

Environmental and Social Review Summary (ESRS)

Improving Waste Management and Resource Efficiency in Brusque, Santa Catarina – Brazil

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

The Ecotriagem LTDA company (the “Client” or “Company”) has requested financing for the construction, maintenance, and operation of a Materials Recovery Facility (“MRF”) in the City of Brusque, State of Santa Catarina, Brazil (the “Project”). The materials to be recovered at the MRF include plastics, paper, Tetra Pak cartons, and ferrous¹ and nonferrous² metals. The MRF will be built within an existing private Waste Management Central (“WMC”) operated by the Recicle Catarinense de Resíduos LTDA company (the “Operator”). The WMC will be operated and maintained by the Operator’s teams and is considered an Associated Facility (“AF”).

The Environmental and Social Due Diligence (“ESDD”) was conducted in October and November 2024 and included meetings with the client and a review of documents, including an ESDD report on the Project prepared by an independent consultant.

The ESDD process examined the availability of documents related to the Project’s commitment to human rights and its zero-tolerance policy against reprisals. The Client will develop: i) a Human Resources Policy, ii) a Human Rights and Anti-Harassment Policy; and iii) Grievance Channels with explicit provisions ensuring respect for human rights, including: i) compliance with labor laws, ii) diversity and inclusion; iii) equal opportunity; iv) ban of child labor and labor analogous to slavery; v) zero tolerance for reprisals; and vi) other provisions. These documents will cover the Project’s policies and procedures toward human rights protection and guarantee a safe environment for stakeholders to express their concerns without fear of retaliation.

2. Environmental and Social Classification and Rationale

In compliance with IDB Invest’s Environmental and Social Sustainability Policy, the project has been classified as category B as it may generate the following impacts and risks, among others: i) worker accidents; ii) soil contamination; iii) underground water contamination; iv) traffic accidents; v) risks of noncompliance with labor and health, safety, and security requirements in the supply chain; vi) vehicular accidents; vii) loss of biodiversity; and viii) leaks involving chemicals and others contaminants. These impacts and risks are estimated to be of medium-low intensity.

¹ Ferrous metals contain iron in their composition and include steel, cast iron, and others.

² Nonferrous metals do not contain iron in their composition and include copper, aluminum, zinc, etc.

The Performance Standards ("PS") triggered by the project are: i) PS1: Environmental and Social Risk and Impact Assessment and Management; ii) PS2: Labor and Working Conditions; iii) PS3: Resource Efficiency and Pollution Prevention; iv) PS4: Community Health, Safety and Security; and vi) PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

3. Environmental and Social Context

3.1 General Characteristics of the Project Site

The Project is being implemented within a WMC that is already in operation. The MRF consists of a Mechanized Sorting Unit for urban solid waste, which will process more than 90% of the volume of urban solid waste ("USW") received daily by the WMC in order to sort recyclable materials (plastics, aluminum, iron, cardboard), preventing these materials from going to landfills and directly contributing to the inclusion of these materials in the circular economy. The MRF will occupy an area of approximately 6,000 m² in a shed with metal and masonry structures. The Client will be responsible for building the MRF but the WMC's team will handle its operations.

The WMC in Brusque, where the Project will be implemented, is a private and modern enterprise that has landfill areas for USW, an effluent treatment station, a gas capturing and burning system, administrative facilities, and a reception area with a scale and other facilities. The company currently serves 15 cities³ in the State of Santa Catarina and receives an average volume of 675 tons of USW per day.

Both the MRF installation site and the WMC are located in a rural area alongside several commercial and industrial companies, in addition to an airfield and a few sparse homes. The nearest home is about 500m from the MRF site. Access to the WMC is through an unpaved road. The entire unit is fenced.

3.2 Contextual Risks

The Project's contextual risks are very limited, as the MRF is located within a fenced WMC, with access controlled 24x7. Unlike other facilities handling USW, the WMC is not informally accessed by members of neighboring communities to retrieve recyclable materials. However, workers who currently retrieve recyclable waste manually at the WMC will be fully used to operating the MRF. Therefore, the Project's installation will not cause economic displacement or dissatisfaction in the neighboring communities.

As workers are hired in accordance with Brazilian labor laws, strikes, or protests against the Project are not expected. The Project's area of influence does not pose significant contextual social risks.

