

Environmental and Social Review Summary (ESRS) BRK Ambiental Maranhão Project

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

BRK Ambiental - Maranhão S.A (the "Client", the "Company" or "BRK") entered into a 35-year concession agreement with Consórcio Intermunicipal de Saneamento Básico ("CISAB")¹, by virtue of which it will be responsible for distributing treated water as well as collecting and treating wastewater for the municipalities of São José de Ribamar and Paço do Lumiar, both located in the state of Maranhão, in the northeast of Brazil. The Client aims for achieving: (i) 90% treated water distribution; and (ii) 80% domestic wastewater collection and treatment, for about 390,222 people². Financing proceeds will be used to expand and improve the treated water distribution networks and mainly to extend the domestic wastewater treatment and collection networks (the "Project") in Brazil's Legal Amazon.

The Environmental and Social Due Diligence ("ESDD") included interviews with the Client and its team, documentation review, visits to the Project sites and talks with the neighboring communities. Among other aspects, the process involved assessing the following procedures: (i) environmental management; (ii) social impacts and risks control; (iii) health and safety; (iv) community relations; (v) treated water quality; (vi) treated wastewater quality; (vii) water availability; (viii) pollution control; and (ix) social projects.

2. Environmental and Social Categorization and Rationale

As per IDB Invest's Environmental and Social Sustainability Policy, the Project was classified as of Category B because it could generate, among other things, the following risks: (i) changes in rivers water quality; (ii) potential aquifer depletion; (iii) dust creation; (iv) noise generation; (v) increase in local road traffic; and (vi) interferences with the community activities. Those impacts and risks are estimated to have medium-to-high intensity and are considered to be limited to the Project area. Therefore, they can be managed with readily available, feasible measures to be implemented within the proposed transaction.

The Environmental and Social 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) PS5: Land Acquisition and Involuntary Resettlement.

¹ An association of the municipalities participating in the concession.

² Population as informed for the municipalities of Paço do Lumiar and São José de Ribamar in the 2022 population census carried out by the Brazilian Institute of Geography and Statistics (IBGE).

3. Environmental and Social Context

3.1 General characteristics of the Project's site

The municipalities affected by the Project are located near the state capital (São Luiz), with a predominantly urban, low-income informally employed population³. The Project reached 91% coverage with the treated wastewater distribution network and only 34% with the wastewater treatment and disposal systems.

All the water to be distributed to the population is taken from the local aquifer by means of 207 wells. The water distribution system records a current loss rate of 57%. The Company has 34 active wastewater treatment plants ("WWTP"), operating with the support of wastewater pumping stations ("WPS"). The domestic wastewater collection, treatment and disposal systems serve housing units⁴. Wastewater networks to serve the population inhabiting other urban areas are still to be implemented.

The Client is investing in improving the water distribution network with water reservation centers⁵ ("WRC") and a new WTP. However, most sewers are open, running along several streets in the municipalities covered by the Project. This causes groundwater to be polluted, mainly with nitrate.

The communities possibly benefitting from this perceive the Project positively, as water is available where it was not easily accessible before the Project started. Also, there is great expectation around the expanded coverage of the wastewater collection and treatment networks. Wastewater discharged into open sewers is seen as an urgent problem to solve.

3.2 Contextual risks

The main contextual risk is related to illegal water abstraction, which has been controlled by the Client. Because the concession went into effect in 2015 and the wells were put up by politicians and the citizens themselves, the idea of paying for the supply of treated water was resisted. At that point, the illegal abstraction rate was as high as around 70%, so the Client had to launch campaigns which helped shed light on the improvements in the service quality, the network coverage expansion, and the use of a social rate to convince those who resisted the Project. Nevertheless, there is still a strong cultural build-your-own-well tendency leading to illegal water abstraction and water rates rejection, among other things.

The Client has, therefore, resorted to awareness campaigns, network inspections to detect illegal water abstraction, supply suspension of irregular customers, etc. In June 2023, the illegal abstraction rate had dropped to 23%. The Client will continue taking action to reduce illegal water abstraction even further.

³ In São José de Ribamar, the average monthly salary of formal workers was 1.8 minimum salaries (about USD 508.32); however, only 10.22% of the population was formally employed in 2021. In Paço do Lumiar, the average monthly salary of formal workers was 1.7 minimum salaries (about USD 480.08), with only 6.8% of the population formally employed in 2021. Source: IBGE, 2024.

⁴ Residential units and condominiums.

