup>9</sup> Environmental Licenses and 1 Environmental Sheet

<sup>10</sup> Environmental Impact Statement (“EIS”).

<sup>11</sup> The feed is mainly composed of soybeans, wheat, and fish meal, which can be either extruded or pelleted.

<sup>12</sup> <https://www.skretting.com/siteassets/global/sustainability/pdfs/pdf-interactive-skretting-sustainability-report-2021.pdf?v=4a2cef>; <https://vitapro.com.pe/sostenibilidad/>; <https://www.biomar.com/es-cl/ecuador/sostenibilidad/politicas-lineamientos/>

Despite this, in order to mitigate gender risks, the Company has developed a corporate procedure for the identification and attention of cases of discrimination, harassment at work, and all forms of violence against women in the workplace, with the goal of adequately managing any complaints that may arise. Furthermore, the Client, through the Maria Guare Foundation, runs a program to raise awareness among employees with the aim of eradicating gender violence, providing knowledge and tools to combat this social problem and promote equal rights.

According to Promarisco's structure, currently 534 (24 %) of the company's total workforce are women, of which: i) 452 (85 %) hold operational positions, distributed 99% in the packing plant and 1% in the shrimp farms; ii) 72 (13 %) in administrative positions; and iii) 10 (2 %) hold managerial positions.

The Company provides Personal Protective Equipment (PPE) and work uniforms, as required by the regulations in force and workers' gender. Nevertheless, the Company will manage the occupational risks of its employees, including those who are pregnant. Taking into account that in recent years the Company has incorporated female personnel, it will develop a gender risk identification and assessment procedure by applying IDB Invest's "Gender Risk Assessment Tool" (GRAT) to prevent and manage gender-related risks in its operations. It will also sign the statement<sup>13</sup> of support for the Women's Empowerment Principles (WEP)<sup>14</sup> and complete the WEP<sup>15</sup> gender equality measurement tool.

#### 4.1.c.iii Climate Change Exposure

The Company's operations are exposed to high physical risks, as they have moderate to high exposure to acute weather hazards and other natural disasters. All locations are exposed to earthquakes; all production units are highly exposed to extreme heat waves. Similarly, Marfrisco has a moderate to high exposure to flooding and all shrimp farms have a high exposure to drought. In terms of chronic risks, there is a moderate to high risk of increased precipitation patterns considering different climate scenarios. Finally, there is a high exposure to tsunamis in Quiñonez, Bellavista, Santa Lucia and Chanduy. Consequently, Promarisco will consider the most relevant climate risks within its risk matrix and will update its Self-Protection Plans for its entire value chain.

#### 4.1.d Management Programs

The existence of various certifications for international standards and compliance with Ecuador's regulatory requirements indicates that the Company has developed instruments that allow it to demonstrate its compliance. Promarisco processes and labels the production of its own farms as per ASC standards and the shrimp from its suppliers is exported under quality and food safety standards. Operations at the packing plant comply with the food safety requirements of the BAP processing standard. In addition, a traceability system is in place to comply with phytosanitary, food safety, and

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<sup>13</sup> <https://www.weps.org/join>

<sup>14</sup> These principles are the result of a partnership between the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) and the United Nations Global Compact.

<sup>15</sup> <https://weps-gapanalysis.org/>

sustainability requirements. Moreover, the Company provides support to suppliers interested in upgrading their practices to Global GAP requirements and expects the supply of certified raw materials<sup>16</sup> to increase in the near future.

Nevertheless, the Company must develop procedures to avoid, prevent, mitigate, or compensate the environmental, social, occupational health and safety, and labor impacts identified in a manner proportional to the assessment carried out, so that mitigation measures are managed systematically.

#### 4.1.e Organizational Capacity and Competency

The Company has a Process and Environmental Coordinator in charge of the shrimp farms and a Quality and Environmental Management System Coordinator at the packing plant, who ensure compliance with the EMPs and report to the Corporate Quality Manager (at NPVA level) for the *Litopenaus vannamei* species. There are two people in charge of the OHS Management System, who report at the country level to the Human Development Management Office and also to Corporate Management (at NPVA level). It also has a main occupational physician who reports directly to the Human Development Management Office and rotating occupational physicians who are in charge of the shrimp farms and laboratories, who report to the main occupational physician.

Nevertheless, the Company will: i) define a person responsible for the integration of the ESMS to lead the development, implementation and monitoring of all environmental, social, and health and safety management plans, programs, and procedures, including contractors and suppliers; ii) define and ensure the adequacy of the necessary human and financial resources to address the development and implementation of the ESMS, in accordance with the scale of current and future operations; and iii) regularly evaluate the effectiveness and adequacy of the assigned skills and competencies.

#### 4.1.f Emergency Preparedness and Response

The Client has developed a Self-Protection Plan (SPP) for the packing plant outlining the most probable risks posing severe operational consequences, including: ammonia leaks in the process room and machine room, fire, explosion from high voltage transformers and electrical substation, and flooding due to rain or the rising of the Guayas River. The packing plant has a firefighting system, smoke detection buttons, portable fire extinguishers in all operating and administrative areas of the plant, and fire, evacuation, and first aid brigades have been formed, for which there is an annual specialized training program. As part of its SPP, it has also identified and mapped the external support institutions<sup>17</sup> to be called upon in the event of an emergency. The SPP includes maintenance plans for the firefighting system and electrical equipment and installations. The Company also has a training and simulation program, which includes two drills per year. At the date of the ESDD, the Company was in the process of expanding the firefighting system in compliance with the provisions of the local fire department in order to obtain its operating permit.

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<sup>16</sup> Shrimp that have completed the breeding and fattening process according to the requirements defined by the Company.

<sup>17</sup> Emergencies (911), Durán Fire Department, Durán IESS Hospital, Durán Police, Durán Traffic Commission, Red Cross, Civil Defense, National Directorate of Aquatic Spaces, Electric Company.

The self-protection plans for shrimp farms have identified the following risks: fires, spills or leaks of hazardous materials, earthquakes, floods, accidents, tsunamis, and social risks. Emergencies have been classified according to their severity; warning systems are in place with sirens and loudspeakers; annual maintenance of fire extinguishers, alarms, and low voltage electrical installations, transformation center, diesel tanks and gas installations is considered. Fire, spill, evacuation and first aid brigades have been formed, for which there is an annual specialized training program and detailed action procedures for each identified risk.

