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# ENVIRONMENTAL AND SOCIAL COMPLIANCE REPORT (ESCR)

**Klabin S.A.**

PUMA Pulp Mill

Forest plantations

Transport operations

Port operations

Brazil

Reporting Period: (January/2023) through (June/2023)

Report completion date: (01/august/2023)

## • INTRODUCTION

### • The Annual Environmental and Social Report

The Lenders Common Terms Agreement requires Klabin to prepare a comprehensive Environmental and Social Compliance Report for the PUMA facilities and related operations. This document comprises the format for environmental and social performance reporting for the period(s) required in the Common Terms Agreement. The Annual report informs the Lenders about the environmental and social state of the project. This format may be revised from time to time to account for additional performance reporting requirements.

**Scope of the Environmental and Social Compliance Report is i) PUMA Pulp Mill and associated facilities, ii) the mill's port terminal in Paranaguá port, iii) wood supply operations of the pulp mill and**
**iv) transport operations.**

It is important to mention that, based on the project's location and nature, some processes/actions/outputs from the project cannot be distinguished from (and/or cannot be specifically associated to) PUMA I (original project) and/or PUMA II (expansion). For that reason, during PUMA II construction and before its completion, the following actions need to be conducted by the Borrower when preparing and submitting an ESCR:

- **Before PUMA II completion**
    - Klabin E&S team leading the report delivery for PUMA I would only respond/complete the sections related with PUMA I; and
    - Klabin E&S team leading the report delivery for PUMA II would only respond/complete the sections related with PUMA II construction (without references to the Paranaguá port operations, which are being considered as part of the scope of PUMAI).

- **After PUMA II completion**

- Every section should be completed and submitted considering PUMA facilities as a whole (PUMA I + PUMA II), which also encompasses the Paranaguá port operations.

- **Preparation Instructions**

The following points should assist you in completing this form. Please be descriptive in your responses and attach additional information as needed.

- The Common Terms Agreement requires designated Klabin personnel to complete and submit environmental and social monitoring reports in compliance with the reporting intervals stipulated in the Common Terms Agreement.
- Klabin must report qualitative and quantitative project performance data according to the Common Terms Agreement for the environmental and social monitoring parameters included in this report format.
- Reporting language is English.
- The main purpose of completing this form is to provide the following information:

1. Environmental and social management system (organization, plans, programs and activities)
2. Occupational health and safety (OHS) performance
3. Significant environmental and social events
4. General information and feedback
5. Reports to illustrate compliance with host country regulations and international environmental policies and guidelines and binding/contractual commitments
6. Social and economic management / Community development
7. Data interpretation and corrective measures
8. Progress on implementing the Environmental and Social Action Plan (ESAP) as agreed in the Common Terms Agreement.

If there were any exceeding of environmental permits' conditions or any exceeding of other conditions agreed in the Common Terms Agreement, please report further in Chapter 7, Data interpretation and corrective measures.

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- **Agent's Contact Information**

If you have any questions regarding this Report or wish to discuss completion of the Environmental and Social Compliance Report please contact the following persons in IFC and IDB Invest:


Name: Irene Angeletti

Telephone Number: +1 202 458 8921Facsimile Number:

Email: iangeletti@ifc.org



Name: Ernani Pilla

Telephone Number: +1 202 256 9755Facsimile Number:

Email: ERNANIP@iadb.org

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## • 1 ENVIRONMENTAL AND SOCIAL MANAGEMENT

### 1.1 Report Preparer

| | |
|---|---|
| **To be completed by Klabin´s authorized representative** | Name and Title:<br>Francisco Cesar Razzolini – Executive Director<br>Phone: +55 (11) 3046-5975<br>Email: fcrazzolini@klabin.com.br<br><br>Name and Title:<br>Marcos Paulo Conde Ivo – Chief executive<br>Phone: +55 (11) 3046-9912<br>Email: mivo@klabin.com.br |
| **Klabin company information** | Office physical address: Av. Brg. Faria Lima, 3600 - Itaim Bibi, São Paulo - SP, 04538-132<br><br>Web page address: www.klabin.com.br |

I certify that the data contained in this Environmental and Social Compliance Report completely and accurately represents Klabin operations during this reporting period. I further certify that analytical data summaries[1] incorporated in Chapter 5 are based upon data collected and analysed in a manner consistent with the monitoring guidance presented in the IFC general environmental, health and safety guidelines[2] and IFC EHS guidelines for pulp and paper mills[3].

Francisco César Razzolini
Executive Director

Marcos Paulo Conde Ivo
CFO and I.R Officer

[1] Raw analytical data upon which summaries are based should not be submitted with this Environmental and Social Compliance Report but must be preserved by PUMA/Klabin and presented to the Facility Agent upon demand.

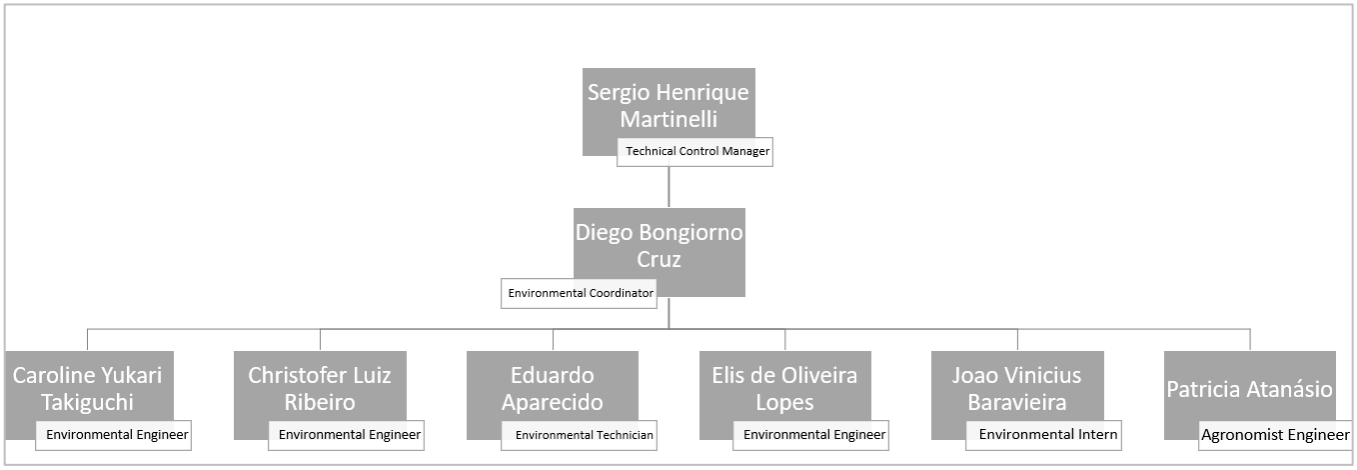
[2] https://www.ifc.org/wps/wcm/connect/29f5137d-6e17-4660-b1f9-02bf561935e5/Final%2B-%2BGeneral%2BEHS%2BGuidelines.pdf?MOD=AJPERES&CVID=jOWim3p

[3] https://www.ifc.org/wps/wcm/connect/2310ee34-7432-4546-8898-03372c9b51e2/Final%2B-%2BPulp%2Band%2BPaper%2BMills.pdf?MOD=AJPERES&CVID=jkD2FLw

## 1.2 Environmental, Social and Health and Safety Responsibility Chart

Please name the individuals in the company who hold responsibility for environmental, social and health and safety performance (e.g. Environment Manager, Occupational Health and Safety Manager, Community Relations Manager) and give their contact information (Name, Address, Telephone Number, Fax Number, E-mail Address). Include Team Chart/Organogram in Annex.

### 1.2.1 ENVIRONMENTAL TEAM - OPERATION

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|---|
| **Technical Control and Environmental Manager**<br>Sergio Henrique Saavedra Martinelli<br>Address: Faz. Apucarana Grande s/n – Ortigueira - PR<br>Telephone Number: +55 (42)99978-5468<br>E-mail Address: smartinelli@klabin.com.br |
| **Environmental Coordinator**<br>Diego Bongiorno Cruz<br>Address: Faz. Apucarana Grande s/n – Ortigueira - PR<br>Telephone Number: +55 (42) 99104-7249<br>E-mail Address: diego.cruz@klabin.com.br |
| **Environmental Engineer**<br>Caroline Yukari Takiguchi<br>Address: Faz. Apucarana Grande s/n – Ortigueira - PR<br>Telephone Number: (42) 99123-6904<br>E-mail Address: caroline.ytakiguchi@klabin.com.br |
| **Environmental Engineer**<br>Christofer Luiz Ribeiro<br>Address: Faz. Apucarana Grande s/n – Ortigueira - PR<br>Telephone Number: 42 99155-4648<br>E-mail Address: christofer.ribeiro@klabin.com.br |

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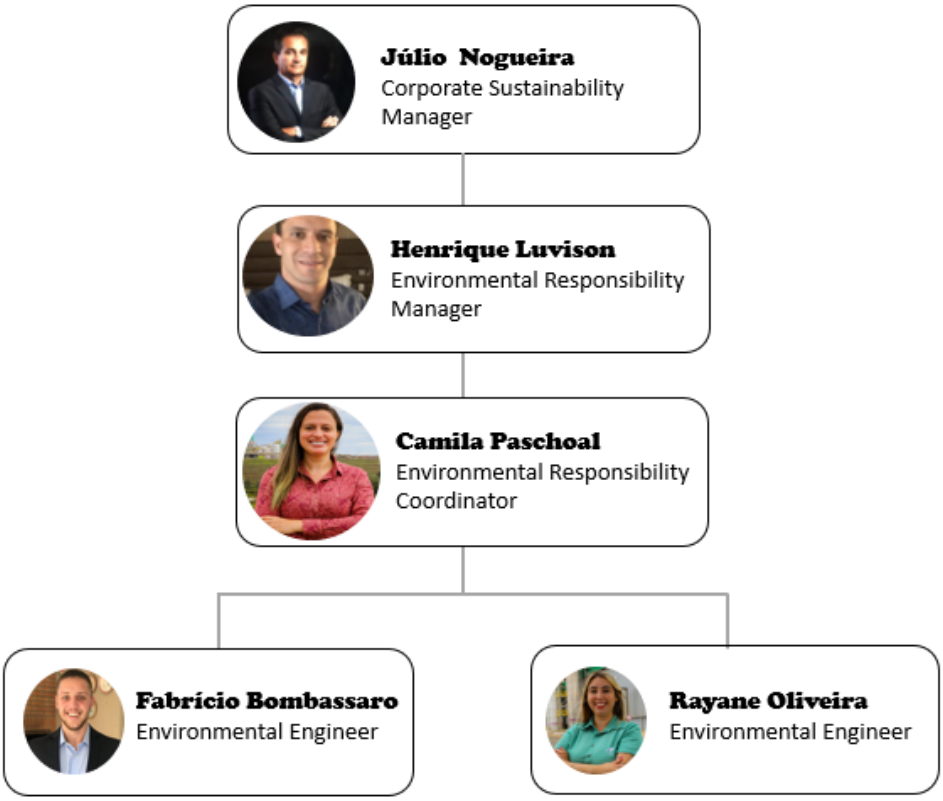
|---|
| **Environmental Engineer**<br>Elis de Oliveira Lopes<br>Address: Faz. Apucarana Grande s/n – Ortigueira – PR<br>Telephone Number: +55 42 99822-0684<br>E-mail Address: elis.lopes@klabin.com.br |
| **Agronomist Engineer**<br>Patricia Atanasio<br>Address: Faz. Apucarana Grande s/n – Ortigueira - PR<br>Telephone Number: 42 99847-0236<br>E-mail Address: patricia.atanasio@klabin.com.br |
| **Environmental Technician**<br>Eduardo Aparecido de Proença<br>Address: Faz. Apucarana Grande s/n – Ortigueira - PR<br>Telephone Number: 42 99161-6575<br>E-mail Address: eduardo.proenca@klabin.com.br |
| **Environmental Intern**<br>Joao Vinicius Baravieira<br>Address: Faz. Apucarana Grande s/n – Ortigueira - PR<br>E-mail Address: joao.baravieira@klabin.com.br |

### 1.2.2 ENVIRONMENTAL TEAM – PROJECT

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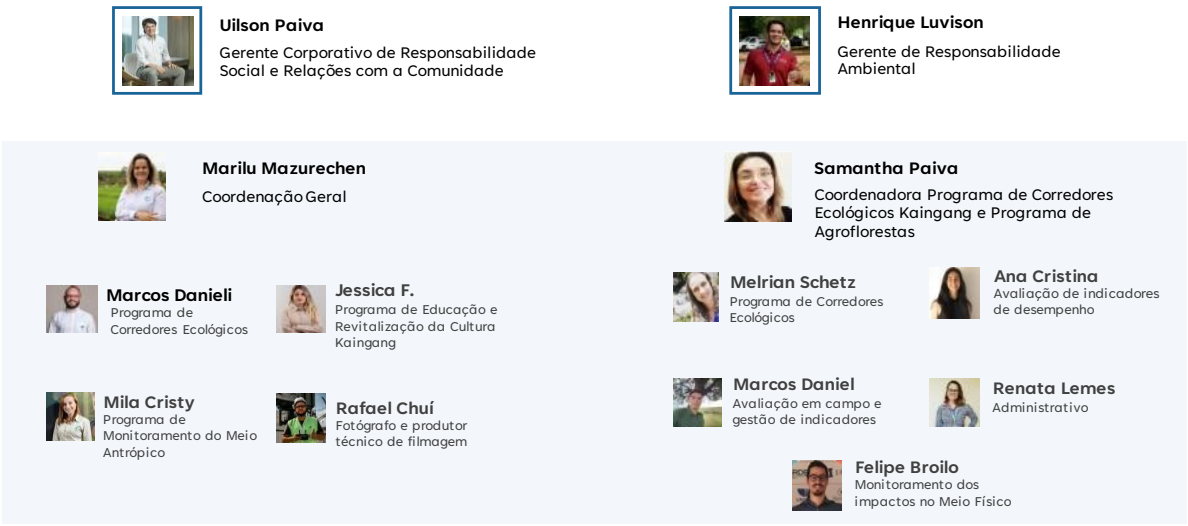
|---|
| Corporate Sustainability Manager<br>**Júlio Cesar Batista Nogueira**<br>Address: Faz. Apucarana Grande s/n – Ortigueira – PR<br>Telephone Number: (42) 99973-4445<br>E-mail Address: julio@klabin.com.br |
| Environmental Responsibility Manager<br>**Henrique Luvison G. da Silva**<br>Address: Faz. Apucarana Grande s/n – Ortigueira - PR<br>Telephone Number: (42) 99919-9364<br>E-mail Address: hlsilva@klabin.com.br |
| Environmental Responsibility Coordinator<br>**Camila Paschoal**<br>Address: Faz. Apucarana Grande s/n – Ortigueira - PR<br>Telephone Number: (42) 99158-9139<br>E-mail Address: camila.paschoal@klabin.com.br |
| Environmental Engineer<br>**Rayane Oliveira**<br>Address: Faz. Apucarana Grande s/n – Ortigueira - PR<br>Telephone Number: (42) 99153-0416 |

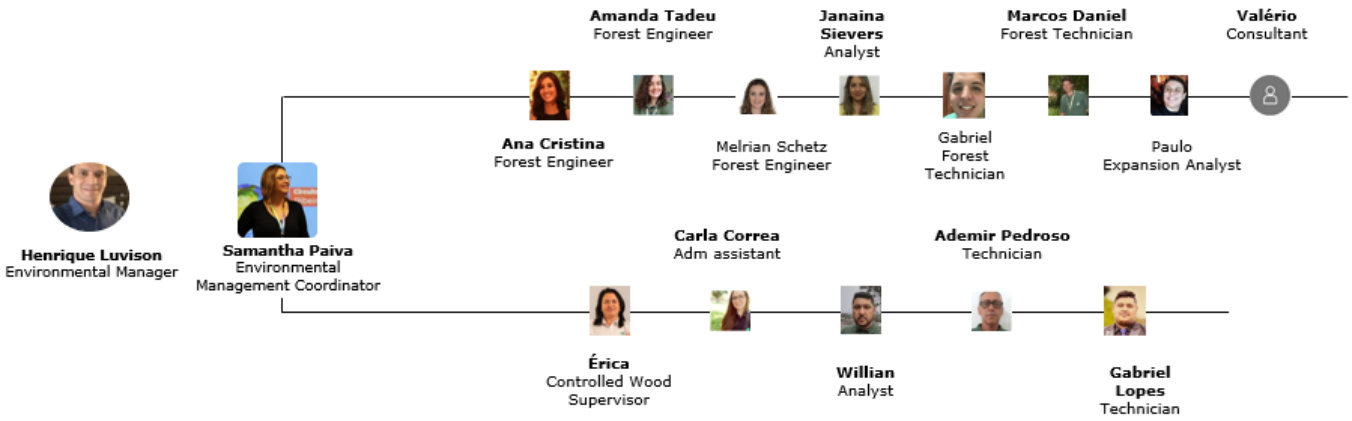
| |
|---|
| E-mail Address: rayane.ioliveira@klabin.com.br |
| Environmental Engineer<br>**Fabrício de Abreu Bombassaro**<br>Address: Faz. Apucarana Grande s/n – Ortigueira - PR<br>Telephone Number: (42) 98877-0146<br>E-mail Address: fabricio.bombassaro@klabin.com.br |

## 1.2.3 COMMUNICATION PUMA II, SOCIAL RESPONSIBILITY AND RELATIONS WITH THE COMMUNITY

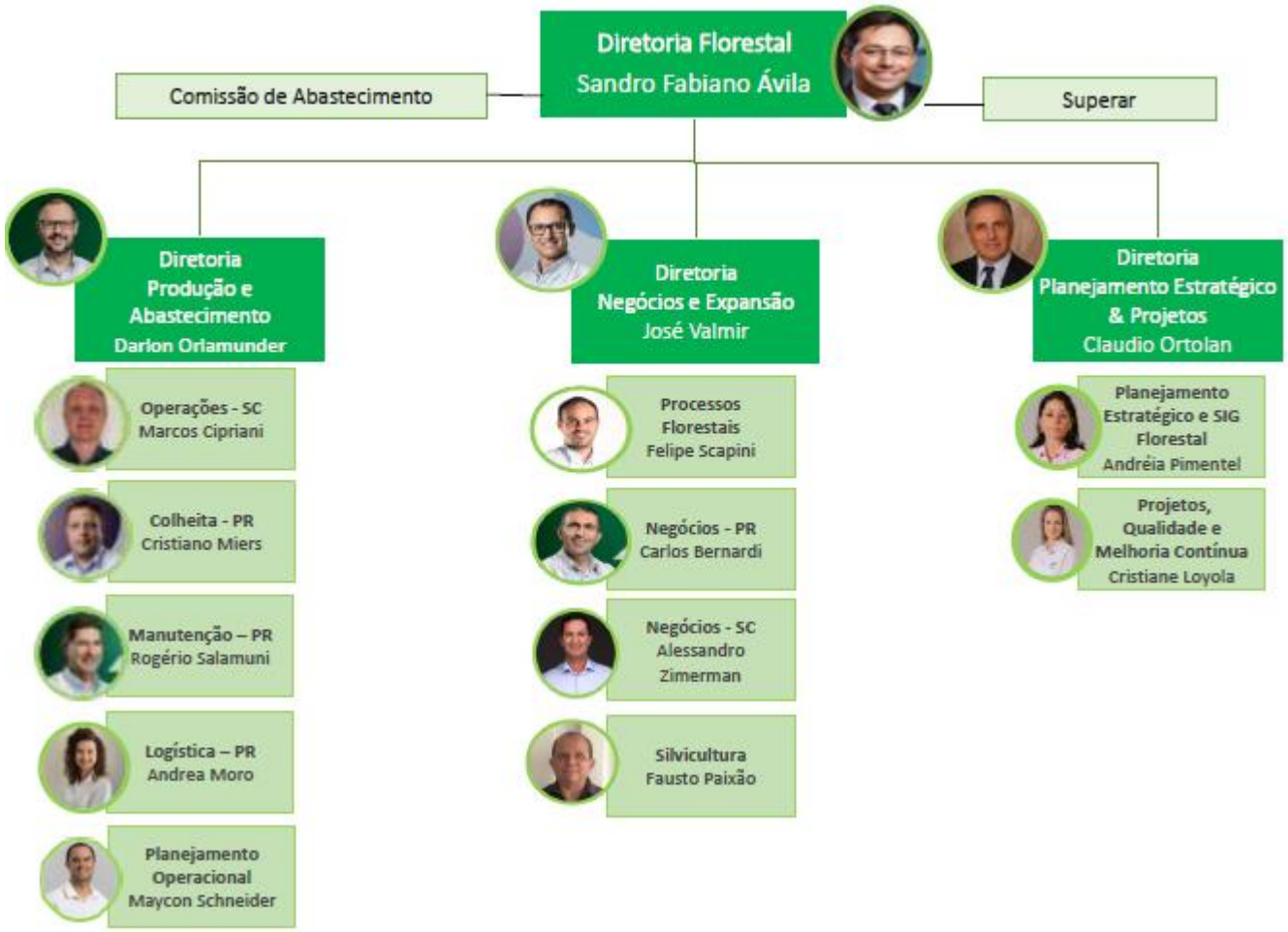
## 1.2.4 INDIGENOUS BASIC ENVIRONMENTAL PROGRAM – PBAI



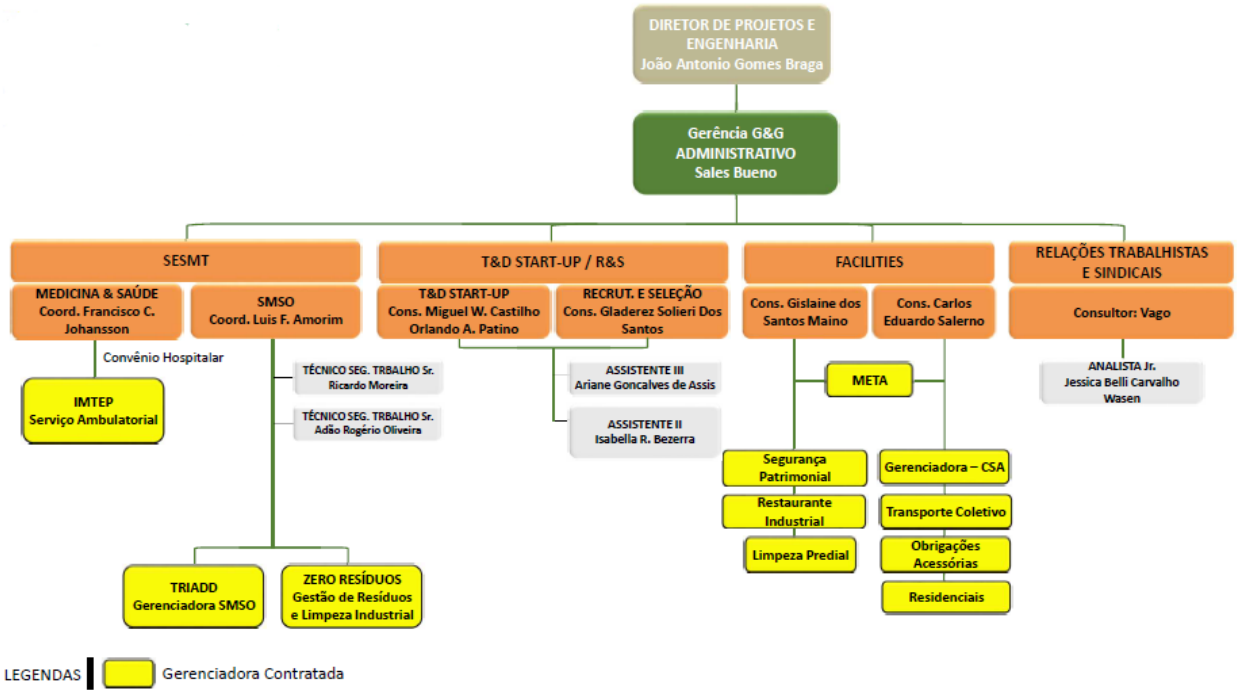

## 1.2.5 FOREST ENVIRONMENTAL RESPONSIBILITY CHART



### 1.2.5.1 FOREST ORGANIZATION CHART



### 1.2.6 HEALTH AND SAFATY - PROJECT




## 1.3 Summary of Current Status

Describe the project status and level of business activity. Describe any significant changes since the last report in the company or in day-to-day operations that may affect environmental and social performance. Describe any management initiatives (e.g. ISO 14001, ISO 9001, OHSAS 18001, FSC or equivalent Quality, Environmental and Occupational Health and Safety certifications).

In case the Project is still under construction the inclusion of a short narrative on overall physical progress for the reporting period: i) engineering; ii) procurement, iii) civil construction. Use graphics/charts e.g. general progress curve, actual/estimated manpower needs, etc.

**PHASE I**

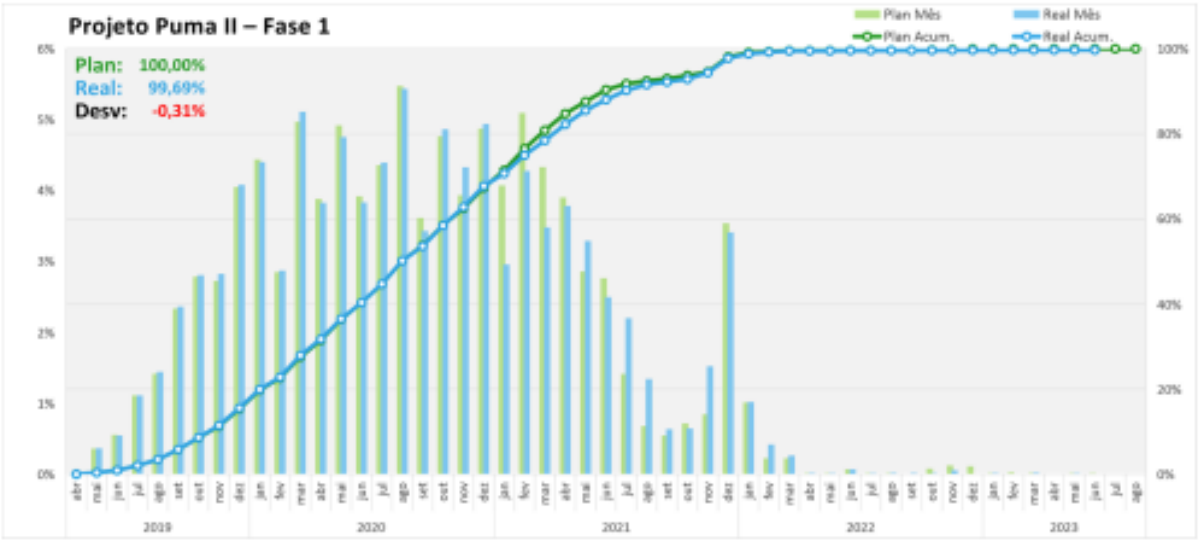
- Phase 1 of the project ended physically with the execution of pending items in the general shutdown in April.
- Progress in the period shows an overall performance of 99.69% against the planned 100.00%, representing a negative deviation of -0.31%, compared to a negative deviation of -0.30% in the previous month. The loss of progress is due to the FA events not achieved in the period.

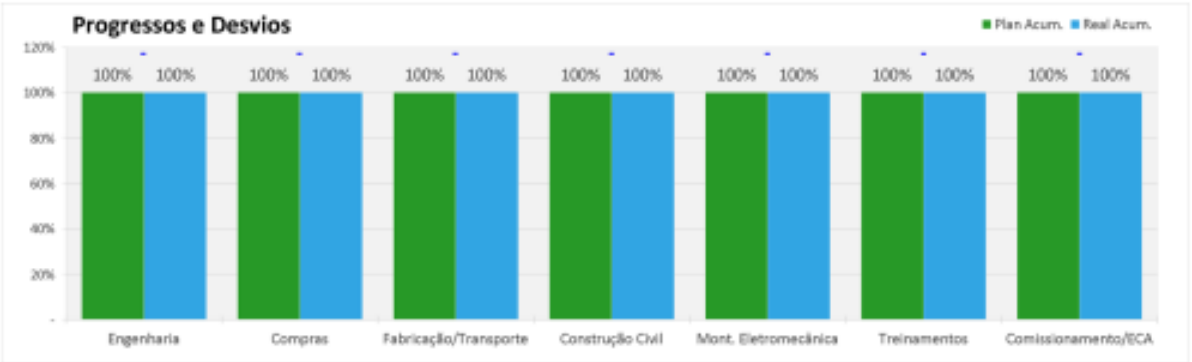
| | Geral | Construção Civil | Montagem Eletromecân |
|---|---|---|---|
| **Planejado:** | 100,00% | 100,00% | 100,00% |
| **Realizado:** | 99,69% | 100,00% | 100,00% |
| **Desvio:** | -0,31% | 0,00% | 0,00% |
| **Desvio anterior:** | -0,30% | 0,00% | 0,00% |

- The CDF 2 performance test was performed and the steam generation parameter was not reached due to difficulties with the composition of the biomass. It will be redone at another time. Other performance parameters were reached.

- In April, the CDR 2 performance test was carried out and the performance was approved. Steam generation was not fully achieved due to variation in the HHV of the black liquor, below the specified. The FA will be issued.