⁵ The water reservation centers (WRC) are operational units located in the highest areas which are fed from supply wells, where treated water reservoirs, treatment systems using sodium hypochlorite for disinfection purposes and sometimes pumping stations, labs and administrative units are set up. The Client is planning to add 8 WRC across the concession area. There are currently six WRCs in operation and one under construction.

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

4.1 Assessment and management of E&S risks and impacts

The Client has proven to meet Brazil's environmental licensing requirements by submitting the corresponding installation and operation environmental licenses, as well as those allowing for groundwater collection. Compliance with all licensing, permits and authorization requirements is guaranteed with the use of special software for environmental licensing management called OneGreen. The system is widely spread across the environmental management of BRK's operations, which makes it possible to manage the requirements, terms and documents linked to the environmental licensing process.

The Client has in place some environmental and social ("E&S") risks and impacts procedures and programs, including: (i) environment, and occupational health and safety in the administrative areas; (ii) guidelines for trench digging and shoring; (iii) legal requirements management; (iv) socioenvironmental work project; (v) service and works signage manual; (vi) environmental licensing; (vii) self-assessment program for the Quality, Health, Safety and Environment (QHSE) and integrated management system; (viii) internal audit program for requirement compliance; (ix) identification and assessment of environmental impacts; (x) checklist of environmental risks and impacts; (xi) non-retaliation policy and consequence management; (xii) emergency readiness and response; and (xiii) leakage control in tanks and reservoirs, etc.

4.1.a E&S assessment and management system

The E&S risks and impacts system currently in place consists of several independent procedures. So, the Client will integrate them into a formal E&S Management System ("ESMS").

4.1.b Policy

The Client will prepare an E&S Impact Management Policy, as part of the ESMS.

4.1.c Identification of risks and impacts

The Client has its own procedure to identify and assess environmental impacts, which consists of an E&S risks and impacts checklist. It lists environmental risks and impacts, assesses the importance of the impacts, and identifies operating controls to mitigate the negative effects.

4.1.c.i Direct and indirect impacts and risks

Some of the main direct Project risks and impacts are: (i) possible aquifer depletion due to excessive water abstraction; (ii) potential soil pollution due to exposure to chemicals; (iii) pipeline rupture and leakage of treated water and effluents; (iv) neighbors disturbance due to noises; (v) neighbors disturbance due to odors from the WTPs; (vi) upset neighbors due to particulate matter created at the work site; (vii) traffic delays near the work areas; (viii) potential pollution of surface water bodies in case of sewer pipe crack; and (ix) direct employment creation.

Some of the Project's main indirect risks and impacts are: (i) indirect employment creation; (ii) reduction of waterborne disease rates; (iii) higher social inclusion of vulnerable communities thanks to access to treated water, etc.

4.1.c.ii Analysis of alternatives

The distribution network side of the Project involves the road network of the municipalities covered by the concession and no alternatives need to be analyzed. The areas where larger units will be set up, like WRCs, WTPs and WPSs, take into consideration the area topography and availability as well as how interference with the local communities can be minimized. The Client will develop a procedure to analyze alternatives that identifies E&S risks and impacts to support the site selection process for the implementation of sanitation assets.

4.1.c.iii Cumulative impact analysis

The Client has not performed any formal cumulative impact analyses. A preliminary assessment has shown that the incremental impacts generated by other projects currently under execution and to be executed in the future within the Project area of influence will not be significant since most expected works will be local, small- or medium-sized, and built in a relatively short time.

4.1.c.iv Gender risks

In Brazil, gender equality was consolidated in its Constitution of 1988⁶, which established that men and women have the same rights and obligations, and prohibited any gaps in salaries, work performance and hiring criteria in terms of gender, marital status, age, and skin color. Nevertheless, challenges remain to reach such equality. Brazil scored 0.72 in the Global Gender Gap Index 2023, which places it as 57th among the analyzed countries. Violence against women remains high. A total of 3,423 women were violently killed in Brazil in 2022; 105 of those incidents happened in the state of Maranhão⁷.

In order to control gender risks, the Client has a Code of Professional Ethics in place which condemns all forms of discrimination, harassment, or violence, and encourages whistleblowing of inappropriate behavior. The code also promotes a positive work environment and establishes zero tolerance for acts of discrimination, harassment or violence based on age, color, race, religion, gender, marital status, family background, sexual orientation, nationality, or disability.

The Client has a Confidential Channel, which is available 24/7 and guarantees anonymity. No retaliation will be tolerated against claimants. The Client will prepare, adopt, and disclose a Policy Against Discrimination, Moral and Sexual Harassment.

