Environmental and Social Review Summary

1. Overview of Scope of IDB Invest E&S Review

The focus of the environmental and social review is to ensure that the Client's operations in Brazil conform to the IDB Invest's Sustainability Policy and, where appropriate, propose actions to close any potential compliance gap in the form of an Environmental and Social Action Plan (ESAP). The E&S review will examine the potential environmental and social impacts the Project may have on the city and residents of Belém, Brazil

The IDB Invest E&S specialist conducted a short site visit from April 23rd to April 26th. The E&S specialist reviewed the projects key environmental and social management documents such as the *Plano de Meio Ambiente*. The local water board was consulted as well as a sample of business owners.

2. Environmental and Social Categorization and Rationale

The Project has been classified as a Category B project, according to IDB Invest's Sustainability Policy, since it can produce low-to-medium magnitude negative impacts. The main E&S risks identified are related to work and labor conditions, efficient use of resources, contamination prevention, health and community safety, traffic management,² and potential cultural heritage impacts. Therefore, the Project triggers the following IFC performance standards: Assessment and Management of Environmental and Social Risks and Impacts (PS1); Labor and Working Conditions (PS2); Resource Efficiency and Pollution Prevention (PS3); Community Health, Safety and Security (PS4); and Cultural Heritage (PS8).

IFC PS5, PS6, and PS7 do not apply since the Project will not produce any relevant impacts on biodiversity conservation or natural habitats, is not located near indigenous territories and will not affect any indigenous community. Further, the Project will not require any involuntary resettlement.

3. Environmental and Social Context

The Project will be implemented in the northern Brazilian city of Belém located in the state of Pará. Belém is situated at the confluence between two large rivers, the Río Guamá and the Río Acará which feed into the Amazon river basin. The city has a total population of around 1.4 million and a metropolitan area of around 2.2 million. Belém is located about 1,200 km from Manaus, Brazil and thus is greatly influenced by its surrounding jungle and forest environments

In 2015, the State Water and Sanitation company COSANPA (*Companhia de Saneamento do Pará*), awarded a public bid to a Spanish led consortium called AGUAS DO GUAMÁ for the design,

¹ Additional documents that were reviewed include: Plano de Qualidade COPASA, Plano de Segurança COPASA, Relatoria de Funcionários COPASA; Plano de Gestão Segurança e Saúde Ocupacional, Organograma Belém COPASA

² Traffic management plans will be required however due to the method of pipe replacement, minimal to no disruption in traffic patterns should occur.

construction and operation of services aimed at increasing public water supply and creating a more efficient water delivery system. Currently around 70-80% of the water supplied to the city's population is lost due to broken pipes, inefficient water system designs, aging infrastructure, and illegal water connections, among many other problems. The current system has around 1,253 km that are considered obsolete including pipes made of asbestos.

AGUAS DO GUAMÁ, the Client, has specific aims to: (1) Register old and new clients to the network; (2) replace aging and/or obsolete pipes; (3) install new residential and commercial meters; (4) re-organize the water sectors in the city; (5) and implement a new system of control and operations. The replacement of aging pipes will occur with a non-destructive method which does not require major civil works. The method opens a small excavation at the entry point and pushes new tubing through the system without the need for excavating large areas. The method will be used to replaced 138 km of aging pipes, as well as 50 km of new pipes for a total of 187km. The remaining works will replace aging asbestos pipes using the same non-destructive methodology. The method being used greatly reduces the environmental and social impacts of older practice.

Operations for the Project have not yet begun. The Client has a small number of staff stationed in Belém to conduct preparatory analyses before construction begins and contracting of additional staff will be required.

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 an environmental and social management system (ESMS) called *Plano de Gestão Ambiental*. The client's ESMS contains all of the elements typical of a IDB Invest complaint system. The *Plano de Gestao Ambiental* includes procedures for managing solid waste, training programs for staff, monitoring and evaluation of environmental and social risks, and plans for potential emergencies. In addition to this, the client's ESMS contains a well-developed flow chart for how the plans are managed within the system and a good Occupational Health and Safety plan called, *Plano de Gestão Segurança e Saúde Ocupacional*.

The Client has policies that detail its mission, values, and position towards the environment as well as other similar commitments. Each policy addresses a specific commitment to sustainability throughout the Client's management system.

The local and national environmental agencies do not require an ESIA for this project however the client is developing specific management plans to control all environmental and social risks.

a. Identification of Risks and Impacts

The Client's ESMS can detect and manage risks and impacts originating from the works that are being planned. The procedures are contained in the *Identificação de Perigos Riscos e Impactos Ambientais* and are incorporated into the ESMS.

b. Management Programs

The Client has a series of environmental health and safety management plans that aim to mitigate the Project's associated risks.

- 1. Solid Waste Management (Gerenciamento dos Resíduos Sólidos).
- 2. Health and safety in the workplace (*Plano de Gestão Segurança e Saúde Ocupacional*)
- 3. Contractors management (*Plano de Gestão da Qualidade*)
- 4. Emergency responses management (*Plano de Atendimento Às Emergências*)
- 5. Procedures for noise reduction.