**OVERALL CURVE AND PROJECT PROGRESS MAP - PUMA II (Phase I)**



**PHASE II**

- The advance in the period, considering the original planning, was above the planned, with an overall realized of 91.42% against the planned of 91.91%, representing a negative deviation of -0.49%, compared to a negative deviation of the previous month of -1.15%

| | Geral | Construção Civil | Mont. Eletromecânica |
|---|---|---|---|
| Planejado: | 91,91% | 94,18% | 94,63% |
| Realizado: | 91,42% | 94,17% | 92,83% |
| Desvio mês atual: | -0,49% | -0,01% | -1,80% |
| Desvio mês anterior: | -1,15% | -0,03% | -2,15% |

- Considering the recovery plan, progress in the period was higher than planned, with an overall performance of 91.42% against the planned 91.88%, representing a negative deviation of -0.46% compared to a negative deviation of the previous month of -1.12%.

| | Geral | Construção Civil | Mont. Eletromecânica |
|---|---|---|---|
| Plano de Recup. | 91,88% | 94,18% | 94,51% |
| Realizado: | 91,42% | 94,17% | 92,83% |
| Desvio mês atual: | -0,46% | -0,01% | -1,68% |
| Desvio mês anterior: | -1,12% | -0,03% | -2,01% |

- The MP28 works continue to be the main work front, delays in the commissioning of the sill, building ventilation system, shake and ultrafiltration, can impact the operationalization of the system, team in daily meetings for immediate actions, in order to contain the possible impacts. The highlight was the conclusion of the mass milestone on the canvas and the conclusion of the assembly of systems in the chemical and colour kitchen area.Daily meetings were held in order to monitor Civil Construction activities - MP28, aiming at priority deliveries for electromechanical assembly.
- The consolidation of the punch list in MP28 (Valmet) is in progress and the elimination of pending issues in MP28 civil construction (CESBE) for the issuance of the TERD.Good progress of electromechanical assembly on MP28.
- At the cutter and packaging machine, the Passaban transformer was energized during the period and the assembly of the conveyors began.
- Completion of the contracted scope of Data and Voice Network, electromechanical assembly (Palmont), laying of cables for access control and infrastructure for CCTV. (BOP 1).
- Conclusion of the electromechanical assembly of the contractual scope. (BOP 2).
- Good progress in the elimination of pending issues in the Fiberline, BCTMP, Capacity increase of the Fiberline and Wood Preparation.
- In the period, the 2nd dryer was received and placed on the base and the 3rd dryer is expected to be received in the next period.

- The histogram of this phase reaches the number of 2,259 registered workers, against 3,090 in the previous month.

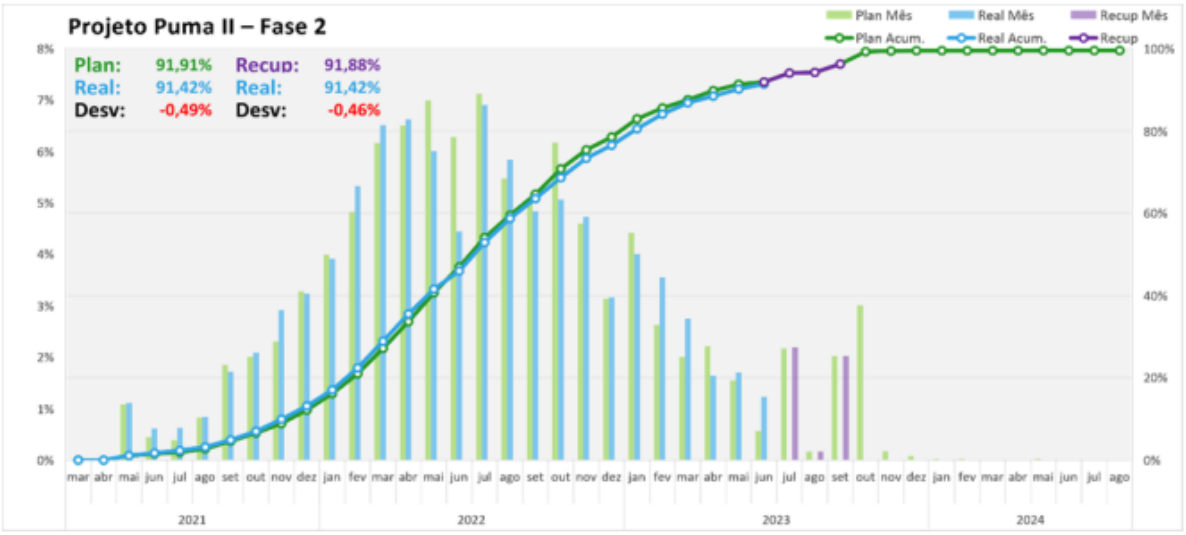
- Engineering: Suppliers' Engineering activities continue to be developed as planned, except for the Dedicated Systems (OTS) areas, which present advances below expectations.

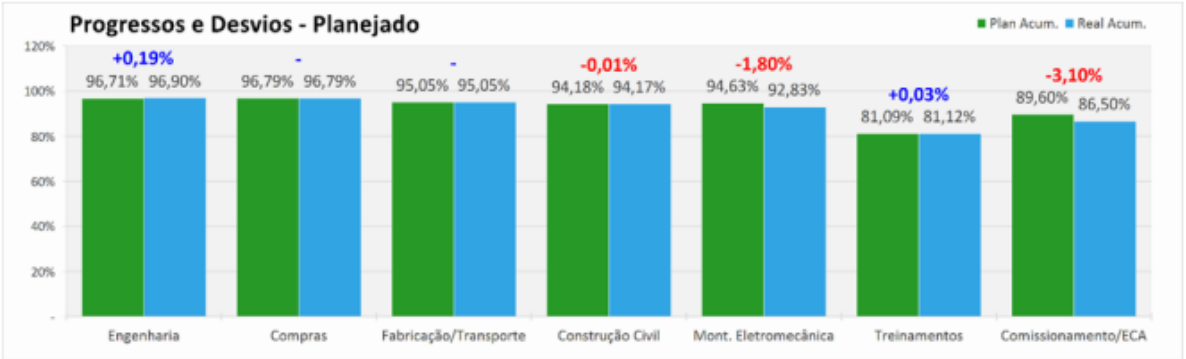
- Civil Construction: The Civil Construction activities of the suppliers continue to be developed, at the moment, below what was planned, with emphasis on the areas of Sludge Dryers.

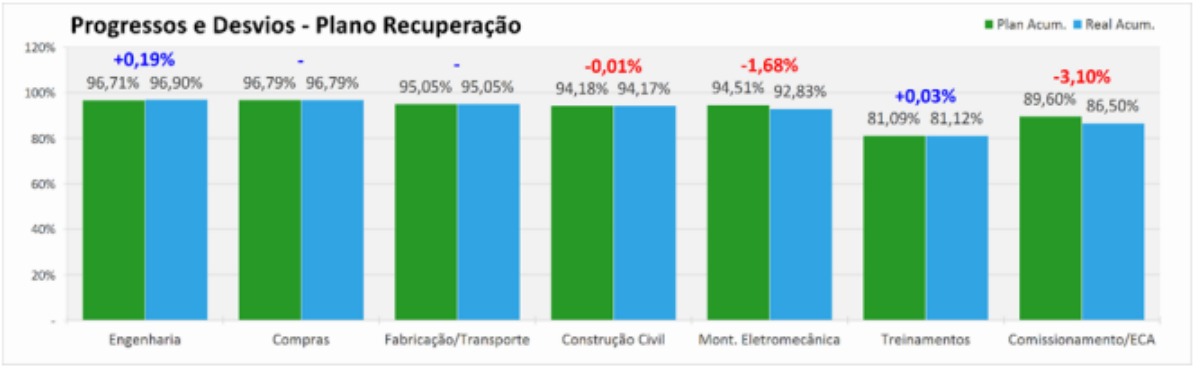
- Electromechanical Assembly: Suppliers' Electromechanical Assembly activities continue to be developed, at the moment, below plan, with emphasis on the areas of Paper Machine - MP28, BOP - Package 1 (Chillers, Generator, Workshop and Mini-EPCs), Paper - MP28 (Valmet) and Sludge Dryers.

- Commissioning/ECA: The Commissioning/ECA activities of suppliers continue to be developed, at the moment, below plan, with emphasis on the areas of Paper Machine - MP28, BOP - Package 1 (Chillers, Generator, Workshop and Mini-EPCs), Paper Machine - MP28 (Valmet), Distributed Control System (DCS) and Sludge Dryers.

**OVERALL CURVE AND PROJECT PROGRESS MAP - PUMA II (Phase II)**



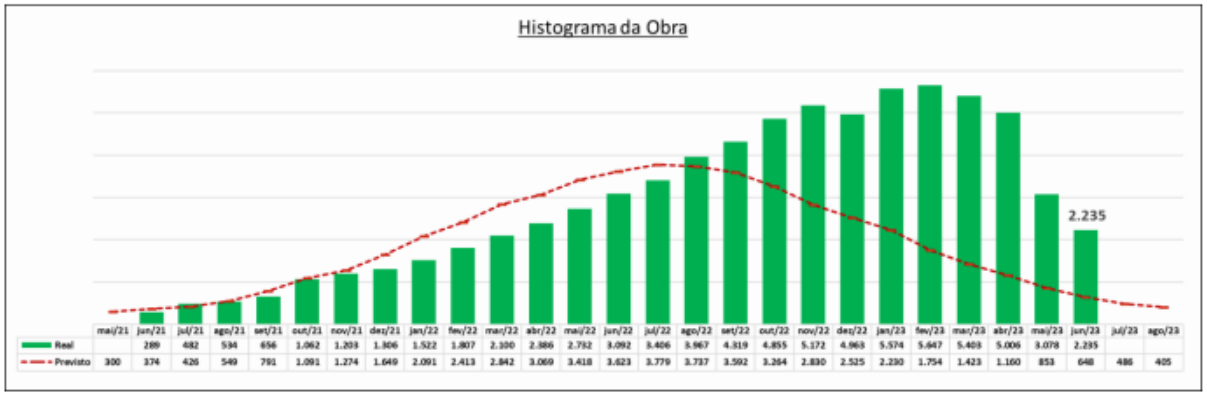






## ABSOLUTE DEVIATION MAP

| | | Planned | | Recovery Plan | |
|---|---|---|---|---|---|
| Area | Weight | Deviation | WeightedDeviation | Deviation | WeightedDeviation |
| **Puma Project II – Phase 2** | **100,0%** | **-0,49%** | **-0,49%** | **-0,46%** | **-0,46%** |
| **Paper Machine 28** | **61,0%** | - 0,77% | - 0,470% | | |
| **Paper Machine 28 - Valmet** | **50,1%** | - 0,97% | - 0,486% | | |
| **Paper Machine 28 - CESBE** | **9,7%** | | | | |
| **BOP – Package 1** | **0,8%** | - 1,39% | - 0,012% | | |
| **Infrastructure and Factory Streets** | **0,4%** | | | | |
| **Sludge Drying** | **1,7%** | - 2,06% | - 0,035% | -0,53% | -0,009% |
| **Dedicated Systems (OTS)** | **0,2%** | -0,02% | 0,001% | | |
| **Paper Machine - Cutter and Skid Baler** | **0,8%** | 1,68% | 0,013% | | |
| **Power Distribution** | **1,3%** | 0,10% | 0,001% | | |
| **Distributed Control System** | **0,6%** | -0,96% | -0,006% | | |
| **BCTMP** | **7,7%** | -0,02% | -0,002% | | |
| **Fiberline 1 – Capacity Increase** | **6,6%** | 0,07% | 0,005% | | |
| **Balance of Plant** | **2,6%** | -0,45% | -0,012% | | |
| **BOP – Package 2** | **1,7%** | | | | |
| **Fiberline** | **9,7%** | 0,16% | 0,016% | | |
| **Wood Yard** | **2,9%** | -0,09% | -0,003% | | |

### HISTOGRAM OF THE WORK




## 1.4 Status Of The Environmental, Social, Health & Safety Management System (ESH&S-MS)

- Status of Corrective Action Plan [only where applicable]
- Status of Environmental & Social Action Plan [Short narrative on progress towards closing key activities as per priority milestones. Include entire ESAP with updated 'status' fields as Annex]
- Environmental Management and Indicators

The ESAP updated status are available on OneDrive.

### 1.5 Status of Relevant Permits

Include table of Relevant Authorizations as per Schedule 3 of the Common Terms Agreement

| Ref. | Scope of permit (aspect) | Project component | Official permit name | Granted by (Institution) | Issue date | Expiration date |
|---|---|---|---|---|---|---|
| | | | | | dd/mm/yyyy | dd/mm/yyyy |
| **1** | Water | Puma I and Puma II | Grant - 2812/2019 | Paraná Water Institute | 16/07/2019 | 29/03/2026 |
| **2** | Effluent | Puma I and Puma II | 12886/2023/OD-GOUT | Paraná Environmental Institute | 06/02/2023 | 06/02/2029 |
| **3** | **Operation Permit** | Puma I and Puma II | LO-A 227393 | Paraná Environmental Institute | 05/04/2023 | 05/04/2025 |
| **4** | Environmental License Operation | Railway Branch | LO 34882 | Paraná Environmental Institute | 14/03/2017 | 14/03/2021 |
| **4.1** | Environmental License Operation | Railway Branch | Protocol 17.077.026-9 | Paraná Environmental Institute | 11/11/2020 | - |
| **5** | Environmental License Operation Renovation | Paranaguá Port Terminal KM 05 | RLO 219433-R1 | Paraná Environmental Institute | 12/02/2021 | 12/02/2027 |
| **6** | Environmental License Operation | Paranaguá Port Terminal PAR-01 | LO 276509 | Paraná Environmental Institute | 05/08/2022 | 05/08/2026 |
| **7** | Environmental License Operation | Fuel station | LO 185675-R1 | Paraná Environmental Institute | 10/07/2020 | 10/07/2026 |
| **8** | Preliminary Permit | Phase 1 and 2 of Puma II | LP-A 148370 | Paraná Environmental Institute | 30/09/2018 | 19/09/2020 |
| **9** | Preliminary Permit | Phase 2 of Puma II | LP-A 217482 | Paraná Environmental Institute | 26/01/2021 | 26/07/2021 |
| **10** | Installation Permit | Phase 1 and 2 of Puma II | LI-A 157633 | Paraná Environmental Institute | 26/05/2020 | 29/06/2026 |
| **11** | Installation Permit | Phase 2 of Puma II | LI-A 226943 | Paraná Environmental Institute | 06/04/2021 | 29/01/2024 |
| **12** | **Operation Permit** | Waste Management Center Expansion | LO-A 176409 | Paraná Environmental Institute | 14/07/2021 | 20/02/2024 |

- **2 OCCUPATIONAL HEALTH AND SAFETY PERFORMANCE (OHS)**

The Klabin personnel are required to monitor, record, and report occupational health and safety incidents and workplace conditions throughout the reporting period.

## 2.1 Brazilian Compliance

Please list any reports submitted to Brazilian authorities, e.g. on OHS, fire and safety inspections, environmental, compliance monitoring, emergency exercises, as well as comments received and corrective actions taken. Monitoring and inspections by Brazilian authorities with subsequent actions taken shall also be summarized and reported.

If any of the information requested in the Environmental and Social Compliance Report (Section 2.2 - Section 2.4) is contained in reports sent to Brazilian authorities, please submit a copy of the applicable section of the report.

## 2.2 Incident Statistics Monitoring

Please report on incidents during the reporting period. Contractor employees are required to adhere to comparable occupational health and safety standards. If the project uses contractor employees, please also report any contractor employee incidents. Expand or shrink the tables as needed. Report separately in their own tables i) the pulp mill and associated facilities, ii) pulp mill's Paranaguá port, iii) eucalyptus and pine plantation operations and iv) transport operations.

### 1. Total Amounts - Project

| | **This reporting period** | | **Reporting period- 1 period ago** | | **Reporting period- 2 periods ago** | |
|---|---|---|---|---|---|---|
| • **Report TOTAL numbers for each parameter** | Own employees | Contractor employees | Own employees | Contractor employees | Own employees | Contractor employees |
| Employees | 150 | 5.156 | 150 | 3.240 | 150 | 2.409 |
| Man-hours worked | 33.000 | 1.134.320 | 33.000 | 712.800 | 33.000 | 529.980 |
| Fatalities | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Non-fatal injuries[4] | 0 | 3 | 0 | 5 | 0 | 1 |
| Lost workdays[5] | 0 | 37 | 0 | 79 | 0 | 7 |
| Vehicle collisions[6] | 0 | 0 | 0 | 1 | 0 | 3 |
| LTIFR[7] | 0 | 2,49 | 0 | 3,08 | 0 | 3,14 |

## 1. Total Amounts - Operation

| | **This reporting period** | | **Reporting period- 1 period ago** | | **Reporting period- 2 periods ago** | |
|---|---|---|---|---|---|---|
| • **Report TOTAL numbers for each parameter** | Own employees | Contractor employees | Own employees | Contractor employees | Own employees | Contractor employees |
| Employees | | | | | | |
| Man-hours worked | 1.785.234 | 3.690.500 | 3346.919 | 5.800.520 | 1.761.462 | 3430.460 |
| Fatalities | 0 | 0 | 0 | 0 | 0 | 0 |
| Non-fatal injuries[4] | 0 | 3 | 8 | 1 | 2 | 2 |
| Lost workdays[5] | 39** | 193 | 230 | 502 | 120 | 411 |
| Vehicle collisions[6] | 0 | 0 | 0 | 0 | 0 | 0 |
| LTIFR[7] | 0 | 1.25 | 4,46 | 2,70 | 3,66 | 1,89 |

Lost wordays** We had an accident with an own employee that continuing in January and February away from the work. In 2023, with our own employees we didn´t.

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**2. Fatality details for this reporting period – Project and Operation**

| *Own employees or contractor employees?* | *Time of death after accident (e.g. immediate, within a month, within a year)* | *Cause of fatality* | *Corrective measures to prevent reoccurrence* | *Responsible and deadline for completion* |
|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 |

**3. Non-fatal injuries details for this reporting period - Project**

| *Own employees or contractor employees?* | *Total workdays lost* | *Description of injury* | *Cause of accident* | *Corrective measures to prevent reoccurrence* | *Responsible and deadline for completion* |
|---|---|---|---|---|---|
| Contractor Employees | 8 | Pressed his 3rd finger of the right hand | Failure in the scaffold assembly procedure | Review procedure / recycling of the procedure on Assembly and Disassembly of scaffolding | Victor Hisatugo |
| Contractor Employees | 9 | Right Knee Injury | Risk Perception Failure | Recycling risk perception | Rafael Machado |
| Contractor Employees | 15 | Pressing 2nd finger of left hand | Inappropriate employee positioning | Develop device to handle metal sheet | Lucimara C.Silva |
| Contractor Employees | 13 | Pressing “3rd and 4th” Right Hand. | Interference left in the way | Improve assessment of the Safety Analysis (AST) of the activity | Lucimara C.Silva |
| Contractor Employees | 15 | Left shoulder and left leg bone injury | worker fall into grate opening | Prohibition of access to the footbridge / Adequacy of unsafe conditions | Celso Stival |
| Contractor Employees | 4 | Cut left hand | Risk Perception Failure | Recycling risk perception /Protection Cutting surface | Rafael Machado |
| Contractor Employees | 15 | Amputation of the 1st distal phalanx | Activity execution failure / Failure | Adequate method for part removal / Guarantee the follow up of the supervision on every | Carlos Henrique |

| | | | | | |
|---|---|---|---|---|---|
| | | | supervise activity | critical activity. | |
| Contractor Employees | 15 | Fracture left foot | Overlapping work on own team planning failure Lack of communication | Improve planning / communication / Recycle scaffolding assembly procedure | Rafael Machado |
| Contractor Employees | 15 | Tíbia and fíbula crack/fracturright foot | Lack of planning for Klabin's Operation / Unsafe condition | Recycle Klabin's cargo handling procedure / Recycling risk perception | Rafael Machado |
| Contractor Employees | 7 | Fracture in the left toe | Inadequate tool for the activity | Use of specific workbench / Retraining employees Safety Analysis (AST) and Hand Tools | Luciane Demeterko |

### 3.1 Non-fatal injuries details for this reporting period – Operation

| *Own employees or contractor employees?* | *Total workdays lost* | *Description of injury* | *Cause of accident* | *Corrective measures to prevent reoccurrence* | *Responsible and deadline for completion* |
|---|---|---|---|---|---|
| contractor employees | 20 | The employee was carrying out the piping positioning activity in the pipe rack of the pine fiber line, which was on a tube (platter), with the support of two other colleagues, when the piping came out of the tube (platter) that was close to his hand, making a movement | Absence of procedure of piping assembly | Proceed the piping assembly and train the pesonal | Diego Reisdoffer |

| | | | | | |
|---|---|---|---|---|---|
| | | (seesaw), when he tried to hold the pipe, he came to press his left hand (between the thumb and index finger), having a cut between the thumb and index finger and suffering a fracture in the phalanx of the thumb finger of the left hand | | | |
| contractor employees | 21 | Collaborator carried out her activities and when performing hip rotation movement, she dislocated her knee losing her balance. | Change the safety shoe the safest one | Change the safety shoe the safest one | Carlos Paz |
| contractor employees | 2 | When performing welding inside the MC26 Dry Pulper tank, the employee felt burning in his eyes (reported the next day). Released home and returns tomorrow classification. | Difficult access location, not allowing the use of solder mask conventional. | A new study was carried out in partnership with Oficina mecanica (Providing a malleable mask allowing the use in places of difficult access.) | Carlos Renê |

[4] Incapacity to work for at least one full workday beyond the day on which the accident or illness occurred.

[5] Lost workdays are the number of workdays (consecutive or not) beyond the date of injury or onset of illness that the employee was away from work or limited to restricted work activity because of an occupational injury or illness. [6] Vehicle Collision: When a vehicle (device used to transport people or things) collides (comes together with violent force) with another vehicle or inanimate or animate object(s) and results in injury (other than the need for First Aid) or death.

[7] LTIFR, lost-time injury frequency rate. Calculate LTIFR using the following equation: LTIFR= (Number of lost time injuries in accounting period) / (Total hours worked in accounting period) × 1 000 000.

**4. Vehicle collision details for this reporting period - Project**

| *Own employees or contractor employees?* | *Cause of collision* | *Corrective measures to prevent reoccurrence* | *Responsible and deadline for completion* |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

**Note**:

Due to the lack of communication of commuting accidents, due to the occurrences happening over the fence on several highways in different parts of the State of Paraná, it became technically unfeasible to carry out investigations of various commuting accidents in Puma II Phase II Project. Another important factor is that those accidents happened on interstate highways, where klabin has no power or management over.

In this sense, there is no way to treat, prevent and/or elaborate action plans for the external occurrences.

Occurrences are recorded through COMMUNICATION OF TRAVEL ACCIDENTS (CAI), as well as registration in statistics.

**Training for this reporting period - Project**

| *Own employees or contractor employees?* | *Description of training* | *Number of employees that attended* |
|---|---|---|
| Own employees | Work at height; Work in Confined Spaces; Safety in electricity; security inspections; accident analysis and investigation | 45 |
| Contractor Employees | Work at height; safety inspections; confined space work; electricity; use of PPE´s; work safety analysis (AST); work permits (PT); risk perception; working with lifting platforms; prevention and firefighting; Safe Behavior; check lists; Leadership; internal commission of accident prevention; Life Protection Policy; rotary tools; environmental education (waste segragation); integration training. | 5214 |

### 5.1 Training for this reporting period – Operation

| *Own employees or contractor employees?* | *Description of training* | *Number of employees that attended* |
|---|---|---|
| Own Employess | Tagout Training Practice | 1896 |

** We plan to make the same Tagout Training Practice for all the contractors employees.

### 2.4 Life and Fire Safety - Project

Please complete the following table for the Project (mill site and Paranguá port).

| *Fire Safety Verification Activities* | *Mandatory Frequency* | *Date(s) Performed* | *Observed Deficiencies*[9] | *Corrective Actions and Schedule For Implementation*[10] |
|---|---|---|---|---|
| Fire Drills | Minimum: Klabin to propose | 20/03/2023 | Drying the nozzle sealing O rings | Purchase of new O rings and replacement |
| Inspect and certify fire detection and suppression electrical and mechanical systems. | Minimum: Klabin to propose | Monthly Inspection | - | No problem identified |
| Inspect, refill/recharge portable fire | Minimum: Klabin to | Monthly Inspection | - | Recharge/maintenance according to validity and identified nonconformities |

### 2.4.1 Life and Fire Safety – Operation

| *Fire Safety Verification Activities* | *Mandatory Frequency* | *Date(s) Performed* | *Observed Deficiencies*[9] | *Corrective Actions and Schedule For Implementation*[10] |
|---|---|---|---|---|
| Fire Drills | annual<br>semester<br>semester<br>semester<br>semester<br>Yearly<br>semester<br>annual | BREC<br>AMUVI<br>Area evacuation (SDCD)<br>Rescue in vertical environment<br>Environmental<br>Emergency (leakage)<br>Confined space rescue vehicle rescue fire fighting real fire | Simulation focused on training<br>Car parked close to the event<br>there were no opportunities<br>there were no opportunities<br>The team did not use the Ambclean product to contain chemicals<br>There were doubts as to the best way for containment<br>there were no opportunities | no action<br>Guide the team on positioning vehicles in occurrences<br>there was no action<br>there was no action<br>Training for knowledge of using sealing compound (Ambclean)<br>Training with the firefighter team to contain chemicals<br>there was no action<br>Make shims for stabilization<br>Guide the team on positioning vehicles in occurrences<br>Instruct the team on how to leave the vehicle in a position for easy |

| | | | | |
|---|---|---|---|---|
| | | Emergency at the WSA Plant | there was a lack of shims to stabilize the vehicle<br>Parked the car against the wind and in the direction of the smoke<br>Positioned the vehicle in a position that makes it difficult to quickly escape from the area | evacuation in case of an explosion or change of fire |
| Inspect and certify fire detection and suppression electrical and mechanical systems. | Trimester | Electric Mechanics | When opportunity is found, repairs are made during inspections<br>When opportunity is found, repairs are made during inspections | Corrective and preventive system repair<br>Corrective and preventive system repair |

| | | | | |
|---|---|---|---|---|
| Inspect, refill/recharge portable fire extinguisher | 1st monthly level 2nd annual level 3rd level 5 years | Fire extinguisher inspections | When opportunity is found, repairs are made during inspections | Corrective and preventive system repair |

## 2.5 Significant OHS Events - Project

Please explain any significant Occupational Health and Safety events not covered in the above OHS tables. The report could include proposed revision of the OHS Management System (if applicable), revised quantitative objectives, action plans for technical improvements, and planned training activities.

| *Date of event* | *Event description* | *Affected people/environment* | *Reports sent to local regulatory agencies* | *Corrective actions (including cost and time schedule for implementation)* |
|---|---|---|---|---|
| Not applicable | | | | |

### 2.5.1 Significant OHS Events – Operation

| *Date of event* | *Event description* | *Affected people/environment* | *Reports sent to local regulatory agencies* | *Corrective actions (including cost and time schedule for implementation)* |
|---|---|---|---|---|
| 22/02/23 | Strategic Safety Planning | 103 leaders | No | No |
| 24/07 – 28/07 | Week Prevention | 2300 | No | No |

## • 3 SIGNIFICANT ENVIRONMENTAL AND SOCIAL EVENTS

Personnel are required to report all environmental and social events[11] that may have caused damage; caused health problems; attracted the attention of outside parties; affected Klabin´s labour or adjacent populations; affected cultural property; or created liabilities for Klabin.

Attach photographs, plot plans, newspaper articles and all relevant supporting information of any significant environmental or social event.

Please report on the following topics, expanding or collapsing the table where needed.

- There were no significant environmental events during this report period;
- So far, there were no significant social events;

11 Examples of significant incidents: chemical and/or hydrocarbon materials spills; fire, explosion or unplanned releases; industrial injuries; fatalities including transportation; ecological damage/destruction; local population disruption; disruption of emissions or effluent treatment; legal/administrative notice of violation; penalties, fines, or increase in pollution charges; negative media attention; chance cultural finds; labor unrest or disputes.

## • 4 GENERAL INFORMATION AND FEEDBACK

Provide any additional information including the following:

1. In detail, describe print or broadcast media attention given to Reporting scope of companies during this reporting period.
2. In detail, describe interactions with non-governmental organizations (NGOs) or public scrutiny of Reporting scope of companies.
3. Describe Reporting scope of companies' public relations efforts.

External Communication – Press, divulgation and monitoring

Klabin considers press as a fundamental relationship public for communication with its different stakeholders. In Project Puma II, the journalists' service structure includes several activities – such as release production and support to press professionals, monitoring of all published information about the Project and related subjects (as well as information about the Puma Mill).

A structured team is responsible for media monitoring (clipping), which consists on reading the daily news from main regional media vehicles, in addition to radio stations, websites and Internet blogs. For this reason, there is the possibility of giving a prompt feedback to the media vehicles in the case of the publication of divergent information. Every time a divergent new is divulgated, the communication team gets in touch with the press to avoid expectations or negative wishes of the community by receiving non-official information.

Releases

In this report's period, there were 4 press releases divulgated to local press. In majority, notes consisted on information about the adjacent constructions' interferences on the region's day-by-day.

| RELEASES | DATA |
|---|---|
| "Ampliação da PR-160 entre Telêmaco Borba e Imbaú terá sistema de pare e siga" | 06/fev |
| " Klabin forma localmente 150 operadores de empilhadeira e ajudantes" | 04/abr |
| " Klabin contrata consultoria para apoiar Telêmaco Borba, Ortigueira e Imbaú no combate à violência contra crianças, adolescentes e mulheres" | 23/mai |
| " Rodovia PR-160 terá interdição total nesta terça-feira (30) para detonação de rochas" | 24/mai |

Besides proactive press releases, there is reactive media treatment. The company might be called to clarify any theme of interest of the journalists, or its spokesperson might be invited to speak about a Project Puma II related theme in the media vehicles.