4.1.c.v Exposure to climate change

As much as 74% of the Project area presents a high risk of draughts, whereas in the remaining area the risk is moderate. This is worsened by heat waves anticipated in future emission

⁶ Constitution of the Federative Republic of Brazil of 1988.

⁷ National Map of Gender Violence.

scenarios. Moreover, the annual rainfall average for Maranhão in 1979-2022 tends slightly to drier conditions.

Drinking water utilities are sensitive to draughts, which alter water levels in aquifers and reservoirs, thus diminishing surface water availability and groundwater recharge, which, in turn, may lead to shortages in the summer due to a longer hot, dry season. The effects of draughts may make it harder to meet the water needs, thus impacting on facilities operations in the short term or service quality and delivery in the medium and long terms.

Climate change may cause the sea level to rise, which may bring about saline intrusion, both into the coast aquifers and estuaries, thus compromising the quality of the raw water and raising treatment costs.

The Client has a Water Resources Management and Water Safety Plan⁸ with several recommendations to guarantee monitoring and rational use of the available resources, and to deal with climate change risks.

The Project is deemed as aligned with the provisions of the Paris Agreement, based on an analysis in line with IDB Group's Paris Alignment Implementation Approach.

4.1.d Management programs

The Client has in place an extensive amount of programs and procedures to tackle E&S risks and impacts, including: (i) environment, and occupational health and safety in the administrative areas; (ii) guidelines for trench digging and shoring; (iii) legal requirements management; (iv) E&S work project; (v) service and works signage manual; (vi) environmental licensing; (vii) self-assessment program for the QHSE and integrated management system; (viii) internal audit program to assess compliance with environmental permit terms; (ix) identification and assessment of environmental impacts; (x) checklist with environmental risks and impacts; (xi) emergency readiness and response; (xii) leakage control in tanks and reservoirs; (xiii) chemicals management, and (xiv) noise and vibrations control, etc. These procedures will be integrated into the ESMS.

4.1.e Organizational capacity and competency

The Client has a Quality, Health, Safety and Environment (QHSE) Management Department that handles the Project's E&S risks and impacts. It is as well supported by the corporate area and employs the following 23 professionals: (i) a QHSE female coordinator; (ii) an environmental female supervisor; (iii) an occupational safety male supervisor; (iv) a female occupational nurse; (v) two environmental analysts; (vi) four lab technicians; (vii) someone in charge of the water and sewer operation; (viii) a lab assistant; (ix) five assistants for the water and sewer operation; (x) three occupational safety technicians; (xi) a clerk; and (xii) two apprentices.

⁸ NHC Brasil Consultores. Water Resources Management and Water Safety Plan for the Municipalities of Paço do Lumiar and São José de Ribamar, state of Maranhão. 2022.

4.1.f Emergency preparedness and response

The Client has in place an Emergency Response Plan (ERP), including: (i) objectives; (ii) scope; (iii) references; (iv) concepts and definitions; (v) responsibilities; (vi) general requirements for preparing emergency response plans; (vii) training and emergency drills; (viii) alerts and evacuation; (ix) breakdown of the roles in the emergency response plan; (x) additional content of the emergency response plans; (xi) emergency response plan update; and (xii) emergency-response-related inspections.

The ERP also has an annex with emergency operation scenarios, as well as supplementary procedures covering: (i) emergency preparedness and response activities; (ii) procedures to prevent leaks of tanks and reservoirs; and (iii) explosion and fire prevention measures.

4.1.g Monitoring and review

The Client has a specific procedure for conducting internal audits assessment of compliance with environmental permit commitments and the QHSE system. System OneGreen monitors compliance with the provisions in the environmental licenses and water use permits. Self-assessment reports on the QHSE system are prepared annually, in which conformities, non-conformities and observations are included.

The Client regularly monitors the quality of the water in the supply wells, of the treated water and the distribution network. The results are used to identify actions to improve the water abstraction, treatment, and distribution systems.

4.1.h Stakeholder engagement

At the beginning of the concession in 2015, the Client mapped the stakeholders; the information is kept up to date by the Social Responsibility team. BRK holds regular meetings with the community to inform them and the authorities about the works and the E&S actions. Additionally, every week the social communications, works, and engineering, operation and maintenance teams prepare a plan to inform the communities on the activities planned for the following week. This is done with loudspeakers, digitally over WhatsApp, through text messages to the contacts in the concessionaire's database, with banners on the Client's website, publication of weekly schedule on printed newspaper, direct contact from the social dialog team with the community leaders and notifications to condominium owners association.

