## **ENVIRONMENTAL AND SOCIAL COMPLIANCE REPORT (ESCR)**

#### Klabin S.A.

PUMA Pulp Mill

Forest plantations

Transport operations

Port operations

Brazil

Reporting Period: Jan/2022 through Jun/2022

#### 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

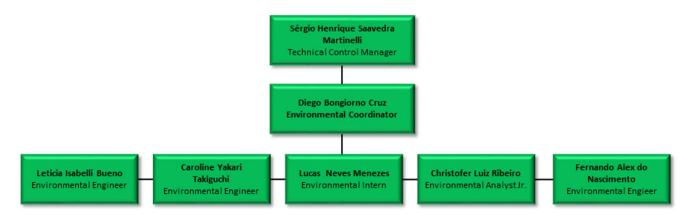
- Klabin E&S team leading the report delivery for PUMA I would only respond/complete the sections related with PUMA I; and
- Klabin E&S team leading the report delivery for PUMA II would only respond/complete the sections related with PUMA II construction (without references to the Paranaguá port operations, 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.

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

#### ENVIRONMENTAL AND SOCIAL MANAGEMENT - PUMA I



#### **Technical Control and Environmental Manager**

Sergio Henrique Saavedra Martinelli

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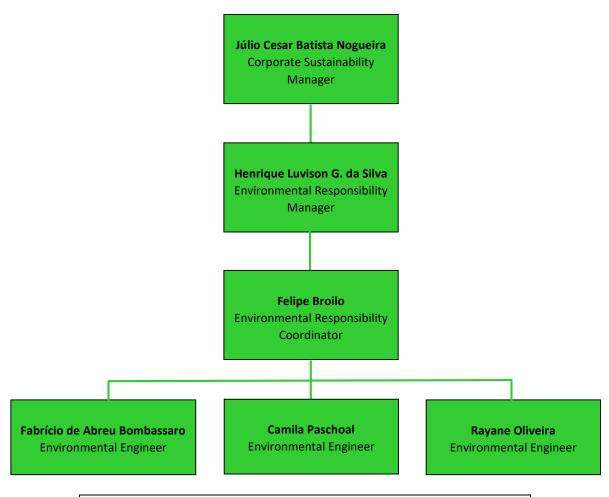
#### **Environmental Intern**

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#### ENVIRONMENTAL AND SOCIAL MANAGEMENT – PUMA II Project



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**Environmental Engineer** 

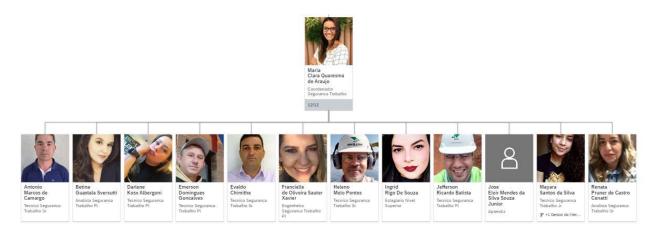
Fabrício de Abreu Bombassaro

Address: Faz. Apucarana Grande s/n – Ortigueira - PR

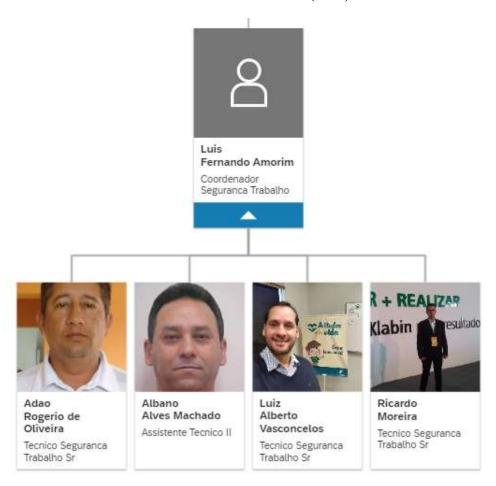
Telephone Number: (42) 98877-0146

E-mail Address: <a href="mailto:fabricio.bombassaro@klabin.com.br">fabricio.bombassaro@klabin.com.br</a>

