

Environmental and Social Review Summary (ESRS) Aegea / Águas de Manaus Project – 14826-01 - BRAZIL

Original language of the document: Portuguese
Issuance Date: May 2024

1. General Information of the Project and Overview of Scope of IDB Invest E&S Review

Aegea Saneamento (the “Holding”) is the largest private business in the basic sanitation sector in Brazil. In June 2018, the Holding was granted a concession for basic sanitation services in Manaus, in the State of Amazonas, Brazil, and created the company Águas de Manaus (the “Client” or “Company”), which was responsible for the provision of services of access to, treatment and distribution of drinking water and for the collection, treatment and final disposal of domestic sewage (the “Project”). Under the terms of the concession agreement, the Client is responsible for universalization of services until 2033, aiming at 99% of treated water distribution coverage and 90% coverage of sewage collection and treatment, benefiting more than 2 million people¹. The Client requires financing for the investment necessary to meet the universalization goals as stated above.

Environmental and Social Due Diligence (“ESDD”) was implemented through documentation review, virtual meetings, and a visit to the Project site. Among others, the topics analyzed were: i) environmental and social management policies and procedures, ii) working conditions, iii) occupational health and safety practices and accident records, iv) community relations and social communication, v) efficient water and sewage treatment processes, vi) compliance with drinking water and wastewater standards, vii) grievance mechanisms, viii) energy efficiency, and ix) loss management.

2. Environmental and Social Categorization and Rationale

In accordance with IDB Invest Environmental and Social Sustainability Policy, the Project has been classified as a category B operation as it may cause, among others, the following impacts and risks: i) generation of solid waste, ii) contamination of water sources, iii) interference with local communities, iv) interference with vehicular traffic, v) increased risk of accidents involving employees and third parties, vi) risks of breakage and leakage in water and sewage networks and major pipelines, and vii) family resettlement. These impacts and risks are deemed to be of medium to medium–high intensity, site-specific, largely reversible, and readily addressed through mitigation measures implemented in the context of the proposed operation.

The Performance Standards (“PS”) applied to this Project are: i) PS1: Assessment and Management of Environmental and Social Risks and Impacts, ii) PS2: Labor and Working Conditions, PS3:

¹ According to the Instituto Brasileiro de Geografia e Estatística (IBGE), the population of Manaus in the 2022 census was 2,063,689.

Resource Efficiency and Pollution Prevention, iv) PS4: Community Health, Safety and Security, and v) PS5: Land Acquisition and Involuntary Resettlement.

3. Environmental and Social Context

3.1 Project site overview

The Project currently has 83 Sewage Pumping Stations (“EEE”), 120 Sewage Treatment Plants (“ETE”), 4 Water Treatment Stations (“ETA”), together with approximately 4,155 km of treated water distribution networks, including 245 km of major pipelines, 816 km of sewage collection networks and 52 active wells. This infrastructure is distributed around the urban perimeter of the city of Manaus.

The main driver of economic development in Manaus is the Manaus Free Trade Zone (“ZFM”)², which has attracted a wide variety of industries to the city surroundings due to tax incentives offered by the Federal and State Governments. These industries are largely responsible for job creation, involving labor with different levels of qualification. In contrast to the economic buoyancy of Manaus is the surrounding landscape, the lush Amazon Rainforest. This feature resulted in Manaus becoming an attractive destination for families seeking a higher income and more enjoyable living conditions. Upon arriving in Manaus, many migrants end up settling in informal communities around the city.

On the banks of the Negro River tributaries, locally called *igarapés*, several stilt house communities have emerged. These wooden dwellings are precarious structures raised on stilts, with heights over 10 meters above river level. In these areas, living conditions are even more precarious, as these constructions have unsafe access, usually through makeshift ladders or boards, and no sewage collection systems, causing significant accumulation of solid waste on the *igarapés* banks. These houses are built at very high levels over the surface of the *igarapés* as a protection against frequent flooding in the region. Even so, many stilt houses are affected when the Negro River overflows onto the neighboring land, thus leaving many inhabitants without housing.

To achieve the goals of universal supply of treated water as well as sewage collection and treatment, the Client will have to serve both formal and informal urban areas. On the one hand, in 2021 the Client had already reached 98% coverage of access to treated water, which brought it very close to the universalization goal. On the other hand, in 2022 only 27% of the population had sanitary sewage systems. Therefore, the main challenge for the Project will be to expand coverage

² The Manaus Free Trade Zone (ZFM) is an industrial area created as a model of economic development implemented by the government to provide an economic foundation in the Amazon region, in addition to promoting better productive and social integration of this region into the country. The ZFM is managed by the Manaus Free Trade Zone Superintendence (Suframa) and covers a total area of ten thousand square kilometers that includes the city of Manaus, capital of the State of Amazonas, and its surroundings. It currently houses around 600 industries.

by means of sewage collection and treatment systems, especially in informal areas, where creative approaches³ have already been implemented to install networks.

3.2 Contextual risks

The urban dynamics of Manaus resulted in the emergence of several informal communities in its different areas, where public governance tends to be precarious or even non-existent. The Project operations in such communities entail risks inherent in these areas, such as violence, conflicts with criminality, interrupted access to communities determined by local gangs, among others. These risks have been mapped and consolidated by the Client in a Social Risk Survey Matrix.

To address these risks, the Client applies the concept of Social License to Operate, which consists in building a relationship of trust and dialogue with communities and their permission to operate in the territory. Before any work front or an intervention in these communities, the Company Social Responsibility Team maps the community stakeholders and begins a process of engagement and active communication with community leaders and members, by disseminating information about the Project.

While the Company operates drinking water or sewage systems, engagement and close proximity to local community leaders are crucial for prevention and maintenance of this infrastructure. Through a two-way communication channel, communal leaders may anticipate information to their fellow community members about the arrival of Águas de Manaus workers (who always wear a Company uniform) and, likewise, local leaders may inform the Company when their access to the territory is not appropriate, due to contextual factors⁴.

Holding the Social License to Operate also depends on other factors, such as communication consistency, quality and efficiency in operations, and service provision. To this end, the Company implements a series of social strategies and programs with a special focus on: i) mapping, engagement and active communication with stakeholders and community leaders, through the *Afluentes* Program, ii) social communication, with consistent capture of and response to complaints by the Client's communication channels⁵, iii) a social discount rate⁶, which allows for low-income families to pay for the Client's services, and iv) provision of water and sewage bills⁷. This set of actions significantly reduces the risks of working in informal communities dominated by organized crime.