³ The WMC receives USW from the following cities in Santa Catarina: Blumenau, Brusque, Navegantes, Gaspar, São Francisco do Sul, Penha, Barra Velha, Araquari, Piçarras, Nova Trento, São João Itaperiú, Imbuia, Vitor Meireles, Major Gercino, and Vidal Ramos.

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

4.1 Environmental Risk and Impact Assessment and Management

4.1.a Environmental and Social Assessment and Management System

The Project has a preliminary environmental license that exempts it from obtaining an environmental license for installation. This license is valid until June 2030. The Project's associated facility, the WMC, also has an environmental license for operation, valid until April 2026, and a preliminary environmental license that exempts it from obtaining an environmental license for installation of a hazardous waste storage facility. The latter license is valid until March 2025.

The Client will develop an Environmental and Social Management System (ESMS) that will include the procedures developed at the WMC, which has ISO 14,000 and 45,000 international standard certifications for environmental and health, safety, and security management, respectively.

4.1.b Policy

The Client will develop an environmental and social risk and impact management policy.

4.1.c Identification of Risks and Impacts

The Client will develop an environmental and social risk and impact identification matrix for the MRF, which will be a part of the ESMS.

4.1.c.i Direct and Indirect Impacts and Risks

The Project's main direct risks and impacts include: i) worker accidents; ii) soil contamination; iii) underground water contamination; iv) traffic accidents; v) risks of noncompliance with labor and health, safety, and security requirements in the supply chain; vi) vehicular accidents; vii) loss of biodiversity; and viii) leaks involving chemicals.

The main indirect impacts include: i) an increase in the availability of recycled materials, stimulating the circular economy; ii) a reduction in the area required for USW landfills, increasing the useful life of the WMC; iii) job and income creation; and iv) tax revenue generation.

4.1.c.ii Alternative Location Analysis

The Project is located within the WMC, which is in an industrial area that is already used for managing USW. In this context, there was no need to evaluate alternative locations.

4.1.c.iii Cumulative Impact Analysis

As the Project will be located within a WMC, it is estimated that any effects will be negligible on Environmental and Social Value Components ("ESVC") such as: i) remaining forests in the area; ii) wildlife, including endangered species; and iii) neighboring communities in the Project's area.

4.1.c.iv Gender Risks

Gender risks in Brazil are complex and multifaceted, with various forms of inequality and violence. The main aspects to be considered include: i) gender violence, high levels of violence against women in Brazil, including femicides and domestic violence. In 2021 and 2022, there was a significant increase in cases of rape, with a woman or girl falling victim every 10 minutes;⁴ ii) economic inequality, as Brazilian women dedicate significantly more time to unpaid work, such as home and family care, as compared to men. In 2022, women spent on average 21.3 hours per week on these activities, almost twice more than men.⁵ This reflects a persistent inequality in the job market and in the division of responsibilities; iii) education and empowerment. Although women have advanced in education, they are still underrepresented in leadership and decision-making positions. In 2022, only 39.3% of women were in management positions.

The Client's permanent staff has only 4 male officers. The WMC's operations are handled by 66 professionals, of which 9 (13.64 %) are women.

4.1.c.v Gender programs

In order to prevent risks of discrimination and gender violence, the Client will develop: i) a Human Resources Policy with specific provisions requiring compliance with labor laws, worker protection principles, and the commitment to equal opportunity and nondiscrimination; ii) a Human Rights and Anti-Harassment Policy with specific provisions against bullying and sexual harassment, gender violence, child labor, modern slavery, in addition to establishing a zero-tolerance policy with respect to retaliations against persons submitting complaints; and iii) a Grievance Channel for workers and third-parties, with provisions for receiving, addressing, and responding to complaints.

The Policies and the Complaint Submission Channel will be disseminated. Workers and contractors will be trained on the Human Rights and Anti-Harassment Policy. The Grievance Channel will be active during the Project's operations.

4.1.c.vi Climate Change Exposure

The analysis of risks related to climate-change exposure on a regional scale identified a moderate risk of floods in the Project's inception region. However, a locally focused analysis examined the elevation of the terrain where the MRF will be installed, between 26 and 32m, and its position in relation to the closest watercourse, the Itajaí-Mirim River, which varies in elevation between 10 and 15m under normal flow conditions, identifying a difference of 11-22m in elevation between the river and the Project's area.