Nevertheless, the Company shall: i) detail the material resources available for emergency response at its shrimp plants; ii) detail the means of communication available at its shrimp plants; iii) detail the procedure in case of medical emergency evacuation; iv) conduct periodic consultations with the communities in its ADSI to identify on-site and off-site emergency scenarios; v) develop and implement external communication channels; and vi) develop shared resources and collective community response systems.

#### 4.1.g Monitoring and Review

Due to the environmental permits it holds, the Client submits environmental compliance reports (semiannual and annual) of the Environmental Management Plans (EMPs) and environmental compliance audits (ECAs) to the Guayas Provincial Directorate of the Environment, which is the competent environmental authority of the Ministry of the Environment, Water, and Ecological Transition (MAATE). The EMPs contain prevention and mitigation sub-plans and monitoring plans (MPs), which include: i) effluents; ii) hazardous, non-hazardous, and special solid and liquid waste; iii) water quality; iv) ambient noise; v) air emissions; vi) energy consumption; vii) water consumption; and viii) hazardous materials.

Promarisco holds several valid certifications (GLOBAL GAP, BAP, ASC, and IFS) that are audited annually by external and internal teams and has therefore determined internal control processes focused mainly on food safety, based on scheduled inspections to verify compliance; it also maintains a rigorous schedule of external audits taking place at least every six months, which allows monitoring of E&S performance as per the requirements determined by each certification.

With regard to the supply chain, the Company has undertaken a process to strengthen and monitor the E&S performance, and food safety and security of its shrimp suppliers by monitoring their processes, such as harvesting, since this is the most important process for guaranteeing product quality and can also have a significant environmental impact if sodium metabisulphite is improperly handled.

In labor matters, the Company receives unannounced audits from the Ecuadorian Social Security Institute (IESS) and the Ministry of Labor (MDT) to confirm compliance with employer obligations such as reviewing payroll, payments, and documents as required by regulations, which are verified through interviews with employees. To date, no nonconformities have been reported by the controlling authorities.

Nevertheless, the Client shall develop: (i) a procedure to monitor and evaluate the performance of the Company's Environmental and Social Management System that includes key performance indicators (KPIs); (ii) a compliance matrix for all legal and contractual obligations, including the competent authority that gives the authorization or issues the permit or license; and the dates of issuance and validity; (iii) a procedure for compliance with legal requirements, to define the guidelines, responsibilities, and methodology to be followed to identify, access, update, communicate, evaluate, and follow up on compliance with legal requirements related to its operations; (iv) an internal or external audit procedure, including responsibilities, methodology, schedule, and action plans; and (v) a procedure for linking improvements and operational changes to the ESMS and integrating them into continuous improvement.

#### 4.1.h Stakeholder Engagement

As part of the development of the Expost EIAs of the packing plant, shrimp farms, and laboratory, the populations of the area of direct and indirect social influence were identified, which determined that there were no communities or human settlements within the ADI and All under the established temporal and spatial criteria; nevertheless, a study was conducted of the social, economic, and cultural conditions of the cantons where each of the Company's production units are located. In 2021, the Company conducted a participatory social impact assessment (PSIA) of the communities within the area of social influence (ASI). During this process, the ADSI was defined as the Jaime Roldós<sup>18</sup>, Cerrito de los Morreños, and Puerto Bellavista<sup>19</sup> communities, and a consultation and participation process was carried out in these communities in 2019.

Likewise, the Company, through its Conflict Resolution Policy, has committed to address the concerns raised in the Social Impact Study conducted in 2021 of the communities identified within its ADSI.

#### 4.1.h.i Disclosure of Information

The Company, through the PSIA undertaken in 2019, disseminated the following information to the communities of the ADSI: i) activities carried out by the Company; ii) management of identified environmental impacts; iii) management of metabisulphite; iv) responses to complaints, claims, and concerns raised during the participation and consultation process. In addition, it has shared the Environmental Impact Assessment on Biodiversity (EIAB) and the PSIA with the communities.

#### 4.1.h.ii Informed Consultation and Participation

A consultation and participation process was carried out with these communities in 2019, which collected all the concerns expressed by their inhabitants, and the Company committed to their due attention and management. This has been managed through frequent meetings with the community.

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<sup>18</sup> Located in the rural area of the Naranjal parish, belonging to the Naranjal canton, Guayas province.

<sup>19</sup> Puná parish, Guayaquil canton, Guayas province.

#### 4.1.i External Communication and Grievance Mechanisms

##### 4.1.i.i External Communication

Promarisco will develop and implement a procedure for handling external communications that includes methods for: i) receiving and recording external communications from the public; ii) analyzing and evaluating the issues raised in such communications and determining how to address them; iii) providing appropriate responses, following up, and documenting them; and iv) adjusting the management program, as appropriate. The Client is also encouraged to make periodic reports on its environmental and social sustainability available to the public.

##### 4.1.i.ii Grievance Mechanisms for Affected Communities

The Company has implemented a Conflict Resolution Policy through which it commits to maintaining good relations with the neighboring communities of the ADSI, with dialog being a primary instrument for conflict resolution; reference is made to the communication channels for filing a complaint, claim, or report, which are: i) by telephone and ii) by e-mail. ([aruizcamara@nuevapescanova.com](mailto:aruizcamara@nuevapescanova.com), [pyepe@promarisco.com](mailto:pyepe@promarisco.com), [vcastro@promarisco.com](mailto:vcastro@promarisco.com)). As of the date of the ESDD, no community concerns have been identified regarding environmental impacts, but rather, their complaints are related to private security personnel in the context of the members of the crab associations that carry out their activities near the perimeter of the Client's shrimp farms.

The mechanism in place, however, does not allow traceability of the complaint from its receipt to the final response. Promarisco will therefore update its external grievance mechanism to include the following, among others: i) details of the means of receiving complaints; ii) a documentation system for recording, tracking, and analyzing complaints and solutions; iii) response records; iv) mechanisms for communication and dissemination of complaints filed and processed to external stakeholders; v) senior management review process to evaluate the effectiveness of the system; and vi) training for stakeholders on the application of the procedure.

##### 4.1.i.iii Ongoing Reporting to Affected Communities

The Company will include information regarding the Company's environmental and social performance in the schedule of meetings it has defined with the communities identified within the ADSI.