³ The Client developed a pilot project in a part of an informal community ("Beco do Nonato") where the Company implemented a house-to-house sewage collection system without major works. This Project was awarded a prize by the UN and will be replicated in other informal communities, especially those on stilts.

⁴ For example, in the case of a conflict or police operations.

⁵ As part of the *Afluentes* Program, community leaders have direct contact with the Social Responsibility Team and may deal with complaints by community members without an intermediary.

⁶ The Client offers different subsidy schemes according to the degree of family vulnerability, i.e. a subsidized rate, the Manauara rate and the 10 rate, (R\$ 10,00, ten reais), which fosters the assimilation of the Project in those communities.

⁷ For many vulnerable families, having a water bill linked to their address may lead to their formal inclusion in the economy, favoring, for example, purchases on instalments. This benefit is recognized by residents in vulnerable communities.

Other contextual risks in the Project are vandalism and the impact of climate change on infrastructure. Regarding the former, the main risk is pipe breakage and leaks leading to water theft. To address this issue, the Client has expanded the use of measurement technologies and information integration into an Integrated Operation Center, whereby water and pressure losses are quickly detected and investigated.

Regarding climate risks, the Client is aware of possible impacts and has consequently made investments⁸ to ensure water supply at the lowest water level⁹ of the Negro River, i.e., when the stream could reach levels below water pump positions.

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

4.1 Assessment and management of environmental and social risks and impacts

The Client has the support of an Environmental and Health and Safety Management Program, and the *Interage* Program (described below). The Project has the appropriate environmental licenses covering sanitation assets which mandatorily require environmental licensing: 153 active environmental licenses, which cover water treatment stations, sewage treatment plants, underground water abstraction, wastewater, water supply systems, surface catchment, sewage systems and others. Environmental licenses are monitored by the SE Suite system¹⁰, so that specific conditions are met, and renewal requests are timely submitted.

4.1.a E&S assessment and management system

The *Interage* Program involves 65 procedures and 130 work instructions focusing on environmental, social management and occupational health and safety. Some of the main procedures used by the Client are: i) communication and investigation of accidents and environmental incidents, ii) development of environmental guidelines for water catchment, treatment and distribution, environmental guidelines for effluent management, iii) preparation of the greenhouse gas inventory, iv) management of environmental aspects and impacts, v) environmental licensing management, vi) chemicals management, vii) solid waste management, viii) claims management, and ix) responding to emergencies.

4.1.b Policy

The Client follows the Holding's Environmental, Health and Safety Policy, which includes: i) objective, ii) application, iii) references, iv) definitions, v) description, vi) annexes, and vii) records.

⁸ Investments were made to implement complementary water catch systems in order to operate Water Treatment Stations ("ETA") by harvesting water from depths lower than the current minimum levels of catchment reached by the pumps of the existing fixed system.

⁹ The drop in water level corresponds to the decrease in the Negro River water level. While in Manaus this usually occurs between September and November, its intensity varies, depending on the rains.

¹⁰ SE Suite (SoftExpert Excellence Suite) is software to optimize, automate and strengthen business processes in different sectors in an integrated way. SE Suite is based on the BPMN (Business Process Model and Notation) standard and quickly creates executable processes, using events, activities, tasks, decisions, lines, and other elements.

The policy sets forth commitments in the areas of environment and occupational health and safety. However, the Client will draft an Integrated Environmental, Social and Health and Safety Policy specific to the Project which will also include commitments in the social area.

4.1.c Identification of risks and impacts

The Client applies a specific procedure for Environmental Risk and Impact Management and prepares spreadsheets identifying environmental aspects and impacts for each asset in the Project, i.e., asset activities, environmental aspects, environmental impacts, legal requirements, controls, and action plans to manage identified environmental impacts. The Client will review these spreadsheets to include the potential social impacts and health and safety risks of each asset.

4.1.c.i Direct and indirect impacts and risks

The main risks as well as the direct and indirect negative impacts of the Project are linked to the implementation of its works and, to a lesser extent, the operation of sanitation assets. These are, among others: i) the involuntary resettlement of families, ii) potential contamination of soil and water, iii) probable traffic interruption, iv) increased number of accidents involving employees and third parties, v) localized air quality changes, vi) noise emission, vii) odor emission, viii) increase in solid waste production, and ix) job creation. Indirect impacts tend to be positive, such as: i) depollution of water sources, ii) reduction of water-borne diseases, iii) creation of indirect jobs, iv) improved water quality in effluent receiving bodies, v) increased basic sanitation services for vulnerable communities, vi) inclusion of underserved populations in basic sanitation systems.

4.1.c.ii Analysis of alternatives

In addition to the assets already incorporated into the Project, the Company foresees an expansion mainly based on the construction of ETEs, EEEs, domestic sewage collectors and interceptors to ensure the goal of universal service. Therefore, sewage and water networks must extend over the entire urban grid and do not require alternative studies to be conducted.

However, for the construction of larger units such as ETEs and EEEs, a preliminary analysis of alternatives will be carried out before a decision is made on the location of an asset, in order to avoid or minimize any unwanted impacts (involuntary resettlement, economic displacement, impacts on biodiversity or cultural heritage, among others). To meet this need, the Client will execute a Preliminary Alternative Analysis Procedure.

4.1.c.iii Cumulative impact analysis

The preliminary analysis of cumulative impacts entailed the selection of four Valued Socio-Environmental Components (VSEC)¹¹: i) water resources, ii) aquatic biota, iii) vectors of water-borne diseases, and iv) public health. Since the Project will be developed mainly in environments previously altered by human presence (basically in urban locations), the projects included in the analysis of cumulative impacts are urban works whose aggregate impact is not material.

4.1.c.iv Gender risks

The Holding has a Code of Conduct, which establishes zero tolerance to moral and sexual harassment in its business units or in any location where its employees are present, and to discrimination in hiring, remuneration, access to training, promotion and termination, or retirement based on race, ethnicity, caste, religion, disability, gender, sexual orientation, union membership or political affiliation. The Holding also has a Policy for Preventing and Combating Moral and Sexual Harassment, applicable to all its companies, including Águas de Manaus, which provides guidelines for the identification and description of different forms of harassment, as well as general guidelines for reporting and management of this issue.