Media Monitoring (clipping)

Everything that is divulgated on the media is monitored daily – news classification by themes: the ones that mention Project Puma II directly, the ones the in any form might quote Klabin (or Puma Mill), and the others that bring relevant subjects for the region (health, public security, environmental issues, etc.).

A group of workers in Klabin, related to Project Puma II, receives the clipping weekly with an abstract of week news about the Project and relevant subjects, aiming the comprehension of the published subjects' inter-relation. A number of 90 media vehicles, 63 websites, 7 radios and more than 20 influencers are monitored daily – except the ones that have different periodicities. Summary of weekly report and press performance report from January to June 2023 in annex.

Materials and communication actions developed

The construction journal is a space where workers are protagonists, appearing on the pages through special reports, opinions and photos. In addition to being a source of institutional information, the newspaper is also an important channel for answering questions from professionals.

In issue 29, we highlight the workers who have already appeared in the Puma II Project communication

vehicles, valuing even more their participation in the construction of this very important work.
In issue number 30, we talk about the Risk Perception Laboratory developed by the company Pöyry. In it, a model shows the main activities of the project, what should be observed and what should be corrected in the worker's daily life. In addition, on page 4, special details the operation of the new warehouse that is being built.

In issue 31, we honor Women's Month. With several testimonials from workers, we made a special one to celebrate the strength and importance of women in the work. We also brought an overview of the PM28 updates, bringing relevant information to all professionals.

And in issue 32, security was on the agenda. Klabin's 5 Rules for Life were highlighted, and Puma II Project workers were able to talk about how they practice these rules on a daily basis. There was also a dedicated page to remember the activities of the Project in the General Shutdown of the Puma Unit.
During the Carnival period, workers talked about the importance of not drinking before coming to work, having a good night's sleep if they were working during the period, and awareness-raising activities about the impact of alcohol and drug use on life, family and at work.

Workers were able to clear up doubts with the medical team that assists workers at the Puma II Project outpatient clinic.

For commissioning activities, a campaign was developed. We produce graphic materials explaining the activity, what risks the testing activities in the plants offer. We marked all areas under construction about individual risks with banners. A banner with general information was installed in the cafeterias.

Information was reinforced on Puma Radio, the Click Puma II website and at events held at the exit of the cafeterias that took place during the year. In order to reinforce the importance of correct waste disposal in the Puma II Project, we developed the Recycle Your Habits campaign. In it, we reinforce how materials should be disposed of correctly in homes and residential areas.

Afterwards, we invited workers to participate in the Recycle Your Habits Challenge. The company that had the best result in the month's waste disposal was presented with end cups to raffle among its workers. The evaluation was carried out monthly by the company responsible for collecting and correctly disposing of the materials.

## 5 REPORTS TO ILLUSTRATE COMPLIANCE WITH HOST COUNTRY REGULATIONS AND INTERNATIONAL ENVIRONMENTAL POLICIES AND GUIDELINES

### 5.1 Noise

PUMA/Klabin is required to monitor point source air emissions as specified in the relevant environmental permit. Monitoring should take place while the pulp mill is operating.

PUMA/Klabin is required to monitor sound pressure levels as specified in the relevant environmental permit. Monitoring should take place while the pulp mill is operating and compared with the background levels defined in the project's ESIA/EIA.

| MONITORING SITES | COORDINATES | |
|---|---|---|
| | UTM X (m) | UTM Y(m) |
| P1 | 526836 | 7320893 |
| P2 | 525480 | 7320143 |
| P3 | 524504 | 7319320 |
| P4 | 524536 | 7316963 |
| P5 | 527670 | 7316371 |

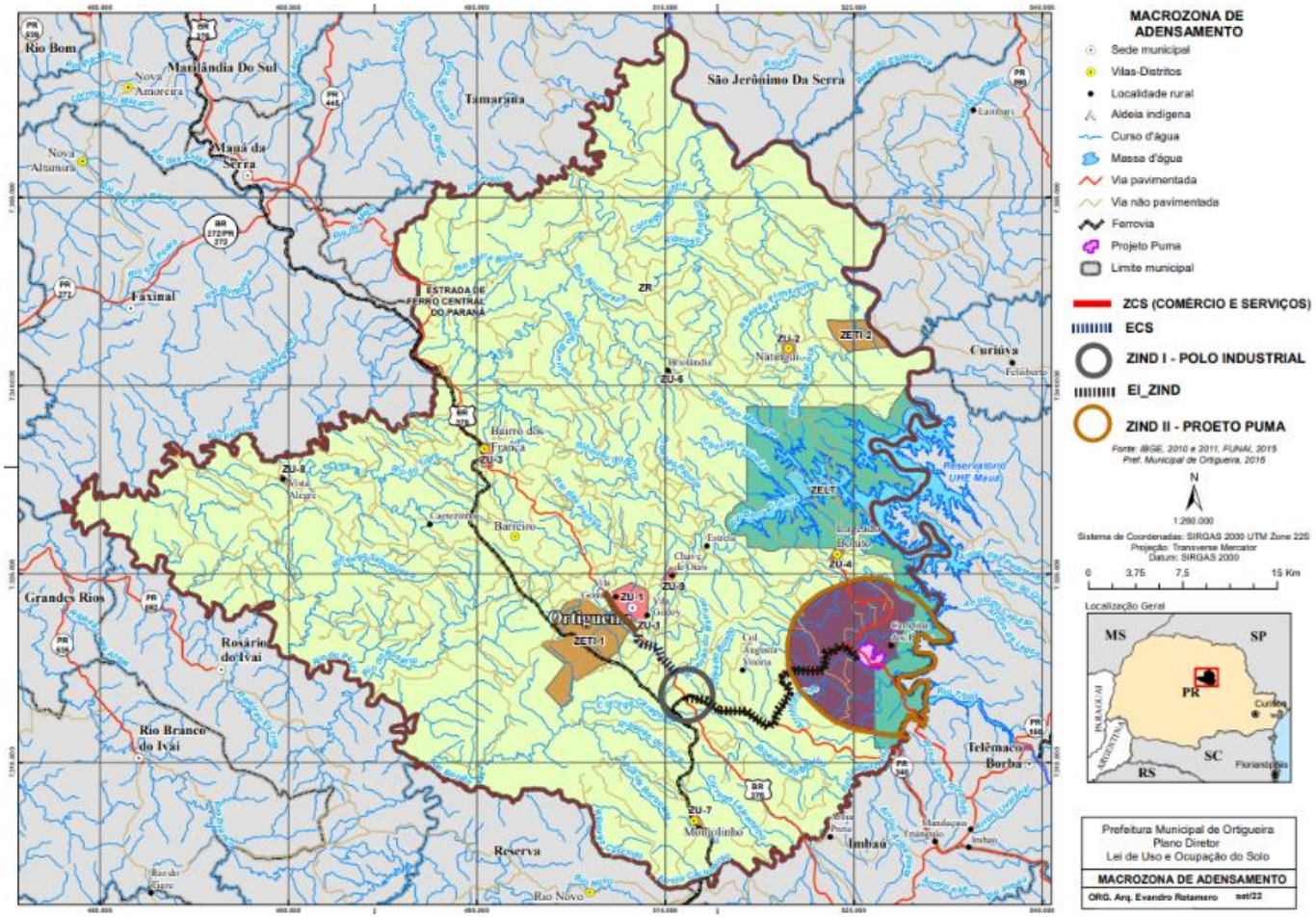

Location of noise monitoring point.

Ortigueira's Master Plan was updated in January 2023 (Supplementary Law n° 326/2023), and the region is now classified as Industrial Zone (ZIND II), considering a 6-kilometer radius around Puma Plant.
Based on the Brazilian regulation (NBR 10151), the characterization as an Industrial Zone changes the noise reference values to 70dB during the day and 60dB during the night, as it is presented below.

| MONITORING SITES | RECEPTOR | UNITS | LEGAL LIMITS NBR 10151 | | LIMITS IFC Guidelines | | REFERENCE Considered by the Project | |
|---|---|---|---|---|---|---|---|---|
| | | | DAYTIME | NIGHT TIME | DAYTIME | NIGHT TIME | DAYTIME | NIGHTTIME |
| P1 | Industrial | dB (A) | 70 | 60 | 70 | 70 | 55 | 45 |
| P2 | Industrial | dB (A) | 70 | 60 | 70 | 70 | 55 | 45 |
| P3 | Industrial | dB (A) | 70 | 60 | 70 | 70 | 70 | 60 |
| P4 | Industrial | dB (A) | 70 | 60 | 70 | 70 | 70 | 60 |
| P5 | Industrial | dB (A) | 70 | 60 | 70 | 70 | 55 | 45 |

Puma Unit will continue to consider the limits adopted by the project as a reference, and there will be no increase in the sound pressure levels of its current operations.

In regard with the Zoning change, Ortigueira aims to attract new projects and investments to the region. As it can be observed in the map below, another industrial zone (ZIND I – POLO INDUSTRIAL) was created in BR 376 and PR 340 highways intersection.



**CONFIDENTIAL**

| MEASURED VALUES | P1 | | P2 | | P3 | | P4 | | P5 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | DAYTIME | NIGHTTIME | DAYTIME | NIGHTTIME | DAYTIME | NIGHTTIME | DAYTIME | NIGHTTIME | DAYTIME | NIGHTTIME |
| September/2019 | 44 | 39 | 62 | 40 | 63 | 55 | 65 | 57 | 51 | 39 |
| Nov/2019 | 47 | 45 | 51 | 63 | 56 | 48 | 47 | 50 | 53 | 44 |
| January/2020 | 68 | 62 | 50 | 46 | 71 | 67 | 56 | 48 | 62 | 60 |
| March/2020 | 36 | 47 | 58 | 42 | 63 | 56 | 57 | 46 | 47 | 45 |
| July/2020 | 49 | 52 | 44 | 47 | 69 | 63 | 67 | 44 | 47 | 51 |
| December/2020 | 50 | 50 | 52 | 51 | 69 | 67 | 55 | 50 | 51 | 46 |
| March/2021 | 51 | 48 | 52 | 41 | 63 | 58 | 57 | 53 | 47 | 42 |
| June/2021 | 50 | 49 | 47 | 46 | 62 | 55 | 55 | 45 | 47 | 47 |
| November/2021 | 54 | 53 | 50 | 43 | 61 | 57 | 53 | 49 | 48 | 49 |
| March/2022 | 50,4 | 50,1 | 46,8 | 43,5 | 64,0 | 57,7 | 66,1 | 65,1 | 51,8 | 46,3 |
| June/2022 | 48,1 | 52,7 | 51,5 | 38,3 | 66,2 | 63,9 | 63,1 | 57,7 | 50,3 | 41,0 |
| September/2022 | 56,4 | 50,5 | 49,3 | 44,7 | 66,9 | 72,2 | 65,1 | 64,4 | 53,3 | 41,1 |
| November/2022 | 55,1 | 52,7 | 48,8 | 48,2 | 67,8 | 56,8 | 60,4 | 54,0 | 48,0 | 49,9 |
| March/2023** | 52,2 | 55,6 | 45,0 | 38,8 | 61,4 | 58,6 | 61,2 | 57,9 | 49,8 | 34,7 |
| April/2023* | 42,9 | 41,5 | 44,7 | 41,4 | 61,7 | 54,3 | 57,6 | 48,9 | 49,1 | 43,1 |

*Campaign during Puma annual shutdown – background conditions.

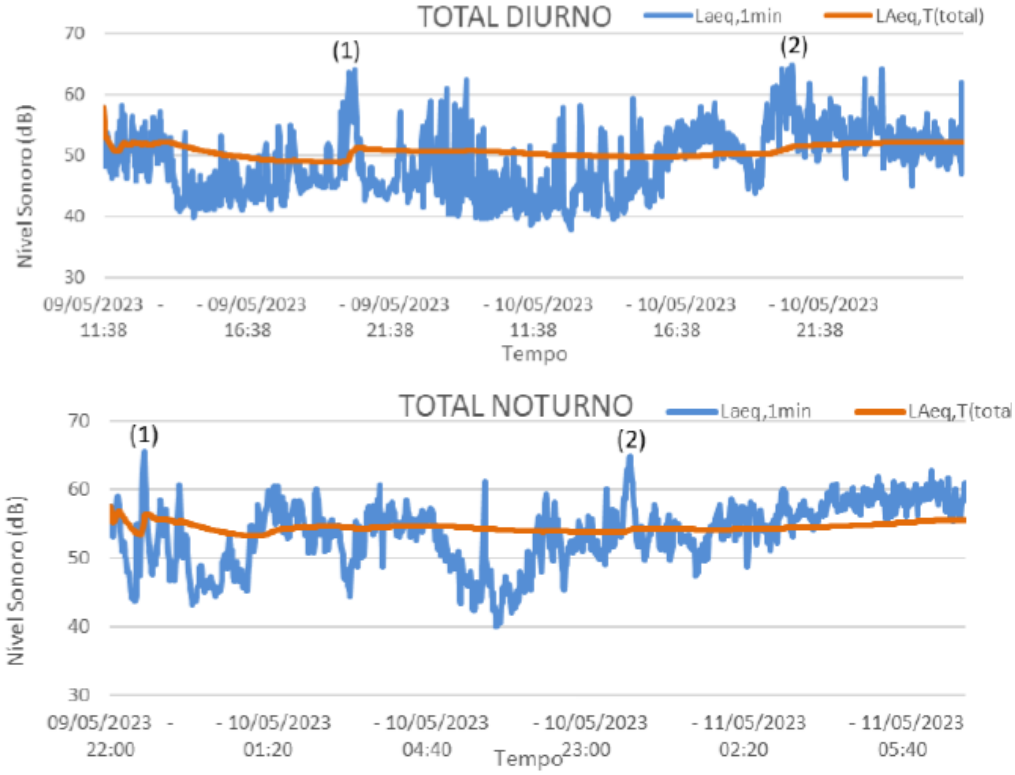
**Data from points 1, 2, 3 and 5 were corrupted due to excessive humidity in the sampling devices, caused by meteorological conditions. Considering that, Klabin did a complementary sampling in May for new results.

Results highlighted considering the comparison with the projects reference. Regarding legal limits, all 2023 results are complying.

Since September / 2019, monitoring campaigns follow the IFC Guidelines – Noise management methodology, with 48 hours duration. Besides that, we improved our method for critical reviews by using a sound recorder to identify peaks during the campaign and clarify its sources (since March/2022).

In P1, during march/2020 monitoring campaign, a different methodology (5-minute sampling time) was used, because the landowner did not provide extended access to his property due to Covid-19 concerns.

**Measured values 1Q 2023 – P1**




**1Q 2023 – P1**
**Critical review:**

Daytime measurements – the results for sound pressure level are complying with projects reference and legal limits.

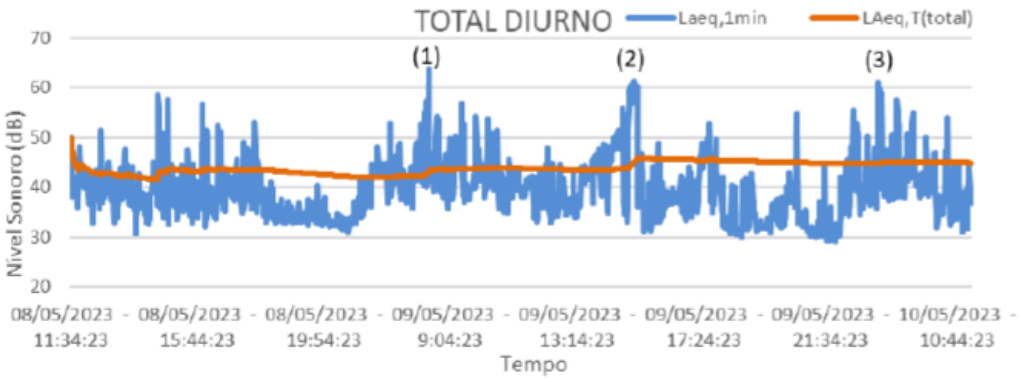
Nighttime measurements – the projects reference was exceeded in the period, which was caused by a probable industrial noise, as identified in the recorder. For this period, no process deviation or noise complaints were identified.

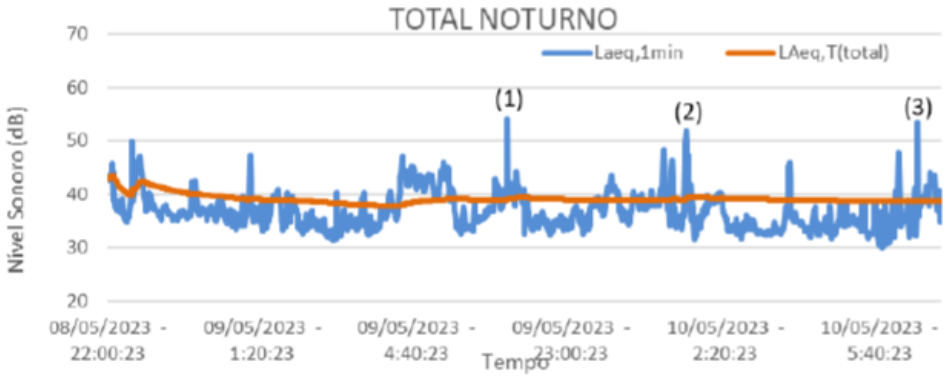
In both periods, the results meet the legal limits of 70dB (day) and 60dB (night), demonstrating environmental compliance.

*In the latest monitoring reports (since March/2022), it was used a sound recorder to identify peaks during the campaign and clarify its sources.

Measured values 1Q 2023 – P2

- **PONTO 02**



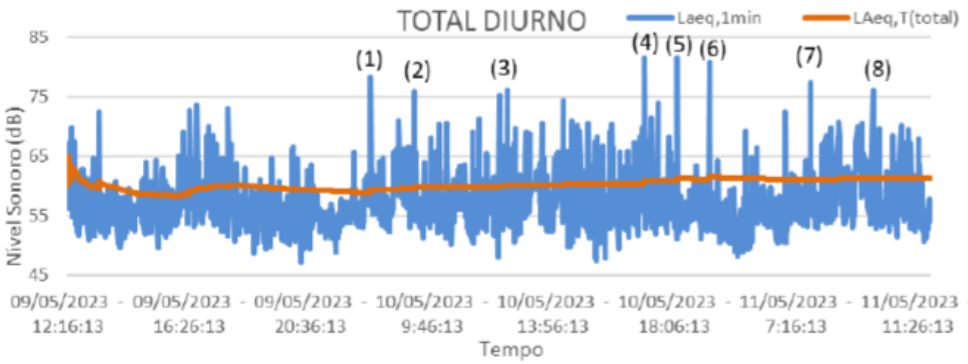

**1Q 2023 – P2**
**Critical review:**

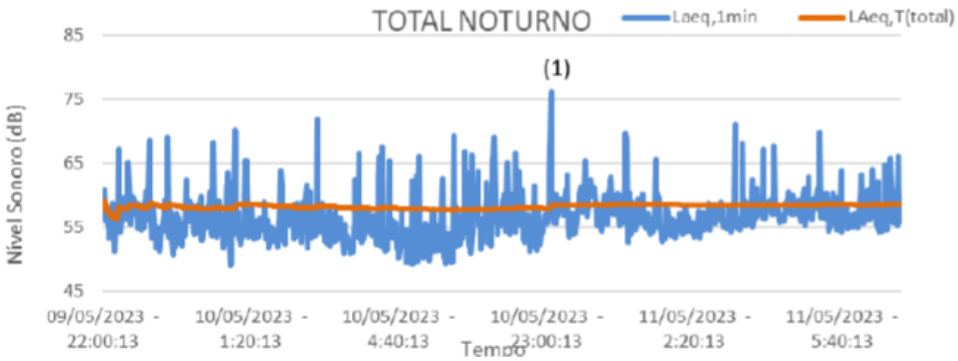
At this location, the results for sound pressure level are complying with the projects reference and the legal limits, daytime and nighttime, demonstrating environmental compliance.
Peaks registered are related to bird whistles.

*In the latest monitoring reports (since March/2022) it was used a sound recorder to identify peaks during the campaign and clarify its sources.

**Measured values 1Q 2023 – P3**

- **PONTO 03**



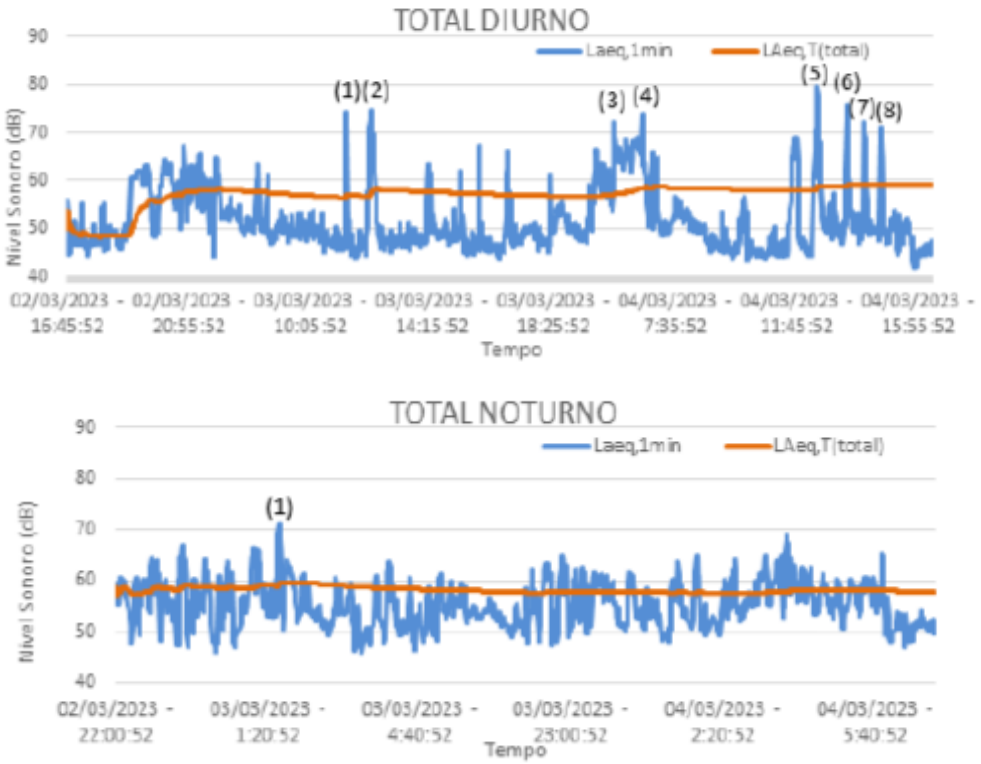




**1Q 2023 – P3**
**Critical review:**

At this location, the results for sound pressure level are complying with the projects reference and the legal limits, daytime and nighttime, demonstrating environmental compliance.
Peaks registered are related to vehicles, insects and wind.

*In the latest monitoring reports (since March/2022), it was used a sound recorder do identify peaks during the campaign and clarify its sources.

**Measured values 1Q 2023 – P4**




**1Q 2023 – P4**
**Critical review:**

All sound pressure level results meet the reference values adopted by the project, both during the day and at night.

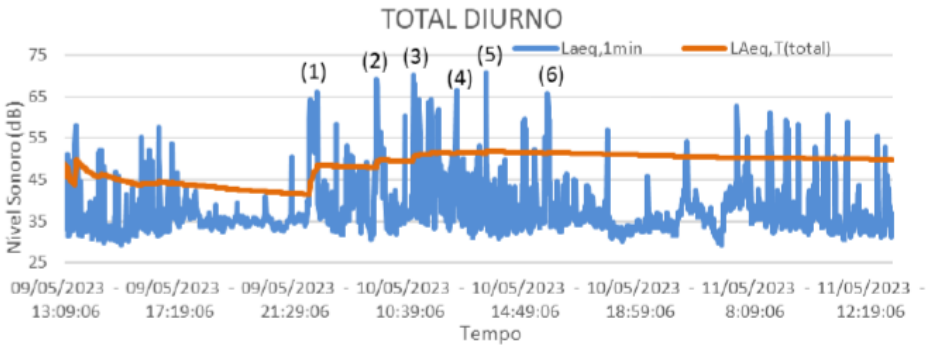
Peaks recorded during the day are mainly related to precipitation noise, and the movement of trucks. During the night period, the peak was related to precipitation.

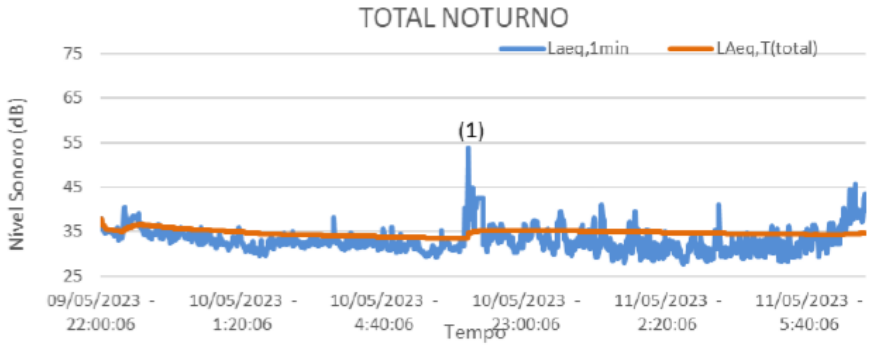
In both periods, the results meet the legal limits of 70dB (day) and 60dB (night), demonstrating environmental compliance.

*In the latest monitoring reports (since March/2022), it was used a sound recorder do identify peaks during the campaign and clarify its sources.

## Measured values 1Q 2023 – P5

- **PONTO 05**




**1Q 2023 – P5**
**Critical review:**

All sound pressure level results meet the reference values adopted by the project, both during the day and at night.

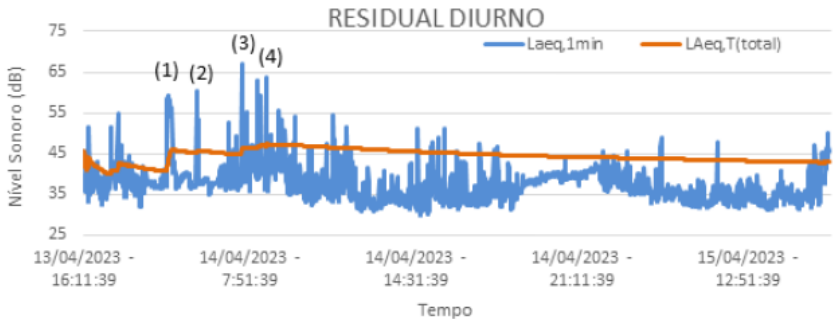
Peaks recorded during the day are mainly related to dog barks and bird whistles. During the night period, the peak was related to vehicles.

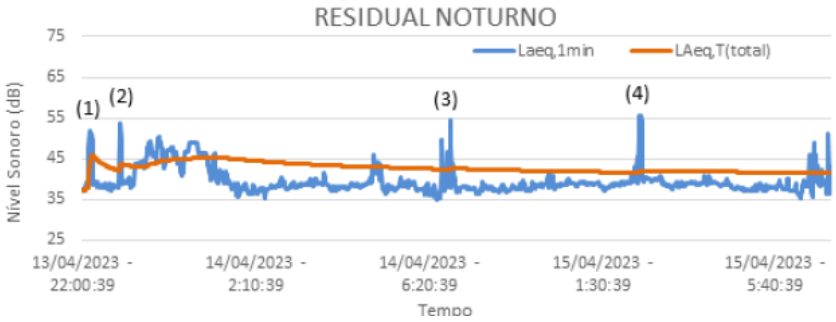
In both periods, the results meet the legal limits of 70dB (day) and 60dB (night), demonstrating environmental compliance.

*In the latest monitoring reports (since March/2022), it was used a sound recorder do identify peaks during the campaign and clarify its sources.

**Measured values 2Q 2023 – P1**

- **PONTO 01**




**2Q 2023 – P1**
**Critical review:**

All sound pressure level results meet the reference values adopted by the project, both during the day and at night.