## 4.2 Labor and Working Conditions

### 4.2.a Working Conditions and Management of Worker Relationships

At the time of the ESDD, the Company had 2,376 employees, of which 586 (25%) are women and 1790 (75 %) are men; there is a low personnel turnover, with a percentage of 12.82% in 2021. The Company, in addition to having Internal Labor Regulations (ILRs)<sup>20</sup>, has policies and procedures that

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<sup>20</sup> Approved by the Ministry of Labor through Resolution MDT-RI2022213685 on June 8, 2022, it is valid for two years.

allow it to properly manage employee relations, the transparent and objective selection of its personnel, the promotion of career plans, and training programs, among others. These procedures include: i) general HR policy documents; ii) general talent management procedure; iii) corporate recruitment, selection, onboarding, and exit procedure; vi) selection and hiring procedure; and vii) training plan.

#### 4.2.a.i Human Resources Policies and Procedures

The Company has the following policies: i) social welfare policy, whereby it undertakes to: comply with labor legislation, ensure a workplace free of harassment or abuse, prohibit acts of discrimination and ensure equal opportunity, protect the workforce, maintain active communication, and provide a safe and healthy work environment. In addition, Promarisco has adhered to the following NPVA Group policies: i) Corporate Talent Management Policy; and ii) Corporate Recruitment, Selection, Onboarding, and Exit Policy.

#### 4.2.a.ii Working Conditions and Terms of Employment

The Company's ILR contains provisions related to: i) the employment contract; ii) working hours and duration of the working day; iii) remuneration; iv) paid annual leave; iv) employee duties and obligations; v) employee prohibitions; vi) employer's obligations and prohibitions; and vii) sanctions.

Promarisco manages different working days and shifts<sup>21</sup>, depending on location: in the shrimp farms there are extended working days<sup>22</sup>, which are duly approved<sup>23</sup> by the competent agency (Ministry of Labor), and workers spend the night in camps provided by the Company. In this modality, the Client offers its workers transportation from the packing plant's dock to their work site and meals throughout the workday, in addition to laundry facilities and recreation<sup>24</sup> and dining areas. Workers' rooms have curtains to ensure privacy, bunk beds, and lockers for their clothes and personal belongings, as well as adequate ventilation and thermal comfort provided by air conditioners; there is one bathroom and one shower per room; in some cases, there is a maximum number of 15 workers per room. There are rooms exclusively for female staff, which are segregated from the men's rooms; women share at a maximum of 2 people per room, with a bathroom and shower. Nevertheless, the Company will review and implement the necessary improvements in line with the IFC-EBRD<sup>25</sup> Worker Accommodation Guidelines: Camp Processes and Standards.

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<sup>21</sup> Day and night shift.

<sup>22</sup> Packaging Plant shifts: 8:00 a.m. - 6:00 p.m. and 7:00 p.m. - 5:00 a.m.; Shrimp Farm shifts: 15/6 from 7:00 a.m. - 4:00 p.m.; Harvest 7:00 p.m. - 3:00 a.m. (3 nights a week)

<sup>23</sup> Approvals are detailed in the Internal Labor Regulations (ILR)

<sup>24</sup> Volleyball courts and TV in the dining rooms.

<sup>25</sup> [https://www.ifc.org/wps/wcm/connect/60593977-91c6-4140-84d3-737d0e203475/workers\\_accomodation.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-60593977-91c6-4140-84d3-737d0e203475-ijetNlh](https://www.ifc.org/wps/wcm/connect/60593977-91c6-4140-84d3-737d0e203475/workers_accomodation.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-60593977-91c6-4140-84d3-737d0e203475-ijetNlh)

#### 4.2.a.iii Workers' Organizations

Promarisco, as part of the Nueva Pescanova Group, incorporates and abides by the Corporate Code of Ethics and is committed to respecting freedom of association and collective bargaining, as well as the rights of ethnic minorities and Indigenous peoples in the places where it operates. The Company currently has the Promarisco S.A. Workers Union, formed in 2016; however, it does not have a collective bargaining agreement in force.

It should be noted that over the last five years the Company has been sued by five former employees. As of the date of the ESDD, two of these lawsuits are awaiting enforcement of the ruling in favor of the Company and three are still being processed.

#### 4.2.a.iv Non-discrimination and Equal Opportunity

The Company, abiding by national legislation, including the agreements<sup>26</sup> signed between Ecuador and the International Labor Organization (ILO), international standards and agreements<sup>27</sup>, its Code of Ethics, the Self-Declarations of Social Practices regarding Human Rights issued for all its production units and the provisions of its ILR, is committed to the fulfillment of human and labor rights, non-discrimination or violence, promotion of decent work, equal remuneration, maintaining transparent hiring processes, and non-retaliation in the event of complaints or grievances. It rejects any violent or discriminatory conduct based on ideology, religion or beliefs, family status, ethnic, racial, or national origin, sex, sexual orientation or identity, gender, illness, or disability. It has also implemented a procedure for identifying and addressing cases of discrimination, harassment at work, and all forms of violence against women in the workplace.

#### 4.2.a.v Retrenchment

Promarisco, through its Corporate Policy, has stated that, in the event of retrenchment, this will take place in a planned manner based on the principle of non-discrimination.

#### 4.2.a.vi Grievance Mechanism

The Company has implemented its Suggestion Box Corporate Procedure, whose main goal is to enable a communication channel between employees and the organization in order to promote an adequate working environment for both parties. This procedure allows complaints, claims, or suggestions to be submitted anonymously and also states that there will be no retaliation against those who file a complaint or claim. The channel for submitting a complaint is only through the suggestion box with the previously defined format. The boxes are reviewed every 15 days by social workers, who together with the Social Welfare Coordinator filter and evaluate the relevance of the complaints, which are directed to the corresponding departments for the development of a corrective action plan, and a response is issued within a period of 15 days either to the interested

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<sup>26</sup> Convention No. 100 concerning Equal Remuneration for Men and Women Workers for Work of Equal Value and Convention No. 111 concerning Discrimination in Respect of Employment and Occupation.

<sup>27</sup> Principles of the United Nations Global Compact (UN Global Compact); Organization for Economic Cooperation and Development Guidelines (OECD) for Multinational Enterprises; Tripartite Declaration of Principles on Multinational Enterprises and ILO Social Policy; among others.

party or through the billboards displayed in each of its facilities; complaints are registered by the Social Welfare area in charge of the Human Development Management Office.