The Ethics Channel receives complaints via telephone or an online form, guaranteeing anonymity, and, in any case, confidentiality throughout the investigation process. This process may result in disciplinary measures, in accordance with the Policy of Consequences and Disciplinary Measures. Since 2023, in cases of harassment or discrimination, the Company also has operated a Reception Channel, which offers specialized assistance to victims by qualified professionals in the field of psychology.

As to the participation and representation of women, currently 10% of the Company's leadership positions are held by women. The Client has set a target of 45% of women in leadership positions by 2029, in line with the goals established by the Holding.¹²

The Client also aims to promote gender equality in the communities where it operates, by implementing social responsibility programs with a focus on income generation and training of women. For example, the *Mãos à Obras* [Program offers free hydraulics training to the local population, in 2023, the Company trained three groups exclusively for women to qualify them for the job market in this sector, including home plumbing services.

Other programs are administered with partner institutions. Among these, the *Ela Pode* program, developed together with the *Instituto Rede Mulher Empreendedora*, which caters free training

¹¹ Valued Socio-Environmental Components are environmental and social important attributes. They can be: i) physical characteristics; ii) habitats; iii) wild animal populations; iv) ecosystem services; v) natural processes (water, nutrient cycles, and microclimate); vi) social conditions (health, economic, etc.) or cultural values. Practical Guide for Assessment and Management of Cumulative Impacts in Latin America and the Caribbean. IDB Invest, 2022

¹² Aegea Saneamento issued a Bond linked to three ESG goals i) reducing energy consumption by 15% measured in kWh/cubic meter; ii) increase from 32% to 45% of women in leadership positions, and iii) increase from 17% to 27% of black people occupying leadership positions.

sessions to women in vulnerable socioeconomic situations, including workshops in different areas of entrepreneurship, business and personal finance, digital tools, and leadership, among others.

The Company also seeks to ensure the participation of female leaders in the *Afluentes* Program and its communication and engagement processes with communities. Currently, there is 38% of women over the total of mapped community leaders.

4.1.c.v Exposure to climate change

An analysis of the risks of exposure to climate change indicated that the risk of drought does not appear in the climate model, but it is predicted to increase to a moderate level because of climate variability. This condition is worsened by current heat waves and projected scenarios of future emissions. Furthermore, the average annual precipitation trend over the 1979-2022 period shows a slight inclination towards drier conditions. These effects may lead to difficulties in meeting water demands, the operation of facilities or the service quality or level in the medium and long terms.

The Client has implemented an Action Plan to ensure catching water from the Negro River (meeting 80% of treated water needs in Manaus) at the 2 ETAs located in *Ponta do Ismael* (PDI) if there were an extremely steep drop of the river level. Under this plan, should the drop go beyond the minimum limit of the fixed catching system, pump-equipped barges will be actuated and displaced to deeper locations in the river, to be coupled to the existing catching system by means of specifically designed pipes. In the event of a drop in the river level that compromises the operation of the fixed pumps, the Project will be prepared to set off the emergency collection system.

On the other hand, the risk of flooding exists in some areas to the south and east of the Project area, in the neighborhoods closest to the Negro River and its streams. River swelling or flooding can damage current infrastructure, causing service disruptions. Given this exposure to natural risks and the sensitivity of the activity, the Client will prepare a Climate Change Risk and Impact Management Program, focused on forecasting actions, prioritizing, and adapting sanitation infrastructure.

It is considered that the Project is aligned with the Paris Agreement based on an analysis applying the IDB Group Paris Alignment Implementation Approach.

4.1.d Management programs

The Client uses the *Interage* Program, made up of 65 management procedures, among which the following stand out: i) communication and investigation of accidents and environmental incidents, ii) environmental guidelines for water catchment, iii) treatment and distribution, environmental guidelines for effluent management, iv) preparation of the greenhouse gas inventory, v) management of environmental aspects and impacts, vi) environmental licensing management, vii) chemicals management, viii) solid waste management, ix) claims management, and x) emergency response plan and other procedures.

4.1.e Organizational capacity and competency

The Project has dedicated environmental, social responsibility and health and safety teams. The environment, health and safety team is made up of 19 professionals: i) a manager; ii) two physicians, iii) a nursing technician, iv) an administrative analyst, v) an environmental analyst, vi) a quality analyst, vii) five administrative assistants, viii) two administrative aides, and ix) five occupational safety technicians. The social responsibility team is made up of 13 professionals: i) a manager, ii) a social responsibility coordinator, iii) a social responsibility specialist, iv) two senior social responsibility analysts, v) a mid-level social responsibility analyst, vi) four junior social responsibility analysts, vii) an assistant, viii) an aide, and ix) a young trainee.

4.1.f Emergency preparedness and response

The Client has an Emergency Response Plan (“ERP”) structured into the following items: i) objective, ii) references, iii) definitions, iv) responsibilities, v) guidelines to be followed upon identifying the occurrence, vi) immediate emergency actions, vii) applicable scenarios, viii) assistance by the socio-environmental sector, ix) intervention of the communication sector, x) communication, xi) recommendations, xii) annexes, and xiii) drafting.

The ERP covers 27 emergency scenarios, for example: i) being run over, ii) fire and explosion, iii) activities and work at heights, iv) activities in confined spaces, v) floods, vi) breakage of large diameter major pipes, vii) leakage of chemicals, viii) electric shock, and ix) collapse of slopes or closure of ditches under construction.

Since the beginning of the concession in 2018, a total of 561 accidents¹³ have been reported. Over this total, 58% are leaks in the distribution network, 24% are leaks in connection branches and 18% account for other (fleet accidents, slope slips included in the Project, etc.).

4.1.g Monitoring and review

The Company has an Operational Control Center (“OCC”) that involves remote and real-time monitoring of operations, detects anomalous situations, and organizes maintenance teams to trigger efficient responses and corrective actions without delay, including cases of emergencies. System automation is on the increase and allows for remote control and actions, such as opening and closing valves, actuating pumps, etc.