4.1.i External communication and grievance mechanisms

The Project has in place toll-free telephone channels to receive grievances, suggestions, and requests⁹.

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⁹ 0800-771-0001, available 24/7 and (11) 99988-0001, available for WhatsApp messages during business hours.

the concessionaire's database, with banners on BRK's website, publication of weekly schedule on printed newspaper, direct contact from the social dialog team with the community leaders and notifications to condominium owners associations.

4.2 Labor and working conditions

4.2.a Working conditions and management of worker relationships

The Client employs 334 workers, 272 (81%) of whom are men and 62 (19%) are women. Out of them, 328 workers (98%) were recruited in the state of Maranhão.

4.2.a.i Human resources policies and procedures

Work relations are governed by a specific law in Brazil¹⁰. The Company complies with all the applicable legal requirements. Work relations within the Company are handled through a Workforce Management Rulebook, which offers guidelines, procedures, and responsibilities to be observed in the processes involving staff management. The rulebook is linked to: (i) the code of conduct and professional ethics; (ii) the pay policy; (iii) the selection and recruitment rule; (iv) the conflict-of-interest rule; and (v) anti-bribe and anti-corruption policy.

4.2.a.ii Working conditions and terms of employment

The working conditions are based on the Brazilian labor legislation, as well as on the arrangements and collective bargaining agreements of the trade unions workers are associated with.

4.2.a.iii Workers' organizations

As per the Code of Professional Ethics and Conduct, the Company respects the workers' rights to join trade unions and their collective agreements, ruling their terms of employment. A total of 141 workers are currently union members, who account for 42% of all the workforce.

4.2.a.iv Non-discrimination and equal opportunity

The Company's Code of Professional Ethics and Conduct explicitly prohibits any form of discrimination based on age, color, race, religion, gender, marital status, family background, sexual orientation, nationality, or disability.

The Client has in place some specific diversity and inclusion programs, one of which is "Programa Diversifik", which aims for 40% of women in leadership positions and 30% of women of the overall workforce by 2024. Moreover, the program and other inclusion initiatives promote opportunities and professional integration of people of African descent, with disabilities and from the LGBTQI+ collective.

The Company carries out some projects and actions to promote diversity inside and outside the Company. LIBRAS, Brazil sign language, is taught to BRK's employees in client-facing positions, which resulted in 80 of them serving deaf clients at BRK's customer care centers.

¹⁰ Decree Law No. 5,452 of May 1, 1943. Labor Laws Consolidation.

The career acceleration program for Afro-descending women as well as the professional program for women (Venezuelan refugees, socially vulnerable Brazilians, Afro-descendants, and Indigenous population) offering training as pipefitters or plumbers are other examples of how the Company makes efforts to make inclusion and diversity a reality.

The selection and recruitment processes also consider the principles of diversity and inclusion. The Client has a Selection and Recruitment Rulebook with guidelines seeking to preserve equality, fight discrimination and offer equal opportunity for all candidates.

4.2.a.v Retrenchment

The Project does not expect collective dismissals. The Client observes Brazilian legislation for staff employment termination, which includes, among other measures: (i) the employee must be given a 30-day notice period, with certain time to seek new employment; (ii) a fine of 40% of the balance of the severance pay fund (FGTS, for its acronym in Portuguese); (iii) the worker has the right to withdraw the balance in the FGTS; (iv) the employee has the right to collect the proportion of their annual leave entitlement; (v) the employee has the right to receive the proportion of their annual statutory bonus; (vi) the employee is entitled to receive unemployment benefits for a specific period; (vii) the employee shall receive a recommendation letter; and (viii) the employee shall be guided on relocation, among other benefits.

4.2.a.vi Grievance mechanism

The Company has a Confidential Channel, which is operated by an independent third party, to receive grievances, reports, suggestions, and requests. The channel, which allows anonymity, is permanently available and can also be accessed via the Internet, a toll-free number or e-mail.

In 2021 and 2022, the Confidential Channel received 40 reports of different nature, 80% of which were related to behavioral issues, 8% to possible conflicting relationships, 5% to incompliances with safety standards and 7% to other issues. All reports were investigated; 25% of them were considered appropriate and 28% partially appropriate; five disciplinary actions were taken. Feedback and training sessions were also applied.

The Code of Professional Ethics and Conduct includes disciplinary measures, which range from a verbal warning to work contract termination, legal actions for damage recovery and, if applicable, reporting the fact to the appropriate authorities.