Nevertheless, Promarisco will develop a Training Program on the use of this mechanism, for implementation and dissemination to its contractors and subcontractors.

#### 4.2.b Protecting the Workforce

The Corporate Code of Ethics expresses its total rejection of child labor and forced or compulsory labor. No forced or child labor was observed during the ESDD.

#### 4.2.c Occupational Health and Safety

For occupational health and safety (OHS) management, Promarisco has its Occupational Health and Safety Internal Regulations (OHSIR), which establish obligations, responsibilities, procedures, and training for its proper management.

Promarisco has plans and procedures in place to conduct its activities, which include, among others: i) control and provision of personal protective equipment (PPE); ii) accident investigation; iii) industrial safety inspections; iv) safety signs; v) contractor and supplier management; and vi) fire prevention and control. Nevertheless, the Company will: i) install safety signs with speed limits for vehicles, motorcycles, and other heavy vehicles used during operation in all its shrimp farms; ii) adapt the storage sites for solid, liquid, and compressed gas hazardous materials in its shrimp farms; iii) carry out industrial hygiene measurements pursuant to the HIREC matrices at least once a year.

The Company will define goals to reduce these indicators in its annual occupational health and safety plans, based on the frequency (LTIFR) and severity (LTISR) indexes.

In addition, Promarisco, as required by national regulations<sup>28</sup>, has established Joint Occupational Safety and Health Committees (JOHSC) that consist of representatives of both workers and employers and their respective alternates. Because it operates several work centers, to date it has established six committees duly registered with the corresponding authority. The main functions of the JOHSC are to ensure compliance with the OHSIR and to promote a preventive safety culture in the Company to avoid accidents and occupational diseases. The JOHSCs meet on a monthly basis and the issues discussed are recorded in minutes for subsequent auditing and follow-up.

In terms of occupational health, all of the Company's production units have a medical clinic with personnel available 24 hours a day. The Company has developed an Emergency Assistance and Transfer Service procedure and a Medical Evacuation Procedure (MEDEVAC) through which it has established that, in the event of an accident, the patient will be evaluated and stabilized by the Company's medical staff, and the steps to follow should a medical evacuation be required. The Company has a lactation room in its packing plant, with procedures for its use. Nevertheless, the

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<sup>28</sup> Regulation on Workers' Safety and Health and Improvement of the Working Environment (Executive Decree No. 2393/1986), every organization with more than 15 workers must form a Joint Health and Safety Committee.

Client shall develop and implement a procedure for the provision of food services to ensure food safety in the camps.

From the morbidity records, the most significant diseases in the shrimp farms are infectious and ergonomic, while in the packing plant they are infectious, metabolic and, to a lesser extent, ergonomic. The Company must therefore strengthen training in ergonomic activities and incorporate strict biosafety protocols to prevent infectious diseases, both in its shrimp plants and in the packing plant.

The Company has an Annual Training Program that includes specific training in industrial safety to comply with the competencies required by the regulations in force and certifications held by the Company. These trainings are mainly carried out by specialized external companies, while others are handled internally. Workers also receive annual psychosocial risk training from the Ministry of Public Health (MSP), as part of the Psychosocial Risk Prevention Program.

#### 4.2.d Provisions for People with Disabilities

In keeping with the country's regulations, as of the date of the ESDD, 3.4% of the Company's employees were persons with disabilities or recipients of a disability pension from any social security system. At the time of the ESDD, the Company was searching for personnel to be hired to meet the 4% required by the standard. Nevertheless, the Company will define specific provisions for personnel with disabilities within the Company, which will ensure the full development of the employee in their work environment and will consider the incorporation of universal design principles in the design, construction, and operation (including emergency and evacuation plans) of new construction and in the restructuring, expansion, or modernization of all its facilities, to maximize use their use by all potential users, including persons with disabilities.

#### 4.2.e Workers Engaged by Third Parties

Promarisco mainly contracts permanent physical security and river logistics services. In addition, through its Charter of Ethics, it commits companies to comply with its Corporate Code of Ethics and other internal rules and regulations. Additionally, in terms of OHS, the Company has the OHSIR, which includes contractors within its scope; the Company also has a Contractor and Supplier Management Procedure whose purpose is to ensure compliance with safety, quality, security, health, and environmental measures established by legislation, the organization, certification standards, and by the contractor company itself. Nevertheless, the Company will include in its work contracts with service companies specific clauses for compliance with labor, occupational health and safety, and environmental regulations, and will include in the management procedure for contractors and suppliers, an initial induction by Promarisco on the internal procedures to be complied with.

#### 4.2.f Supply Chain

Promarisco follows its Ethical and Social Charter for Suppliers, which requires compliance with business conduct standards, national legislation, and ILO conventions ratified by the country. The

main suppliers<sup>29</sup> that are part of the feed supply chain also hold BAP and Global GAP certifications, and have codes of ethics and conduct and policies regarding labor compliance and occupational health and safety, which prohibit child labor, support equal opportunities, respect free labor association, offer safe and healthy working conditions, and provide work environments free of harassment, among others.

### 4.3 Resource Efficiency and Pollution Prevention

#### 4.3.a Resource Efficiency

Since 2020, Promarisco has achieved greater resource efficiency due to the technification of its processes, through the implementation of: i) automatic feeders, which has allowed: (a) efficient feed consumption due to built-in hydrophones that allow knowing the precise moment when the shrimp are being fed; and (b) use of renewable energy since the feeders use solar panels; and (ii) electric aerators<sup>30</sup> which aim to reduce recirculating water consumption from 10% to 7% and improve water quality and productive yield. The Company has also developed a feasibility study for replacing fossil energy sources with renewable energy (solar) for its shrimp farms located on the Quiñonez and Bellavista Islands; however, the energy demand required is not compatible with the Company's reality in terms of the area required and the costs involved. Nevertheless, the Client for the Marfrisco shrimp farm is in a long-term plan to draw all of the energy demanded from the public grid, eliminating fossil fuel generation.

##### 4.3.a.i Greenhouse Gases

The Company's main sources of greenhouse gas ("GHG") emissions are as follows: i) 100% of energy production in the shrimp farms located on the islands is produced using fossil fuels<sup>31</sup> (diesel and gasoline); ii) industrial wastewater treatment plants at its packing plant; iii) river and land transportation of raw materials, inputs, and finished product.