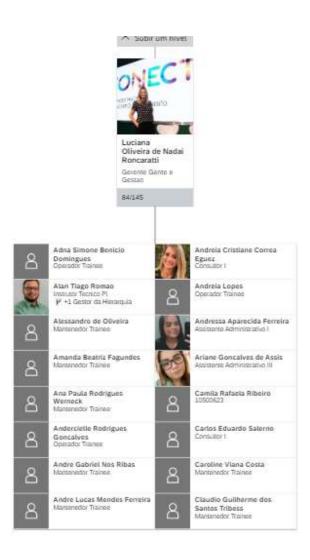
## OCCUPATIONAL HEALTH AND SAFETY PERFORMANCE (OHS) PUMA I



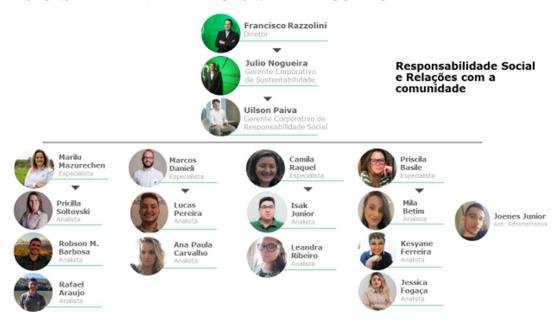
## OCCUPATIONAL HEALTH AND SAFETY PERFORMANCE (OHS) PUMA II



#### SOCIAL AND ECONOMIC IMPACT MANAGEMENT / COMMUNITY DEVELOPMENT



#### RESPONSIBILITY AND RELATIONS WITH THE COMMUNITY



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



#### BASIC INDIGENOUS ENVIRONMENTAL PLAN - PBAI



<sup>\*</sup>Samantha Paiva, Engenheira Florestal

#### **1.2 Summary of Current Status**

#### PHASE I

• Advance in the period shows an overall realized of 99.49% against the planned of 99.59%, representing a negative deviation of -0.10%, compared to a negative deviation of the previous month of -0.07%;

	Geral	Construção Civil	Montagem Eletromecânica
Planejado:	99,59%	100,00%	100,00%
Realizado:	99,49%	100,00%	99,97%
Desvio:	-0,10%	0,00%	-0,03%
Desvio anterior:	-0,07%	0,00%	-0,04%

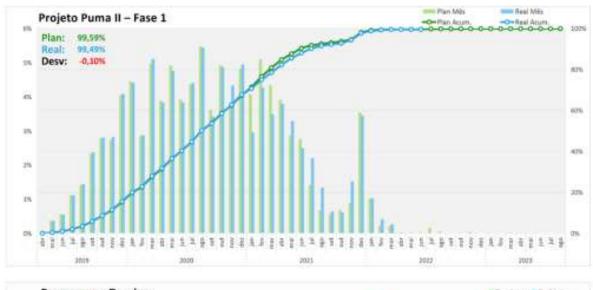
Considering the processes and facilities necessary for paper production:

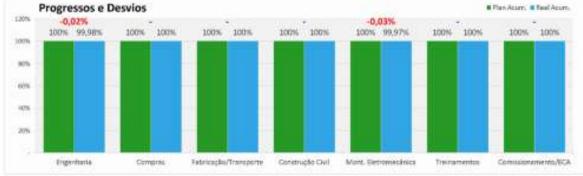
• The overall advance in the period shows an overall realized of 99.54% against the planned of 99.55%, representing a negative deviation of -0.01%, compared to a negative deviation from the previous month of -0.01%. The electromechanical assembly maintained the performance with an advance of 99.96% against a planned of 100.00%, representing a negative deviation of -0.04% against a negative deviation from the previous month of -0.04. The construction activity is finished.

	Geral	Construção Civil	Montagem Eletromecânica
Planejado:	99,55%	100,00%	100,00%
Realizado:	99,54%	100,00%	99,96%
Desvio:	-0,01%	0,00%	-0,04%
Desvio anterior:	-0,01%	0,00%	-0,04%

- In addition to the elimination of pending issues in some plants, Biomass Gasification has reached the PA condition and the Sulfuric Acid Plant, recently completed, is still in the process and production curve adjustments phase;
- At the end of the month the number of registered workers is 285, against 429 in the previous month;
- The Covid-19 again presented some cases after a period of low index, with 11 positive cases, including phase 2 workers, and at the end of the month there were 0 workers away. The characteristic of these latter cases is of very mild symptoms and without the need for hospitalizations.