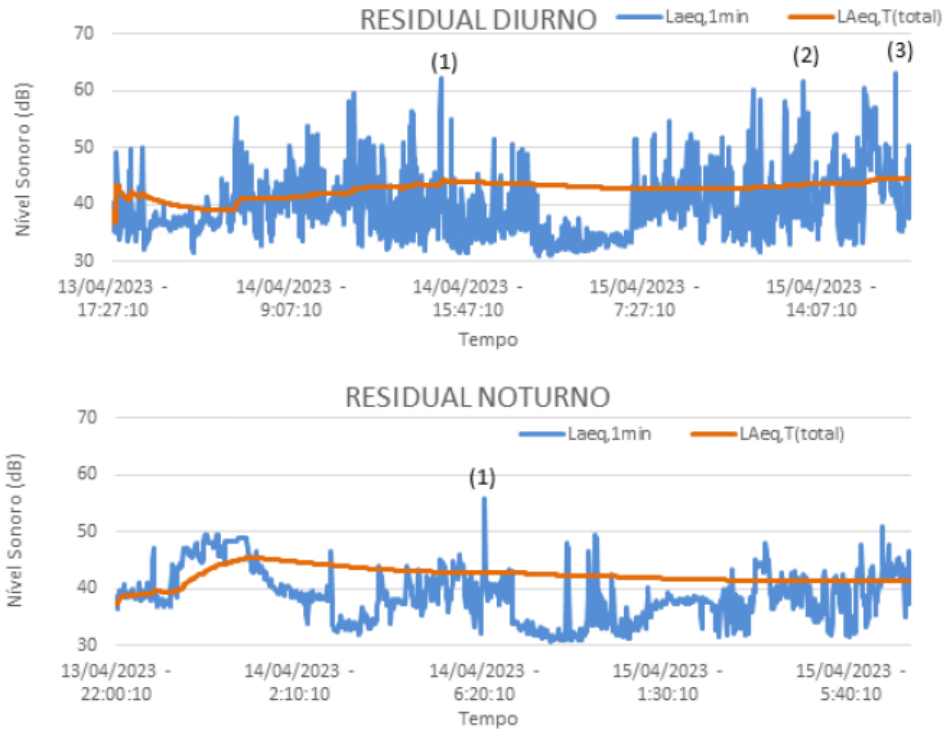
Peaks recorded during the day and the night are mainly related to insects and bird whistles.

In both periods, the results meet the legal limits of 70dB (day) and 60dB (night), demonstrating environmental compliance.

*In the latest monitoring reports (since March/2022), it was used a sound recorder to identify peaks during the campaign and clarify its sources.

**Measured values 2Q 2023 – P2**

- **PONTO 02**



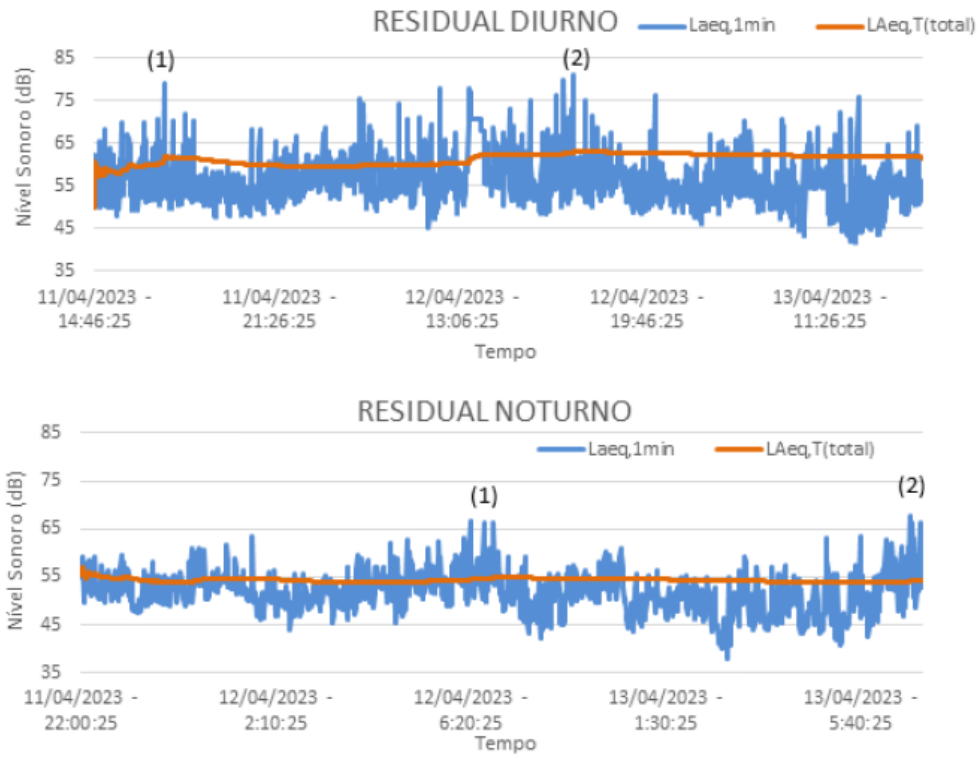

**2Q 2023 – P2**
**Critical review:**

At this location, the results for sound pressure level are complying with the projects reference and the legal limits, daytime and nighttime, demonstrating environmental compliance.
Peaks registered are related to bird whistles, insects, and dog barks.

*In the latest monitoring reports (since March/2022) it was used a sound recorder to identify peaks during the campaign and clarify its sources.

**Measured values 2Q 2023 – P3**

- **PONTO 03**



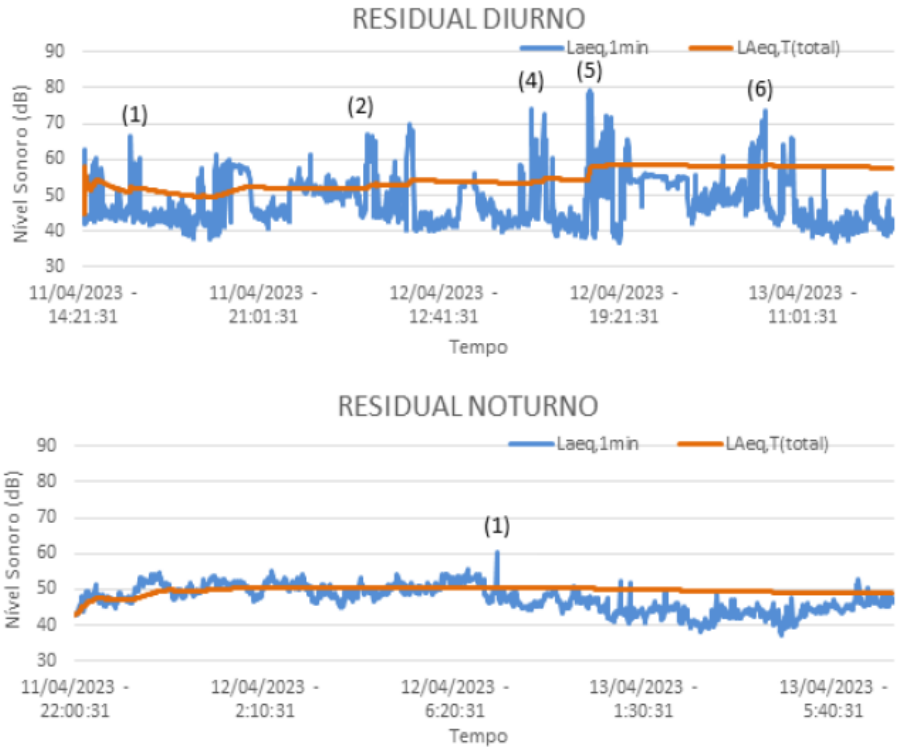

**2Q 2023 – P3**
**Critical review:**

At this location, the results for sound pressure level are complying with the projects reference and the legal limits, daytime and nighttime, demonstrating environmental compliance.
Peaks registered are related to vehicles and motorcycles.

*In the latest monitoring reports (since March/2022), it was used a sound recorder do identify peaks during the campaign and clarify its sources.

**Measured values 2Q 2023 – P4**

- **PONTO 04**




**2Q 2023 – P4**
**Critical review:**

All sound pressure level results meet the reference values adopted by the project, both during the day and at night.

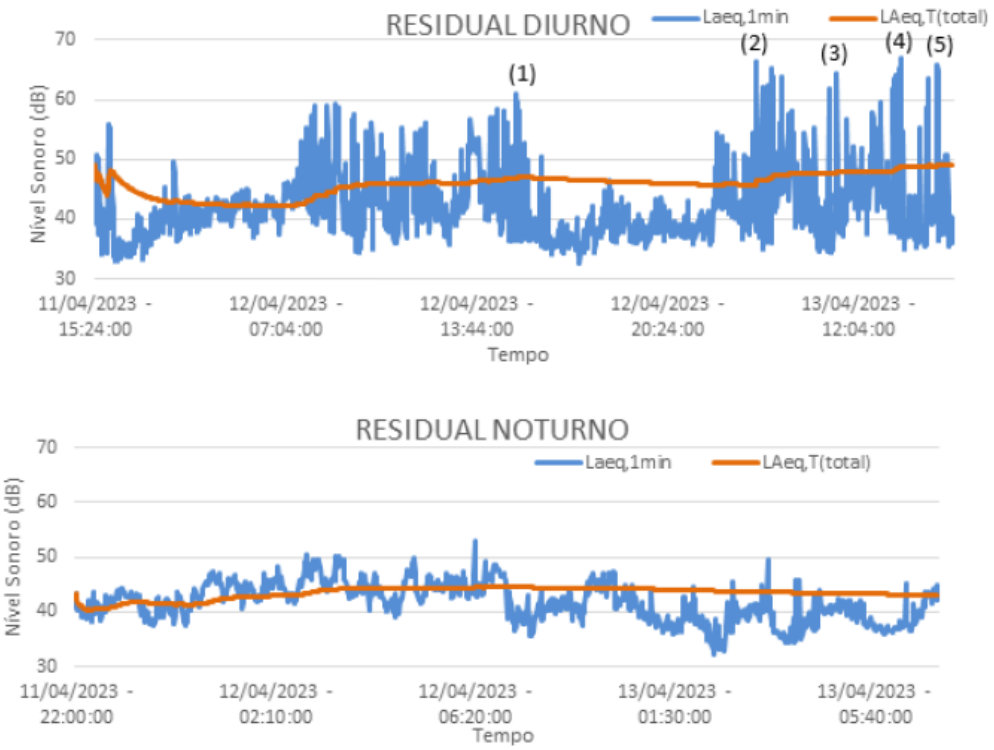
Peaks recorded during the day and night are mainly related to the movement of trucks, vehicles, and insects.

In both periods, the results meet the legal limits of 70dB (day) and 60dB (night), demonstrating environmental compliance.

*In the latest monitoring reports (since March/2022), it was used a sound recorder do identify peaks during the campaign and clarify its sources.

**Measured values 2Q 2023 – P5**

- **PONTO 05**




**2Q 2023 – P5**
**Critical review:**

All sound pressure level results meet the reference values adopted by the project, both during the day and at night.

Peaks recorded during the day are related construction in the residential building in front of the monitoring location. During the night period, no peaks were registered.

In both periods, the results meet the legal limits of 70dB (day) and 60dB (night), demonstrating environmental compliance.

*In the latest monitoring reports (since March/2022), it was used a sound recorder do identify peaks during the campaign and clarify its sources.

### 5.2 Point Source Air Emissions

PUMA/Klabin is required to monitor point source air emissions as specified in the relevant environmental permit. Monitoring should take place while the pulp mill is operating.

| **Point Source Air Emissions Monitoring[1] - Reporting Period Jan/2023 through Jun/2023** | | | | | | |
|---|---|---|---|---|---|---|
| *Sampling frequency (if not continuous, define sampling frequency below)* | *Pollutant* | *Unit* | *Numerical Standard Adopted by the Project* | *PUMA/Klabin´s Performance, Average for the reporting period* | *Maximum* | *Minimum* |
| **Recovery Boiler 1** | | | | | | |
| Semiannual | PM | mg/Nm3 | 100 | 13,55 | 19,42 | 9,88 |
| Semiannual | $SO_2$ | mg/Nm3 | 100 | 4,96 | 4,97 | 4,94 |
| Semiannual | NOx | mg/Nm3 | 470 | 182,32 | 186,48 | 174,20 |
| Semiannual | TRS | mg/Nm3 | 15 | 5,28 | 5,31 | 5,22 |
| Semiannual | $H_2S$ | mg/Nm3 | - | - | - | - |
| **Biomass Boiler 1** | | | | | | |
| Semiannual | PM | mg/Nm3 | 100 | 82,91 | 86,61 | 79,51 |
| Semiannual | $SO_2$ | mg/Nm3 | - | 5,18 | 5,19 | 5,15 |
| Semiannual | NOx | mg/Nm3 | 500 | 134,86 | 139,02 | 129,29 |
| Semiannual | TRS | mg/Nm3 | - | - | - | - |
| Semiannual | $H_2S$ | mg/Nm3 | - | - | - | - |
| **Lime Kiln I** | | | | | | |

[1] Provide a scaled facility map showing the precise location of all discharge points.

| | | | | | | |
|---|---|---|---|---|---|---|
| Semiannual | PM | mg/Nm3 | 100 | 90,11 | 98,67 | 85,22 |
| Semiannual | $SO_2$ | mg/Nm3 | - | 2,03 | 2,06 | 2,00 |
| Semiannual | NOx | mg/Nm3 | 470 | 148,79 | 149,47 | 148,43 |
| Semiannual | TRS | mg/Nm3 | 30 | 13,36 | 13,85 | 12,93 |
| **Lime Kiln II** | | | | | | |
| Semiannual | PM | mg/Nm3 | 100 | 50,68 | 52,60 | 49,25 |
| Semiannual | $SO_2$ | mg/Nm3 | - | 3,65 | 4,15 | 3,38 |
| Semiannual | NOx | mg/Nm3 | 470 | 112,49 | 132,29 | 77,55 |
| Semiannual | TRS | mg/Nm3 | 30 | 10,42 | 10,89 | 9,69 |

Please report valid limits from the Brazilian environmental permit and measurement results to the table below - Annex 2 - 24

12 Provide a scaled facility map showing the precise location of all discharge points.

| **Point Source Air Emissions Monitoring[2] - Reporting Period Jan./2023 through Jun/2023** | | | | | | |
|---|---|---|---|---|---|---|
| *Sampling frequency (if not continuous, define sampling frequency below)* | *Pollutant* | *Unit* | *Numerical Standard Adopted by the Project* | *PUMA/Klabin´s Performance, Average for the reporting period* | *Maximum* | *Minimum* |
| **Recovery Boiler 2** | | | | | | |
| Semiannual | PM | mg/Nm3 | 100 | 28,16 | 37,69 | 21,49 |
| Semiannual | $SO_2$ | mg/Nm3 | 100 | 2,98 | 3,21 | 2,53 |
| Semiannual | NOx | mg/Nm3 | 470 | 103,47 | 107,01 | 99,68 |
| Semiannual | TRS | mg/Nm3 | 15 | 3,84 | 4,27 | 3,61 |
| Semiannual | $H_2S$ | mg/Nm3 | - | - | - | - |
| **Biomass Boiler 2** | | | | | | |

[2] Provide a scaled facility map showing the precise location of all discharge points.

| | | | | | | |
|---|---|---|---|---|---|---|
| Semiannual | PM | mg/Nm3 | 100 | 25,94 | 30,29 | 22,75 |
| Semiannual | $SO_2$ | mg/Nm3 | - | 2,40 | 2,79 | 2,20 |
| Semiannual | NOx | mg/Nm3 | 500 | 80,76 | 81,07 | 79,71 |
| Semiannual | TRS | mg/Nm3 | - | - | - | - |
| Semiannual | $H_2S$ | mg/Nm3 | - | - | - | - |
| **Lime Kiln III** | | | | | | |
| Semiannual | PM | mg/Nm3 | 100 | 41,43 | 50,41 | 29,99 |
| Semiannual | $SO_2$ | mg/Nm3 | - | 2,25 | 2,27 | 2,22 |
| Semiannual | NOx | mg/Nm3 | 470 | 101,81 | 109,45 | 97,52 |
| Semiannual | TRS | mg/Nm3 | 30 | 12,85 | 13,84 | 12,30 |
| **Sulfuric Acid Plant - WSA** | | | | | | |
| Semiannual | PM | mg/Nm3 | 70 | 22,86 | 32,42 | 13,10 |
| Semiannual | $SO_x$ | mg/Nm3 | 280 | 24,11 | 35,62 | 14,77 |
| Semiannual | NOx | mg/Nm3 | 560 | 0,00 | 0,00 | 0,00 |
| Semiannual | TRS | mg/Nm3 | 15 | 0,00 | 0,00 | 0,00 |
| Semiannual | $SO_2$ | Kg $SO_2$/t $H_2SO_4$ | 2,0 | 0,0623 | 0,0831 | 0,0421 |
| Semiannual | $SO_3$ | Kg $SO_3$/t $H_2SO_4$ | 0,15 | 0,0041 | 0,0081 | 0,00 |

Please provide in the table below the amount of absolute emission during the reporting period of each given parameter divided by amount of pulp produced in same period of time.

| Parameter | Unit | PUMA/Klabin Pulp Mill's performance[13] | IFC guideline[14] |
|---|---|---|---|
| Amount of produced pulp | ADt | 912.526 | |
| TSP | kg/ADt | 0,32 | 0,5 |
| SO2 as S | kg/ADt | 0,03 | 0,4 |
| NOx as NO2 | kg/ADt | 1,41 | 1,5 |
| TRS as S | kg/ADt | 0,04 | 0,2 |

## 5.3. Ambient Air

Ambient Air refers to any unconfined portion of the atmosphere, and it is termed open air or surrounding air. Ambient air monitoring is carried out for a variety of reasons, including assessment of environmental problems and evaluation of interventions.

PUMA/Klabin is required to monitor ambient air at subsequent defined locations. Monitoring should take place while the pulp mill is operating.

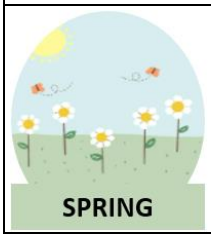
Please fill in valid ambient air quality limits from the Brazilian environmental permit and measurement results to the table below. If there is more than one ambient air quality monitoring place, each monitoring place needs a table of its own.

| MONITORING SITES | COORDINATES | |
|---|---|---|
| | UTM X (m) | UTM Y(m) |
| P1 | 534.966,00 | 730.8215,00 |
| P2 | 525.512,00 | 7.295.990,00 |
| P3 | 507.685,00 | 7.321.940,00 |

13 Report average figures for the reporting period.

14 IFC. 2007: Environmental, health and safety guidelines for pulp and paper mills. Page 30.


Location of ambient air quality monitoring points.

| **Air Quality Monitoring Campaigns** | |
|---|---|
| Seasons of the year | Monitoring Period |
|   | 04/19/2018 through 05/30/2018 – Completed<br>05/24/2019 through 06/24/2019 – Completed<br>06/16/2021 through 07/01/2021 – Completed<br>06/01/2022 through 06/08/2022 – Completed<br>05/02/2023 through 05/09/2023 - Completed |
|   | 09/06/2019 through 09/22/2019 – Completed<br>09/09/2022 through 09/16/2022 – Completed<br>07/2023 – next campaign |
|   | 10/16/2018 through 11/17/2018 – Completed<br>12/01/2020 through 12/18/2020 – Completed<br>11/28/2021 through 12/18/2021 – Completed<br>11/11/2022 through 11/26/2022 - Completed |

| | |
|---|---|
|   | 03/11/2020 through 03/27/2020 – Completed<br>03/23/2022 through 03/29/2022 – Completed<br>02/27/2023 through 03/06/2023 - Completed |

The objective is to attend seasonal variations that represent all typical weather conditions experienced in the region.

The air quality monitoring methodology, conduct the monitoring in each sampling location for a period of five* days:
Site 1: Telêmaco Borba
Site 2: Imbaú
Site 3: Ortigueira
***Starting with the December 2021 Report, monitoring campaigns have been conducted for a period of seven consecutive days, as recommended.**
**Since March/2022, all three locations are monitored simultaneously.**

The methodology and the location of the sampling points were reported to the Paraná Environmental Institute at the PCA. Every quarter, since de beginning of the project, a report with all the information and results is also sent to the Environmental Agency.

15 ~~Please provide a scaled map show~~ing the precise location of all monitoring points.

Starting with 2023 1st quarter report (March), the P02 monitoring location has a new address in the city of Imbaú. Historically, the courtyard of the Municipal Department of Education was used for positioning the sampling equipment. Considering the circulation of school vehicles in the establishment and, consequently, the risk of damaging the equipment and compromising the monitoring of Air Quality, the Department of Education itself asked Klabin to evaluate other locations for the next campaigns.


*P02 – Imbaú: Previous location in Alcino P. Moreira Street, corner of Rua Athanazio Moreira Sobrinho Street - São Cristovão neighborhood.*

Through an evaluation of possible new locations in the city, the alternative that met all sampling criteria within the urban territorial boundary of Imbaú was the Associação de Pais e Amigos dos Excepcionais – APAE, located at

Amazon River Avenue, Imbaú - PR, 84278-000. There is a 14-meter difference in altitude from previous location, and the distance between them is approximately 1.740 meters. Considering the Köppen climate classification as Cfa in the region, in terms of climatology, there is no impact related to the relocation of sampling. The visit in Imbaú was accompanied by the Municipal Secretary for Environment.

The selected point complies with representativeness criteria of the region, respecting logistical, infrastructure and environmental aspects. Relatively easy access for daytime operation, and availability of nearby and reliable electrical power. This new location was considered since the 1st quarter of 2023, during Air Quality monitoring campaign in March. There was no change in the other monitoring locations (P01 and P03). The same sampling methods and standards will be maintained in the new P02 location.

*P02 – Imbaú: Pictures from the new sampling location (APAE), taken during the first visit, and from the monitoring campaign in March/2023, with the sampling equipment.*

| Ponto | Data do Monitoramento | RESULTADOS | | | | | | | | | Classificação da Qualidade do Ar IQA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $NO_2$ - 1h (µg/m3) | $SO_2$ - 24h (µg/m3) | $MP_{10}$ - 24h (µg/m3) | $MP_{2,5}$ - 24h (µg/m3) | PTS - 24h (µg/m3) | ERT - 1h (µg/m3) | O3 - 8h (µg/m3) | CO - 8h (ppm) | H2S – 1h (ppm) | |
| P1 Telêmaco Borba | 27/02/2023 | 36,4 | <L.D. | 17,9 | 8,1 | 31,7 | <L.D. | 38,0 | <L.D. | <L.D. | **Boa** |
| | 28/02/2023 | 36,3 | <L.D. | 10,5 | 4,2 | 17,8 | <L.D. | 41,5 | <L.D. | <L.D. | **Boa** |
| | 01/03/2023 | 56,0 | <L.D. | 16,6 | 7,2 | 30 | <L.D. | 42,3 | <L.D. | <L.D. | **Boa** |
| | 02/03/2023 | 31,9 | <L.D. | 11,1 | 5,8 | 21,5 | <L.D. | 49,0 | <L.D. | <L.D. | **Boa** |
| | 03/03/2023 | 32,6 | <L.D. | 13,3 | 6,2 | 20,6 | <L.D. | 52,7 | <L.D. | <L.D. | **Boa** |
| | 04/03/2023 | 39,1 | <L.D. | 10,6 | 4,9 | 18,9 | <L.D. | 33,5 | <L.D. | <L.D. | **Boa** |
| | 05/03/2023 | 25,1 | <L.D. | 9,3 | 3,9 | 14,5 | <L.D. | 33,0 | <L.D. | <L.D. | **Boa** |
| P2 Imbaú | 27/02/2023 | <L.D. | <L.D. | 11,1 | 6,1 | 18,9 | <L.D. | 39,0 | <L.D. | <L.D. | **Boa** |
| | 28/02/2023 | <L.D. | <L.D. | 7,9 | 4 | 12,5 | <L.D. | 43,3 | <L.D. | <L.D. | **Boa** |
| | 01/03/2023 | <L.D. | <L.D. | 18,5 | 8,9 | 35,3 | <L.D. | 54,4 | <L.D. | <L.D. | **Boa** |
| | 02/03/2023 | <L.D. | <L.D. | 9,8 | 5,5 | 18 | <L.D. | 54,8 | <L.D. | <L.D. | **Boa** |
| | 03/03/2023 | <L.D. | <L.D. | 10,9 | 5,5 | 16,3 | <L.D. | 49,4 | <L.D. | <L.D. | **Boa** |
| | 04/03/2023 | <L.D. | <L.D. | 7,9 | 4,3 | 16,2 | <L.D. | 50,7 | <L.D. | <L.D. | **Boa** |
| | 05/03/2023 | <L.D. | <L.D. | 7,2 | 4,2 | 13,2 | <L.D. | 48,3 | <L.D. | <L.D. | **Boa** |
| P3 Ortigueira | 27/02/2023 | <L.D. | <L.D. | 13,2 | 7,1 | 20,6 | <L.D. | 38,7 | <L.D. | <L.D. | **Boa** |
| | 28/02/2023 | 28,0 | <L.D. | 6,8 | 4,5 | 15 | <L.D. | 50,1 | <L.D. | <L.D. | **Boa** |
| | 01/03/2023 | 29,4 | <L.D. | 12,4 | 6,8 | 24,7 | <L.D. | 56,0 | <L.D. | <L.D. | **Boa** |
| | 02/03/2023 | 29,4 | <L.D. | 11,5 | 6,1 | 20,1 | <L.D. | 55,8 | <L.D. | <L.D. | **Boa** |
| | 03/03/2023 | <L.D. | <L.D. | 9,7 | 5,6 | 17,3 | <L.D. | 51,0 | <L.D. | <L.D. | **Boa** |
| | 04/03/2023 | <L.D. | <L.D. | 10,9 | --* | 19,8 | <L.D. | 48,9 | <L.D. | <L.D. | **Boa** |
| | 05/03/2023 | 30,8 | <L.D. | 13,3 | 5,8 | 20,2 | <L.D. | 44,0 | <L.D. | <L.D. | **Boa** |
| Limites CONAMA nº 491/2018 | | **260** | **125** | **120** | **60** | **240** | **n/a** | **140** | **9** | **n/a** | |

**1st quarter 2023 - Critical review:**
This monitoring campaign conducted in March 2023 present very good results, where all 3 locations attend legal limits of air quality, for all parameters analyzed. Air quality index classification as “Good” in all cases.

*LOD: Limit of detection of the technical standard used to determine the concentration (µg/m³).*
**C06/P03 was canceled due to blown fuse. It can be observed that the legal limits were met on the other days, significantly below the reference value.*

| Ponto | Data do Monitoramento | RESULTADOS | | | | | | | | | Classificação da Qualidade do Ar IQA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $NO_2$ - 1h (µg/m3) | $SO_2$ - 24h (µg/m3) | $MP_{10}$ - 24h (µg/m3) | $MP_{2,5}$ - 24h (µg/m3) | PTS - 24h (µg/m3) | ERT - 1h (µg/m3) | O3 - 8h (µg/m3) | CO - 8h (ppm) | H2S – 1h (ppm) | |
| P1 Telêmaco Borba | 02/05/2023 | <L.D. | <L.D. | 29,6 | 14,5 | 60,8 | <L.D. | <L.D. | <L.D. | <L.D. | **Boa** |
| | 03/05/2023 | <L.D. | <L.D. | 29,1 | 16,2 | 55,7 | <L.D. | 23,9 | <L.D. | <L.D. | **Boa** |
| | 04/05/2023 | 24,3 | <L.D. | 27,9 | 14,9 | 67,5 | <L.D. | 5,0 | <L.D. | <L.D. | **Boa** |
| | 05/05/2023 | <L.D. | <L.D. | 23,5 | 12,4 | 41,1 | <L.D. | 46,7 | <L.D. | <L.D. | **Boa** |
| | 06/05/2023 | 103 | <L.D. | 23,2 | 12,5 | 41,3 | <L.D. | 4,8 | <L.D. | <L.D. | **Boa** |
| | 07/05/2023 | <L.D. | <L.D. | 23,6 | 14,2 | 38,6 | <L.D. | 56,1 | <L.D. | <L.D. | **Boa** |
| | 08/05/2023 | <L.D. | <L.D. | 30,8 | 17,7 | 60,9 | <L.D. | 13,6 | <L.D. | <L.D. | **Boa** |
| P2 Imbaú | 02/05/2023 | 10,2 | <L.D. | 26,5 | 13,7 | 43,8 | <L.D. | <L.D. | <L.D. | <L.D. | **Boa** |
| | 03/05/2023 | 10,8 | <L.D. | 26,2 | 10,8 | 49,7 | <L.D. | 12,7 | <L.D. | <L.D. | **Boa** |
| | 04/05/2023 | 9,9 | <L.D. | 24,0 | 9,9 | 44,9 | <L.D. | 45,8 | <L.D. | <L.D. | **Boa** |
| | 05/05/2023 | <L.D. | <L.D. | 22,6 | 10,5 | 38,4 | <L.D. | 3,6 | <L.D. | <L.D. | **Boa** |
| | 06/05/2023 | <L.D. | <L.D. | 22,8 | 11,2 | 35,5 | <L.D. | 57,2 | <L.D. | <L.D. | **Boa** |
| | 07/05/2023 | 10,7 | <L.D. | 26,4 | 12,5 | 42,1 | <L.D. | 21,6 | <L.D. | <L.D. | **Boa** |
| | 08/05/2023 | <L.D. | <L.D. | 34,6 | 15,0 | 65,2 | <L.D. | 54,0 | <L.D. | <L.D. | **Boa** |
| P3 Ortigueira | 02/05/2023 | 16,2 | <L.D. | 29,4 | 15,5 | 56,0 | <L.D. | <L.D. | <L.D. | <L.D. | **Boa** |
| | 03/05/2023 | 24,2 | <L.D. | 29,1 | 18,5 | 56,6 | <L.D. | 17,2 | <L.D. | <L.D. | **Boa** |
| | 04/05/2023 | 19,6 | <L.D. | 30,9 | 18,7 | 62,3 | <L.D. | 36,4 | <L.D. | <L.D. | **Boa** |
| | 05/05/2023 | 19,6 | <L.D. | 33,9 | 20,5 | 62,0 | I* | 14,2 | <L.D. | <L.D. | **Boa** |
| | 06/05/2023 | 57 | <L.D. | 29,5 | 19,1 | 47,2 | <L.D. | 52,6 | <L.D. | <L.D. | **Boa** |
| | 07/05/2023 | 10,9 | <L.D. | 29,8 | 19,2 | 55,4 | <L.D. | 44,5 | <L.D. | <L.D. | **Boa** |
| | 08/05/2023 | 12,2 | <L.D. | 27,4 | 19,7 | 50,6 | <L.D. | 27,6 | <L.D. | <L.D. | **Boa** |
| Limites CONAMA nº 491/2018 | | **260** | **125** | **120** | **60** | **240** | **n/a** | **140** | **9** | **n/a** | |

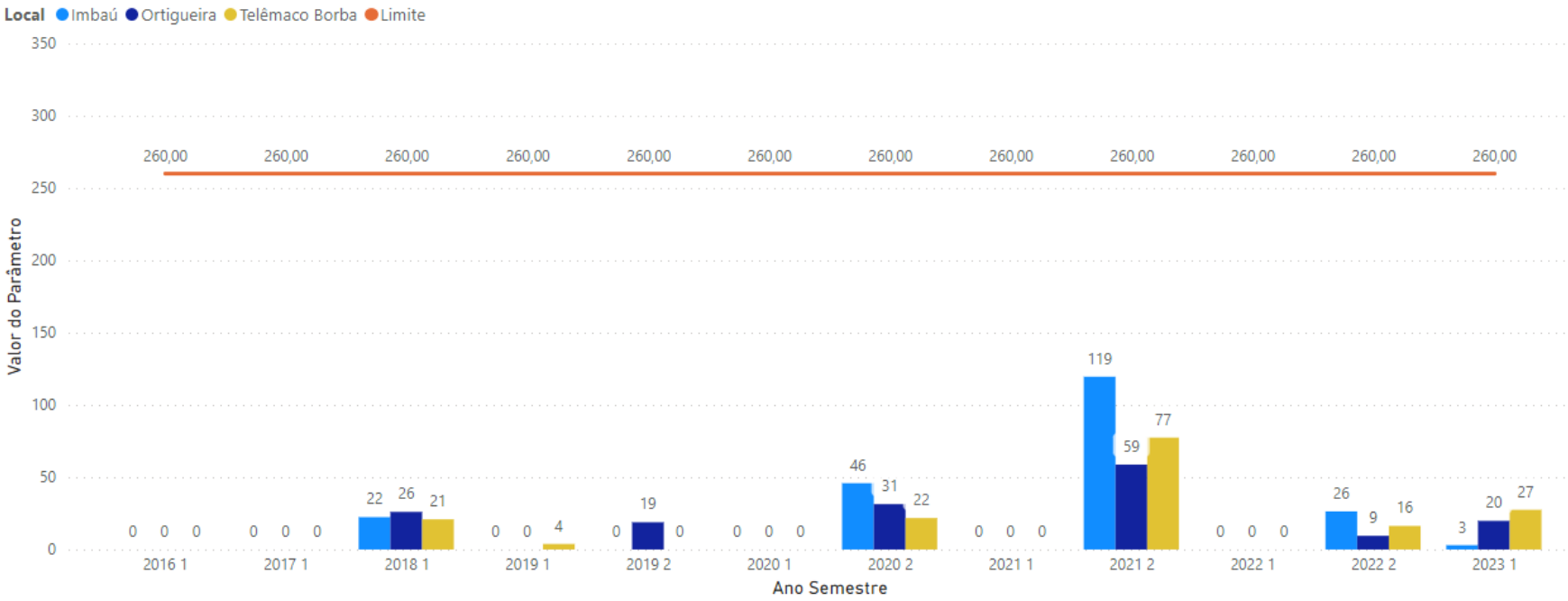
**Critical review:**

This monitoring campaign conducted in May/2023 present very good results, where all 3 locations attend legal limits of air quality, for all parameters analyzed. Air quality index classification as “Good” in all cases.