The client will need to create additional plans to comply with the IDB Invest's Sustainability Policy such as: a stakeholder engagement plan, grievance mechanism, a traffic management plan and a security plan. These plans will be included in the ESAP as action items.

c. Organizational Capacity and Competency

The ÁGUAS DO GUAMÁ environmental team, is composed of several staff members that cover occupational health, environment, and social themes within the project. The organigram is well designed to allow for the environmental team to have autonomy to suggest and make changes needed in order to comply with local and international environmental regulations but also to identify and manage environmental and social risks.

d. Emergency Preparedness and Response

The operations have a series of emergency procedures, as they relate to worker safety and how to receive emergency care in the event of an accident. Although each contractor will also have its own set of emergency procedures and plans, all plans will be governed by the emergency plans that the Client applies in Brazil, in order to conform to IDB Invest E&S policies.

e. Stakeholder Engagement

The Client currently does not have a stakeholder engagement plan or procedure, nor do they have a grievance mechanism in operation for this project. Both a stakeholder engagement plan and grievance mechanism will need to be developed in order to comply with the IDB Invest Sustainability Policy. These actions will be included in the ESAP.

4.2 Labor and Working Conditions

a. Working Conditions and Management of Worker Relationships

There are currently no works for the project. However, the client does have a well-developed contractor management system that includes human resource policies and procedures to manage environmental social risks as well as labor risks. Contractors will be required to abide by the client's ESMS and will report directly to the environmental and contractor managers. Accidents and incidents will be tracked by the contractor and reported back to the client to ensure that contractors follow all procedures around safety and security in the workplace. In addition, the client's policies include will need additional information to include procedures around freedom of association, worker's grievance mechanism, and a non-discrimination policy. These policies will be revised an included in their overall contractor management policy and added as an action item on the ESAP

b. Occupational Health and Safety (OHS)

The Client has an OHS management system, capable of detecting risks within the subcontractor pool. The system, records and manages all safety accidents including near misses, loss time, and fatalities.

The OHS system will meet international requirements on handling and disposing of dangerous material such as asbestos when replacing old piping. Asbestos is classified as a Class I – hazardous waste in Brazil and will be disposed of according to local laws. The procedures will need to be detailed in a revised version of the OHS management system and an action item in the ESAP.

c. Workers Engaged by Third Parties

Contractual agreements with workers engaged by third parties are obligated to follow the same environmental and health and safety policies and procedures set out by the Client. Contracts with the contractors and subcontractors include the need to follow all provisions set out in the environmental licenses obtained by partner COPASA, as well as penalties for failing to comply with the latter.

4.3 Resource Efficiency and Pollution Prevention

a. Resource Efficiency

Greenhouse Gases

There are currently no ongoing works for this proposed project. The client will work with IDB Invest to prepare a GHG calculation once final plans are developed.

ii. Water Consumption

The projects purpose is to efficiently deliver water to Belem's residents and commercial enterprises. ÁGUAS DO GUAMÁ itself will consume water in its offices and it contractors for the works. Consumption will be monitored by ÁGUAS DO GUAMÁ.

b. Pollution Prevention

i. Waste

The company has an effective waste management policy. Subcontractors are required to comply with the client's own policy and terms of disposal for all waste materials. In addition, ÁGUAS DO GUAMÁ has hired a third party licensed waster collection company that follows local laws for waste disposal.

AGUAS DO GUAMÁ has instituted a set of measures to reduce waste produced through a company-wide recycling program once other means of reducing waste have been exhausted.

c. Hazardous Materials Management

Hazardous materials are also managed by a third-party company. The contractual agreements require the disposal company to have an effective ESMS and the disposal of any hazardous materials is monitored by the Client through its own ESMS system. Old piping containing asbestos will be disposed of according to Brazilian law through the client's third-part contractor. The client has a standard procedure for monitoring contracts and agreements to ensure environmental and social compliance.

4.4 Community Health, Safety and Security

The ESDD identified two main community health and safety concerns: (1) Dust emitted during the construction phase. Standard practices are employed to control dust particles during construction.

This will be detailed further in the *Plano de Gestao Ambiental*; (2) Noise pollution. The *Plano de Gestao Ambiental* has a mechanism to reduce noise during construction which contractors must adhere to.

In addition to these concerns, ÁGUAS DO GUAMÁ will need to develop a grievance mechanism in order to comply with IIC Sustainability policy. This will be included as an action item in the Environmental and Social Action Plan (ESAP).

a. Security Personnel

The client does not currently have procedures for security of the facilities or construction sites and will need to be created. The new plan will be included as part of the revised contractor management.plan and all contractors will be required to adhere to these provisions. An action item for this will be included in the ESAP.

4.5 Land Acquisition and Involuntary Resettlement

No individual or group will be required to relocate or be resettled as a result of this project.

4.6 Biodiversity Conservation and Natural Habitats

This project will not impact biodiversity or any natural habitats.

4.7 Indigenous Peoples

This project does not impact indigenous people in any way.

4.8 Cultural Heritage

The client currently does not have a chance find procedure. This will be needed as an integrated part of the ESMS. An action for this item will be included in the ESAP.