The Client outsources companies to carry out internal and external audits of the health and safety management system. In addition to auditing, the environment, health, and safety teams perform inspections of construction sites and generate Checklists (“LV”), where deviations are highlighted, and corrections are requested.

¹³ The Client defines claims as risk materialization of any event in which an asset suffers an accident or material, personal loss, liability, or damage to third parties. Incident or accident involving a resident or employee, generally accompanied by direct damage to movable or immovable property.

To monitor the quality of treated water and effluents, more than 28,000 physical and chemical analyses are carried out per month according to a sampling network with 640 sample collection points. The Company executes daily evaluations of organoleptic parameters¹⁴ and outsources certified laboratories¹⁵ for more complex assessments. When deviations are detected, causes are investigated, and action plans are implemented to eliminate anomalies.

4.1.h Stakeholder engagement

The Company implements the *Afluentes* Program as part of its strategy to obtain the Social License to Operate. This program, focused on mapping and formal and informal communication with leaders from local communities, is intended to establish an open channel of communication and build a relationship of trust with society. The Program is executed without any interruptions, not only during previous stages, but also at the implementation, operation, and maintenance stages of the Project.

Once the initial contact with local leaders is made, the Client Social Responsibility team embarks on an unmediated approach to the community, by presenting and sharing information about the Project, resolving doubts, and heeding suggestions and demands. These activities are carried out at community meetings, or visits to each family in the community. To date, the Client has mapped around 1,300 community leaders, 780 of which are considered active.

Both the Social Responsibility team and the *Afluentes* Program play a key role in coordinating and planning the Project activities. The technical teams are accountable for the construction, implementation and maintenance of water and sewage networks, as well as the construction and renovation of water and sewage treatment plants. Their members exercise continuous coordination and communication with the Social Responsibility team, to receive authorization to access the territory and collect information about the best days and times to operate, so as to reduce the impact on communities and neighborhoods.

Additionally, the Company puts into practice a series of social responsibility programs and activities, the purpose of which is to generate a positive impact on society, especially in the vulnerable communities where it operates. To mention a few: i) the *Nota 10* Health Program, which encompasses kindergarten, elementary (I and II) and high schools, where teachers, principals, students and families promote learning and ludic activities of environmental education, and also foster awareness about basic sanitation, the conscious use of water, and the correct disposal of sewage and waste, ii) the *Água na Boca* Program, which offers free cooking and food handling courses for local people who already work informally in the sector, and iii) the *Jovens Pioneiros* Project, which recruits public school teenagers in peripheral regions for an educational program addressing water and sanitation topics and the activities of *Águas de Manaus*, holds lectures with collaborators, and offers guidance in the construction of projects to solve problems in the socio-environmental arena.

¹⁴ Color, turbidity, chlorine, fluorine.

¹⁵ ISO 17.025-certified laboratories.

4.1.h.i Information disclosure

The *Afluentes Program* is one of the main channels for dissemination of information to the communities. Thanks to direct contact with communal leaders, the Client readily communicates any topic relevant to the Project, inclusive of those relating to works, maintenance, suspension of services (planned and emergency), projects and social responsibility activities. After being informed, local leaders are responsible for sharing the information with their constituents. In general, this dissemination takes place via WhatsApp, in person, or at community meetings, if applicable.

Additionally, the Client Communication team is responsible for propagating information about the Company to different audiences and by several means (social networks, local pamphlets and posters, and local community radio stations), depending on the objective to target and the communication strategy.

4.1.i External communication and grievance mechanisms

The Company has external communication and customer service channels available 24 hours a day, 7 days a week. These communication channels are the following: i) a toll-free telephone number, ii) WhatsApp, iii) email, and iv) an online Ombudsman platform, exclusively for receiving complaints. These channels are printed on water bills and posted in social media. Once grievances or complaints are received, they are forwarded to the Company's internal sectors, according to the content of the request.

In order to approach the communities served by the Company and improve communication, personalized service is offered to the leaders, particularly in the most vulnerable communities where it may be more difficult to resort to traditional communication channels. Thanks to WhatsApp 24x7, leaders can present their complaints and demands, which are managed by the Social Responsibility team by promptly contacting internal teams for priority resolution, as applicable.

The Holding also has an Ethics Channel, available to employees, suppliers, customers, and external interested parties, which receives statements about the occurrence of misconduct or suspicious activities that violate the Code of Conduct and the legislation in force in Brazil. All reports are treated confidentially and may be sent anonymously. This channel also has a toll-free telephone number and online customer attention on the AEGEA website. Reports are received by an independent company, submitted to the Ethics Committee and the Investigation Committee, and treated in pursuance of the Ethics Channel Policy and the Policy on Consequences and Disciplinary Measures.

4.2 Labor and working conditions

4.2.a.i Human resources policies and procedures

The Company has Regulatory Instructions for different aspects of human resources management, such as: i) Recruitment and Selection Management, ii) Integration Management, iii) Position and Compensation Management, iv) Benefits Management, v) Employee Transfer Management, vi) Profit Sharing Policy, and vii) Management of Employee Termination. The Holding also has a Code of Conduct containing the principles and guidelines to be observed by all AEGEA companies and their employees. This code presents guidelines for ethical and anti-corruption conduct, environment, occupational health and safety, moral and sexual harassment, among others.

Pursuant to the Regulatory Instructions guidelines, the Client will develop and adopt its own Human Resources Policy, which will consolidate the main aspects of human resources management and hiring procedures.

4.2.a.ii Working conditions and terms of employment

The Company currently has a total of 1,125 in-house employees, 23% of whom are women. Employees are hired in accordance with the provisions of Brazilian labor legislation, as provided for in the Consolidation of Labor Laws (“CLT”). The Client has day and night shifts of 40 working hours per week, broken down in 9 hours from Monday to Thursday, and 7 hours on Friday.

The Company offers its collaborators benefits such as meal vouchers, transportation vouchers, medical and dental health plan, life insurance, childcare assistance, birth aid, and partnerships with well-being and physical exercise platforms (Zenklub¹⁶ and Gympass¹⁷).

In terms of remuneration, benefits and termination procedures, conditions are formally specified in Aegea Saneamento Regulatory Instructions, including the procedures for: i) Position and Remuneration Management, ii) Benefits Management, and iii) Employee Termination Management.