In order to assess the Project's exposure to floods, historic records were reviewed with respect to peak Itajaí-Mirim River flood events around the City of Brusque. These occurred in 1984,⁶ 2008, and

⁴ Brazil. Comitê da ONU analisa avanços e preocupações na proteção das mulheres. <https://news.un.org/pt/story/2024/05/1832246>.

⁵ IBGE. Estatísticas de Gênero: Indicadores Sociais das Mulheres no Brasil. 3rd edition. https://biblioteca.ibge.gov.br/visualizacao/livros/liv102066_informativo.pdf

⁶ Melo, N. A.; Freitas, A. L.; Archer, L. R. B. Alerta Brusque: Aprimorando o Aplicativo sobre as Cheias do Rio Itajaí-Mirim. Instituto Federal Catarinense. 2019. <https://core.ac.uk/download/333719634.pdf>.

2011, and reached over-elevations of up to 10.30m in water levels, which would not be sufficient to reach the Project's area.

The analysis demonstrates that the Project's position relative to the closest watercourse minimizes the risk of flooding, even during extreme weather events. Other risks of climate-change exposure were not considered to be relevant.

4.1.d Management Programs

During the MRF's construction phase, under the terms of the environmental license, the Client shall implement the following programs: i) construction waste management; ii) environmental control for the construction; iii) fauna and flora rescue; and iv) environmental education and social communication. The following programs were required for the Project's operational phase: i) solid waste management; ii) emergency response; and iii) equipment maintenance.

The required programs under the WMC's operating environmental license (facility associated with the Project) include: i) monitoring the effluent treatment station (ETS); ii) monitoring the treated effluent collection body; iii) monitoring underground water; iv) odor, gas, and particulate material control and management; v) solid waste management; vi) environmental education and social communication; vii) monitoring settlements, erosions, and landfill stability; viii) monitoring the autoclave sterilization system; ix) monitoring smokestack emissions; x) environmental action and emergency plan; and xi) closing, recovery, and future-use plan.

Based on the environmental and social risk and impact matrix, the Client will revise existing plans and programs and, if any unaddressed risks and impacts are identified, develop additional procedures, plans, and programs to manage them. The Client will incorporate these programs into the Environmental and Social Management System (ESMS).

4.1.e Organizational Capacity and Competency

The Client has a small team of professionals, namely: i) a CEO; ii) a Chief New Business Officer; iii) a Chief Facilities Officer; iv) a Chief Financial Officer (currently vacant); and v) a Chief Project Implementation Officer. In order to meet the environmental and social risk and impact management requirements and control compliance with ESMS requirements, the Client will add a qualified professional in the area.

4.1.f Emergency Preparedness and Response

The WMC has an Emergency Action Plan (EAP) structured around the following items: i) goal; ii) application; iii) references; iv) definitions; v) responsibilities; vi) procedures; vii) environmental, health, safety, and security considerations; viii) records; and ix) history of revisions.

The EAP covers 17 possible accident scenarios, including: i) fuel and oil spills and/or leaks; ii) accidents with victims; iii) explosions; iv) full-fledged and incipient fires; v) electrical discharges/lightnings; vi) internal transportation with waste spills; vii) external transportation with waste spills; viii) venomous animal poisoning; ix) wind and rain storms; x) storage lake breaches and

leachate leakages; xi) chemical piping and tank ruptures; xii) excessive rainfall; xiii) leachate leakages due to landfill seal failures; xiv) power generator failures; xv) slope ruptures or failures; xvi) electrical shocks; and xvii) infectious diseases. The EAP describes the procedures to respond to each of the above scenarios.

The Client will use the WMC's EAP to prepare for emergencies. Based on the environmental and social risk and impact matrix and the health, safety, and security risk assessment, the Client will revise the EAP and ascertain whether there are any accident scenarios and response procedures that are not covered in the WMC's EAP. If so, the existing EAP will be complemented.

4.1.g Monitoring and Review

The Client will develop and implement a periodic internal ESMS audit procedure to evaluate the performance of various environmental and social risk and impact management actions.

4.1.h Stakeholder Engagement

The Client will develop a Stakeholder Engagement Plan ("SEP") that will leverage the contents of the Social Communication Plan and include: i) a stakeholder mapping; ii) a list of contacts and leaders; iii) stakeholder communication strategies and channels; iv) grievance and complaint mechanism. The SEP will be a part of the ESMS.