4.2.b Protecting the workforce

The Company's Code of Professional Ethics and Conduct prohibits child labor and forced labor. Also, the Client has a Code of Ethics and Conduct for Suppliers, which obliges the latter to prevent and fight the use of compulsory or forced labor, child labor, and other questions related to pedophilia, discrimination, moral or sexual harassment; they shall as well monitor their value chains in this regard.

The Client has in place a Policy against Modern Slavery and People Trafficking, which takes the following into consideration: (i) objectives; (ii) scope; (iii) general considerations; (iv) links; (v) guidelines; (vi) record control; (vii) final considerations; (viii) version control and history; (ix)

approvals; and (x) annexes. The policy seeks to define the guidelines to prevent and fight modern slavery and people trafficking when running Company business.

4.2.c Occupational health and safety

Health and safety matters in Brazil are enforced by 37 regulations from the Ministry of Labor. These regulations define the occupational health and safety requirements to be observed by all the companies in their operations.

The Company is obliged to comply with all the regulations and submitted several related procedures; for example, (i) incident investigation and reporting; (ii) personal protection equipment (“PPE”) management; (iii) work safety planning; (iv) reward and punishment policy (zero tolerance and golden rules); (v) PPE checklist; (vi) criteria for assessing suppliers’ documentation; (vii) third-party risk assessment; (viii) workplace risk assessment; (ix) guidelines to prepare a risk management plan (“RMP”); (x) the Project’s safety planning; (xi) fleet safety; and (xii) health and safety team staffing, among others.

The Client records all health and safety incidents, even those that were not considered accidents. This initiative is aimed at mapping and dealing with the risks before they turn into more serious issues. Two instances of lost time accidents and four no lost time accidents took place in 2022. One instance of lost time accidents and two no lost time accidents occurred until August 2023. The rate of lost time accidents was 1.61 in 2022 and 1.31 until August 2023. The accident rates correspond to incidence rates of 17.96 in 2022 and 8.98 in 2023 and are lower than the average incidence for the sector of 22.47¹¹.

4.2.d Provisions for people with disabilities

Brazil has a specific law¹² to guarantee the inclusion of people with disabilities in the workplace. This law requires that companies with between 201 and 500 employees shall cover 3% of their positions with rehabilitated beneficiaries of the National Social Security Institute or with people with disabilities. The Client has currently 11 employees with disabilities, which accounts for 3.29% of its workforce.

4.2.e Workers engaged by third parties

The Company has 326 workers engaged by 13 external companies to perform ancillary activities and services (guards, supervisors, assistants, cleaning staff, drivers, builders, plumbers, general services assistants, etc.).

The Client supervises the outsourced labor agreements to guarantee that they comply with the requirements imposed by Brazilian labor legislation, including: (i) environmental, health and safety standards to hire third parties; (ii) the existence of an environmental, health and safety manual for hired companies; (iii) the standard to assess third party risks; (iv) the criteria to analyze documentation from hired third parties; (v) the standard to assess the suppliers’ performance, etc.

¹¹ Ministry of Social Security. Work accidents indicators, according to the National Classification of Economic Activities, Brazil, 2020.

¹² Law N°. 8,213 of July 24, 1991.

4.2.f Supply chain

The Client has in place a Code of Ethical Conduct for Suppliers, which requires hired companies to manage the economic, social, labor, tax, and environmental risks in their supply chains to guarantee business continuity. This code comprises the following sections: (i) introduction; (ii) purpose and values; (iii) scope; (iv) compliance with laws, rules and regulations; (v) relations with suppliers; (vi) employee development; (vii) positive work environment; (viii) unfair competition; (ix) conflict of interests; (x) gifts, presents, entertainment and hospitality; (xi) social media; (xii) environmental, social and governance management; (xiii) human rights; (xiv) environment; (xv) political activity and freedom of association; (xvi) work practices; (xvii) secrecy and confidentiality; (xviii) information transparency; (xix) voluntary commitment; (xx) communication of changes; (xxi) legal measures against violations to the code; (xxii) modifications; and (xxiii) disclaimer to the reader.

4.3 Resource efficiency and pollution prevention

4.3.a Resource efficiency

In 2022, almost 47% of the power produced in Brazil came from renewable sources¹³. Between 2021 and 2022 the Company consumed 19,752,750.80 and 17,992,796.37 Kwh/year, respectively. Between January and August 2023, the accumulated power consumed was 12,027,770.13 Kwh. Out of the above, 53 % of the power was consumed by low-voltage operation units, whereas the rest related to high-voltage operation networks.