The Company's shrimp farms have the following: i) Quiñonez – 2 pumping stations with a total of 14 diesel engines; ii) Santa Cecilia – 2 pumping stations with 8 diesel engines; iii) Bellavista - 3 pumping stations with a total of 10 diesel engines; and iv) Marfrisco – 3 pumping stations with a total of 18 diesel engines. They currently estimate energy efficiency to be approximately 11,000 to 32,000 megajoules/Tn of shrimp produced.

The Company, at the NPVA Group level, does measure its carbon footprint; however, at the Promarisco level it has no full scope 1 calculation and measurement. Hence, an Integrated GHG Management Program will be implemented to identify, quantify, and report the scope 1 and 2 GHG emissions inventory, as well as scope 3 material emissions. The GHG emissions baseline will be the

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<sup>29</sup> Skretting, <https://www.skretting.com/globalassets/shared-documents/ec/code-of-conduct-brochure-spanish-general.pdf?v=4979c8>; Biomar, Haid, Inbalnor, Vitapro

<sup>30</sup> They are currently involved in a pilot project at the Marfrisco shrimp farm.

<sup>31</sup> Water pumping stations, floating pumps, use of heavy machinery (tractors, dump trucks, dredges, cranes, harvesters), camp generators, pickup trucks, outboard motors, motorcycles, forklifts, electric plant, mechanical workshop, private security boats and motorcycles, concrete mixer, welding machine.

year 2022 and these gases will be accounted for annually in reports that include an explanation of their variation, if any.

#### 4.3.a.ii Water Consumption

In shrimp farms, water is pumped from estuaries into settlement ponds before being released into hatchery ponds through a central reservoir canal. Water is gravity-fed back into the estuaries through large expanses of native mangroves. Water is abstracted from the estuaries to the pumping stations, and production depends on the stability of salinity levels and the quality of the river's inflows. The parameters measured daily are: oxygen, temperature, salinity, and turbidity, which are monitored twice a day to ensure the quality of the water in the process pools. When required, oxygen peroxide ( $H_2O_2$ ) is added to the water to obtain the minimum oxygen percentage required (3.0 mg  $O_2$ /l) for production; also, 10% of the water in each pool is changed daily to maintain optimum  $O_2$  levels. It should be mentioned that, as per the Ex post EIAs conducted in 2010, samples of the estuaries' water quality<sup>32</sup> were taken to define their baseline. To date, no significant alterations to the water quality have occurred. The existing regulatory instruments do not require the obligation to obtain permits for the use and exploitation of this resource; however, the Company has submitted the corresponding requests to the competent authority (Ministry of Environment, Water and Ecological Transition, MAATE).

As for fresh water, water for consumption in the shrimp farms located on the islands is purchased and arrives by river transport in tanker trucks, and in the case of the shrimp farms located on the mainland, water is obtained from wells, which have their respective permits for use and exploitation; the water is filtered and chlorinated prior to consumption. Annual consumption is 8000  $m^3$ /year.

In the Chanduy laboratory, there is a seawater intake through two well points, which is naturally filtered through shells and beach sand. The water required for the process is 6000 $m^3$ /month. Fresh water is acquired from third parties and is mainly used in the process of obtaining larvae, as well as to help reduce salinity to the required limits; its annual consumption is 10,500  $m^3$ /year.

The packing plant holds permits for the use and exploitation of surface water<sup>33</sup> (Guayas River) and deep well water for its industrial processes of: i) shrimp washing, classification, freezing, and washing of facilities (9.64 l/s); and ii) ice and liquid ice production (5.78 l/s). This water is made potable through a process of coagulation and flocculation and subsequent chlorination. The Company measures and records the volumes of water used, so that it does not exceed the authorized flows; annual water consumption is 921,443  $m^3$ /year. The Company is currently in the process of updating the aforementioned permits, including a request for an increase in the flow rates allowed in the current authorizations.

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<sup>32</sup> TABLE 3. Admissible Quality Criteria for the preservation of flora and fauna in fresh, cold, or warm waters, and in marine and estuarine waters: Temperature, pH, Oils and Fats, Dissolved Oxygen, Ammonia, Sulfides, Iron, Total Suspended Solids, Settleable Solids, Floating Material; and, TABLE 13: Temperature, pH, Oils and Fats, Biochemical Oxygen Demand BOD5, Chemical Oxygen Demand COD, Kjeldahl Nitrogen (Organic), Total Suspended Solids from Book VI, Appendix 1, of the Unified Text of Secondary Legislation of the Ministry of Environment TULSMA).

<sup>33</sup> Total annual permitted water volume of 486,663.55  $m^3$  from each permit.

#### 4.3.b Pollution Prevention

In shrimp farm operations, wastewater is generated during pool water changes. Probiotics and bioremediators are used to improve shrimp health, water quality, and culture stability conditions. They are applied in the ponds or pre-hatcheries or directly in the feed, consisting of aerobic and anaerobic efficient microorganisms (EM). Organic fertilizers are also applied, along with molasses. Effluents are discharged through the outlet sluice into the drainage canal and the effluent is monitored every six months as per the maximum permissible limits (MPL) established by the national regulations<sup>34</sup> in force for discharges into bodies of water; however, parameters such as O<sub>2</sub> and temperature are monitored on a daily basis.

As for domestic wastewater from toilets and showers, the shrimp farms have implemented septic tanks to treat it, with the addition of bacteria and enzymes to accelerate the breakdown process. The wells are maintained annually or every two years, as needed.

The sludge and sediments from dredging the reservoir canals, decanting ponds, and pools are disposed of in settlement ponds. It's worth noting that in 2020 the Company began the process of permanently dredging its canals, for which purpose, due to the volume generated, it has enabled pools previously used for production to adequately dispose of these sediments and not alter the conditions of the surrounding mangrove swamp.

The packing plant has a wastewater treatment plant (WWTP) that consists of aerobic treatment using activated sludge combined with a membrane biological reactor (MBR). Water analyses are performed every six months according to the PM of the EMP; nevertheless, the Company will develop a Procedure for the operation of the WWTP to include the actions to follow in the different emergency scenarios and will define the respective formats and the register of the effluent parameters monitored daily and discharged into the Daule River, meeting the parameters of the national regulations in force and the World Bank Guidelines on Environment, Health and Safety for Aquaculture.<sup>35</sup>

Ambient noise and combustion gas and particulate matter emissions at the shrimp farms are generated mainly at the pumping stations and electric power generators.