4.1.i External Communication and Grievance Mechanisms

A mechanism to receive complaints from external parties will be developed and implemented as part of the SEP. The Client will report on complaints received and how they were addressed.

4.2 Labor and Working Conditions

4.2.a Working Conditions and Managing the Relationship with Workers

The Client has a team consisting of the CEO and 3 other officers, and another officer (CFO) is to be added. In addition, the team will be expanded with the hiring of an expert in environmental and social risk and impact management.

4.2.a.i Human Resources Policies and Procedures

The Client will develop a Human Resources Policy that will include the following provisions and commitments: i) compliance with labor standards; ii) definition of work hours; iii) definition of positions, remunerations, and benefits; iv) worker protection principles; v) nondiscrimination and equal-opportunity principles; and vi) workers' freedom of association.

In addition, the Client will develop a Human Rights and Anti-Harassment Policy that will cover the following definitions and provisions against: i) bullying; ii) sexual harassment; iii) gender violence;

iv) child labor, v) modern slavery; and vi) zero-tolerance commitment with respect to retaliations against Complaint Channel users.

4.2.a.ii Work and Employment Conditions

The Client is compliant with Brazilian labor standards⁷ and will establish the terms of employment in the Human Resources Policy.

4.2.a.iii Labor Unions

In Brazil, freedom of association in unions is guaranteed under the Federal Constitution.⁸ This freedom will be strengthened as a commitment in the to-be-developed Human Resources Policy. The Client currently does not have unionized workers.

4.2.a.iv Nondiscrimination and Equal Opportunities

Nondiscrimination and equal-opportunity commitments will be established in the Human Resources Policy.

4.2.a.v Staff Reduction

The Client does not have any collective layoffs planned.

4.2.a.vi Grievance Mechanism

The Client will develop and implement a channel to receive worker and third-party complaints, which will include the following provisions: i) definition of channels to receive complaints; ii) assignment of responsibilities for receiving, addressing, and responding to complaints; iii) description of procedures to address complaints; iv) periodic reports to upper management; v) possibility of receiving anonymous complaints; and vi) policy on consequences in case of Human Rights and Anti-Harassment Policy violations.

4.2.b Protecting the Workforce

4.2.b.i Child Labor

In Brazil, the legal provisions that ban child labor include the Federal Constitution of 1988 and the Statute of Children and Adolescents (“SCA”).⁹ In compliance with legal prohibitions, the Client will ensure that the Human Rights and Anti-Harassment Policy includes provisions to prevent and avoid child labor.

⁷ Brazil. Decree-Law No. 5452 of May 1, 1943. Approves the Consolidation of Labor Laws in the country.

⁸ Brazil. 1988 Constitution of the Federative Republic of Brazil.

⁹ Brazil. Law No. 8,069 of July 13, 1990.

4.2.b.ii Forced Labor

In Brazil, the legal provisions against forced labor or labor analogous to slavery include the Brazilian Penal Code¹⁰ and Law No. 10,803.¹¹ In compliance with legal prohibitions, the Client will ensure that the Human Rights and Anti-Harassment Policy includes provisions to prevent and avoid forced labor or labor analogous to slavery.

4.2.c Occupational Health, Safety, and Security

The Project will be operationalized by WMC's team, which has ISO 45,001 Standard Certification and established occupational health, safety, and security procedures in compliance with Brazil's Health, Safety, and Security Regulatory Standards ("RS"), including: i) Risk Management Program; ii) Environmental Risk Assessment Report; iii) Respiratory Protection Program; iv) Hearing Protection Program; v) Workplace Ergonomic Assessment; among other procedures.

The Client will conduct a health, safety, and security risk assessment pertaining to the Project and compare it to WMC's set of health, safety, and security procedures. If uncovered risks are identified, the Client will develop additional health, safety, and security procedures and request their implementation.

During the Project's construction and operational phases, the Client will gather evidence of compliance with health, safety, and security procedures and monitor: i) number of accidents; ii) total number of lost work days; iii) frequency of injuries with time loss; iv) seriousness of injuries with time loss; v) fatalities; vi) vehicle collisions; vii) evaluation of root causes of accidents with time loss, incapacitating accidents, and fatalities; viii) action plans to improve health, safety, and security management; and ix) health, safety, and security training, including schedules, training courses, length, and frequency.