*LOD: Limit of detection of the technical standard used to determine the concentration (µg/m³).*
*I*: Analytical result inconsistent with the historical series and physical quantity.*

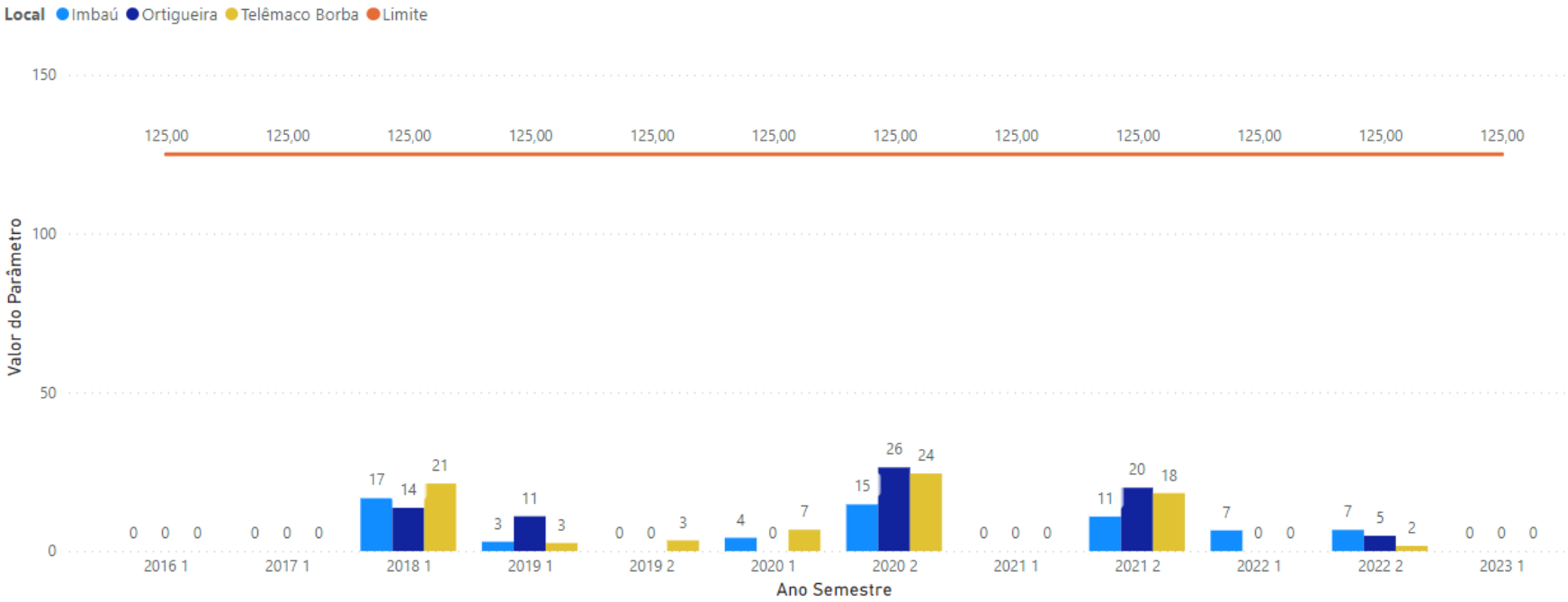
The results of the monitoring campaigns are shown in the graphs below:

**Ambient air quality monitoring – NO2**



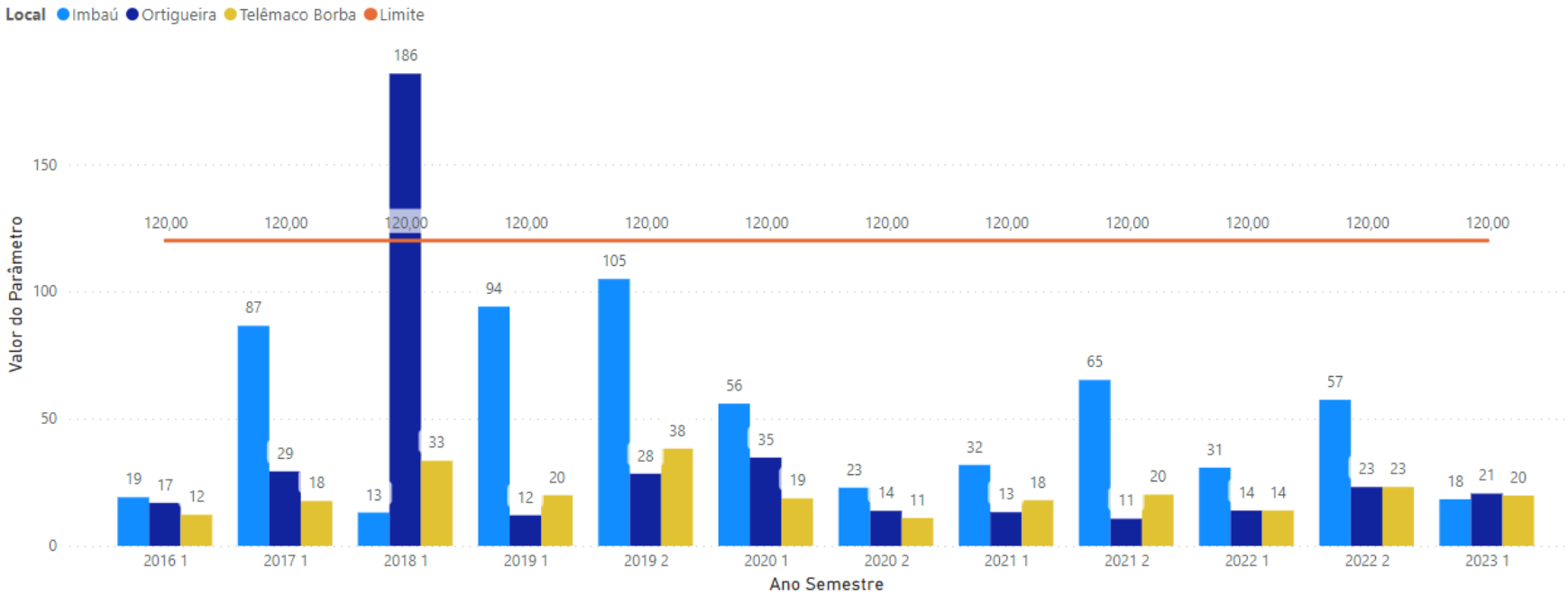

**Critical review:**
The results for the NO2 parameter demonstrate compliance in all campaigns.

## Ambient air quality monitoring – SO2




**Critical review:**
The results for the SO2 parameter demonstrate compliance in all campaigns.

**Ambient air quality monitoring – PM10**

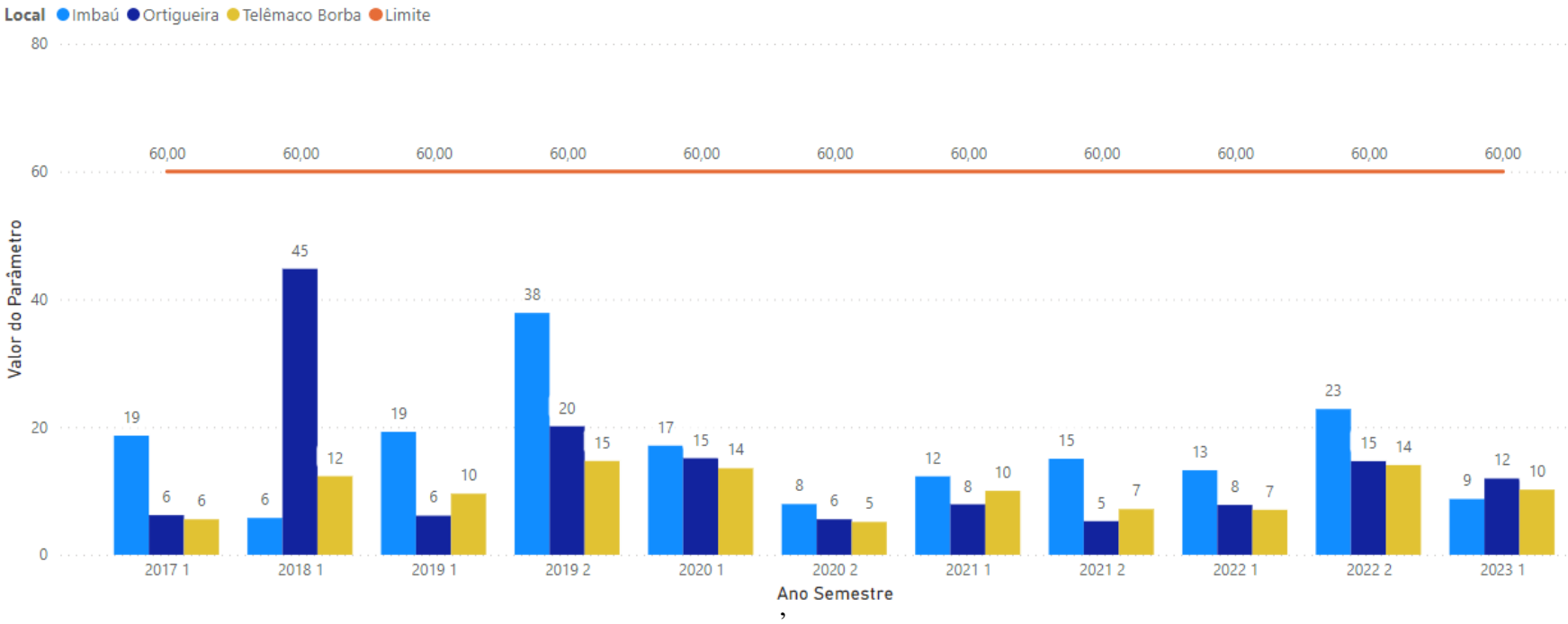



**Critical review:**

Regarding the 2018 monitoring results, the synoptic conditions were characterized by dry and stable weather, unfavorable to the removal and dispersion of atmospheric pollutants. Under these conditions, the natural emissions of particulates tend to increase, and consequently the concentrations of PTS and MP10, as was the case of the samplings carried out in the period. In fact, numerous overshoots of PTS, overshoot in fewer MP10, and no overshoot of MP2.5, indicate that the origin of the particulates is predominantly from natural (non-industrial) sources.

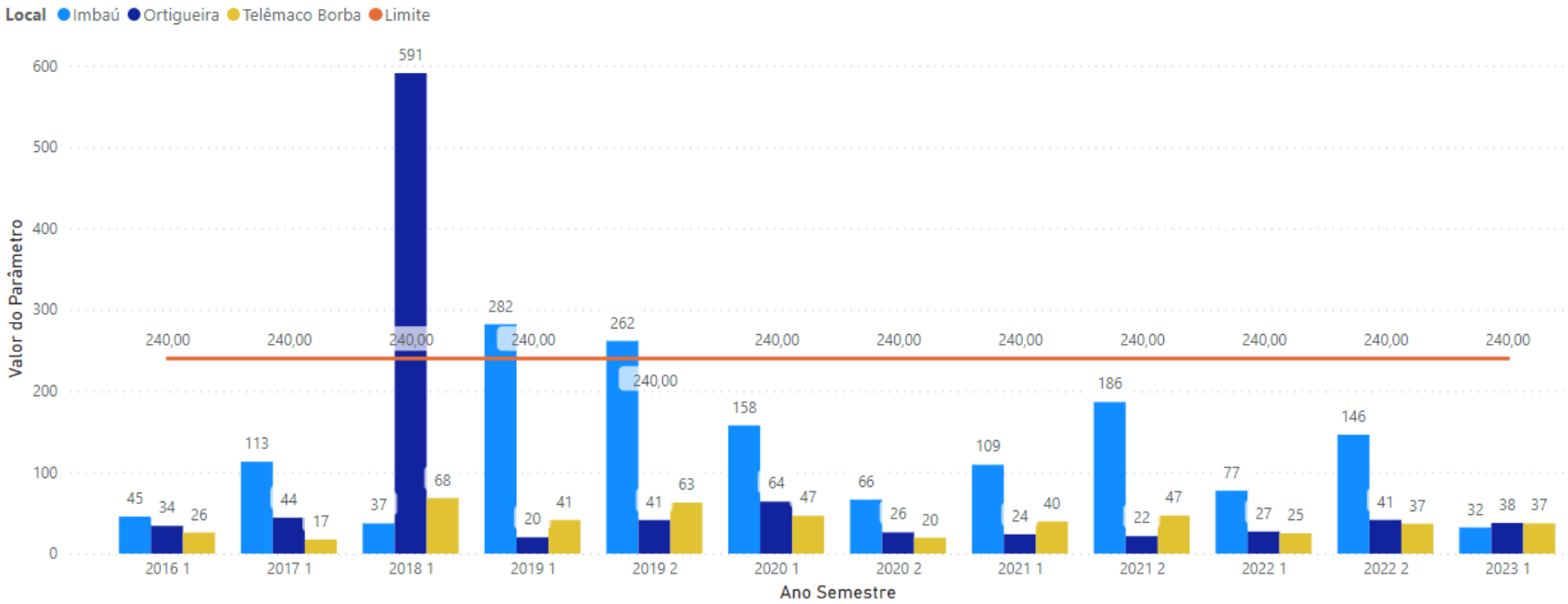
In other monitoring campaigns, the results demonstrate compliance.

## Ambient air quality monitoring – PM 2,5




**Critical review:**
The results for the PM 2,5 parameter demonstrate compliance in all campaigns.

**Ambient air quality monitoring – TSP**

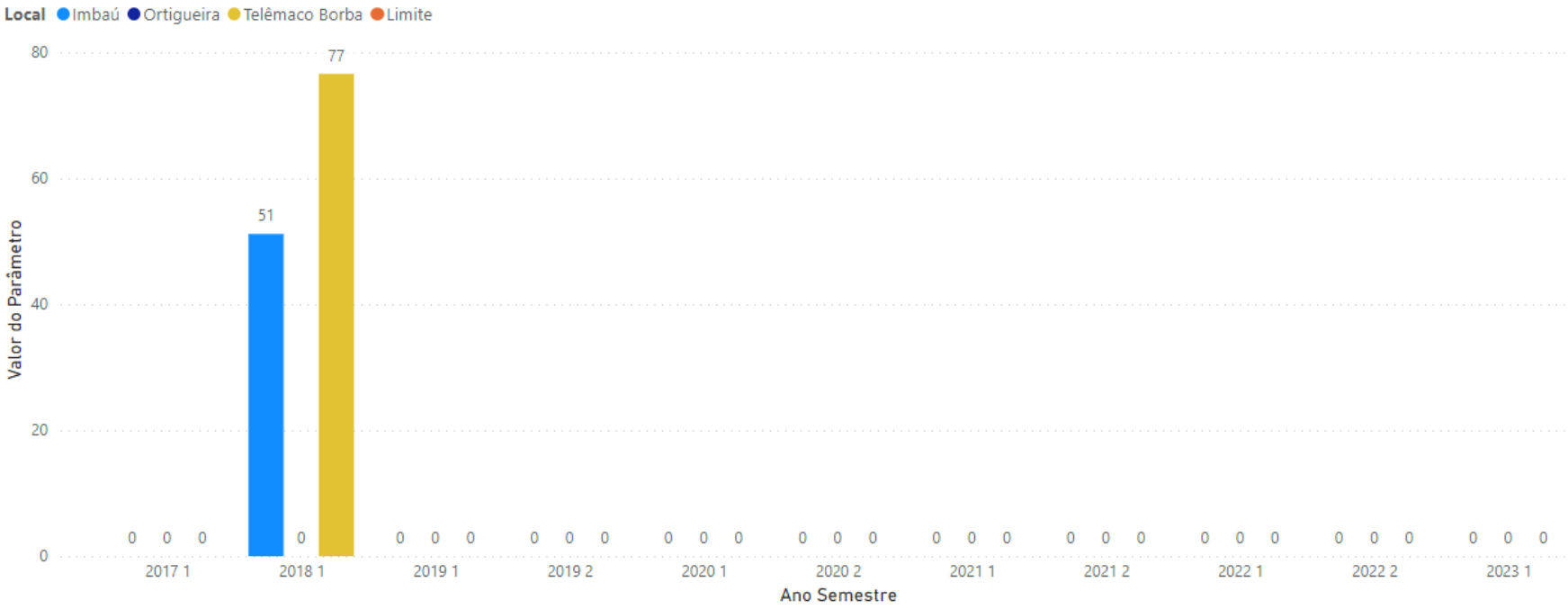



**Critical review:**

Regarding the 2018 monitoring results, the synoptic conditions were characterized by dry and stable weather, unfavorable to the removal and dispersion of atmospheric pollutants. Under these conditions, the natural emissions of particulates tend to increase, and consequently the concentrations of PTS and MP10, as was the case of the samplings carried out in the period. In fact, numerous overshoots of PTS, overshoot in fewer MP10, and no overshoot of MP2.5, indicate that the origin of the particulates is predominantly from natural (non-industrial) sources.

In other monitoring campaigns, the results demonstrate compliance.

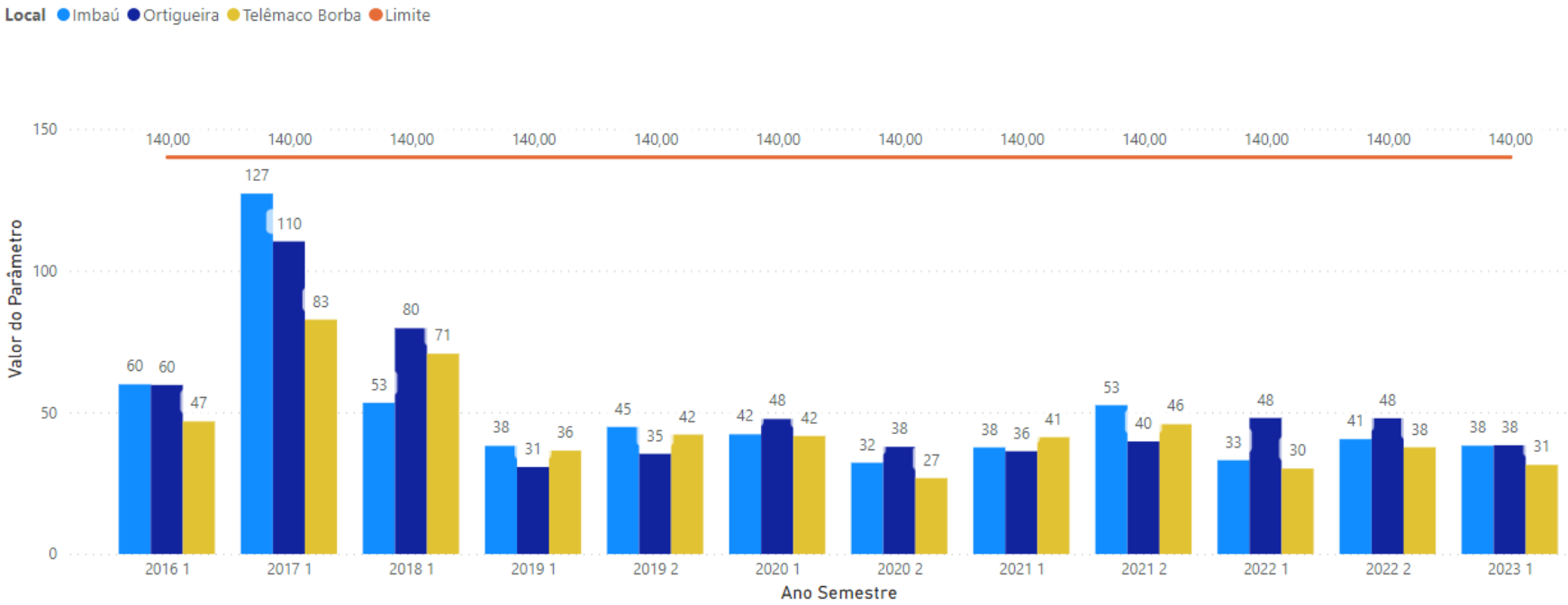
**Ambient air quality monitoring – TRS**




**Critical review:**

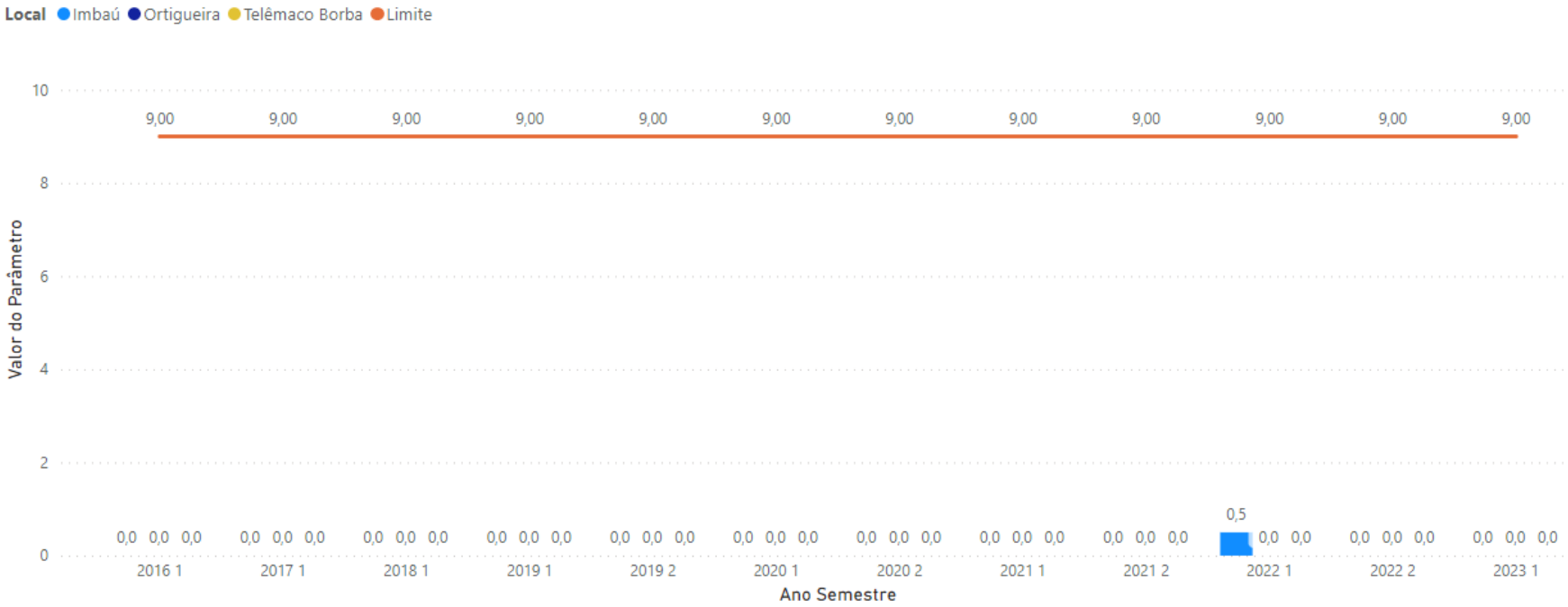
The limit is not applicable for the TRS parameter, however in recent years the results are lower than the quantification limit for the method used.

## Ambient air quality monitoring – O3




**Critical review:**
The results for parameter O3 demonstrate compliance in all campaigns.

**Ambient air quality monitoring – CO**




**Critical review:**
The results for parameter CO demonstrate compliance in all campaigns.

### 5.4. Liquid Effluent

Liquid Effluent refers to all types of liquid waste which is discharged from the pulp mill site. Types of liquid effluent include process, sanitary, storm water, leachate and thermal discharges. PUMA/Klabin is required to monitor liquid effluent at agreed discharge points. Monitoring should take place when the facilities are both operating and under construction.

Please fill in valid limits from the Brazilian environmental permit and measurement results to the table below. Each discharge monitoring place needs a table of its own.[16]

| *Sample Frequency (samples/year or continuous)* | *Parameter* | *Unit.* | *Numerical Standard Adopted by the Project (please indicate units)* | *PUMA/Klabin´s Performance Average (please indicate units)* | *Maximum* | *Minimum* |
|---|---|---|---|---|---|---|
| Continuously* | pH | - | 6 -9 | 7,01 | 7,22 | 6,83 |
| Continuously* | Flow | m3/h | 7400 | 6027 | 7006 | 3865 |
| Continuously* | Temperature increase | °C | Max. 40 | 34 | 36 | 29 |
| Fortnightly | COD | mg/L | 230 | 107,43 | 168,10 | 45,10 |
| Fortnightly | $BOD_5$ | mg/L | 30 | 8,93 | 15,30 | 2,00 |
| Monthly | AOX | mg/L | - | 1,185 | 1,400 | 0,810 |
| Fortnightly | Total Phosphorus | mg/L | 0,30 | 0,21 | 0,30 | 0,03 |
| Fortnightly | Total Nitrogen Ammoniacal | mg/L | 20 | 0,22 | 0,75 | 0,05 |
| Fortnightly | Total Nitrogen | mg/L | - | 4,62 | 7,84 | 1,22 |
| Fortnightly | TSS | mg/L | 100 | 29,63 | 46,00 | 15,00 |

*Calculated the monthly average.

Effluent Monitoring Point shown below.