Promarisco will perform: i) semiannual measurements of combustion gases and particulate matter from stationary and mobile sources; ii) annual measurement of air quality; iii) quarterly measurement of ambient noise; and compare these results with the maximum permissible limits established in the World Bank's General Environmental, Health, and Safety Guidelines<sup>36</sup>.

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<sup>34</sup> TABLE 3 Acceptable Quality Criteria for the preservation of flora and fauna in fresh, cold, or warm waters, and in marine and estuarine waters, and, TABLE 13. Limits for Discharge to a Marine Water Body, Book VI, Appendix 1, of the Unified Text of Secondary Legislation of the Ministry of Environment TULSMA).

<sup>35</sup> <https://www.ifc.org/wps/wcm/connect/950277c1-6f16-4c07-9ad2-f1af63e7a3a6/0000199659ESes%2BAquaculture%2Brev%2Bcc.pdf?MOD=AJPERES&CVID=nPtf56r>

<sup>36</sup> <https://documents1.worldbank.org/curated/en/862351490601664460/pdf/112110-SPANISH-General-Guidelines.pdf>

#### 4.3.b.i Waste

Non-hazardous, organic, and recyclable solid waste is generated in kitchens, offices, homes, toilets, personal bathrooms and from individual or personal consumption. This waste is managed as follows: (i) non-hazardous waste (plastic tanks, aluminum bags to contain substances or food) is collected in containers and stored in a temporary site to be removed to the mainland on a weekly basis; ii) organic waste (food and kitchen waste, green waste) is also collected and taken to a site where it is composted on site with the addition of Cal P24 for odor treatment; and iii) recyclables (paper, glass, plastic bottles, plastic or vegetable fiber sacks, cardboard, and plastic tanks) are collected daily; however, there is no fixed collection frequency.

The following activities generate hazardous and special waste: i) maintenance of equipment and machinery such as the main and auxiliary electric power generators, internal combustion engines, turbines and vehicles, and maintenance of existing infrastructure. This waste is managed through duly authorized managers; river transportation is the responsibility of the environmental managers and have previously approved emergency plans for this purpose.

Nevertheless, the Company will develop procedures for the management of hazardous, non-hazardous, special, and recyclable waste in all its shrimp farms, laboratories, and packing plants, and will disseminate these procedures to all its workers. The procedure shall include, at least, the following (i) waste classification (color coding); (ii) persons responsible for internal collection and temporary stockpiling; (iii) external transportation, treatment, and final disposal of hazardous, non-hazardous, recyclable, and special waste; (iv) organic waste management (on-site and off-site); (iv) maintenance of waste collection sites; (iv) daily record of each type of waste generated, which shall be consolidated in a control matrix; and (v) frequency of hazardous waste evacuations with the Authorized Manager when 50% stored capacity is reached. Promarisco shall also: i) perform general maintenance of the existing temporary storage sites, separate each type of waste stored to avoid cross-contamination, install signage according to the type of waste stored, have a spill kit for hazardous waste, and store the waste according to its compatibility; ii) disseminate and train its direct personnel and contractors on the procedure; iii) define key performance indicators on managing these wastes.

#### 4.3.b.ii Hazardous Materials Management

The most widely used hazardous substances in shrimp farms are petroleum derivatives: diesel and lubricating oils used in pumps, generators, and vehicles. At the packing plant, risks are inherent to storage of: i) diesel for emergency power sources; ii) transfer of chemicals; and iii) significant storage of anhydrous ammonia refrigerant used for cooling, individual quick freezing (IQF), and frozen storage. Promarisco uses authorized, government-supervised transportation companies and all diesel is stored in steel tanks that are properly protected and comply with regulations. Used oils and oil filters are temporarily stored on site and then transported off-site for treatment and disposal by companies authorized to provide these services. Nevertheless, guidance and fire prevention and suppression equipment are available at the appropriate sites in the shrimp farms.

A chemical product in massive use in the Company, which is stored in its packing plant and sent to the shrimp farms, is sodium metabisulfite (sodium hydrogen sulfite<sup>37</sup>), which is used as an additive for processing shrimp to prevent melanosis and lengthen its shelf life; however, it is a compound that degrades the soil and reduces the oxygen in water. Eight years ago, the Company implemented the methodology of applying metabisulfite directly to the ice bins that receive the shrimp once they are harvested, i.e. the chemical does not enter the pools. It should be noted that the metabisulfite is weighed and dosed at the packing plant, so this product is not currently stored on the farms.

In all its operating plants and camps, the Company uses refrigerants that are not considered ozone depleting substances (ODP) and have a low global warming potential (GWP): i) R-134a for refrigerators (shrimp and packing plants); ii) R-410a and R-404a for air conditioners.

The packing plant uses Ammonia Systems for refrigeration, for it has developed Emergency Response Procedures in case of leakage. Nevertheless, Promarisco will update this procedure in line with international standards such as those of the International Institute of Ammonia Refrigeration (IIAR), which will also include training, scheduled drills, and a proactive and regular communication plan for all workers, contractors, and the community.

#### 4.3.b.iii Pesticide Use and Management

Promarisco uses a minimum of hazardous materials and does not use antibiotics, pesticides, or chemical additives in its farming. Extensive farming<sup>38</sup>, which allows for low stocking rates and disease-resistant shrimp, are key pillars of the Company's strategy to prevent disease outbreaks, including white spot syndrome virus (WSSV). The resilience of the shrimp sector has led to encouraging results for the industry through the use of biological stabilizers such as probiotics, vitamins C and E, among others, which have induced a condition in the shrimp's immune system that controls the replication of the virus. It should also be noted that antibiotics are not used during the maturation stage since there are no major diseases at the moment. Also, according to the Veterinary Health Plan, the culture and disease control policy does not include vaccinations since the shrimp's immune system has no immunological memory. Thus, Promarisco's Laboratory Division performs routine PCR analyses to verify that post larvae production is free of pathogens. Finally, regular effluent monitoring ensures that water quality parameters are within national limits and established industry standards.