The Project is supplied power from the local electricity concessionaire. However, the Client made investments and established an agreement with a 4 MW solar power plant¹⁴, which compensates 80% of the consumption of the low-tension operation units. Moreover, the Project has generators, which are used in case of power cut-offs.

In order to optimize power consumption, the Company has an automated system to control pump operation, called SCADA¹⁵, which monitors operation in real time, detects failures and schedules operation to optimize the consumption of power.

4.3.a.i Greenhouse gases

The Company will map greenhouse gas emissions and track the results.

4.3.a.ii Water consumption

From January to August 2023, the Project produced about 3,225,000 m³/month on average and billed about 1,287,000 m³/month in the same period (which represents only 40%). To solve this problem, the Company is implementing a Loss Reduction Program with the following components: (i) installation of meters in all production wells; (ii) inspections for leaks in the water distribution network; (iii) sectorization of the water distribution networks; (iv) recovery of water storage reservoirs; (v) tiered reduction of water flows into the network during the night; (vi) fight against illegal connections; (vii) installation of water meters for consumers; and

¹³ Empresa de Pesquisa Energética. 2024.

¹⁴ Agreement executed between Athon Energia and Matões photovoltaic power plant.

¹⁵ Supervisory Control and Data Acquisition.

(viii) regular update of the consumers' database. The Company seeks to cut losses to 25% with these actions, as expected in the concession contract.

4.3.b. Pollution prevention

The Company is currently operating 34 WTPs, which are distributed across the concession area and serving 34% of the population. The main technology used for treating wastewater includes upflow anaerobic sludge blankets (UASBs). The treated effluents are periodically analyzed for compliance with the Brazilian standards¹⁶. The tests performed by the Client reveal that the conditions are acceptable for most of the parameters analyzed, except for the ammonium nitrogen concentrations. In order to guarantee that the national standards for treated effluents are complied with at the new WWTPs, the Client will prepare and implement a compliance plan to meet the requirements of CONAMA Resolution N°. 430/2011.

The Project is committed to supplying water in quantity and quality that are suitable for the consumption by the population. The Company runs its own (and outsources) treated water lab tests for compliance with the Brazilian potability standards¹⁷. Treated water tests revealed that the concentrations were adequate for most parameters, except for the maximum permissible values of nitrate and aluminum. The excessive concentrations of nitrate are due to *in natura* wastewater runoff and infiltration into the soil, which pollutes the aquifer; the aluminum exceedances are associated with the geochemical composition of the soils in the Project area. In order to correct the deviations seen in the nitrate concentrations, the Company will prepare and implement a Supplementary Treatment Plan to guarantee all regulatory requirements are met.

Given the need to extend the sewage service coverage, the Company's plans include setting up a new wastewater treatment plant, WWTP Cajueiro, which will initially be able to treat 60 l/s, which will increase access to sewage services from the current 34% to 45% by late 2026. A second stage will be initiated later on to increase the treatment capacity of the plant by another 60 l/s. This increase will extend the sewage service coverage to 49% in 2027.

Other initiatives to extend the sewage service coverage include remodeling WWTPs Lima Verde and building WWTP Centro de Ribamar, expected for completion in 2027 and 2028, respectively. Further investments will be necessary to reach the sewage service coverage goal of 80% of the population.

4.3.b.i Waste

The Company has a Project-specific Solid Waste Management Program (SWMP), comprising: (i) general information; (ii) definitions; (iii) legal aspects; (iv) geographic location of the business; (v) description of the business; (vi) current diagnosis of waste management of the business; (vii) waste management concept; (viii) actions to reduce waste generation; (ix) conditioning, identification and staging; (x) waste transportation; (xi) waste treatment and disposal; (xii) emergency response plan; (xiii) training; and (xiv) final considerations.

¹⁶ CONAMA Resolution N°. 430 of May 13, 2011. Ministry of Environment. Brazil.

¹⁷ GM/MS Resolution N°. 888 of May 4, 2021. Ministry of Health. Brazil.

The Project waste hub is located at the water reservation center N° 9 ("WRC 09")¹⁸. Some of the main waste types generated by Project assets are: (i) non-hazardous solid waste from cleaning activities (toilets, product containers, WWTP sludge, filter sand); (ii) civil construction waste from infrastructure expansion and maintenance works; and (iii) hazardous wastes, including chemicals used in labs, batteries, fluorescent lamps, electronic equipment, etc. Given the small volume generated at the operation units, waste is transported from the units where it is generated to the waste management hub at RC09 and later to companies with authorizations and licenses for waste transportation and disposal. Part of the non-hazardous waste and civil construction waste is recycled. The Company controls waste transportation and disposal by issuing specific documents, including waste transportation manifests and solid waste final disposal certificate.