4.2.d Provisions for persons with disabilities

Brazil has legal requirements¹² that establish obligations related to inclusion of Persons with Disabilities ("PWDs") in companies. However, the inclusion of PWDs is mandatory only for companies with more than 100 workers. Neither the Client, with 5 employees, nor the WMC, with 66 employees, are subject to the legislation's requirements.

4.2.e Third-Party Workers

As part of the Project's implementation, the Client engaged companies that are responsible for construction and assembly of the MRF's equipment. In order to ensure compliance with legal requirements, protect human rights, and manage environmental and social risks and impacts in activities performed by third-party contractors, the Client will develop contract clauses to ensure that third-party contractors meet the Project's commitments with respect to: i) labor laws; ii) health,

¹⁰ Brazil. Decree-Law No. 2,848 of December 7, 1940. Article 149 defines the elements that characterize labor analogous to slavery.

¹¹ Law No. 10,803 of December 11, 2003, provides a penalty of 2 to 8 years of imprisonment for those who exploit slave labor.

¹² Brazil. Law No. 8,213 of July 24, 1991. Quota Law.

safety, and security requirements; iii) human rights; and iv) environmental management procedures.

The Company will also develop and implement an inspection procedure to periodically evaluate whether third-party contractors are in compliance with: i) labor regulations; ii) health, safety, and security standards; iii) human rights protection; and iv) environmental management procedures. Verifications will be combined with periodic inspections at the construction/work sites.

The Client will verify whether third-party contractors engaged in providing construction and other services at the WMC facilities have complaint channels and, if not, make their own complaint channel available to receive and handle third-party complaints.

4.2.f Supply Chain

The main input for the Project consists of USW collected in 15 cities by waste collection trucks. These are operated by City Governments or concessionaires and there is no contractual relationship between the waste collection truck fleet operators and the WMC. The daily number of vehicles that arrive at the WMC is approximately 90 trucks/day, in addition to 1 bus/day and 30 small vehicles/day. Truck drivers are hired by the City Governments or the concessionaires that operate the waste collection truck fleets.

4.3 Resource Efficiency and Pollution Prevention

4.3.a Resource Efficiency

Based on the MRF plant's energy needs and considering 17 hours of operation per day, the monthly energy consumption for the Project is estimated to be 448,800kWh/month. The administrative area is expected to consume approximately 2,750kWh/month, resulting in an average monthly consumption for the Project in the order of 450,000kWh/month. This energy will be obtained from the local distribution grid.

4.3.a.i Greenhouse Gases

The Brazilian energy matrix renewables reached 49.1% of total energy produced in 2023¹³. To reduce the Project's emissions, the Client will procure energy supply contracts in the open energy market¹⁴ in order to increase the share of renewables in the energy mix and reduce greenhouse gas emissions.

The Client will prepare annual inventories of the Project's greenhouse gas emissions considering Scopes 1 and 2.

¹³ Gov. Agency Renewable sources rose to 49.1% of the Brazilian energy matrix. 6/20/2024.

¹⁴ In Brazil, the Open Energy Market is a competitive electric energy trading environment in which participants may openly negotiate all commercial terms, such as supplier, price, amount of contracted energy, period of supply, payment, among others. <https://www.mercadolivredeenergia.com.br/>.

4.3.a.ii Water Consumption

The MRF's operations do not require water. Water will be used only for cleanup, with a consumption volume between 2.5 and 3.5m³ of water per cleanup cycle. Considering the daily frequency of this activity, water consumption should vary between 75 and 105m³/month. The consumption by the administrative area was estimated at 5m³/day, resulting in a monthly consumption of 150m³/month. Therefore, monthly water consumption should vary between 225 and 255m³/month. Water for cleanup will be obtained from a rainwater capture tank, thus reducing the need for well water. Water for the administrative area will come from an artesian well.

4.3.b Pollution Prevention

During the construction phase, the Project's waste will be managed through a Construction Waste Management Program ("CWMP"). During the operational phase, the Project's waste will be managed through a Waste Management Program ("WMP"). Plans include guidelines for proper temporary waste storage, the use of licensed companies for transportation and final disposal of waste, and generation of the appropriate documentation.