4.2.a.iii Workers’ organizations

The Company recognizes the right of employees to join trade unions, as provided for in the Consolidation of Labor Laws (CLT) and the Federal Constitution of Brazil. Nowadays, 56% of employees are members of SINDAEMA/AM, the Amazonas Water, Sewage and Environmental Workers Union.

¹⁶ Zenklub is an emotional health platform for companies that offers programs in: i) online therapy, nutrition, coaching and other specialties; ii) diagnosis and behavior analysis; and iii) training and development for teams and leaders.

¹⁷ Gympass is a fitness and wellness app for businesses, providing daily access to thousands of gyms and studios around the world with just a monthly subscription.

4.2.a.iv Non-discrimination and equal opportunity

The Client implements the *Respeito Dá o Tom* Program, an initiative advocated by the Holding to encourage the hiring and development of black people and women, and to increase diversity in leadership positions. The Program organizes awareness-raising activities for employees, such as lectures and conversation groups, with the intention of promoting diversity and racial equality.

The Company is also governed by the Code of Conduct. Among other topics, the code has a chapter on “Work Environment and Professional Development,” which establishes zero tolerance to discrimination based on race, ethnicity, caste, religion, disability, gender, sexual orientation, union membership or political affiliation in hiring, remuneration, access to training, promotion, termination, or retirement procedures.

The Policy of Consequences and Disciplinary Measures established by the Sponsor implements internal procedures for investigating alleged misconduct and for applying disciplinary measures in the event of violations of the Code of Conduct.

4.2.a.v Retrenchment

Once the works phase of the Project has been completed, employees in charge of preconstruction and construction activities may be allocated to administrative or operational teams, depending on their performance. Outsourced workers whose main functions are related to construction will be relocated by subcontractors in other Projects.

When the concession period is over, the Project activities will be taken over by the grantor, i.e., the Municipality of Manaus. Following a Regulatory Instruction by Aegea Saneamento for Employee Transfer¹⁸ Management, a part of the employees who work in the concession will be absorbed by the municipality and another group will be transferred to other companies in the Holding.

4.2.a.vi Grievance mechanism

The only means Águas de Manaus has in order to deal with complaints, doubts or grievances is its Ethics Channel, which receives statements about the occurrence of misconduct or suspicious activities that violate the Aegea Saneamento Code of Conduct and the legislation in force in Brazil. Consequently, the Client will develop and adopt a grievance mechanism that allows for the reception, processing and resolution of complaints, doubts and grievances submitted by its in-house and outsourced employees.

¹⁸ This Regulatory Instruction provides the procedures, criteria, and guidelines for the transfer of employees to companies in the Holding, prioritizing specialists, coordinators, managers and board members, and local labor.

4.2.b Protecting the work force

Pursuant to current labor legislation established by the Consolidation of Labor Laws (“CLT”), labor rights are guaranteed to employees and outsourced workers in the Company. The Code of Conduct establishes zero tolerance to child or slave labor, applicable not only to employees, but also to suppliers and business partners.

4.2.c Occupational health and safety

The Client complies with national regulations in occupational health and safety, especially the Regulatory Norms of the Ministry of Labor and Employment of Brazil¹⁹. Workers are trained according to their exposure to occupational risks.

The Client has several health and safety procedures in place, including: i) leave and restricted work, ii) preliminary risk analysis, iii) medical and occupational health examinations, iv) instructions for work at height, iv) management of personal protective equipment, v) procedure for excavation services, vi) procedure for services in confined spaces, vii) hazard survey and risk analysis, viii) health and safety standards for subcontractors, ix) work permit, x) load movement, and xi) operation and maintenance of pressure vessels and process units.

The Client sets and monitors health and safety goals. In 2023, the accident target was defined as a frequency rate²⁰ (“FR”) of 7.34, lower than the frequency rate of 7.8 recorded in 2022. The result in 2023 reached 5.5, meeting the target. Therefore, a new target of 5.2 was established for 2024.

In 2024, a fatality was recorded: a worker entered a trench to retrieve a tool and it collapsed, causing his death. This accident generated a discussion and an action plan at corporate level to avoid recurrences.

4.2.d Provisions for people with disabilities

The Brazilian legislation²¹ requires that every company with more than a thousand employees allocate at least 5% of vacancies to people with disabilities (“PWD”). Currently, the Client has 52 persons with disabilities, who represent around 4.6% of its total payroll.

The Holding Regulatory Instruction for Hiring Persons with Disabilities and Special Needs: i) provides for compliance with Brazilian legislation as to vacancies reserved for persons with disabilities PWD; ii) establishes recruitment strategies, criteria and procedures for selecting and hiring disabled people; and iii) requires that these employees be ensured accessibility and

¹⁹ The Regulatory Norms (NRs) of the Ministry of Labor and Employment (MTE) are a set of technical provisions and procedures that establish minimum safety and health standards for workers in different sectors. Regulatory Norms define the obligations, rights and duties with which employers and workers must comply to ensure a safe and healthy work environment.

²⁰ The Frequency Rate (FR) is calculated by multiplying the number of lost-time injuries by one million, divided by the number of hours worked in the period under assessment.

²¹ Law No. 8213, 24 July 1991.

adequate working conditions and environment, occupational health and safety, and inclusion in the evacuation drills defined in the unit's Emergency Response Plan.

4.2.e Workers engaged by third parties

At present, the Client has 692 outsourced workers²², hired through 30 workforce supply companies. Their main duties are the implementation and maintenance of water and sewage networks, domestic water and sewage connections, repair of asphalt paving, property security, and cleaning, among others.

The Company implements the Regulatory Instruction on Occupational Health and Safety and Environment for Subcontractors and Service Providers, which states the mandatory requirements for subcontractors, in compliance with labor legislation and occupational health and safety regulations. Depending on the activity to be carried out, the Company may also require the presentation of risk analyses and environmental risk prevention programs. With the intention of verifying the correct implementation of these requirements, the Client carries out regular field inspections.

For outsourced employees who work in administrative and operational areas, the Company also requires third-party companies to offer benefits such as meal vouchers and health plans to their employees.

4.2.f Supply chain

Supplier management is governed by Aegea Saneamento Regulatory Instructions regarding: i) Registration of Vendors and Customers, ii) Payment of Vendors, and iii) Business Partner Relationship Policy. All suppliers are registered on an internal online platform and undergo an Integrity Due Diligence ("IDD") upon registration. There is also quality control of construction materials, personal protective equipment, and uniforms.