Hazardous waste (chemicals used in the Company's test labs, fluorescent lamps, batteries, home appliances and others) is classified and temporarily stored at the waste hub in RC09. When a reasonable volume is reached, waste is transported to its disposal site by companies with the appropriate licenses to transport, handle and dispose of hazardous waste.

The Client is currently analyzing alternatives to use the sludge from the WWTPs, including their use in the production of construction aggregates and to use it in agriculture. The Company will prepare an Alternatives Assessment for the Reuse of Sludge from the WWTPs.

4.3.b.ii Hazardous materials management

The Client has a specific procedure to manage chemical substances, covering the following topics: (i) general requirements; (ii) labeling and identification; (iii) safety data sheet for chemical products; (iv) storage and stocking; (v) handling and safety; (vi) chemical substances unloading procedures; (vii) transportation; (viii) emergency response; (ix) disposal of expired or used chemical substances, or chemically-contaminated material; (x) licenses to purchase, use, store and transport controlled substances; (xi) critical analysis and monitoring; and (xii) training.

Sanitation assets have specific areas to store chemicals, flammable materials, and waste, organized according to product compatibility. Storage areas have containers to contain spills in case of leakage or spillage.

4.3.b.iii Pesticide use and management

The Project does not use pesticides in its operations.

4.4 Community health, safety, and security

4.4.a Community health and safety

The Project may potentially generate the following issues for community members: (i) temporary traffic interruption during network maintenance or expansion activities; (ii) increased levels of particulate matter; (iii) increased noise levels; (iv) odor generation at the WWTPs and WPSs; (v) increased risk of accidents involving pedestrians around the work areas;

¹⁸ The water reservation center N° 9 ("WRC09") centralizes the Company's solid waste management actions.

(vi) possible structural damages to property near the sanitation works; (vii) property floods in case pipeline rupture, etc.

4.4.a.i Infrastructure and equipment design and safety

The procedure to control vibrations and noise emissions includes taking noise measurements and making preliminary inspections in neighboring properties in order to establish the possible impacts. The procedure, which includes measures to control noises and criteria to monitor them, highlights the role of the communication channels with the communities to identify, investigate and respond to residents' grievances.

The air emissions control procedure involves actions like: (i) wetting soils at construction sites or in places where infrastructure expansion or maintenance works are carried out; (ii) limiting traffic in unpaved streets; (iii) covering aggregates during transportation and at staging points; (iv) periodically cleaning and maintaining equipment and vehicles; (v) using methane burning and collection system at stations with UASBs; and (vi) adopting measures to control the emission of odors. The Client's communication channels and teams are prepared to receive, treat, and respond to third-party grievances.

In sanitation networks expansion or maintenance works, the Company implements a procedure to prevent people from being run over by heavy machinery. This sets forth requirements to protect employees, contractors and third parties from being run over or crashed by heavy machinery in operation.

In order to reduce vehicle accidents, the Client has a Fleet Management Manual and a Works Signage Manual, which give road safety guidelines and instructions for putting up safety signage to control vehicle and third-party accident risk. In order to integrate the risk and impact management actions in the worksites, the Client will prepare an E&S Works Management and Communication Plan.

4.4.a.ii Hazardous materials management and safety

The Project's sanitation assets store modest amounts of hazardous materials, which are managed within the facility with PPE, material safety datasheets, safe storage and isolation of chemical products, fuels, and flammable materials, etc. Hazardous products are found in small volumes and do not represent high risk for the communities in the Project area.

Hazardous waste is segregated at specific points within the sites, to be further transported and disposed of in the terms of the SWMP. No risk of damage is seen in connection with such waste for the communities near the sanitation assets.

4.4.a.iii Ecosystem services

The municipalities within the concession area are surrounded by estuaries where seafood collection and artisanal fishing occurs; this corresponds to provisioning ecosystem services that supply food for the people in the Project's area of influence. In turn, the aquatic ecosystems depend upon appropriate water quality. The assessment of water quality data in rivers that receive the Project's¹⁹ treated effluents showed that these do not create significant changes to

¹⁹ Comparison of water quality measured at sampling outlets upstream (or before) or downstream (or after) the discharge point.

water quality. However, the data available indicates that the water in these rivers is already degraded regardless of the discharged Project effluents, due to diffuse discharge of wastewater *in natura* and other soil and water pollutants in the municipality's road network.