Rodent populations in the shrimp farms and processing plant are controlled by physical devices monitored by a specialized contractor, which has developed a Pest Control Procedure, which includes within its list of pesticides some that are classified as Ia (extremely hazardous) within the classification recommended by the World Health Organization (WHO), for which the Client: (i) will update the Pest Control Procedure so that it does not include any substances classified as type Ia within the list, and in the case of using substances classified as II (moderately hazardous) it will include details on their storage, training for their use, PPE, and adequate facilities to correctly handle, store, apply, and dispose of these products.

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<sup>37</sup> The Food and Drugs Administration (FDA) recognizes it as benign in low concentrations.

<sup>38</sup> This system has low densities of between 15,000 and 80,000 post larvae/ha.

#### 4.4 Community Health, Safety and Security

##### 4.4.a Community Health and Safety

##### 4.4.a.i Infrastructure and Equipment Design and Safety

The shrimp farms located in Quiñonez and Bellavista Islands, in addition to Bala Chico, are located in sparsely populated areas, considered rural; it is also worth mentioning that no communities were identified within the ADI and All of the farms; however, in 2019 in the social impact assessment, three communities were defined as ADSI of the Project. The members of these communities are mainly farmers. The packing plant is located in an area declared an industrial zone by the Municipality of Durán; however, the nearest residences are within a 500-meter radius. It should be noted that the companies in the industrial zone have built an alternate road for direct access to the zone to prevent heavy vehicles and machinery from passing through neighboring residential areas, thus avoiding impacts and risks to the sector's inhabitants.

Nevertheless, the main impacts on the community in the operational phase are those related to noise and traffic safety during the transportation of raw materials and finished products. Accordingly, the Company will conduct ambient noise measurements at all plants with nearby communities that have been identified within the ADSI and will maintain close communication with the affected communities to monitor impacts. Transportation is both in-house and subcontracted; for the latter, the requirements associated with the service are detailed in the contracts signed with the suppliers. Nevertheless, Promarisco will develop a Transportation Service Contracting Procedure in line with the principles described in the World Bank General Guidelines (WBG) and international best practices for driver and traffic safety<sup>39</sup>.

##### 4.4.a.ii Hazardous Materials Management and Safety

The Company makes minimal use of hazardous materials and does not use antibiotics. The significant risk of spills is minimized through the use of companies specialized in the transportation and handling of authorized petroleum products<sup>40</sup>, and the use of appropriate storage facilities in compliance with local regulations; therefore, there is no significant risk of exposure to hazardous materials for the communities.

##### 4.4.a.iii Community Exposure to Disease

To prevent the transmission of respiratory diseases caused by the COVID 19 virus, Promarisco developed a COVID 19 Biosafety Protocol for the packing plant, its shrimp farms, and its laboratory, and also developed a COVID 19 Preventive Measures Procedure for contractors, which includes: (i) general prevention guidelines and measures; (ii) prevention measures for packaging material; (iii) biosecurity measures for containers; (iv) prohibitions on attendance at work; (v) transfer to and from the work site; (vi) biosecurity in the workplace; (vii) biosecurity rules for workers; (viii) biosecurity

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<sup>39</sup> Good Practice Note: Road Safety World Bank <https://thedocs.worldbank.org/en/doc/648681570135612401-0290022019/original/GoodPracticeNoteRoadSafety.pdf>

<sup>40</sup> National Navy of Ecuador.

rules when leaving the workplace; viii) biosecurity rules when arriving home; ix) biosecurity rules for suppliers, heavy haulers, and contractors; and x) packaging material suppliers.

#### 4.4.a.iv Emergency Preparedness and Response

The production plants' contingency plans provide for good communications between the farms and operations at the main offices (packing plant), which are guaranteed by radio and cellular service. Potential risks to its operations include severe weather events that could make access roads vulnerable to flotation or drought. Nevertheless, the Company has taken actions to prevent impacts, such as improving the maintenance of access roads within its plants and keeping roads wet during the dry season, as well as implementing traffic protocols during the rainy season. Nevertheless, Promarisco will extend its Self-Protection Plans to the ADSI communities in its facilities and will involve them in drills based on their level of exposure to the identified risks.

#### 4.4.b Security Personnel

The Client has a contract with a private security company duly authorized and licensed by the Ministry of Government of Ecuador (MGE) for protection against theft on the farms and during transportation of raw materials<sup>41</sup> to the farm, finished product to the packing plant, and export zone. Security guards on the farms are armed and undergo a comprehensive training program approved by the MGE before beginning their surveillance activities; likewise, security forces are trained in the progressive use of force. Promarisco will verify whether the contracts with the security company are in line with the requirements of PS 4<sup>42</sup>. The Client will also: i) develop a Physical Security Management Manual that includes professional ethics and human rights issues, incorporating the United Nations Voluntary Principles (“VPs”) on Security Forces and Human Rights<sup>43</sup>; and ii) train security personnel on human rights issues.

### 4.5 Biodiversity Conservation and Sustainable Management of Living Natural Resources

#### 4.5.a General

The mangroves in the Gulf of Guayaquil are home to an important biological diversity that provides ecosystem services that benefit both urban and rural populations, as well as a rich landscape that allows tourism and leisure in certain parts. Aquaculture activities in the country began in 1968, the starting year of mangrove modification. Since then, however, these ecosystems have been protected under a series of laws and regulations, including the Forestry and Conservation of Natural Areas and Wildlife Law and the current Organic Law on the Development of Aquaculture and Fisheries. Promarisco's shrimp farms do not intersect with the areas established in the SNAP, which are part of the State's Natural Areas Heritage (PANE).

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<sup>41</sup> Larvae from its laboratory in Chanduy

<sup>42</sup> The Company shall manage security forces as required by PS 4 (as described in paragraphs 12 to 14).

<sup>43</sup> [https://www.ifc.org/wps/wcm/connect/5e74e4d6-f977-49f3-85cb-e626519b0e49/p\\_handbook\\_SecurityForces\\_2017\\_Spanish.pdf?MOD=AJPERES&CVID=nzgFMTI](https://www.ifc.org/wps/wcm/connect/5e74e4d6-f977-49f3-85cb-e626519b0e49/p_handbook_SecurityForces_2017_Spanish.pdf?MOD=AJPERES&CVID=nzgFMTI)

#### 4.5.b Protection and Conservation of Biodiversity

Due to the ASC certification<sup>44</sup> that the Company holds for its shrimp farms, it has developed an Environmental Impact Assessment on Biodiversity (EIAB) for its activities, which has made it possible to reduce the impact on mangroves and other natural habitats. The Company has also committed to mangrove and biodiversity conservation and compliance with regulations<sup>45</sup>, and since 2011 has implemented Reforestation Plans to reforest 82.99 hectares<sup>46</sup> of mangrove in the Gulf of Guayaquil region. As also required<sup>47</sup> by the ASC certifications obtained in 2019, Promarisco started an additional Reforestation Plan in 2021, which will last for 10 years until it compensates the hectares corresponding to the referred certification (6.31 ha/year).