Please provide in the table below the amount of absolute emission during the reporting period of each given parameter divided by amount of pulp produced in same period of time.

| **Parameter** | **Unit** | **PUMA/Klabin pulp mill's performance**[17] | **IFC guideline (bleached pulp)**[18] | **IFC guideline (unbleached pulp)**[19] |
|---|---|---|---|---|
| Amount of produced pulp (unbleached) | ADt | 728.824 | | |
| Amount of produced pulp (bleached) | ADt | 183.702 | | |
| Flow[20] | m3/ADt | 28,69 | 50 | 25 |
| pH | - | 7,01 | 6 - 9 | 6 - 9 |
| TSS | kg/ADt | 0,85 | 1,5 | 1 |
| COD | kg/ADt | 3,08 | 20 | 10 |
| BOD5 | kg/ADt | 0,26 | 1 | 0,7 |
| AOX | kg/ADt | 0,03 | 0,25 | - |
| Total N[21] | kg/ADt | 0,13 | 0,2 | 0,2 |
| Total P | kg/ADt | 0,01 | 0,03 | 0,02 |

17 Report average figures for the reporting period.

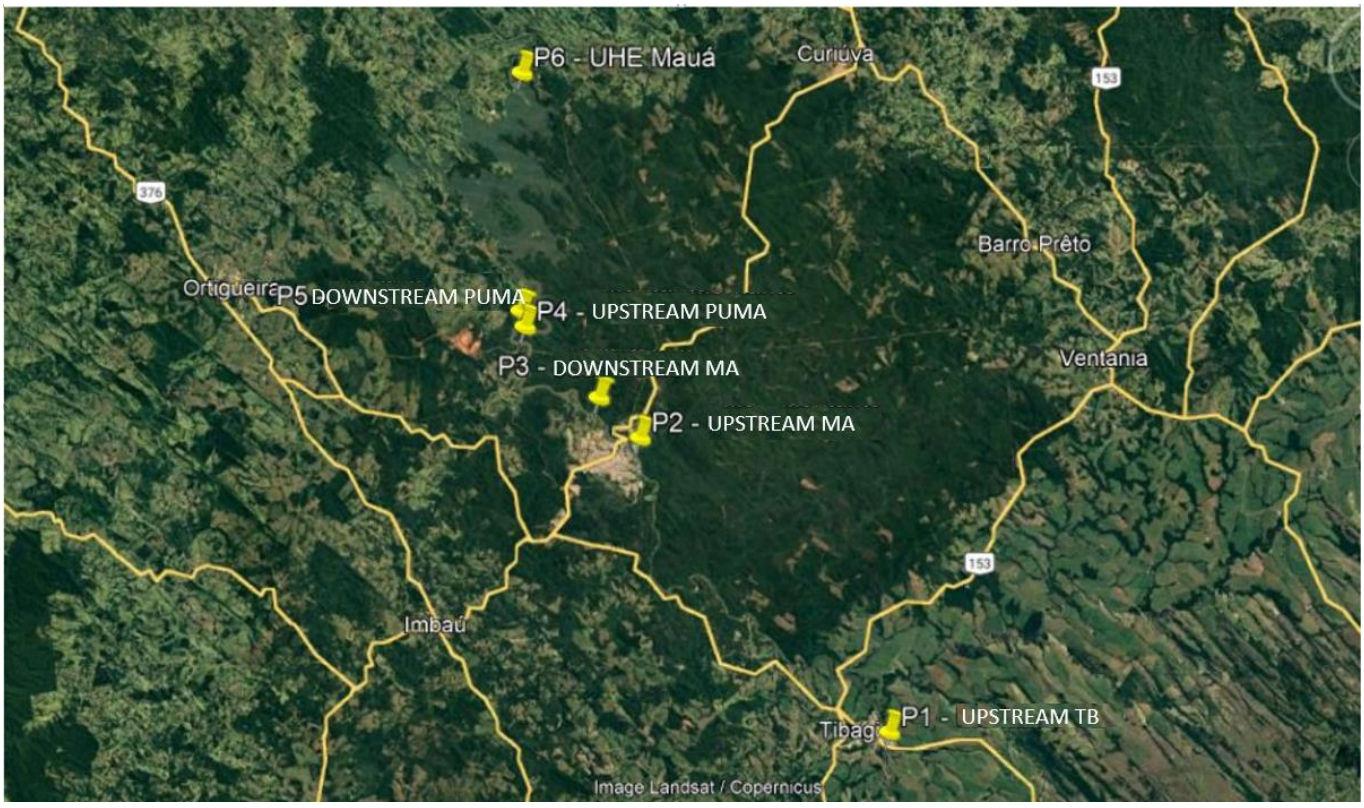
18 IFC. 2007: Environmental, health and safety guidelines for pulp and paper mills. Pages 26 and 29.

19 IFC. 2007: Environmental, health and safety guidelines for pulp and paper mills. Pages 26 and 29.

## 5.5. Ambient Surface Water Quality

PUMA/Klabin is required to collect representative samples of ambient surface water from Tibagi River and submit these samples for laboratory analysis. Representative samples of ambient surface water should be collected to establish upstream (unaffected) sampling points surface water quality and downstream (or affected sampling points) surface water quality. Do not make composite samples. Monitoring should take place both during construction and operation.

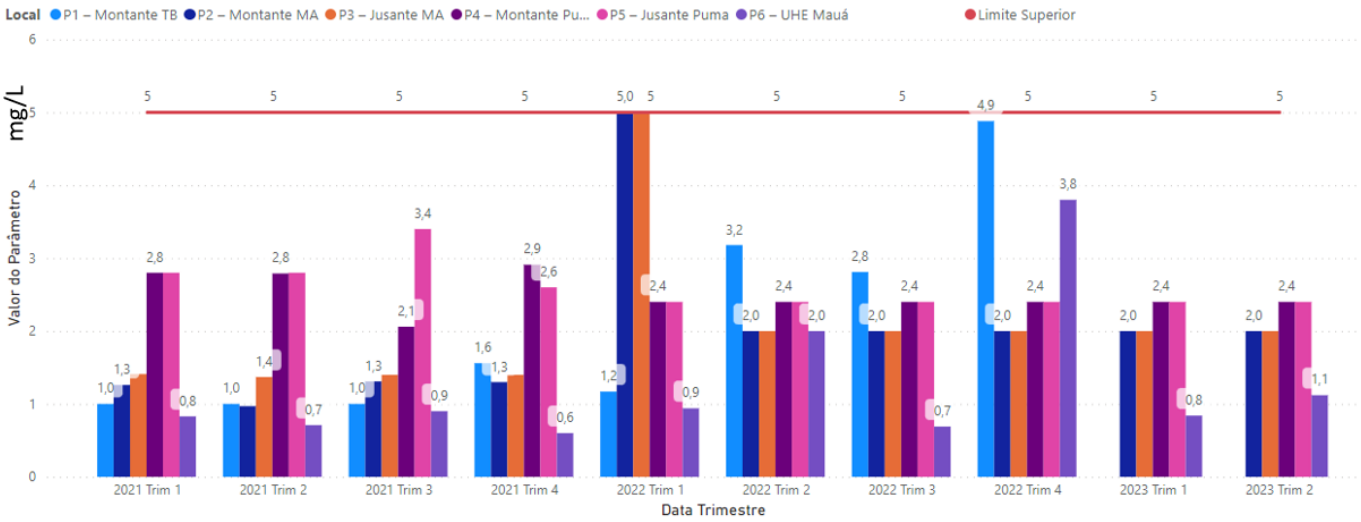
Please provide Brazilian maximum levels in Brazilian units in the table below. Individual tables are needed for each monitoring point.




Location of ambient surface water monitoring points.

*For P1 – Upstream Telêmaco Borba, data is provided by Tibagi Montante Hydroelectric Power Plant. Until the closing of this report, data have not been made available for 1st and 2nd quarters of 2023.
*For P06 – UHE Mauá: Total Phosphorus and Total Nitrogen data were not yet available for the 2nd quarter of 2023. The result will be complemented after receiving the information by the Hydroelectric Power Plant.

## BOD (mg/l)

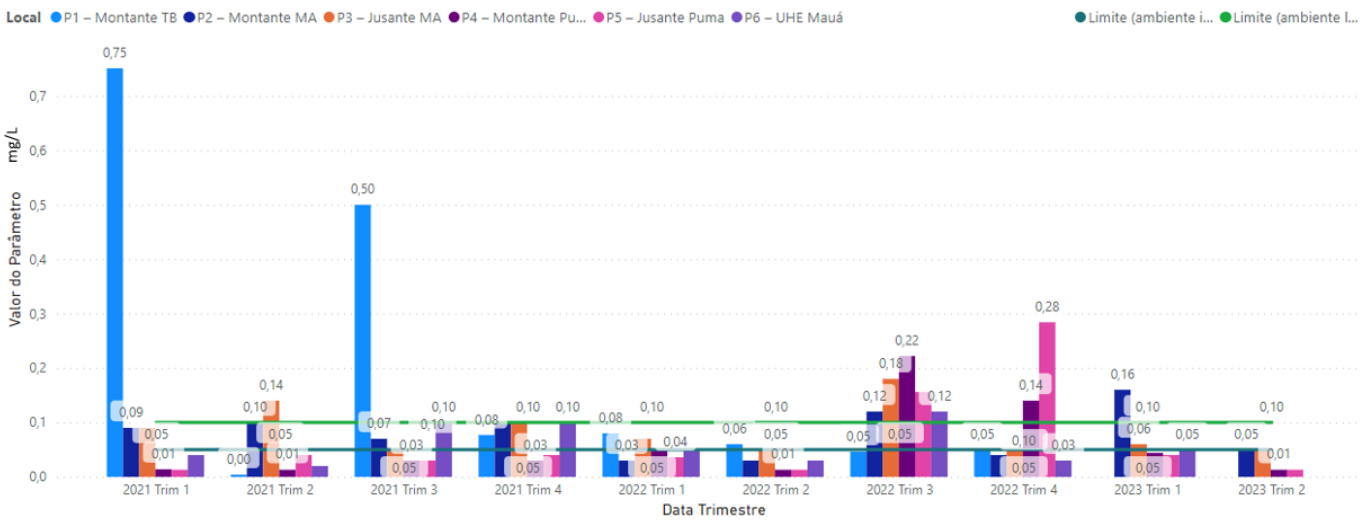



The results in P1 are provided by UHE Tibagi and until closing of this report, they have not been made available for 1st and 2nd quarter of 2023.

**Critical review:**
The results for parameter BOD demonstrate compliance in all campaigns.

Regarding the small increases identified in P2 and P3 during the 1st quarter of 2022, even considering it was in compliance with the legal limit, internal results were verified. Results from treated effluent biweekly monitoring from external laboratory (TECLAB) show expected performance and no deviations. Results from Tibagi River biweekly monitoring from external laboratory (TECLAB) show good results overall, in compliance with the legal limit.

## Total Phosphorus
(mg/l)




The limit of 0.10 mg/L is valid for Monte Alegre (lotic River) and 0.05 for Puma (intermediary River).

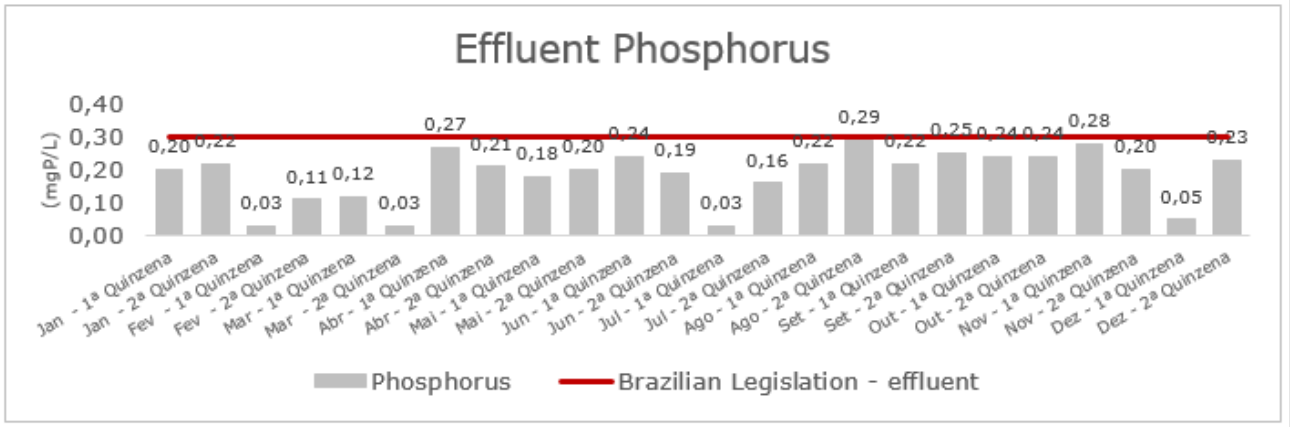
The results in P1 are provided by UHE Tibagi and until closing of this report, they have not been made available for 1st and 2nd quarter of 2023.

**Critical review:**

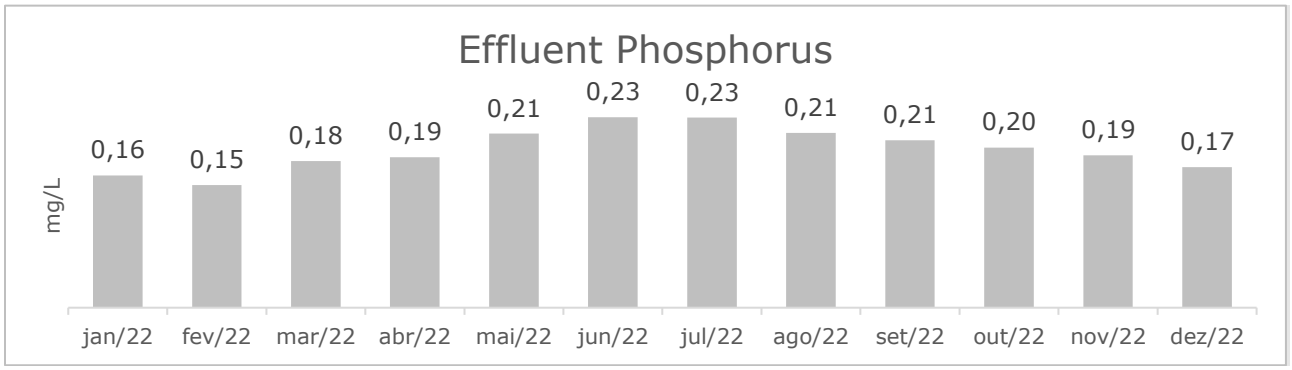
The result for Total Phosphorus was above the Brazilian regulatory limits for upstream and downstream Monte Alegre locations in 1Q 2020, and downstream of Monte Alegre in 2Q and 4Q 2021. These values can be attributed to the municipal wastewater discharge, not related to Monte Alegre effluent contribution. The values for point P1 upstream TB can be attributed to the high rainfall recorded in the period.

3rd quarter 2022 results were above the limit for P02 and P03 (upstream and downstream Monte Alegre). No deviations were identified in Monte Alegre effluent treatment process during the period. For P04 and P05 (upstream and downstream Puma), results were above the limit was well. In this case, the results from upstream were higher, indicating no relation with Puma Plant process. Also, in addition, no deviations were identified in Puma effluent treatment process during the period.

4rd quarter 2022 results were above the limit for P04 and P05 (upstream and downstream Puma). No deviations were identified in Puma effluent treatment process during the period. The treated effluent biweekly monitoring from external laboratory (TECLAB) showed expected performance and no deviations, with results under 0.3 mg/L during all year of 2022, in compliance with the legal limit.



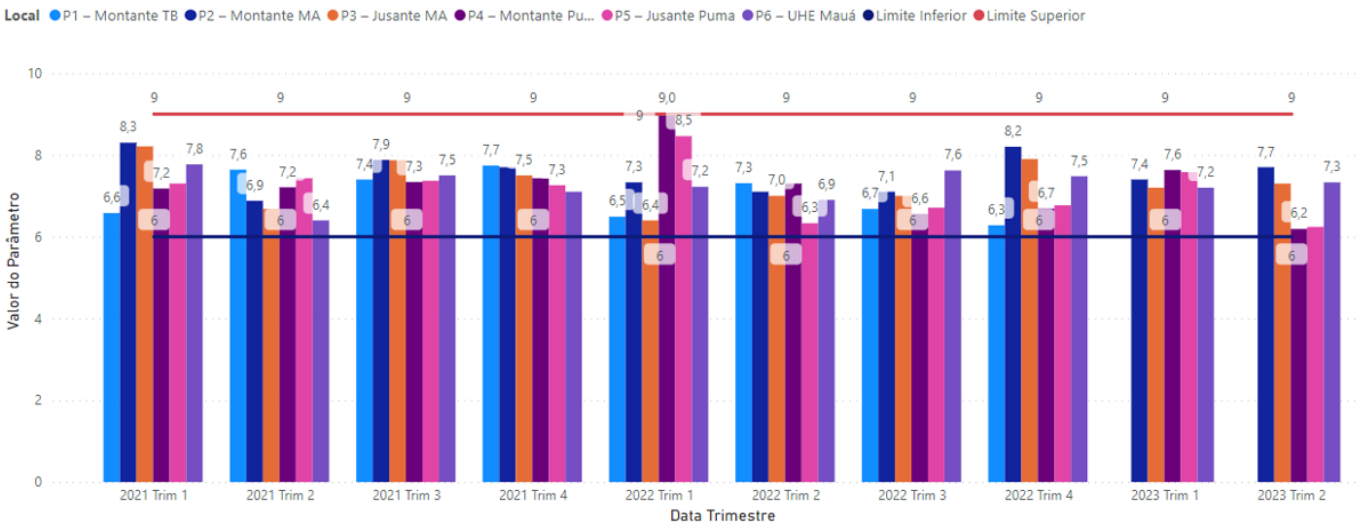

In addition to these external analyses, Klabin does phosphorus concentration analyze by internal laboratory, three times a day. This results below shows also low values and under the Brazilian legislation for effluents discharge (limit 0.30 mg/L). Therefore, the results of elevated phosphorus concentration on the Tibagi River are from external sources, not related to Klabin operation.




1st quarter of 2023: result over the reference number was identified at P02 – Upstream Monte Alegre, which indicates no relation with the effluent release. Considering P03 – Downstream Monte Alegre, the result was within the reference value, indicating normal operating conditions and water quality.

2nd quarter of 2023: The results for Total Phosphorus demonstrate compliance in all locations.

## pH



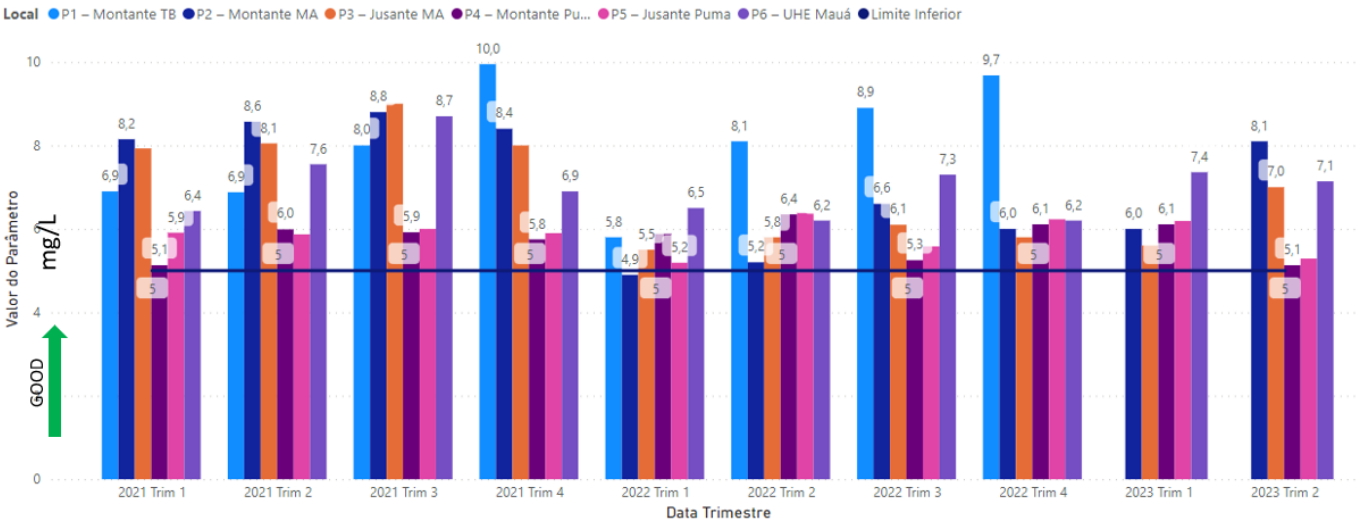

The results in P1 are provided by UHE Tibagi and until closing of this report, they have not been made available for 1st and 2nd quarter of 2023.

**Critical review:**

The results for pH demonstrate compliance in all campaigns, for 1st semester of 2023.

Looking at the trend, we have no record of significant variations in results.

## Dissolved Oxygen
(mg/l)




The results in P1 are provided by UHE Tibagi and until closing of this report, they have not been made available for 1st and 2nd quarter of 2023.

**Critical review:**

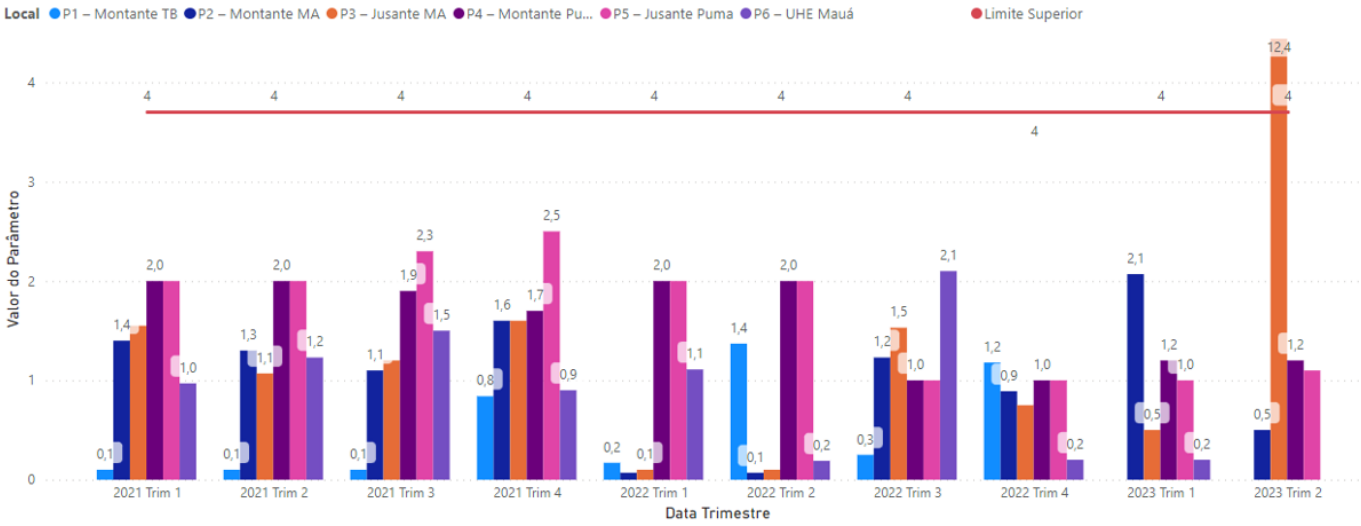
The result for Dissolved Oxygen was below the Brazilian regulatory limits for points upstream and downstream of Puma in 3Q 2020. This shows that there is a contribution from the municipality or rural area between Monte Alegre and Puma. In other monitoring campaigns, the results demonstrate compliance.

During 1st quarter of 2022, P02 – Upstream Monte Alegre registered a result of 4.9 mg/L, 0.1 mg/L below the limit. It represents an external contribution between Tibagi (P1 - UHE Tibagi) and Telêmaco Borba (where Monte Alegre is located).

Regarding 1st semester of 2023, results for Dissolved Oxygen demonstrate compliance in all campaigns.

Looking at the trend, we have no record of significant variations in results.

## Total Nitrogen
(mg/l)



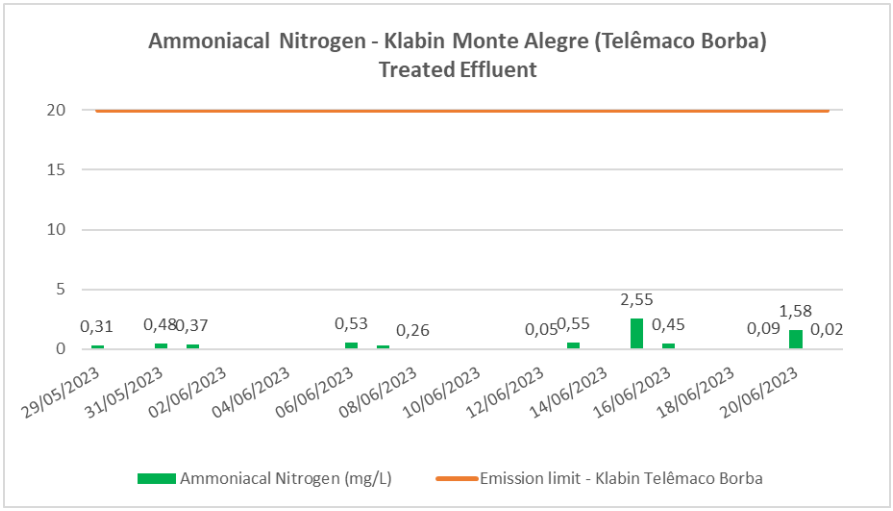

The results in P1 are provided by UHE Tibagi and until closing of this report, they have not been made available for 1st and 2nd quarter of 2023.

## Critical review:

1st quarter 2023: results for Total Nitrogen demonstrate compliance in all locations.

The 2nd quarter campaign presented a value above the reference for P03 – Downstream Monte Alegre. The result is unrelated to the release of effluents from the unit, and the details are presented below.

Monte Alegre Unit (Telemaco Borba) results within normal operating conditions, and no significant variations in the period. All samples below the legal release limit of 20 mg/L, as the graph shows.




Regarding the analyzes by an external laboratory, both results in the period were below the detection limit (<0.05 mg/L) for Ammoniacal Nitrogen.

| Data | Ammoniacal nitrogen (mg/L) |
|---|---|
| Jun/23 - 06/06/23 | < 0,05 |
| Jun/23 - 06/21/23 | < 0,05 |

LoD. = 0,05 mg/L

The higher result for Nitrogen at the downstream point of the Monte Alegre Unit is not related to its effluent discharge, which presented normal operating conditions and with parameters within the expected performance.

The variation may be related to external contributions from the municipality and its wastewater discharge.

In all other campaigns, the results fully comply with Class 2 in accordance with CONAMA 357/2005.

Please provide summary of groundwater sampling results at the pulp mill site during the reporting period and compare them to Brazilian groundwater limits.[23]


The PM7 was found dry in the last campaign and the PM8 is no longer monitored due to inaccessibility after the expansion of the treatment station.

Regarding the other results for points 4 and 5, it is already taking place an analysis re-evaluation to identify possible causes for the result. However, the component found in higher concentrations is not used in any part of the process.