4.3.b.i Waste

Upon arrival at the WMC, trucks containing USW go through a verification step to check whether it meets the requirements to be handled as non-hazardous waste. This verification will be done at the WMC's access gate against certificates submitted by the transporters. After this verification, trucks will be weighed and proceed to the MRF, where the waste will be unloaded and processed. Recyclable waste such as paper, cardboard, plastics, and metals (ferrous and nonferrous) will be sorted and stored in a covered area designated for its sale. The remaining waste will be disposed of in the landfill within the WMC.

The quantities of recyclable waste that are expected from the MRF's operations include: i) PET plastic bottles (336t/month¹⁵); ii) rigid high-density polyethylene ("HDPE") (171t/ month); iii) rigid polypropylene (334t/month); iv) flexible plastics (48t/month); v) aluminum (50t/month); vi) ferrous metals (138t/month); vii) cardboard (69t/month); and viii) Tetra Pak cartons (83t/month), resulting in a total of 1,227t/month of recyclable waste sorted and ready for reuse.

4.3.b.ii Hazardous Material Management

Hazardous waste generated at the MRF is associated mainly with machinery maintenance activities and administrative area operations, as the unit's purpose is to receive and sort USW. Hazardous waste expected to be generated during the Project's construction and operational phases include: i) lubricants; ii) hydrocarbon-contaminated materials; iii) paint and solvent packaging; iv) batteries; v) fluorescent lamps; etc.

Under the CWMP and the WMP, hazardous waste will be segregated, stored, transported, and disposed of in an environmentally safe manner. Licensed companies will be used for transportation

¹⁵ Tons per month.

and final disposal of hazardous waste and will issue waste transportation manifests (“WTMs”) and final hazardous waste disposal certificates.

Effluent generated in the MRF’s cleanup and effluents from the administrative areas will be directed to buffer pools and subsequently to the Effluent Treatment Station (“ETS”) at the WMC. The Client will monitor effluents, underground water, and the treated effluent collection body and report results. They will also submit reports on quantities and disposal of construction waste and hazardous waste.

4.3.b.iii Use and Management of Pesticides

Although the Client does not manage pesticides nor their packaging, there will be a clause in vector control service contracts to ensure that pest control activities do not use Class Ia (extremely hazardous) and Ib (highly hazardous) pesticides under the World Health Organization Recommended Classification of Pesticides by Hazard.¹⁶ Service reports from vector control companies will be verified to confirm compliance with contract requirements.

4.4 Community Health, Safety, and Security

4.4.a Community Health, Safety, and Security

The enterprise is located in a rural area alongside predominantly commercial and industrial companies. The closest company to the Project’s area is located approximately 1km away. There is an airfield nearby, located 0.5km away, and the closest home is about 0.5km from the Project site. In this context, the potential for the Project to affect neighboring communities in terms of noise, air quality, and waste contamination events is considered small. The Client monitored noise in the Project’s surrounding area and the results did not indicate any impact on neighboring communities.

The only potentially relevant aspect in the context of neighboring communities is vehicle traffic. There is a risk of accidents, and of pedestrians and wild animals and pets being run over, in addition to collisions with other vehicles. The WMC receives about 90 trucks of trash, 1 bus, and 30 smaller vehicles daily. As the Project’s access point is an unpaved rural road with no traffic signage, the risks of accidents may be relevant.

4.4.a.i Infrastructure and Equipment Preparation and Safety

The Client will develop a Traffic Safety Plan to reduce risks of accidents, including: i) improving traffic signage along the access road to the WMC; ii) adopting a voluntary speed limit on the access road; iii) raising truck drivers’ awareness about the consumption of alcohol and drugs; iv) monitoring speed limits; v) raising awareness about aggressive driving; among other topics.

¹⁶ The WHO Recommended Classification of Pesticides by Hazard and guidelines to classification, 2019 edition. <https://www.who.int/publications/i/item/9789240005662>

4.4.a.ii Management and safety of Hazardous Materials

The large volume of waste that arrives at the WMC is USW. It is not a hazardous waste. However, the small volume of hazardous waste that may be generated by the Project will be controlled with the implementation of a WMP. Therefore, it is considered that there is no risk of exposing neighboring communities to hazardous waste.