4.3 Resource efficiency and pollution prevention

4.3.a Resource efficiency

In 2023 total energy consumption by the Project was 195,894.95 kW/h, which reached 259 consumer units. This consumption is broken down into 72.3% from the Brazilian Free Energy Market²³ ("FEM") and 27.7%, from the Regulated Contracting Environment²⁴ ("RCE"). The Client is

²² Data provided by the SERTRAS system, a tool for contract management recently deployed by the Client.

²³ The Free Energy Market (FEM) is a competitive environment for trading electricity in Brazil. In this environment, consumers can negotiate directly with generators and marketers to establish personalized contractual conditions. In this market, all energy contracted by the Client comes from renewable sources.

²⁴ The Regulated Contracting Environment (RCE) is a segment of the electricity market where purchase and sale operations are carried out between selling agents and distribution agents, after bidding. The ACR is also known as the regulated market or captive market. In ACR, consumers purchase energy exclusively from the local distributor and are called captive consumers. In ACR, energy comes from renewable and non-renewable sources.

implementing an Energy Efficiency Plan to reach 93.6% of energy capture in the FEM and include distributed generation in its mix, with a share of up to 2.2% of the Company's needs and reducing RCE consumption to 4.2% of total consumption. By migrating to the FEM, the Client reduced its energy costs by 40.8 million reais in 2022 and savings should increase even further as the plan progresses. Another advantage of using FEM is that the Client selects only renewable energy sources, thus contributing to the reduction of greenhouse gas ("GHG") emissions.

The Client and Brasol, a business operating solar plants, entered a partnership the object of which is to supply energy (Distributed Generation), which results in increasing the renewable energy mix and further reducing energy costs. The photovoltaic farm is located in Manaus and has an installed capacity of 2.55 MWp.

4.3.a.i Greenhouse gases

In 2022, the Client generated GHG emissions classified as Scope 1 and Scope 2, amounting to 34,584.69 tCO₂eq/year and 7,982.61 tCO₂eq/year, respectively.

The main ongoing initiatives to reduce GHG emissions are the Energy Efficiency Program and the treatment of sewage plants gases with anaerobic processes. As the Company migrated to FEM, Scope 2 emissions were reduced from 7,962.61 tCO₂e to 356.40 tCO₂e. Another initiative is the implementation of gas treatment systems with a stripping chamber in wastewater treatment plants ("WWTP") that use anaerobic treatment (where GHG emissions are generated) which leads to the partial removal the gases entrained by the anaerobic treatment effluent. The chamber removes gases by means of absorption tower-type filters and reduces emissions into the atmosphere.

The Client will submit annual reports on GHG emissions and projected emissions for the following year.

4.3.a.ii Water consumption

The total volume of water harvested for treatment by the Holding in 2021 and 2022 was 922,353.5 million liters ("ML") and 1,969,811.4 ML, respectively. On the other hand, water consumption in these two years was 973 and 2,421 ML, respectively. The difference between these two years is due to the fact that Águas do Rio incorporated Blocks 1 and 4 into the Concession.

A crucial aspect in this type of operation is the management of treated water that is lost. The Client received the concession with a loss of 59.78% and is working to reduce this percentage on an ongoing basis. The projected loss for 2024 is 52.90% and the objective is to reach 39.80% by the end of the concession period. To this end, the Client has implemented a loss reduction program based upon the following: i) supply sectorization via the creation of 280 Measurement and Control Districts ("DMC"), ii) installation of 370 pressure reducing valves ("VRP"), iii) macro-measurement in Measurement and Control Districts DMC and reservoirs, iv) active leakage detection using geophones, vi) replacement of network branches with previous leaks, vii) renewal of water meters (micro-metering) to reduce apparent losses, and viii) use of the OCC for rapid detection of

anomalies, including pressure losses associated with leaks. The goal is to reduce the leakage rate from 1.62 leaks/km of network to 0.80 leaks/km of network by the end of the concession period. The Client will submit an annual report on the Loss Control Program.

The provision of drinking water is one of the main objectives of the Project. To ensure compliance with drinking water standards, the Client regularly monitors treated water at various points in the treatment system. Samples are collected at the outlet of ETAs, in the distribution network and in reservoirs for physical-chemical analysis. Some of the analyses are carried out in the Company laboratories, but the drinking water standard²⁵ is assessed in accredited external laboratories.

To date, the reports on sample analyses covering the entire distribution system have not shown any violation of drinking water standards. However, the Client will regularly produce reports that prove compliance with the official requirements.

4.3.b Pollution prevention

One of the great benefits of basic sanitation projects is the control of water pollution due to the collection and treatment of domestic sewage. At present, the coverage of treatment systems is 27%, with expansion scheduled to 90% by 2033.

The Company has performed the efficiency²⁶ analysis of organic load removal in the 3 WWTPs with the highest flow rates²⁷ before and after treatment. The average organic load removal rates²⁸ were: i) 83.07% at the *Educandos* ETE; ii) 88.40% at the Timbiras ETE, and iii) 79.31% at *Viver Melhor 1* ETE. The results demonstrate that these plants are satisfactorily efficient in removing organic load.

Treated effluents are also regularly evaluated from a qualitative point of view to verify compliance with local legislation²⁹ and environmental license requirements. To date, despite some occasional records showing minor violations of the standard, most results have been satisfactory. To deal with deviations, the Client has an anomaly assessment procedure, which requires the preparation of corrective action plans. The Client will present reports demonstrating the efficiency of the sewage treatment plants.

4.3.b.i Wastes

The Client has implemented Solid Waste Management Plans (“SWMP”) in sanitation assets, whereby each unit compiles its waste inventory, allocates facilities for temporary storage and segregates waste at source. After this stage, waste—hazardous waste inclusive—is sent to licensed

²⁵ GM/MS Ordinance No. 888/2021

²⁶ Efficiency was evaluated in terms of percentage rates of organic load removal, by using the Biochemical Oxygen Demand (BOD) parameter as an indicator.

²⁷ The 3 ETE with the highest flows currently operated by the Company include: i) *Educandos* ETE, with a flow of 129,000 m³/day; ii) *Viver Melhor 1* ETE with a flow of 191,647 m³/day and iii) Timbiras ETE with a flow of 19,872 m³/day.