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| Parâmetro | Limite | PM01 | PM02 | PM03 | PM04 | PM05 | PM06 | PM09 |
|---|---|---|---|---|---|---|---|---|
| Alumínio | 3500 | 1740 | 383 | 1516 | 1312 | 6921 | 473 | 615 |
| Antimônio | 5 | <0,5 | <0,5 | <0,5 | <0,5 | <0,5 | 0,66 | <0,5 |
| Arsênio | 10 | 0,69 | <0,5 | 0,565 | 0,72 | 1,4 | <0,50 | <0,50 |
| Bário | 700 | 7,9 | 26 | 138 | 39 | 91 | 11 | 66 |
| Boro | 500 | <250 | <250 | <250 | <250 | <250 | <250 | <250 |
| Cádmio | 5 | <0,5 | <0,5 | <0,5 | <0,5 | <0,5 | <0,5 | <0,5 |
| Chumbo | 10 | <5,0 | <5,0 | <5,0 | 18 | 11 | <5,0 | <5,0 |
| Cobalto | 70 | <0,5 | 1,7 | 5,8 | 1,9 | 8,5 | <0,5 | <0,5 |
| Cobre | 2000 | 2,7 | <2,5 | 8,7 | 3,2 | 16 | 2,9 | 1,2 |
| Cromo | 50 | <5,0 | <5,0 | <5,0 | <5,0 | <5,0 | <5,0 | <5,0 |
| Ferro | 2450 | 2681 | 462 | 1171 | 1306 | 5017 | 603 | 684 |
| Manganês | 400 | 30 | 34 | 247 | 44 | 653 | 34 | 28 |
| Mercúrio | 1 | <0,05 | <0,05 | <0,05 | <0,05 | <0,05 | <0,05 | <0,05 |
| Molibdênio | 70 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Níquel | 20 | <5 | <5 | 8,3 | <5,0 | 12 | <5 | <5 |
| Nitrato-N | 10000 | 263 | 656 | <110 | <110 | <110 | 214 | 822 |
| Prata | 50 | <2,5 | <2,5 | <2,5 | <2,5 | <2,5 | <2,5 | <2,5 |
| Selênio | 10 | <0,5 | <0,5 | <0,5 | <0,5 | 3,3 | <0,5 | 1,3 |
| Benzeno | 5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Estireno | 20 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Etilbenzeno | 300 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Tolueno | 700 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Xilenos | 500 | <3 | <3 | <3 | <3 | <3 | <3 | <3 |
| Benzo(a)antraceno | 1,75 | <0,15 | <0,15 | <0,15 | <0,15 | <0,15 | <0,15 | <0,15 |
| Dibenzo(a,h)antraceno | 0,18 | <0,04 | <0,04 | <0,04 | <0,04 | <0,04 | <0,04 | <0,04 |
| Naftaleno | 140 | <0,15 | <0,15 | <0,15 | <0,15 | <0,15 | <0,15 | <0,15 |
| 1,2-Diclorobenzeno | 1000 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| 1,4-Diclorobenzeno | 300 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| Hexaclorobenzeno | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| 1,1-Dicloroetano | 280 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| 1,2-Dicloroetano | 10 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| 1,1,1-Tricloroetano | 280 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| 1,1-Dicloroeteno | 30 | <3 | <3 | <3 | <3 | <3 | <3 | <3 |
| 2,4-Diclorofenol | 10,5 | <0,11 | <0,11 | <0,11 | <0,11 | <0,11 | <0,11 | <0,11 |
| 3,4-Diclorofenol | 10,5 | <5,0 | <5,0 | <5,0 | <5,0 | <5,0 | <5,0 | <5,0 |
| 2,4,5-Triclorofenol | 10,5 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| 2,4,6-Triclorofenol | 200 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| 2,3,4,5-Tetraclorofenol | 10,5 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| 2,3,4,6-Tetraclorofenol | 10,5 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| Pentaclorofenol | 9 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| Cresóis Totais | 175 | <6,0 | <6,0 | <6,0 | <6,0 | <6,0 | <6,0 | <6,0 |
| Fenol | 140 | <1,0 | <1,0 | <1,0 | <1,0 | <1,0 | <1,0 | <1,0 |
| Di(2-Etilhexil)ftalato (DEHP) | 8 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| Dimetilftalato | 14 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| Aldrin + Dieldrin | 0,03 | <0,0019 | <0,0019 | <0,0019 | <0,0019 | <0,0019 | <0,0019 | <0,0019 |
| Endrin | 0,6 | <0,004 | <0,004 | <0,004 | <0,004 | <0,004 | <0,004 | <0,004 |
| p,p'-DDT + p,p'-DDE + p,p'-DDD | 2 | <0,0010 | <0,0010 | <0,0010 | <0,0010 | <0,0010 | <0,0010 | <0,0010 |
| beta-HCH (beta-Lindano) | 0,07 | <0,01 | <0,01 | <0,01 | <0,01 | <0,01 | <0,01 | <0,01 |
| Lindano (gama-HCH) | 2 | <0,004 | <0,004 | <0,004 | <0,004 | <0,004 | <0,004 | <0,004 |
| Bifenilas Policloradas (PCBs) | 3,5 | - | - | - | - | - | - | - |

## 5.6. Solid Waste Management

PUMA/Klabin is required to monitor methods of collection, storage, handling, recycling, reuse and/or disposal of solid waste, and report these methods and measured quantities here during both construction and operational phases. Please complete the information below with information i) from the pulp mill and associated operations and ii) from the mill's port terminal.

| **GENERATION OF SOLID WASTE – PUMA I** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *Solid Waste Type* | *Mounth Quantity (tonne)* | | | | | | *Method of Storage, Handling and/or Treatment* | *Method of Recycling, Reuse or Disposal*[25] |
| | *Jan* | *Feb* | *Mar* | *Apr* | *May* | *Jun* | | |
| Sand | 550 | 567 | 740 | 1231 | 558 | 562 | Dumpster | Recycling |
| Biomass | 891 | 532 | 630 | 1091 | 937 | 810 | Dumpster | Composting |
| Sweep Biomass Wood Stock | 2130 | 2753 | 478 | 212 | 135 | 52 | Dumpster | Composting |
| Lime Gray | 8 | 346 | 205 | 43 | 144 | 220 | Dumpster | Agricultural and forestry use |
| Sulphate Ashes | 0 | 0 | 5 | 3 | 0 | 0 | Dumpster | Agricultural and forestry use |
| Biomass ash | 2298 | 2440 | 2228 | 549 | 1800 | 1747 | Dumpster | Agricultural and forestry use |
| Burnt Lime | 730 | 252 | 967 | 541 | 695 | 342 | Dumpster | Agricultural and forestry use |
| Dregs | 1159 | 969 | 1233 | 408 | 1528 | 1319 | Dumpster | Agricultural and forestry use |
| Grits | 198 | 208 | 494 | 182 | 334 | 346 | Dumpster | Agricultural and forestry use |
| Lime Mud | 1714 | 3772 | 10893 | 5556 | 49 | 13 | Dumpster | Agricultural and forestry use |
| Sand Sludge - PMAD | 70 | 69 | 112 | 14 | 84 | 99 | Dumpster | Recycling |
| Primary Sludge (Fiber Disposal) | 1511 | 820 | 1918 | 1939 | 2725 | 2850 | Dumpster | Recycling |
| Secondary Sludge (Biological) | 3928 | 3985 | 4635 | 1978 | 5399 | 5121 | Dumpster | Composting |
| Tertiary Sludge (Chemical) | 2548 | 2376 | 1773 | 1218 | 1258 | 2632 | Dumpster | Agricultural and forestry use |
| Pinus Reject - Stick | 64 | 95 | 104 | 120 | 70 | 39 | Dumpster | Energy use |
| Pinus Reject - Knot | 13 | 9 | 16 | 2 | 0 | 0 | Dumpster | Energy use |
| Eucalyptus Reject | 67 | 49 | 32 | 3 | 79 | 16 | Dumpster | Energy use |
| Eucalyptus Tailings | 33 | 39 | 18 | 3 | 0 | 0 | Dumpster | Energy use |
| Wood | 13 | 19 | 14 | 23 | 8 | 41 | Dumpster | Reuse and Energy |
| Metal | 29 | 20 | 24 | 22 | 11 | 12 | Dumpster | Recycling |
| Organic waste | 76 | 90 | 96 | 65 | 70 | 44 | Dumpster | Recycling |
| Paper | 39 | 26 | 65 | 62 | 29 | 62 | Dumpster | Recycling |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Plastic | 10 | 8 | 11 | 5 | 4 | 7 | Dumpster | Recycling |
| Non-recyclable (reject) | 187 | 167 | 698 | 302 | 134 | 160 | Dumpster | Landfill |
| Soil | 11 | 0 | 28 | 0 | 43 | 0 | Dumpster | Reuse |
| Inert / Concrete / Rubble | 32 | 16 | 35 | 19 | 38 | 42 | Dumpster | Reuse |

| **GENERATION OF SOLID WASTE – PARANAGUÁ PORTS** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *Solid Waste Type* | *Mounth Quantity (tonne)* | | | | | | *Method of Storage, Handling and/or Treatment* | *Method of Recycling, Reuse or Disposal*[25] |
| | *Jan* | *Fev* | *Mar* | *Apr* | *May* | *Jun* | | |
| Non-recyclable | 4 | 2,5 | 2,4 | 4,3 | 0 | 3,3 | Dumpster | Private landfill |
| Recyclable | 0,7 | 0,2 | 0,1 | 0,1 | 0 | 0,1 | Dumpster | Recycling |

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| *Solid Waste Type* | **GENERATION OF NON-HAZARDOUS SOLID WASTE – PUMA II PROJECT** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | *Month Quantity (tons) Solid Waste Type* | | | | | | | | |
| | *Jan* | *Feb* | *Mar* | *Apr* | *May* | *Jun* | Total 1 SEM 2023 | Method of Storage | Method of Treatment |
| Organic | 67,37 | 88,26 | 57,77 | 72,56 | 36,89 | 26,90 | 349,75 | Dumpster | Composting |
| Non-recyclable | 13,28 | 41,15 | 27,52 | 27,72 | 37,59 | 30,31 | 177,57 | Dumpster | Private Landfill |
| Paper | 20,76 | 26,86 | 27,42 | 20,45 | 18,25 | 11,69 | 125,43 | Dumpster | Recycling |
| Plastic | 17,00 | 20,27 | 21,10 | 13,30 | 11,76 | 11,61 | 95,04 | Dumpster | Recycling |
| Metal | 21,58 | 42,87 | 14,55 | 48,23 | 48,26 | 20,07 | 195,56 | Dumpster | Recycling |
| Wood | 28,93 | 34,27 | 35,92 | 26,05 | 29,48 | 20,85 | 175,50 | Dumpster | Biomass |
| Glass | 0,034 | 0,081 | 0,128 | 0,004 | 0,0148 | 0,00 | 0,261 | Steel Drum | Recycling |
| Concrete | 184,62 | 596,54 | 377,32 | 128,40 | 859,40 | 300,77 | 2447,05 | Dumpster | Reuse |
| Total (t/month) | **353,57** | **850,30** | **561,72** | **336,71** | **1041,64** | **422,20** | **3566,14** | - | - |

**Critical review:**
The generation of waste is within the normal range, as expected by the project.
We always prioritize recycling and reuse.

## 5.7. Hazardous Materials Management

Hazardous materials are those materials that represent an excessive risk to property, the environment or human health because of their physical and/or chemical characteristics. Examples include explosives, toxic or flammable gases, flammable liquids and solids, oxidizing substances, radioactive materials and corrosive substances.

PUMA/Klabin is required to monitor methods of collection, storage and disposal of hazardous materials, and report these methods and measured quantities here. Please refer to the IFC General Environmental, Health and Safety Guidelines / Hazardous Materials Management for additional information. Please complete the information below with information from the pulp mill and associated operations. and ii) from the mill's Paranaguá port terminal.

| **Hazardous Materials Management Summary – Puma I** | | | |
|---|---|---|---|
| *Hazardous Material (Name and Number UN/CAS)* | *Class or division*[3] | *Generation January-June 2023 (tonne)* | *Maximum Quantity Stored on Site (tonne)* |
| Hazardous Waste Produced | | | |
| Chemical Product Packaging (Paints, Solvents And Resins) – IBAMA n° 15 02 02 | 9 | 0 | 50,00 |
| PPE's IBAMA n° 15 02 02 | 9 | 0 | |
| Fluorescent lamps IBAMA n° 20 01 21 | 2 | 1,18 | |
| Flammable Liquids (Paints, Solvents, Glues and Fuel) IBAMA n° 20 01 13 | 3 | 3,17 | |
| Stacks IBAMA n° 16 06 04 | 6 | 0,87 | |
| Various Contaminated Solids (Tows, Cloths, Filters And Etc) IBAMA n° 15 02 02 | 9 | 2,26 | |
| Soil Contaminated with Oil and Grease IBAMA n° 19 13 01 | 9 | 115,313 | |
| Electronic Scrap IBAMA n° 16 02 16 | 6 | 0 | |

[3] UN classification (1. Explosives; 2. Gases; 3. Flammable liquids; 4. Flammable solids; 5. Oxidizing substances; 6. Toxic and infectious substances; 7. Radioactive material; 8. Corrosive substances; 9. Miscellaneous hazardous materials.)

| *Parameters (Same Parameters as Above)* | *PUMA/Klabin´s Method of Storage, Handling and/or Treatment*[4] | *PUMA/Klabin´s Method of Disposal*[5] |
|---|---|---|
| Hazardous Waste Produced | | |
| Chemical Product Packaging (Paints, Solvents And Resins) – IBAMA n° 15 02 02 | Steel Drum | Co processing |
| PPE's IBAMA n° 15 02 02 | Steel Drum | Private Solid Waste Landfill |
| Fluorescent lamps IBAMA n° 20 01 21 | Steel Drum | Decontamination |
| Flammable Liquids (Paints, Solvents, Glues and Fuel) IBAMA n° 20 01 13 | Steel Drum | Co processing |
| Stacks IBAMA n° 16 06 04 | Steel Drum | Recycling |
| Various Contaminated Solids (Tows, Cloths, Filters And Etc) IBAMA n° 15 02 02 | Steel Drum | Co processing or Private Solid Waste Landfill |
| Soil Contaminated with Oil and Grease IBAMA n° 19 13 01 | Steel Drum | Co processing |
| Electronic Scrap IBAMA n° 16 02 16 | Steel Drum | Recycling |

| **Hazardous Materials Management Summary – Paranaguá Ports** | | | |
|---|---|---|---|
| *Hazardous Material (Name and Number UN/CAS)* | *Class or division*[6] | *Generation Jan-Jun 2023 (tonne)* | *Maximum Quantity Stored on Site (tonne)* |
| Hazardous Waste Produced | | | |
| Miscellaneous hazardous materials (IBAMA nº 17 09 03) | 9 | 0 | 5 |

| *Parameters (Same Parameters as Above)* | *PUMA/Klabin´s Method of Storage, Handling and/or Treatment*[7] | *PUMA/Klabin´s Method of Disposal*[8] |
|---|---|---|
| Hazardous Waste Produced | | |

[4] State how hazardous materials / waste is stored on site (e.g. drums, bins, and other containers) and handled (including transported). Provide additional sheets as needed to fully describe disposal, organizations involved in management, locations of facilities, facility permits and agency authorizations.

[5] Report on method of disposal for hazardous waste used only.

[6] UN classification (1. Explosives; 2. Gases; 3. Flammable liquids; 4. Flammable solids; 5. Oxidizing substances; 6. Toxic and infectious substances; 7. Radioactive material; 8. Corrosive substances; 9. Miscellaneous hazardous materials.)

[7] State how hazardous materials / waste is stored on site (e.g. drums, bins, and other containers) and handled (including transported). Provide additional sheets as needed to fully describe disposal, organizations involved in management, locations of facilities, facility permits and agency authorizations.

[8] Report on method of disposal for hazardous waste used only.

| *Parameters (Same Parameters as Above)* | *PUMA/Klabin´s Method of Storage, Handling and/or Treatment*[7] | *PUMA/Klabin´s Method of Disposal*[8] |
|---|---|---|
| Miscellaneous hazardous materials (IBAMA nº 17 09 03) | Steel Drum | Co processing |

| **Hazardous Materials Management Summary – Puma II Project** *(tonne)* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Hazardous Material (Name and Number UN/CAS)* | *Class or division*[9] | *Jan* | *Feb* | *Mar* | *Apr* | *May* | *Jun* | *Total* | *Maximum Quantity Stored on Site* |
| Hazardous Waste – Generation | | | | | | | | | |
| Miscellaneous hazardous materials (IBAMA nº 17 09 03) | 9 | 13,43 | 13,02 | 22,99 | 20,29 | 21,20 | 13,51 | 104,44 | 50,00 |
| Hazardous Waste – Disposal for Industrial Solid Waste Landfill | | | | | | | | | |
| Miscellaneous hazardous materials (IBAMA nº 17 09 03) | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| Hazardous Waste – Disposal for Co-processing | | | | | | | | | |
| Miscellaneous hazardous materials (IBAMA nº 17 09 03) | 9 | 30,68 | 0 | 22,41 | 22,03 | 30,52 | 0 | 105,64 | - |
| Hazardous Waste – Storage | | | | | | | | | |
| Miscellaneous hazardous materials (IBAMA nº 17 09 03) | 9 | 3,23 | 16,25 | 16,83 | 15,09 | 5,77 | 19,28 | 19,28* | 50,00 |

*Total stored at the end of the semester.

[9] UN classification (1. Explosives; 2. Gases; 3. Flammable liquids; 4. Flammable solids; 5. Oxidizing substances; 6. Toxic and infectious substances; 7. Radioactive material; 8. Corrosive substances; 9. Miscellaneous hazardous materials.)

| *Parameters (Same Parameters as Above)* | *PUMA/Klabin´s Method of Storage, Handling and/or Treatment*[10] | *PUMA/Klabin´s Method of Disposal*[11] |
|---|---|---|
| Hazardous Waste Produced | | |
| Miscellaneous hazardous materials (IBAMA nº 17 09 03) | Steel Drum | Co-processing<br>or<br>Industrial Solid Waste Landfill |

[10] State how hazardous materials / waste is stored on site (e.g. drums, bins, and other containers) and handled (including transported). Provide additional sheets as needed to fully describe disposal, organizations involved in management, locations of facilities, facility permits and agency authorizations.

[11] Report on method of disposal for hazardous waste used only.

## 5.8. Forest Plantation Management

Provide summarized information on forestry activities (e.g. harvesting volumes/species, new hectares planted/reformed) for the reporting period.

| | Area acquired/secured during the reporting period<br><br>(No. hectares) | Total land area | % of area under forest plantation | % of area under forest plantation that is certified | Type of FSC and any other relevant certificate(s) |
|---|---|---|---|---|---|
| Klabin areas | ** 8.750 | 502.223 | | | |
| Plantation under proprietary management | | | 39% | 94% | FSC® and PEFC |
| Plantation under Third Party management | | | 4% | 60% | FSC® and PEFC |
| Total | | | 43% | 91% | |

** Acquired area informed the productive area was used

Amount of wood raw material processed in Puma industrial complex during the reporting period:

| | Quantity | Unit |
|---|---|---|
| From plantations managed by Klabin – FSC certified | 1.804.788,35 | t |
| From plantations managed by Klabin – not FSC certified | 18.150,69 | t |
| From third parties – FSC certified | 489.859,19 | t |
| From third parties – not FSC certified | 506.997,59 | t |
| Number of third parties | 131 | - |

Please report any significant fires that have occurred.
No significant accidents.

Please provide copies of post-certification audits.
It's available on the report's OneDrive.

- **6 SOCIAL AND ECONOMIC IMPACT MANAGEMENT / COMMUNITY DEVELOPMENT**

## 6.1 Labor Relations and workforce development

Please report separately i) the pulp mill and associated facilities, ii) pulp mill's Paranaguá port, iii) eucalyptus and pine plantation operations and iv) transport operations in the chapters "Workforce", "Worker's organization" and "Workers' grievance mechanism".

### Workforce

| *Type of employee* | *Total Number for Reporting Period* | *Category of employee* *Total Number for Reporting Period* | |
|---|---|---|---|
| Direct employees | **155** | Men: 106<br>Female: 49 | Management level: 32<br>Management level: 03 |
| Contracted employees[30] | **08** | Men: 08<br>Female: 0 | Management level: 08<br>Workers: 0 |

**CONFIDENTIAL**

## Worker's organization

| *Workers organization* | *Description* |
|---|---|
| Trade unions or worker organizations/committee in workplace | SINTRACON – Heavy construction Union<br>SINTRAPAV – Civil Construction Union |
| Meetings with workers' organization representatives in workplace | • Number of meetings: 06<br>• Name of Trade union or worker organization: Same as above.<br>• Number of employees covered by the agreement: 1,967<br>• Frequency of meetings: Whenever required by any of the parts |

| *Workers organization* | *Description* |
|---|---|
| Collective bargaining agreements | • Agreement signed on: 06/22/2023<br>• Parties signing agreement: Labor Unions and the civil and electromechanical assembling companies<br>• Number of employees covered under collective bargaining agreement: 1,967 |

## Workers' grievances

| Type of grievance | Received | | Investigated | | Resolved | |
|---|---|---|---|---|---|---|
| | Direct employees | Contracted employees | Direct employees | Contracted employees | Direct employees | Contracted employees |
| BENEFITS | 0 | 28 | 0 | 28 | 0 | 28 |
| LEADERSHIP | 0 | 21 | 0 | 21 | 0 | 21 |
| TRANSPORTATION | 0 | 14 | 0 | 14 | 0 | 14 |
| CONTRACT TERMINATION | 0 | 13 | 0 | 13 | 0 | 13 |
| OTHER | 0 | 10 | 0 | 10 | 0 | 10 |
| HUMAN RESOURCES | 0 | 7 | 0 | 7 | 0 | 7 |
| BEHAVIOR DEVIATION | 0 | 5 | 0 | 5 | 0 | 5 |
| REPÚBLICAS | 0 | 4 | 0 | 4 | 0 | 4 |
| HAZARD PAY | 0 | 3 | 0 | 3 | 0 | 3 |
| FOOD | 0 | 3 | 0 | 3 | 0 | 3 |
| SAFETY | 0 | 2 | 0 | 2 | 0 | 2 |
| HIRING PROCESS | 0 | 2 | 0 | 2 | 0 | 2 |
| COVID PROTOCOL | 0 | 1 | 0 | 1 | 0 | 1 |

| | | | | | | |
|---|---|---|---|---|---|---|
| ADMINISTRATION | 0 | 1 | 0 | 1 | 0 | 1 |
| FIELD BREAK | 0 | 1 | 0 | 1 | 0 | 1 |
| THEFT | 0 | 1 | 0 | 1 | 0 | 1 |
| INTERNET | 0 | 1 | 0 | 1 | 0 | 1 |

- Has there been a state inspection on labor or occupational health and safety matters during the period now reported? Please describe. What corrective action has been taken/will be taken by the Company if any is required? No.

- Have there been court cases brought by employees or trade unions based on alleged labor law violations during the period now reported? Please describe. What corrective action has been taken/will be taken by the Company if any is required? No.

- In relationship with the whistle-blower policy, has any kind of information or activity that is deemed illegal, unethical, or not correct within the organization has been denounced/exposed? Please describe. What corrective action has been/will be taken by the Company if any is required. No.

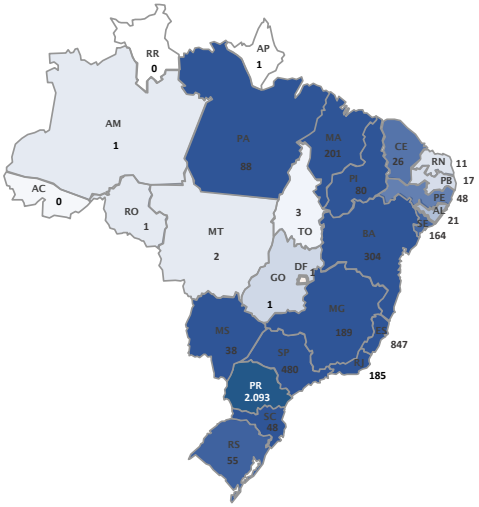
- Has there been labor unrest, strikes or other industrial disputes during the period now reported? What corrective action has been taken/will be taken by the Company if any is required? Please describe in the following table. No.

**Local workforce development**

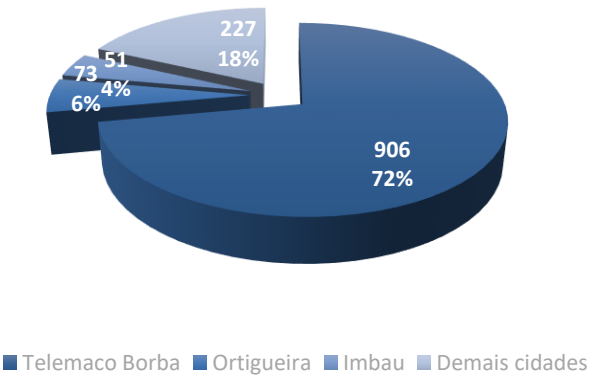
Summarize actions to strengthen participation of local labor and report the following statistics:

- Permanent and Temporary (part-time jobs) provided (#) from local region or state of Parana.

**ORIGIN OF WORKERS**

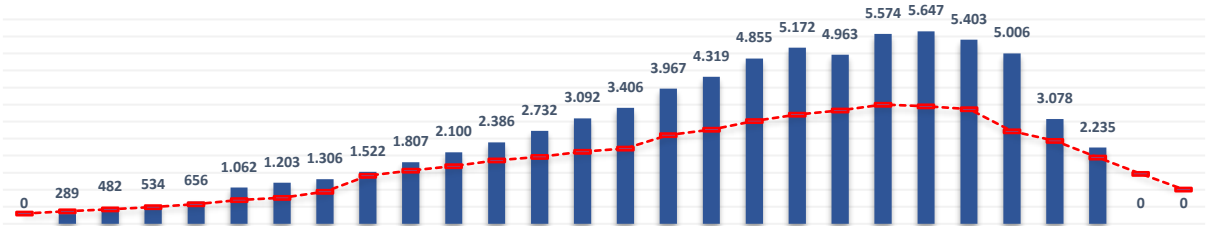



**WORKFORCE EMPLOYMENT**



- Indirect Permanent and Temporary (part-time jobs) provided by Contractors (#)

  See the histogram, bellow:




| | mai/21 | jun/21 | jul/21 | ago/21 | set/21 | out/21 | nov/21 | dez/21 | jan/22 | fev/22 | mar/22 | abr/22 | mai/22 | jun/22 | jul/22 | ago/22 | set/22 | out/22 | nov/22 | dez/22 | jan/23 | fev/23 | mar/23 | abr/23 | mai/23 | jun/23 | jul/23 | ago/23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Realizado | - | 289 | 482 | 534 | 656 | 1.062 | 1.203 | 1.306 | 1.522 | 1.807 | 2.100 | 2.386 | 2.732 | 3.092 | 3.406 | 3.967 | 4.319 | 4.855 | 5.172 | 4.963 | 5.574 | 5.647 | 5.403 | 5.006 | 3.078 | 2.235 | 0 | 0 |
| Total Planejado Klabin | 300 | 374 | 426 | 489 | 574 | 695 | 764 | 943 | 1.411 | 1.567 | 1.693 | 1.859 | 1.967 | 2.114 | 2.213 | 2.607 | 2.765 | 3.023 | 3.205 | 3.328 | 3.501 | 3.452 | 3.368 | 2.714 | 2.440 | 1.952 | 1.468 | 1.010 |

- Total amount of Wages (US$): Not applicable;
- Community member enrolled/trained (#) None for the period;
- Scholarships awarded (#) None for the period.

## 6.2 Community Relations

Please describe specific activities undertaken by the Company to address any such potential negative impact of the project on the local community, that are not covered by the Chapter 8 Progress on implementing the environmental and social action plan (ESAP) – i.e. activities and/or resolutions of the Anthropic Monitoring Committee, etc.

Anthropic Monitoring Program and Committee

The **Anthropic Monitoring Program's main objective is to monitor the socioenvironmental and economic impacts** in the cities of Ortigueira, Telêmaco Borba and Imbaú, Project Puma II's Direct Influence Area (AID).
In order to assist the monitoring and support the implementation of preventive and mitigation measures, at the end of 2013, during Project Puma I, the Anthropic Monitoring Committee was created. The Committee is composed of Klabin members and municipal representatives of the Secretariats of Social Assistance, Health, Education and Finance of the three municipalities of AID, State Regional of Health, State Regional Nucleus of Education and Secretariat of Public Security, Public Prosecutor, as well as other institutional representatives, such as members of the City Council and local trade associations.

The Anthropic Monitoring Committee's goal is to **analyze and act** on identified impacts that may occur related to the **possible population growth** in the municipalities, due to migration of labors or people seeking for job opportunities.

In Project Puma I, the Anthropic Monitoring Committee meetings occurred monthly until October 2016. After this, its members defined to change the frequency – once every four months. This situation kept until May 2019, when the monthly meetings started to occur again, after the announcement of Project Puma II. The members

of the Committee decided, in a workshop in 06/19/2019, the indicators to be monitored monthly that may indicate impact due to workers' temporary migration.

| *Date* | *Description* | *Public (Including Klabin's staff)* | *Location* |
|---|---|---|---|
| 03/30/23 | Anthropic Monitoring Committee Meeting | 19 | Telêmaco Borba |
| 04/27/23 | Anthropic Monitoring Committee Meeting | 21 | Telêmaco Borba |
| 05/25/23 | Anthropic Monitoring Committee Meeting | 20 | Puma |

As informed in the lasts ESCR, the first meetings of 2020 have occurred in the Puma Mill in order to maximize participation, considering its location (right in between the three Municipalities). Between March and May 2020, due to the pandemic scenario and the World Health Organization's (WHO) recommendations, there were no face-to-face meetings. In spite of this, data and information continued to be monitored and shared by e-mail. As soon as the members adapted to the remote work conditions, the Committee decided to have its first remote meeting in June – the formula continued until the end of 2020 and initial meetings of 2021 were remote as well.

In March 2022, the Committee's first face-to-face meeting took place, after long months of remote meetings.

The dynamics of the meetings were reviewed and will be held monthly in one of the municipalities (Telêmaco Borba, Imbaú and Ortigueira). As well as the resumption of meetings and visits at the Puma Unit.

After a few monthly meetings, the Committee's attendees requested to to have bimonthly meetings. Therefore, we hold meetings every two months.

With the end of the year approaching, members requested to resume meetings in 2023.

In March 2023, the monthly meeting of the Anthropic Monitoring Committee was held, with the participation of more than 19 people. The Meeting was held at Klabin's Technology Center, with the aim of bringing them back to the committee and engaging the participants.

In May, the group also visited the new machines at Puma Unit. Many of the visitors were going to the Unit for the first time and were surprised by the size of the undertaking and new Projects.
The meetings of the Anthropic Monitoring Committee continue to be held monthly until the end of Puma II Project, in August/September 2023. After this period, the frequency will be reviewed by the group and the routine of meetings will be established.

**03/30/23 Meeting – Telêmaco Borba – Harmonia**
**Centro de Tecnologia Klabin**
About 19 people logged in, such as municipal secretariats and officials of Ortigueira, Telêmaco Borba and Imbaú City Halls, Health and Educational Regional Nucleolus, the Civil and Military Police Forces and the Commerce and Industry Association of Telêmaco Borba (ACITEL).

The moment marked the resumption of the Committee's monthly meetings, with the frequency of meetings and monitored indicators being aligned with the group. On the agenda, the main impacts and indicators mapped with a 2-year history were addressed.
Meeting report in annex.

**04/27/23 Meeting – Telêmaco Borba - Harmonia**
About 21 people logged in, such as municipal secretariats and officials of Ortigueira, Telêmaco Borba and Imbaú City Halls, Health, and Educational Regional Nucleolus and the Civil and Military Police Forces.

The meeting consisted on data presentation and evaluation in the 5 macro themes of each Municipality (health, security, education, finances and social assistance). No significant changes or impacts observed.

Meeting report in annex.

**05/25/23 Meeting – Puma**
About 20 people logged in, such as municipal secretariats and officials of Ortigueira, Telêmaco Borba and Imbaú City Halls, Health and Educational Regional Nucleolus and the Civil and Military Police Forces.

A visit was made to the Puma Klabin Unit so that the Committee's participants could understand the scope of the Project and also get to know the unit. Many participants did not know the project and were surprised by the size of the entire structure.