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





# CONFIDENTIAL ABSOLUTE DEVIATION MAP

Area	Weight	Deviation	Weighted Deviation
Puma Project II – Phase 1	100,0%	-0,10%	-0,10%
Evaporation Plant	6,8%	- 0,54%	- 0,037%
BOP Complementary	0,5%	- 3,50%	- 0,016%
External Container Yard	3,3%	- 0,48%	- 0,016%
BOP Klabin – Rolls Storage and Auxiliaries Buildings	2,4%	- 0,50%	- 0,012%
Recovery Boiler	10,0%	- 0,04%	- 0,004%
Solids Residues Treatment Plant	0,5%	- 0,40%	- 0,002%
Power Boiler	4,8%	- 0,02%	- 0,001%
Paper Machine 27	22,3%	-	-
Balance of Plant	8,6%	-	-
Fiberline	7,5%	-	-
White Liquor Plant	5,5%	-	-
Wood Yard	5,0%	-	-
BOP – Pipe Rack	4,6%	-	-
Effluent Treatment	3,0%	-	-
BOP- Turbogenerator	2,5%	-	-
WSA Plant	2,3%	-	-
Gasification		2,0%	_
BOP Klabin – Earthwork, Log Yard and Streets		1,6%	
Upgrade MC25 and MC26		1,5%	
Fiberline 1 – Capacity Increase		1,5%	-
Boiler Water Treatment Plant	1,4%	-	-
Power Distribution	1,2%	-	-
Turbogenerator	1,0%	-	-
BOP – Package 2	0,8%	-	-

Distributed Control System	0,6%	-
Gasification Feed System	0,5%	-
5° Effect A – Evaporation Plant I	0,5%	-
Water Treatment	0,4%	-
Chlorine Dioxide Plant	0,4%	-
ETE 1 – Complementary Tertiary Treatment	0,3%	-
BOP – Industrial Restaurant	0,2%	-
BOP – Package 1	0,1%	-
<b>Dedicated Systems</b>	0,1%	-
PIMS	0,1%	-

#### HISTOGRAM OF THE WORK



#### PHASE II

• The advance in the period was below the planned, with an overall realized of 45.97% against the planned of 46.93%, representing a positive deviation of -0.96%, compared to a positive deviation from the previous month of 0.83%;

	Geral	Construção Civil	Mont. Eletromecânica
Planejado:	46,93%	53,31%	8,28%
Realizado:	45,97%	52,56%	8,92%
Desvio:	-0,96%	-0,75%	0,64%
Desvio anterior:	0,83%	-0,78%	0,22%

• The works of MP28 continue to be the main working front with highlights for the lifting of the 1st Skid of piperack and in civil construction the finishing of assembly of precast on shaft 1-1' -

Control rooms of the Expedition. Delay in manufacturing/delivery of imported equipment due to the Covid-19, fire in Valmet Finland shop and war contributed negatively in the period, they are being monitored.

- The histogram of this phase reaches the number of 3,137 registered workers, against 2,768 in the previous month, among them 91% are with vaccination against Covid-19 on time.
- Eight positive cases of Covid-19 were recorded among the workers of this phase of the project;
- Continuity in alignment meetings and availability check in the operational schedule for the activities of FiberLine Capacity Increase at PG23.
- Completed the consolidation of the planning of the Curve Paper Machine 28 Cutter and Packing.
- Carried out the consolidation of dedicated systems planning (OTS).
- Supplier Engineering: The engineering activities of suppliers continue to be under development, at the moment, below plan, with emphasis on the areas of Paper Machine MP28, BCTMP, Fiberline, Power Distribution, BOP Civil (Infrastructure and Street), BOP Cutter and Skid Baler, Paper Machine MP28 (Valmet) and Fiberline;
- Supplier Purchases: Supplier purchasing activities are still under development as planned, with the exception of BCTMP, Fiberline, Wood Preparation, BOP package 1 (Chillers, Generator, Workshop and Mini-EPCs) which show below-the-forecast advances;
- Manufacturing/Transportation: The manufacturing/transportation activities of suppliers continue to be under development, at the moment, below plan, with emphasis on the areas of Paper Machine -MP28, BCTMP, Fiberline, BOP - Package 1 (Chillers, Generator, Workshop and Mini-EPCs), BOP - Package 2 (Pipe Rack, Water Collection Station, ETA, Emissary), Paper Machine - MP28 (Valmet) and Fiberline;
- Construction: The civil construction activities of suppliers are still under development, at the moment, below plan, with emphasis on the areas of Paper Machine MP28, Fiberline, Wood Preparation, Paper Machine MP28 (CESBE);
- Electromechanical Assembly: The electromechanical assembly activities of suppliers continue to be under development, as planned, with the exception of the area of the Fiberline, which present advances below the forecast.