The shrimp farm area is related to a seabird habitat that uses the mangroves adjacent to the shrimp farm for feeding and resting. Species such as *Sesuvium portulacastrum* and *Batis maritima* have been identified, which have positive effects on mangrove regeneration. The mangrove forests on the shores of Quiñonez Island are dominated by *Rhizophora harrisonii* and crustaceans and fish from the adjacent estuaries.

##### 4.5.b.i Critical, Natural or Modified Habitat

According to the EIAB, satellite images of the area are available from 1985, at which time one can see that the shrimp farms already existed; since then, Promarisco has not expanded its area in any way that could have affected the mangroves, and no modifications have been identified in the last 20 years and there are no plans for expansion or potential impacts due to alteration of the production system. Also, according to the monitoring conducted, no endangered or threatened species have been found; however, training has been conducted with the ADSI communities on the care and management of the *Crocodylus Acutus*, commonly known as the coastal crocodile, which is classified as a Vulnerable species. Buffer areas or buffer zones have been set at 25 meters from the perimeter of the shrimp farms to validate the plant cover; however, according to available satellite images, this distance is not met at all points, for which the Company, in accordance with the BAP, shall carry out on-site measurements and comply with the required buffer area. We would like to emphasize that because the Company does not use toxic chemicals or antibiotics, there will be no impact on the mangrove's flora and fauna.

##### 4.5.b.ii Legally Protected Areas and Internationally Recognized Areas

Promarisco's shrimp farms are not located within the SNAP; however, the closest protected areas are: Ecological Reserve, Churute Mangroves, Fauna Production Reserve, El Salado Mangroves, Wildlife Refuge, El Morro Mangroves; it should be noted that these are located between 14 km and 40 km from the shrimp farms. The Company is committed to the protection of mangrove areas, for which it has defined a biodiversity action plan (BAP) that is currently being implemented.

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<sup>44</sup> Principle 2, Locate farms in environmentally sound locations while conserving biodiversity and important natural ecosystems.

<sup>45</sup> Decree No. 1391 of October 15, 2008. Amendments to the General Regulations of the Fisheries and Fisheries Development Law and unified text of fisheries legislation.

<sup>46</sup> Reforested areas in La Josefina, Gulf of Guayaquil

<sup>47</sup> For farms built or permitted prior to May 1999, aquaculturists must compensate for impacts through rehabilitation as determined by the EIAB, or national/state/local authority plans/lists, or 50% of the affected ecosystem (whichever is greater).

#### 4.5.b.iii Invasive Alien Species

The species *Litopennaeus vannamei* is native to the eastern coast of the Pacific Ocean, from Sonora in northern Mexico to Tumbes in Peru, in waters where the temperature is normally above 20°C all year round<sup>48</sup>. However, Guayaquil has historically been the country's main port and has therefore been exposed to the introduction of invasive alien species. In addition, plant cover in the Gulf of Guayaquil has been extensively modified by agricultural activities and the introduction of many invasive and non-endemic species. However, over the years, phytosanitary controls have become more and more demanding. The Company's activity does not involve the introduction of invasive alien species, and additionally the Client will not introduce any invasive alien species that would pose a high risk to the site's flora and fauna.

#### 4.5.c Management of Ecosystem Services

The Company's shrimp farms are mainly surrounded by mangrove areas, which are fragile and highly productive ecosystems characterized by their ecosystem services of provisioning, regulation, support, and cultural services: (i) habitat for species of conservation interest<sup>49</sup>; (ii) refuge and food source for species of high commercial value such as red crab, shrimp, and mangrove cockle; (iii) protective barriers against natural phenomena; (iv) retainers of heavy metals and other pollutants, improving water quality; (v) minimizers of the effects of climate change as they are essential for carbon sequestration and capture; (vi) sites for recreation and enjoyment of the natural landscape; and (vii) promoters of tourism in coastal communities. Given that the Company does not foresee a substantial expansion or modification to the production system, however, it does not represent a direct impact on the mangrove and the ecosystem services it provides.

#### 4.5.d Supply Chain

The Company operates with BAP and Global GAP certified feed suppliers. Although food certification requirements still have some limitations in terms of full transparency, environmental responsibility, and sustainable management throughout the supply chain, at a minimum producers should account for: i) traceability of raw materials; ii) the origin of aquatic and terrestrial ingredients; and iii) control and disclosure in the use of genetically modified (GM) ingredients.

Promarisco purchases raw material (shrimp that have completed their growth stage) arriving at its packing plant to be packaged and frozen, which is currently 46% of its total production. There are more than 100 suppliers. The Company has begun a process of support and capacity building over the last few years, in order for these companies can acquire ASC, Global GAP or BAP certifications, in line with the Client's policies and standards, and environmentally and socially responsible production.. As of the date of the ESDD, 12% of its suppliers have attained ASC certifications.

Nevertheless, to verify that food and raw materials do not come from illegally deforested areas or environmentally protected areas or critical or natural habitats, the Company will develop a Supply

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<sup>48</sup> [https://www.fao.org/fishery/docs/DOCUMENT/aquaculture/CulturedSpecies/file/es/es\\_whitelegshrimp.htm](https://www.fao.org/fishery/docs/DOCUMENT/aquaculture/CulturedSpecies/file/es/es_whitelegshrimp.htm)

<sup>49</sup> Dolphins, crocodiles, and hawksbill turtles

Chain Policy that includes verification systems and practices through geo-referencing tools that allow satellite monitoring of the state of the farming areas and permanent monitoring of the environmental performance of its main suppliers (the latter, depending on the level of control or influence over such suppliers).

#### **5. Local Access of Project Documentation**

For questions about the Project please contact [eescobar@promarisco.com](mailto:eescobar@promarisco.com).