Meeting report in annex.

Have there been any grievances lodged by members of the community or local authorities against the Company? Please describe. What corrective action has been/will be taken by the Company if any is required.

Besides the ones received through Klabin Ombudsman, there were no formal grievances by member of the community or local authorities against the Company.

Provide a summary of grievances lodged by members of the community – including its method such as phone calls, notification to personnel, written complain - directly to Klabin and how the issues were managed.

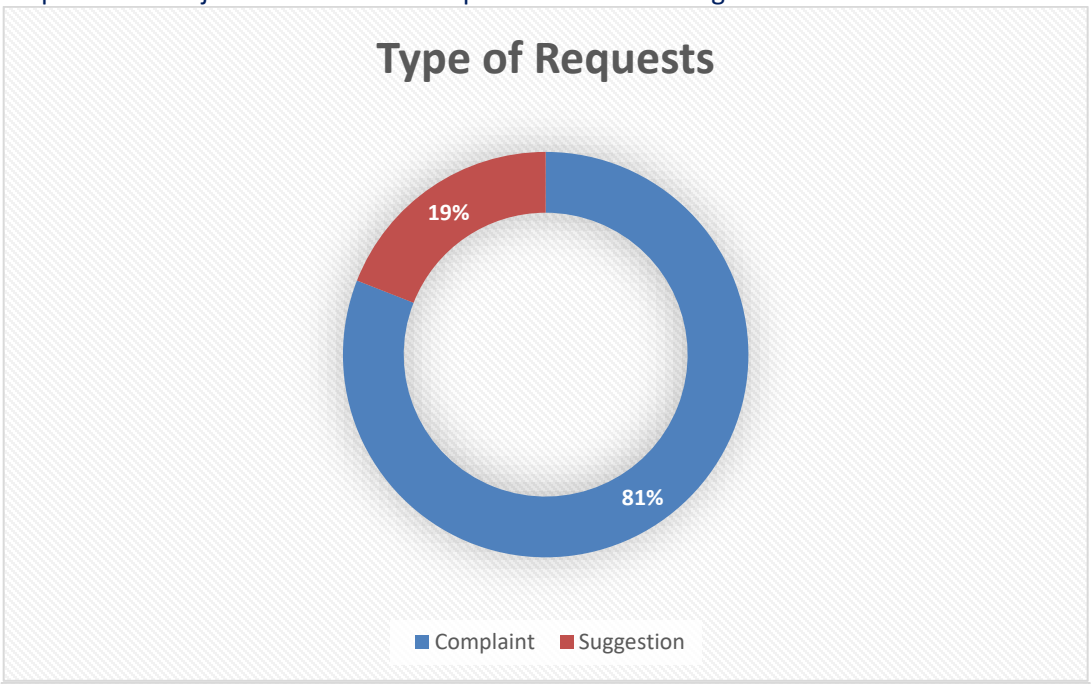
- Klabin Ombudsman and summary of grievances

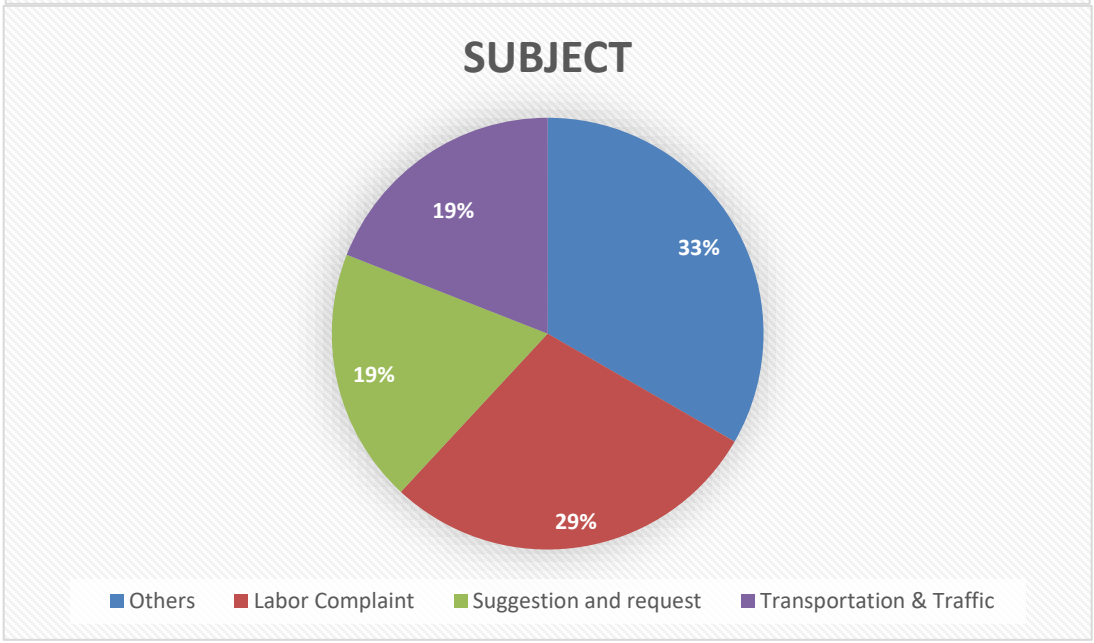
The ombudsman consists in a group of communication tools in which the objective is to develop the company's dialogue and relation with the population of its area of influence – considering the Puma and Monte Alegre mills, Forestry and the projects (such as Puma II).

The requests received by e-mail (faleklabinpr@klabin.com.br), phone calls (0800 728 0607) or Social Media (Facebook and WhatsApp) are monitored periodically in order to provide quick response and avoid conflicts of information.
Complaints related to Puma Mill and Project Puma II received from the community from July 1 to December 31, 2022:

| *Channel* | *Total* |
|---|---|
| Phone Call – 0800 (toll-free) | 21 |

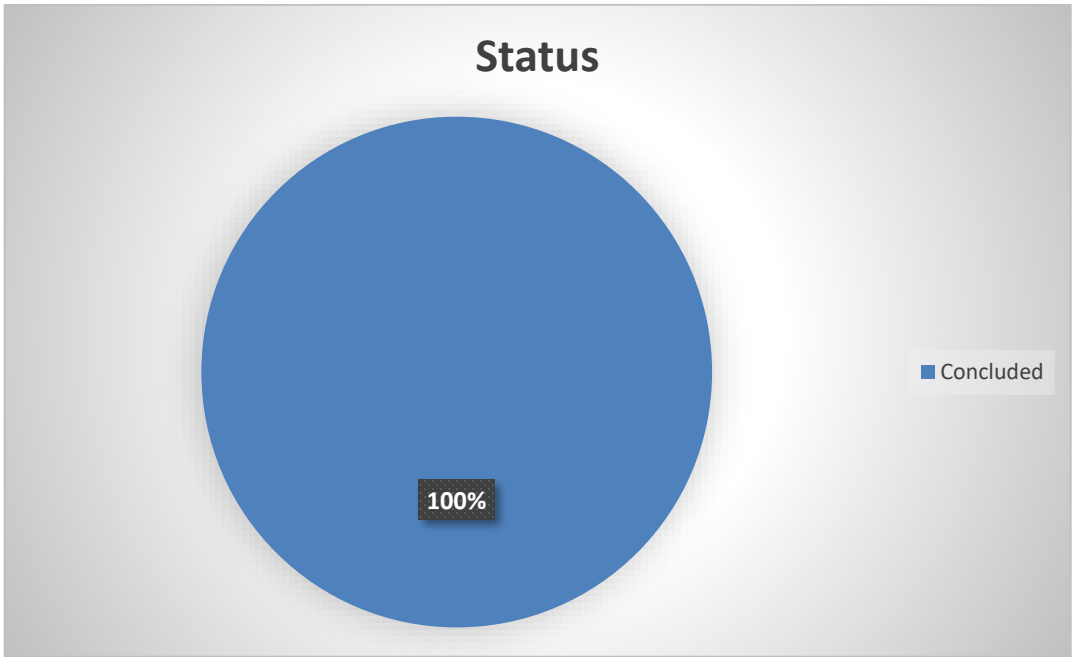
The description and subjects related to the requests received through the ombudsman are described as below:




All demands related to Puma Mill and Project Puma II and Klabin were answered to claimants, as long as it was possible to identify the contacts. Additionally, all demands were forwarded to the responsible sectors

for the appropriate measures – such as notifications for the dangerous drivers, for example. Evidences are archived with the Social Responsibility and Community Relations team and their effectiveness evaluated.




How is information about the operations and/or environmental performance of the mill disseminated among the local community? Please describe.

The information about the operations and/or environmental performance of the mill is disseminated among the local community in different ways such as:

- Meetings with the Communities

Community meetings were re-established as of January 2023. With the end of the pandemic scenario, Klabin continued the process of holding community meetings with the AID public, regarding the progress of the Puma II Project.

The first Meeting held was with the community of Lageado Bonito, Ortigueira. Rural community close to Klabin's Industrial unit, Puma Unit.
The recovery meeting was attended by community members, approximately 31 people, representatives of Klabin, from various areas, including Logistics and Forest Roads, and was also attended by the Municipal Mayor, Ary Mattos, and representatives of the municipal secretariats.
On the occasion, it was possible to present information about the progress of Puma II Project works, Social Programs developed for the community and information about Forestry Operation, which we would have in the community in the coming months.

The community was satisfied with the meeting held and the resumption of these actions. Several points of improvement were discussed, both for Klabin and for the Municipality of Ortigueira.
In March, two more DIA community meetings were held, in Volta Grande and Campina dos Pupos, rural

communities in Ortigueira close to Puma Industrial plant.

The events were attended by approximately 18 people per community.

The main objective of the agendas was to present the progress of Puma II Project works, as well as to identify and map the impacts on the communities, clarify doubts and answer questions.

- Klabin na Comunidade and presence in events

Event organization (Klabin na Comunidade) and presence in municipal events. The two relationship actions have the objective to bring information about Klabin's activities (including Project Puma II), as well as clarify questions about any kind of issue/theme – that include presenting the projects and actions in the social, environmental and local development areas.
Events were supposed to start in March 2022, but all of the predicted ones during the year were canceled due to the pandemic scenario and the World Health Organization's (WHO) recommendations.

In March 2023, Klabin, with representatives from the Social Responsibility and Community Relations, PR Communication and Forestry Commercial areas, was present at Expo Telêmaco Borba, an event held by the Municipality of Telêmaco Borba in celebration of the city's anniversary.

On the occasion, Klabin shared the company's information and results with the community. Information such as jobs, vocational courses, social programs, such as the Solid Waste Program and Semeando Educação, as well as information about Plante com a Klabin. There were more than 5 days of event.
In June, events were held in celebration to the Environment Day in Telêmaco Borba and Ortigueira, in partnership with the municipalities.

The action also had the support of Ambipar ViraSer, a partner in Klabin's Solid Waste Program, and recycling cooperatives in the municipalities.

The dynamic was carried out with a "Knowledge Trail", which led participants to learn more about the initiatives and results of the Solid Waste Program that Klabin, Ambipar ViraSer and seven municipalities of the Caminhos do Tibagi Consortium, develop in partnership.

The program currently supports around 170 environmental recycling agents, and in the last two years, it has already helped to recycle 5,655 tons of waste and avoided sending this material to sanitary landfills. In the square, visitors also participated in activities to raise awareness about waste separation, being alerted to the negative impacts of incorrect disposal on the environment.

- Minuto Klabin (Radio) and Puma Radio

Minuto Klabin is a radio program produced every two weeks by Klabin in partnership with Agência Radioweb and distributed to 18 radio stations and a website in the Campos Gerais region. The content covers cities in Klabin's area of influence: Telêmaco Borba, Ortigueira, Imbaú, Tibagi, Ponta Grossa, Carambeí, Castro, Ipiranga, Ivaí, Palmeira, Piraí do Sul, Porto Amazonas, Reserva, Bituruna, Mallet, Rio Azul, Guamiranga , Imbituva, Irati, Prudentópolis, Rebouças, São João do Triunfo, Teixeira Soares, Inácio Martins, Ventania, Cândido de Abreu, Tamarana, São João da Serra, Sapopema, Figueira, Curiúva, Japira, Ibaiti, Arapoti, Congonhas, Santo Antônio do Paraíso, Santa Cecilia do Pavão, Nova Santa Bárbara, São Sebastião da Amoreira, Nova Fátima, Ribeirão do Pinhal, Jundiaí do Sul, Nova América da Colina, Rio Branco do Ivaí, Rosário do Ivaí, Ortigueira, Marilândia do Sul, São Jerônimo da Serra, Lagoa, Grandes Rios, Faxinal, Mauá da Serra, Cruzmaltina, Campo Largo, Ibaiti, Conselheiro Mairinck, Jaboti, Pinhalão, Tomazina, Wenceslau Braz, Quatiguá, Guapirama, Joaquim Távora, Carlópolis, Santo Antônio da Platina, Jacarezinho, Congonhinhas, Ribeirão do Pinhal, Sengés, Itararé and Itapirapuã Paulista. The

program lasts 1 minute with information on the company's economic, environmental and social activities. The broadcasting frequency of the programs is determined by contract between Klabin and each of the radio companies, being daily or on alternate days, according to the individual agreement by broadcaster.

Puma Radio is a customized and exclusive platform for Puma II Project employees. It is an effective communication channel with the employees engaged in construction. The Communication, Social Responsibility and Community Relations team develops its content in partnership with Agência Radioweb, an experienced company in the internal radio business. The content broadcast by the radio covers musical program and topics such as occupational safety, environment, health, citizenship, public utility services, daily follow-up of the work, interviews and employee's life stories.

Puma Radio is available in the main living areas of Projeto Puma II sucha as: Social Center, Project cafeteria, Capital do Papel residential and reception. The radio is also played on the buses that transport workers from contracted companies from their homes to Puma II Project on a daily basis. In addition to these areas, Rádio Puma's website and application programming are available so that workers can access on their cell phones or laptops and listen whenever they want. According to a survey carried out with Puma II Project workers in July 2022, 75% of respondents said they listened to Rádio Puma in at least one of the forms of content distribution. Events such as Puma Radio Karaoke and Breakfast with Drivers contribute to the relationship with stakeholders in order to communicate about key issues such as safety, citizenship, health and the environment.

A Voz do Matas is a weekly podcast produced by Agência Radioweb in partnership with Klabin's Matas Sociais program. Voz do Matas is produced aiming at informing farmers assisted by the Matas Sociais program and it addresses topics of interest to family farming. Each episode addresses a specific topic related to the planting of vegetables, fruit, forest recovery, pasture management, poultry, beekeeping, meliponiculture, cooperativism, climate change, water treatment, spring protection, financial planning, among others.

Voz do Matas was created in 2020 during the pandemic as a strategy to bring closer and link Matas Sociais program and the farmers benefited in order to maintain continuity in the guidance and technical training offered to farming families.

## 6.3 Community Development

Please provide details of such initiatives supported by the Klabin Community Development Plan or other institutions related to the PUMA Klabin project, that are not covered by the Chapter 8 Progress on implementing the environmental and social action plan (ESAP).

Matas Sociais

The program encourages family farming, families staying in the countryside, stimulating sustainable development in the production and consumption chain, and entrepreneurship among farmers in Paraná and Santa Catarina. A Klabin's initiative, developed in partnership with Sebrae and the NGO Association for the Preservation of the Environment and Life (Apremavi). In 2022, the company offered support in regularizing the Municipal Inspection Service (SIM) for Products of Animal Origin in the municipalities of Tibagi, Ventania, Imbaú and Telêmaco Borba, to better meet the public notice of the National School Feeding Program (PNAE) and to expand to the cities of Palmeira and Ponte Alta.

Other important points of the program are the strategic planning of the Central de Cooperativas da Agricultura Familiar Centro Norte do Paraná (formed by five cooperatives), the continuity of the destination

of fruit and vegetables for different markets, among which the Feira do Bem, of the Municipality of Telêmaco Borba , which enables the exchange of recyclable waste for vegetables, and the purchase of food for the employees in the Company's restaurants and for the animals under the care of the PEK I Klabin Ecological Park.

- Serving more than 1,000 properties since the program started in 2015.
- More than 300,000 native seedlings donated.

Semeando Educação

The program operates in the continuous training of basic education teachers of Portuguese and mathematics and also supports the strengthening of school management, benefiting the municipal public network. Its main objective is to improve the results of official rates, such as the Basic Education Development Index (Ideb).

Klabin Semeando Educação is carried out in 13 municipalities where Klabin operates in Paraná, in 5 municipalities in Santa Catarina, 2 in São Paulo and 1 in Pernambuco. Five of these cities have already registered an increase in the Ideb: Imbaú and Sapopema (in Paraná), Correia Pinto and Lages (in Santa Catarina) and Goiana (in Pernambuco).

- 291 Elementary Schools
- 1,807 trained education professionals
- 22 thousand Elementary School I students benefited.

Information about the program is available at its website [https://semeandoeducacao.klabin.com.br/].

Public Management Support

With the Support Program to the Public Management, Klabin works so that the priority municipalities (see criteria below) for the company's operations reach significant advances based on training and consultancy to improve their planning and the application of public resources (such as the allocation of resources from taxes paid by companies). The purpose of the initiative is to encourage participatory public management, in pursuit of regional development.

The program is present in 15 municipalities: Telêmaco Borba, Ortigueira, Imbaú, Sapopema, Tibagi, Reserva, Curiúva, Paranaguá, Rio Negro, Ventania (in Paraná), Otacílio Costa, Correia Pinto, Lages (in Santa Catarina), in addition to Angatuba (in São Paulo) and Goiana (in Pernambuco).

Program’s results are available in annex.

Program of Solid Waste

The purpose of the program is to improve solid waste management, environmental education in communities and the working conditions and income of environmental recycling agents. It is carried out in partnership with the Caminhos do Tibagi Intermunicipal Consortium in seven municipalities in Paraná, with the support of ViraSer, an entity that provides specialized technical consultancy in structuring cooperatives and articulating partnerships between these groups, public authorities and society.

In 2022, the first group of Environmental Public Managers of the program was formed, with representatives of the seven municipalities, when the Action Plans were prepared and the goals for the next two years were defined. Also in 2022, Klabin expanded the initiative to Goiana (PE), with advances in the diagnosis of the initial situation in the municipality, preparation of the Municipal Plan for Selective Collection and formation of the group of recycling agents “Recicla Goiana”.

In 2023, a meeting was held with the Environmental Public Managers to present the action plan and defined goals.

Program's results are available in annex.

Project MuDança

Since 2015 Klabin supports Project MuDança, at Casa da Criança Padre Lívio Donati, in Ortigueira. MuDança helps in physical, cultural and emotional development of 100 children and teenagers from 10 to 15 years-old, besides contributing to their social inclusion.

On May 6, 2022, Casa da Criança held an inaugural meeting and presentation to resume face-to-face classes, with the presence of new dance teachers, support given by Klabin.

Classes take place every Friday in two periods: morning and afternoon with two classes in each period.

The group achieved admiration and recognition for their artistic quality and was selected to participate in the 2023 Paranaense Final Dance Show held in Curitiba, capital of the State of Paraná.

Artistic Gymnastics Project in Telêmaco Borba

In partnership with the Municipality of Telêmaco Borba, Klabin has been supporting the Artistic Gymnastics Center for over 10 years. Over 100 children attend the activities in the center.

Ariely Miranda, Telêmaco Borba athlete, won a gold medal at the XLI National Artistic Gymnastics Tournament, 41st edition, children´s category (up to 15 years), held in Goiania, from November 15 to 20. There were 98 competitors in the category, representing teams across the country.
Ariely is one of the revelations selected from the groups in partnership with the City through the Municipal Education Department with the Artistic Gymnastics Training Center (CTGA), since she was 9 years old.

The gymnasium of Telêmaco Borba Artistic Gymnastics Training Center (CTGA-TB), located in the BNH neighborhood, was nominated by the Paraná Gymnastics Federation (FPRG) to become one of the units of the Caixa Jovem Promessa Loterias Project, sponsored by Caixa Econômica Federal.

Teachers Ana Paula and Juliano were hired by the Brazilian Gymnastics Confederation (CBG) as project coordinators and have the task of training teachers and employees at the 11 units of Caixa's Centers of Excellence.

Social Educative Project Encantos do Imbaú

The Encantos do Imbaú Socio-Educational Project, active since August 2019, has the support of Klabin and offers guitar, keyboard, percussion, choral singing and music theory classes for 80 vulnerable children and adolescents, aged between 6 and 16 years, in addition to 80 seniors. It is carried out in partnership with the Municipality of Imbaú.

Projeto Superação – Atletismo Reserva

The partnership between Klabin and Projeto Superação began in 2022 with the Company supporting actions on several fronts, including improving the structure that the team uses for athletics training. The initiative also makes donations of sports and educational materials, basic food supplies and items needed to feed and hydrate athletes during competitions, in addition to providing tickets or fuel for those who do not have access to school transport.

Plan to fight Violence against Women – Puma II for women

In 2019, a plan to fight violence against women was created in Puma II Project and municipalities in its area of influence (Ortigueira, Telêmaco Borba and Imbaú).
This action plan aims at:

- Supporting, developing and consolidating projects and initiatives to tackle any type of violence against women; encouraging the participation of Puma II Project employees and the local community (municipalities of Ortigueira, Telêmaco Borba and Imbaú).
- Raising awareness and motivating Klabin's male employees on the subject through informative and educational actions.
- Creating a "support group" for women, providing necessary support for empathetic listening, in addition to strengthening and optimizing the Ombudsman and Integrity Channel and the local network to deal with cases of violence against women.

Strengthening the network to fight violence

Some impacts were identified in three municipalities of the Direct Influence Area (AID), such as greater circulation and movement in local commerce and tax collection growth. Klabin is active in the AID territory, it carries out relevant projects that make a difference and acts in the mitigation of impacts.

In general, the municipalities indicate initiatives aimed at improving network service provision, with an emphasis on violence against children and adolescents and violence against women. However, they recognize the importance of impacting mitigation actions, which they believe to be more critical as a result of the pandemic consequences.

It is commonly recognized that efforts to prevent and fight violence against children and adolescents need to go hand in hand with schools. Sex education and campaigns engaging children, adolescents and families, both in terms of self-protection and the creation of safe spaces for people facing difficult situations. Another similar aspect in the narratives of the three municipalities is that the network is not fully equipped to support and respond to situations of violence against women.

The work with the new consulting firm, Xaraés, has as its main objective to carry out structured and qualified training actions for the work of the Networks to Fight Violence by articulating, integrating and standardizing actions and procedures among the institutions, equipment, services and programs that form the protection network and safety and justice systems, aiming at guaranteeing protective, humanized and comprehensive care with a focus on violence against children and adolescents and violence against women.

The work developed in partnership with the contracted consultancy, Xaraés Consultoria e Projetos, began in January 2023.

Among the actions carried out, there are the internal alignments and presentations of the new consultancy contracted to the municipalities that are part of the Project, (Imbaú, Ortigueira and Telêmaco Borba).

Between May 3rd and 18th, 2023, Xaraés Consultoria e Projetos carried out the project "Strengthening the Network to Fight against Violence" in the three municipalities.
The general objective is to carry out training actions for public agents to work in the Networks for Assistance and Combating Violence against Women, Children and Adolescents.
In addition, it is intended to articulate, integrate and standardize actions and procedures among the institutions, equipment, services and programs that make up the protection network and security and justice systems.

The topics covered in the training sessions were:

- Brazilian Context of Integral Doctrine Protection for Women, Children and Adolescents.
- Reasoning, Contexts of Applicability and the Assistance and Protection Network for Women, Children and Adolescents.
- Commitment of the institutions of the Assistance and Protection Network for Women, Children and Adolescents.
- Concept of Human Rights; Gender and Inequality.
- Concept of Equity and Gender Equality; Childhood and Adolescence in the context of violence.
- National Legislation, International Treaties and Conventions.
- Concept of violence against Women, Children and Adolescents.
- Types and stereotypes regarding violence.
- Consequences of violence against Women, Children and Adolescents on health (physical, mental) and in the world of work.

In Ortigueira, 23 publiuc agents took part of the traininings .

- Municipal Health Secretary: Community Health Agents, UPA Doctors and nurses.
- Municipal Secretary of Social action: CRAS, CREAS, Social Assistance, Specialized hearing.
- Tutelary Council: Counselors and Counselors.

In Telêmaco Borba, 38 public agents were trained

- Municipal Secretariat of Social Assistance: Reception Service, Social Service, Adolescent and Youth Living Center, Child Living Center, Social Assistance Reference Center, Specialized Social Assistance Reference Center.
- Municipal Health Department: Women's Clinic, Health Surveillance, Pediatrics, UPA, Rehabilitation Center, Psychosocial Care Center, Pharmacy.
- Municipal Department of Education: Child Education Section, CEMAE Social Service.
- Public Security: Civil Police
- Health State Secretary : 21st Regional
- Municipal Women's Council
- Tutelary Council

In Imbaú, 28 agents graduated.

- Municipal Health Department: Epidemiological Surveillance, Community Health Agents, Primary Care.
- Municipal Secretariat of Social Assistance: Special Social Protection, CRAS, Service for Coexistence and Strengthening of Bonds.
- Secretariat of Public Security: Military Police
- Municipal Council for the Rights of Children and Adolescents
- Tutelary Council

As the next steps, the presentation of the results and alignments with the municipalities involved are planned.

<u>The Indigenous Basic Environmental Plan (PBAI)</u>

The Indigenous Basic Environmental Plan (PBAI) of the Indigenous Component Study (ECI) of the Indigenous Lands (TI) of Queimadas and Tibagy-Mococa of Klabin S.A.'s Industrial Complex in Ortigueira, State of Paraná, was elaborated attending FUNAI's recommendations after the ECIs and is composed by four programs:

1. Program of Impact Monitoring in the Physical and Anthropic Environment;
2. Program of Revitalization of the Kaingang Education and Culture;
3. Program of Kaingang Ecological Corridors;
4. Program of Revitalization of the Kaingang Production Activities.

Program of Impact Monitoring in the Physical and Anthropic Environment
The first Writing Workshop was held, with all the members (monitors), who are part of the PBAI programs.

The first workshop of the Anthropic Monitoring Program is scheduled for the second half of 2023, starting the other workshops that will be held. For this, alignments were made with the program's monitors to clarify doubts, clarify the content and explain how the other workshops will be carried out.

Program of Revitalization of the Kaingang Education and Culture
Education module - donation of school materials, as support for indigenous schools were carried out on 02/03/2023.
Scholarships - the scholarship program has been active since the year 2017 and the summary follows as detailed below:

- Tibagy Mococa 08 graduates, 05 studying and 9 failing.
- Queimadas 02 graduates, 17 studying and 14 dropping out.

Program of Revitalization of the Kaingang Production Activities
Activities will be carried out from the second semester of 2023.

## • 7 DATA INTERPRETATION AND CORRECTIVE MEASURES

Provide the following information for monitoring data which exceed Brazilian or IFC maximum levels. This refers to data presented in Chapter 5. Provide the information in the table for each parameter exceeded.

| *Monitoring parameter that exceeds Brazilian or IFC guidelines* | *Cause for monitoring parameter exceeding* | *Corrective action plan and responsibility* | *Completion date* | *Cost/USD* | *%Complet e/ Status* |
|---|---|---|---|---|---|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

## • 8 PROGRESS ON IMPLEMENTING THE ENVIRONMENTAL AND SOCIAL ACTION PLAN (ESAP)

Please report on progress to implement the actions specified in the ESAP attached as Schedule III in the Common Terms Agreement. Report on actions which are of on-going character and actions that have not been completed before the reporting period of this Environmental and Social Compliance Report.

The ESAP update is available at the link with the documents.

The ESAP updated status is available in OneDrive.

## • 9 GHG EMISSIONS

In case (and subject to any more stringent obligations that are imposed by any Brazilian law or regulation) the Project has emitted over 25,000 tonnes of carbon dioxide (CO2) equivalents during its operation on the Reporting Period, please report greenhouse gases (GHG) emission amounts (Scope 1 and Scope 2 emissions separately)[32] applying the GHG Protocol methodology. Please report fossil and wood based emissions separately.

The table below shows summary of total Puma I operation GHG emissions. Inventory year: 2022.

| | Emissions in metric tons, by type of GHG | | | | Emissions in metric tons of CO2 equivalent (tCO2e) | | | |
|---|---|---|---|---|---|---|---|---|
| GHG (ton) | Scope 1 | Scope 2 (approach by "location") | Scope 2 (approach by "purchase choice") | Scope 3 | Scope 1 | Scope 2 (approach by "location") | Scope 2 (approach by "purchase choice") | Scope 3 |
| $CO_2$ | 269.250,212000 | 73.148,660000 | - | 102.181,803000 | 269.250,212 | 73.148,660 | - | 102.181,803 |
| $CH_4$ | 389,901000 | - | - | 3,562000 | 10.917,228 | - | - | 99,736 |
| $N_2O$ | 99,522000 | - | - | 2,098000 | 26.373,330 | - | - | 555,970 |
| HFCs | 3,080370 | | | - | 4.168,930 | | | - |
| PFCs | - | | | - | - | | | - |
| $SF_6$ | - | | | - | - | | | - |
| $NF_3$ | - | | | - | - | | | - |
| **Total** | | | | | **310.709,700** | **73.148,660** | **-** | **102.837,509** |

[32] Quantification of GHG emissions will be conducted by the client in accordance with internationally recognised methodologies and good practice, for example, the GHG Protocol.