4.4.a.iii Ecosystem Services

The Project will be implemented within the WMC and will be almost entirely located in altered habitat. There was a need to suppress an area of approximately 1,700m² of reforestation with an understory composed of Atlantic Rainforest in an intermediary stage of regeneration. This area was not used by neighboring communities for extractive purposes, as it was a fenced area within the WMC with controlled access. In this context, it is considered that the loss of ecosystem services for neighboring communities is not relevant.

4.4.a.iv Community Exposure to Diseases

The WMC is a modern facility with systems to treat contaminants. The facility has: i) an autoclave to remove pathogens from hospital waste; ii) a system to capture and an ETS to treat leachates;¹⁷ iii) waterproof cells that prevent leachate percolation into the soil; and iv) a gas capturing and burning system. Given the various existing environmental control systems and the occupation context around the Project, it is considered that the risks of exposing the community to illnesses associated with contact with waste handled at the facility are negligible.

4.4.a.v Emergency Preparedness and Response

The WMC has a robust and well-structured EAP. The exposure of neighboring communities to emergencies within the Project is considered negligible.

4.4.b Security Staff

The Project uses security services. Security guards are unarmed. In order to prevent any risks of excessive use of force, the Client will provide training for security personnel on the United Nations Voluntary Principles on Security and Human Rights.

4.5 Acquisition of Land and Involuntary Resettlement

The Project does not cause any involuntary resettlement nor economic displacement of people.

¹⁷ Leachate is the name given to the organic liquid that accumulates at the bottom of waste landfill cells.

4.6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

4.6.a General Requirements

Most of the Project's area occupies altered habitats, namely an anthropized area located within the WMC. However, there was a need to suppress an area of approximately 1,700m². This area consisted of reforestation with eucalyptus (*Eucalyptus dunni*), an exotic species introduced in Brazil. The understory in the suppressed area was composed of species from the Atlantic Rainforest Biome and had reached the intermediary stage of regeneration.

4.6.b Biodiversity Protection and Conservation

The Project's and the WMC's area do not occupy nor are it near conservation units.

4.6.b.i Critical Habitat

In Brazil, Atlantic Rainforest vegetation is protected by a specific law,¹⁸ which limits suppression of forest remnants past the intermediary stage of regeneration.¹⁹ Considering that the understory in the area of suppressed vegetation was a remnant of Atlantic Rainforest in an intermediary stage of regeneration and that there was a record of an endangered species of hearts of palm (*Euterpe edulis*), with a loss of 10 individuals of this species, as well as a record of an endangered feline species, the wildcat (*Leopardus guttulus*), the suppression zone was considered a critical habitat.

In order to offset the impact, the local environmental agency²⁰ requested and the Client implemented the following measures: i) rescuing of 284 hearts of palm seedlings from the vegetation suppression zone and their reintroduction in similar habitats near the suppression zone; ii) planting of 40 additional eucalyptus seedlings in an area near the suppression zone to offset the loss of 10 individuals of the endangered species; iii) signing a financial compensation agreement with the IMA for cutting down Atlantic Rainforest remnants.²¹

Without prejudice to these measures, the Client will implement the following additional actions: i) establishing a cooperation agreement with a Non-Governmental Organization (“NGO”) that works with reforestation in the State of Santa Catarina in order to reforest an area of 2,000m² with native Atlantic Rainforest vegetation and monitoring the reforestation project for 3 years; ii) introducing signage to prevent animal run overs on the access road to the WMC as part of the Traffic Safety Plan; and iii) raising awareness among drivers about the need to avoid running over wild animals.

4.7 Indigenous Peoples

The Project does not affect Indigenous peoples nor quilombola or vulnerable communities.

¹⁸ Law No. 11,428 of December 22, 2006.

¹⁹ The suppression of Atlantic Rainforest remnants is allowed in exceptional cases of social interest or public usefulness.

²⁰ IMA. Environmental Institute of the State of Santa Catarina.

²¹ Financial compensation agreement under IMA Ordinance 136 of 2018.

4.8 Cultural Heritage

Located within a WMC in an altered environment, the Project does not affect archaeological sites, landmark buildings, or any type of intangible cultural heritage.

5. Local Access to Project Documentation

Documentation related to the project may be found at the following link:
https://docs.google.com/forms/d/1bfjBFSrkW0csMLAxxM-wgFfaMBGIJ_VgaZrGc4N93GA/edit