The Project does not cause any deterioration in water quality of the rivers receiving treated effluent discharges and, therefore, none is expected in the provisioning ecosystem services.

4.4.a.iv Community exposure to disease

According to the Brazilian Institute of Geography and Statistics ("IBGE")²⁰, child mortality rates in 2022 in São José de Ribamar and Paço do Lumiar amounted to 16.59 and 13.91 per 1,000 children born alive, respectively, whereas diarrhea-caused hospitalizations were 0.7 and 0.6 per 1,000 inhabitants, respectively. These figures show, to a large extent, the inefficiencies in basic sanitation within the concession area; especially, the direct discharge of domestic wastewater *in natura* onto the accesses in the concession area.

The gradual expansion of the sewage system associated with the Project shall positively impact those rates, especially the child mortality rate and the waterborne disease incidence.

The Project does not generate significant risks of introducing disease into the community.

4.4.a.v Emergency preparedness and response

In its Emergency Response Plan, the Client includes scenarios of pipeline rupture or damage, and reservoir rupture. These are emergency situations that could affect members of the communities that reside in the vicinity of water pipes and reservoirs. For this reason, specific communication and emergency response actions are required should they occur. Therefore, the Client will review the Emergency Action Plan to include communication and response actions for the communities affected by reservoir and pipeline rupture and leakage.

4.4.b Security personnel

The Client hires armed security personnel for its administrative offices and is implementing automatic security systems in its facilities. Nevertheless, the Company will prepare a Security Plan with provisions to guarantee that private security services providers respect human rights while performing their duties.

4.5 Land acquisition and involuntary resettlement

4.5.a General aspects

Under the terms of the concession contract, the Client can assign certain areas to set up sanitation assets. CISAB and the municipal authorities in the concession area are responsible for issuing municipal legislation to assign the public property for the Project or prepare expropriation decrees covering the areas of interest. The Company is responsible for the expropriations, including compensating the affected parties. So far, the areas assigned for

²⁰ IBGE. Cities. 2024.

asset expansion have been public lands, and to date no expropriation of land occupied by third parties²¹ was carried out.

4.5.a.i Project design

The Client will prepare and implement a procedure to analyze alternatives to support the selection of sites for the basic sanitation assets, like the WRCs, WWTPs and WPSs, in order to minimize the need for expropriations or administrative easements in areas occupied by third parties.

4.5.a.ii Compensation and benefits for displaced persons

The Client will prepare an Involuntary Resettlement and Livelihood Restoration Framework to be implemented in case it is necessary to expropriate privately owned property or land occupied by vulnerable communities.

4.5.b Displacement

The Project may generate physical and economic displacement in case it is necessary to expropriate property. Each case will be considered in the light of the Involuntary Resettlement and Livelihood Restoration Framework.

4.6 Conservation of biodiversity and sustainable management of living natural resources

Even though there are two sustainable conservation units²² and a Ramsar site²³ within the concession area, the Project is fully developed in urban areas and modified habitats; therefore, no impacts are expected on biologically sensitive or critical habitats. However, if sanitation assets or networks were to be expanded into conservation units, the Client will prepare procedures to: (i) analyze alternatives to reduce potential impacts on the biodiversity; (ii) assess risks and impacts on biodiversity; and (iii) prepare environmental management and biodiversity monitoring plans.

4.7 Indigenous peoples

The Project will not affect Indigenous peoples because there are no Indigenous reserves or *quilombola* (of slave descent) communities in the area.

4.8 Cultural heritage

There are 17 archeological sites in the concession area, and no protected historical heritage²⁴. Even though there is no indication of the Project interference with historical, archeological, or immaterial heritage, the Client will prepare an Archeological Chance Finds Procedure to be used in case of unexpected finds when the new sanitation networks and other assets start operating.

²¹ The land occupied by third parties includes private property, and also areas that are informally occupied by vulnerable communities.

²² Itapiracó Environmental Protection Area (EPA) and Upaon-Açu/Muritiba/Rio Preguiça EPA.

²³ Ramsar site: Amazon Estuary and its Mangroves.

²⁴ Protected buildings due to their historical importance.

5. Local Access of Project Documentation

The documentation related to the Project is available at:

<https://www.brkambiental.com.br/maranhao/quem-somos>