²⁸ Raw and treated effluent monitoring reports from 2022 and 2023 were used.

²⁹ CONAMA Resolution No. 430/2011

companies for environmentally safe final disposal. The entire process is documented by Waste Transport Manifests (“WTM”) and Final Destination Certificates (“FDC”).

The treatment of water and domestic effluents produce treatment sludge as its main waste. As all the sludge coming from the different sewage plants is recycled and sent as input to the Timbiras ETE, there is no sludge sent to landfills. The sludge resulting from water treatment is also a potential pollutant. To control this source of contamination, the Client is building a plant to treat the sludge³⁰ generated at the 2 ETAs located in Ponta do Ismael (“PDI”)³¹, aiming for the treatment and environmentally safe disposal of the sludge.

The Client will submit reports on the implementation of the SWMP in the operational units, as well as progress reports on the sludge treatment system in Ponta do Ismael, including the management and final disposal of the treated sludge.

4.3.b.ii Hazardous materials management

The main hazardous waste generated by the Company operations is as follows: i) fluorescent lamps, ii) electronic equipment (telephones, printers, toner cartridges and electronics), iii) cells and batteries, iv) lubricating oil, v) expired chemicals, and vi) packaging of chemicals. This waste is temporarily stored in the units and then sent to companies duly authorized and qualified to process hazardous waste, in accordance with the SWMP of the operational units.

4.3.b.iii Pesticide use and management

The use of pesticides in the Company is restricted to combating pests and disease vectors in operational units. To control the risks of this activity, the Client will review the procedure for Management of Chemicals or draft a procedure expressly banning the acquisition and use of pesticides and Class Ia (extremely hazardous) or Class Ib (highly hazardous) mentioned in the Recommended Classification of Pesticides by Hazard and guidelines to classification by the World Health Organization (“WHO”)³².

4.4 Community health and safety

4.4.a Community health and safety

The main risks and potential impacts of the Project on the health and safety of the community are, among others: i) temporary restrictions on access to third-party properties during works; ii) inconvenience for third parties due to noise and dust in the vicinity of the site; iii) traffic interference during works; iv) increased risk of accidents with third parties in the construction

³⁰ The installation of the sludge treatment system in Ponta do Ismael is part of a Conduct Adjustment Agreement signed with the Attorney General of Manaus.

³¹ The Ponta do Ismael water treatment stations meet 80% of the demand for treated water in Manaus.

³² International Program of Chemical Safety (IPCS). The WHO Recommended Classification of Pesticides by Hazard and Guidelines to Classification: 2009. 2010.

area; v) contamination or flooding of public roads in the event of breakage of sewage or treated water pipes; vi) security risks to the Company teams posed by third parties in vulnerable communities; vii) risks of sexual exploitation of vulnerable persons in construction areas, among others; viii) inconvenience for third parties due to odor from ETAs and ETEs; and ix) inconvenience for third parties due to noise around ETAs, ETEs and treated water and sewage pumping stations.

4.4.a.i Infrastructure and equipment design and safety

The main risks and impacts to potentially affect communities are associated with network expansion and maintenance, and the construction and maintenance of ETAs, ETEs and pumping stations. Operationally, these assets involve a more limited set of risks and impacts, given that pipes are underground, site access is controlled, and noise and odor levels are usually low.

To address the socio-environmental risks and impacts associated with its works, the Company has prepared an Environmental and Social Management Plan for Works and Traffic. This document contains: i) guidelines for construction signs and isolation of areas, ii) criteria and standards for signage and demarcation of work sites, iii) criteria and standards for pedestrian and traffic signs, iv) description of signage materials, v) worker qualification requirements, vi) placement and distance; vii) requirements for construction permits, viii) requirements for construction follow-up by the Company teams, ix) procedures in case of traffic accidents, x) solid waste and effluent management procedures, xi) responsibilities under the waste management plan, xii) classification, handling, storage and final disposal of waste, xiii) wastewater management procedures, xiv) control of atmospheric emissions, xv) environmental education and signage on the site, and xvi) communication actions and mitigation measures for impacts on the local community.

The security risks run by the Company teams working in vulnerable communities are controlled by the *Afluentes* Program, which provides for the previous mapping of leaders and active communication before, during and after works to achieve a “Social License,” thus allowing the Client to operate in the communities.

The cases of breakage of major water pipes and pipes of smaller diameter are within the scope of the ERP. However, to respond to community damage events, the Client will prepare a Damage Survey and Compensation Procedure for Communities Affected by Emergencies.

As to the impacts associated with the operational units, so far there have been no records of complaints by third parties regarding noise and odor.

To control the risks of sexual exploitation during the construction stage, the Client will prepare a Procedure to Combat Sexual Exploitation, Sexual Harassment and Gender-Based Violence, which will be used to train its own staff and outsourced workers. Furthermore, the Client will draft a report with the results of the implementation of the Environmental and Social Management Plan for Works and Traffic.

4.4.a.ii Hazardous materials management and safety

Hazardous materials are generated only within sanitation assets—ETA, ETE, administrative headquarters, and others—and are managed by the SWMP specific to each unit. As construction waste is also managed in this way, there is no exposure of third parties to dangerous materials.

4.4.a.iii Ecosystem services

The Client's operations are entirely carried out in the urban area of Manaus and there is no expectation that ecosystem services will be materially impacted.

4.4.a.iv Community exposure to disease

One of the main indirect impacts of basic sanitation projects is to reduce the transmission of waterborne diseases through the collection, treatment, and adequate final disposal of domestic sewage. It is believed that the Project will contribute to improving public health, inasmuch as sewage systems coverage is extended.

The eventual breakage of sewage collectors or interceptors may cause leaks and the temporary accumulation of waste in the streets, leading to a temporary exposure of passersby to raw sewage, and specifically increasing exposure to water-borne diseases. To prevent this situation, the Company has an OCC, which detects and addresses these events without delay, substantially reducing the risks for communities residing in the affected areas.

4.4.a.v Emergency preparedness and response

The cases of breakage of major water pipes and pipes of smaller diameter are the main scenarios with the potential to affect communities involved in the Project. The ERP contains response actions, and the OCC can readily detect these events, helping to minimize the consequences of all these scenarios. However, the Client will prepare a Damage Survey and Compensation Procedure for Communities Affected by Emergencies to address any losses and damages suffered by the communities disturbed by these events.