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



#### ABSOLUTE DEVIATION MAP

Area	Weight	Deviation	WeightedDeviation
Puma Project II – Phase 2	100,0%	-0,96%	-0,96%
Paper Machine 28	61,0%	- 1,85%	- 1,129%
Paper Machine 28 - Valmet	50,1%	- 2,11%	- 1,058%
Fiberline	9,7%	- 0,92%	- 0,089%
Paper Machine 28 - CESBE	9,7%	- 0,86%	- 0,084%
BCTMP	7,7%	- 0,48%	- 0,037%
Balance of Plant	2,6%	- 0,45%	- 0,012%
BOP – Package 2	1,7%	- 0,36%	- 0,006%
BOP – Package 1	0,8%	- 0,52%	- 0,004%
BOP – Cutter and Skid Baler	0,0%	- 1,09%	-
<b>Dedicated Systems (OTS)</b>	0,2%		
Infrastructure and Factory Streets	0,4%	0,32%	0,001%

Distributed Control System	0,6%	0,30%	0,002%	
<b>Power Distribution</b>	1,3%	0,88%	0,011%	
Sludge Drying	1,7%	0,94%	0,016%	
Paper Machine - Cutter and Skid Baler	0,8%	3,48%	0,027%	
Wood Yard	2,9%	3,57%	0,104%	
Fiberline 1 – Capacity Increase	6,6%	3,60%	0,239%	

#### HISTOGRAM OF THE WORK



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

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

#### https://Klabin-

my.sharepoint.com/personal/dolima klabin com br/ layouts/15/onedrive.aspx?id=%2Fpersonal%2Fdolima%5Fklabin%5Fcom%5Fbr%2FDocuments%2F2%5FPUMA%20II%20Project%2FFase%20I%2FAction%20Plan%2FESAP

## **1.4 Status of Relevant Permits**

Ref.	Ref. Scope of permit	Project component	Official permit	Granted by	Issue date	Expiration date
	(aspect)	-gp	name	(Institution)	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	Grant - 289/2016	Paraná Water Institute	04/03/2016	04/03/2022
3	Effluent	Puma I and Puma II	Protocol 18.399.926-5	Paraná Water Institute	04/12/2021	-
4	Operation Permit	Puma I and Phase 1 of Puma II	LO-A 227393	Paraná Environmental Institute	22/03/2022	05/04/2025
5	Environmental License Operation	Railway Branch	LO 34882	Paraná Environmental Institute	14/03/2017	14/03/2021
6	Environmental License Operation	Railway Branch	Protocol 17.077.026-9	Paraná Environmental Institute	11/11/2020	-
7	Environmental License Operation Renovation	Paranaguá Port Terminal	RLO 219433-R1	Paraná Environmental Institute	12/02/2021	12/02/2027
8	Environmental License Operation	Fuel station	LO 185675-R1	Paraná Environmental Institute	10/07/2020	10/07/2026
9	Preliminary Permit	Phase 1 and 2 of Puma	LP-A 148370	Paraná Environmental Institute	30/09/2018	19/09/2020
10	Preliminary Permit	Phase 2 of Puma II	LP-A 217482	Paraná Environmental Institute	26/01/2021	26/07/2021
11	Installation Permit	Phase 1 and 2 of Puma II	LI-A 157633	Paraná Environmental Institute	26/05/2020	29/06/2026
12	Installation Permit	Phase 2 of Puma II	LI-A 226943	Paraná Environmental Institute	06/04/2021	29/01/2024
13	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)

#### 2.1 Brazilian Compliance

Please <u>list</u> 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.

Does not apply.