4.4.b Security personnel

In order to protect its assets, the Company puts into practice security procedures with outsourced property security teams, in charge of access control and ostensive rounds to check the integrity of gates, padlocks, machine rooms and unit equipment. The assets also have a monitoring camera system (CCTV) integrated into the OCC, which allows for rapid detection of events that pose risks to assets and personnel and prompt response to incidents.

Security guards work unarmed, with the exception of Ponta do Ismael and Baixo I ETAs, which house a robust cabling system and sturdy engines. Since these premises are surrounded by areas controlled by drug trafficking and organized crime, should the use of force be necessary, the Company contacts the Military Police.

Security personnel assigned to the Project attend an integration course and training classes in the following areas: i) property security, ii) access control, and iii) human relations. The minimum qualification requirement for security personnel is the completion of security guard training authorized by the Federal Police, with retraining every 2 years.

To further train security personnel in the responsible use of force, the Client will design and implement training activities grounded on the United Nations Voluntary Principles on Security and Human Rights.

4.5 Land acquisition and involuntary resettlement

4.5.a Overview

Activities to expand sewage and water networks, as well as upgrading water and sewage treatment plants, in some cases may require the expropriation of land and easement areas. Should this be the case, the Attorney General's Office of the City of Manaus, upon request by the Company, analyzes the petition and issues a decree declaring the property is of public utility. In cases where expropriation is required, compensation is calculated in accordance with federal regulations and the practice in the municipality of Manaus.

Although not formally expressed in an internal procedure, the Company gives preference to areas that are unoccupied and have no social function, whether public or private.

So far, nine areas have been requested for the Project, three for expropriation, and the remaining six for easement. These areas were considered unoccupied zones, except for two devoted to commercial use: i) expropriation of a part of the parking space of a commercial building, and ii) a right-of-way in an area of commercial use, specifically the vehicle entry and exit points. In neither case was damage caused to residences, nor was the resettlement or economic displacement of persons needed.

Nevertheless, the Client will build an Involuntary Resettlement and Livelihood Restoration Framework to ensure that these easement areas: i) consider alternative land, prioritizing unoccupied and unused areas to predict or prevent adverse environmental and social impacts, when possible; ii) ensure that the compensation values are equal to or greater than the replacement values of the asset; iii) if necessary, also calculate compensation for affecting temporary or permanent economic activity; and iv) when applicable, establish acceptable conditions for the involuntary resettlement of persons.

4.6 Biodiversity conservation and sustainable management of living natural resources

The Project is entirely located in the urban area of Manaus, where the only conservation unit is the Sumaúma State Park, with a surface area of 53 hectares in the central region of the city. Outside Manaus there are two conservation units, namely: i) the Negro River Ramsar Site, with a

surface area of 12 million hectares to west of the city; and ii) the Key Biodiversity Area of the middle Amazon lowlands, to the east of the city.

Despite the conservation units near Manaus and a small conservation unit in the city, the Project operations are limited to the urban grid; hence, no material impacts on biodiversity are expected. However, to ensure that biodiversity is not affected, the Client is to prepare and implement a Preliminary Alternative Analysis Procedure, which will verify the location of new assets and minimize risks and impacts on biodiversity.

4.7 Indigenous peoples

4.7.a Overview

There are no Indigenous territories, reserves or villages in the concession area, the urban perimeter of the city of Manaus. However, the city has peripheral urban sectors informally called “indigenous neighborhoods” by the local population, in which there is a high concentration of Indigenous persons, or people of Indigenous descent, of different ethnicities.

Among the neighborhoods mapped within the concession area are the following: i) Tarumã, with the sub-neighborhoods called *Comunidade Parque das Nações Indígenas*, *Lírio do Vale*, *Parque das Tribus*, and *Conjunto Habitacional Cidadão 10*; ii) *Redenção*; and iii) *Bairro da Paz*, the three of them located in the west of Manaus; iv) *Bairro Nova Cidade*, in the north; and v) *Bairro da União*, in the south.

The community leaders in these neighborhoods are stakeholders in the *Afluentes* Program, and are actively involved in the Company’s communication, engagement, and social responsibility activities. Therefore, before any intervention in the neighborhoods, the Social Responsibility Team embarks on campaigns to disseminate information, resolve doubts, and promote dialogue with residents, including community meetings with the Company. These activities are always carried out in coordination with communal leaders and respect to local culture and social dynamics. Work and intervention activities in these neighborhoods are only performed once Águas de Manaus is allowed by residents, in line with its Social License to Operate strategy.

The Company also implements social responsibility activities, for example, the *Saúde Nota 10* Program, Roving Health Care, programs to support local entrepreneurship. There are also affirmative actions, such as the Collaborative Biographies Project, a record in book format of five stories of women, including Indigenous women, who are entrepreneurs in situations of socioeconomic vulnerability.

It is worth noting that, as there are no Indigenous territories, reserves or villages, the Company activities in these areas do not require the participation of the National Foundation of Indigenous Peoples (“FUNAI”). In addition, since the Project will not produce negative significant impacts on Indigenous communities, it has not been necessary to originate a Free, Prior and Informed Consent (“FPIC”) process.

4.8 Cultural heritage

The Mocó Reservoir, one of the Águas de Manaus concession assets, is listed as a monument by the National Historical and Artistic Heritage Institute (IPHAN). In 2022 IPHAN presented a request for a Reservoir Conservation and Restoration Project, upon which the Company carried out a detailed assessment of the damages to the building, identifying problems of infiltration, vegetation, cracks, mold, and graffiti, among others.

It is important to highlight that the damage identified in the Mocó Reservoir is the result of prolonged degradation and is not directly associated with the operations by Águas de Manaus. However, as the concessionaire, the Company must protect the value and the conservation of the assets.

To date, no evidence of real or potential impact on material or intangible cultural heritage in the Project areas of influence has been found. However, the Client will prepare and implement a specific procedure for any fortuitous findings of archaeological interest during the works.

5. Local Access to Project Documentation

The documentation relating to the Project can be accessed at the following link: <https://www.aguasdemanous.com.br/>.