#### **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.

#### PUMA I

#### 1. Total Amounts

	This reporting period			
Report TOTAL numbers for each parameter	Own employees	Contracto r employee s		
Employees	1241	1619		
Man-hours worked	1.499.244	3.430.460		
Fatalities	0	0		
Non-fatal injuries <sup>4</sup>	9	5		

Lost workdays <sup>5</sup>	29	110
Vehicle collisions <sup>6</sup>	0	0
LTIFR <sup>7</sup>	1,3	0,3

2. Fatality details for this reporting period

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

## 1. Non-fatal injuries details for this reporting period

Own employees or contractor employees?	Total workdays lost	Descriptio n of injury	Cause of accident	Corrective measures to prevent reoccurrence	Responsible and deadline for completion
		ACA – LC	OSS TIME A	CCIDENT	
Contractor	110	Amputation	Residual	Request a technical	Coord. Carlos Augusto
		of fingers	energy	report from the	Paz
				equipment supplier	
				evaluating the	
				possibility of implementing a	
				mechanical blocking	
				system in the blade	
				drive	
				Procedure review	
Own	20	Ankle sprain	Misstepped	Study adequacy with	Eng.
			in existing	project / Signal the	Johnatan Souza Bobeki
			unevenness	floor according to	
			in the area	existing signage in the	
	0	771 1 1 1	T 1 C	sector.	C 1 1 1 '
Own	9	Thermal and	Lack of		1
		chemical burn	favorable /	of new procedures and structural	Sestari
			safe	improvements	
			conditions	improvements	
			to carry out		
			the visual		

CONFIDENTI	AL				
			inspection		
		ASA – NON	LOSS TIME	ACCIDENTS	
Own	0	Hit against	Lack of	Procedure review	Coord. Maria Clara
		hand	attention	Training	Quaresma
Own	0	Hit against	Operational	Procedure review	Coord. Marcelo Mota
		hand	failure		
Own	0	Hit against	Procedure		Christopher Hilbert Dipp
		face	failure	accident and dissemination of good	de Oliveira
				practices	
Own	0	Chemical	Contact	Change of PPE	Coord. Marcos Henrique
		burn	with the	Procedure review	Sestari
			acid		
Own	0	Fall and	Became	Review and creation	Wander Soares de
		shoulder		of new procedures and	Almeida
		injury	during normal	structural	
			activity	improvements	
Own	0	Hit against	Vehicle	Review and creation	Jones Costa Macedo
		finger	unsuitable	of new procedures	
			for	Conversation about the	
			transportig	accident and dissemination of good	
			tire material	practices	
Own	0	Injuries due to			Jackson Tavares Barbosa
		fall	while walking	improvements	
Contractor	0		Loose floor	Conversation about the	
		fall		accident and dissemination of good	Junior
				practices	
				Procedure review	
Contractor	0	Hit against		Conversation about the	
		finger	failure	accident and	Junior
				dissemination of good practices	
				Procedure review	
<u> </u>	1	_1	1	<u> </u>	<u> </u>

Contractor	0	Hit against	Strong	Analyze and reinforce	Manager Cristianne
		arm	wind,	tent structures	Landgraf Perez
			breaking		
			structures		
Contractor	0	Hit against	Rope break	Conversation about the	Coord. Thiago Prata
		face	_	accident and	
				dissemination of good	
				practices	
				Structural	
				improvements	

2. Vehicle collision details for this reporting period

2. Venicle consists details for this reporting period							
Own employees or contractor employees?	Cause of collision	Corrective measures to prevent reoccurrence	Responsible and deadline for completion				
0	0	0	0				

## 3. Training<sup>8</sup> for this reporting period

Own employees or contractor employees?	Description of training	Number of employees that attended
0	0	0

<sup>&</sup>lt;sup>8</sup> Personnel should be trained in environmental, health and safety matters including accident prevention, safe lifting practices, the use of Material Safety Data Sheets (MSDS), safe chemical handling practices, proper control and maintenance of equipment and facilities, emergency response, personal protective equipment (PEP), emergency response, etc.

## PUMA II

## 4. Total Amounts – Projeto Puma (Jan – Jun/22)

	This reporting period		Reporting period- 1 period ago		Reporting period- 2 periods ago	
Report TOTAL numbers for each parameter	Own employees	Contractor employee s	Own employees	Contractor employees	Own employees	Contractor employees
Employees	205	2195	205	2942	205	3212
Man-hour worked	45.100	555.280	45.100	647.240	45.100	706.640
Fatalities	0	0	0	0	0	0
Non-fatal injuries <sup>4</sup>	0	2	0	1	0	0
Lost workdays <sup>5</sup>	0	14	0	3	0	0
Vehicle collisions <sup>6</sup>	0	0	0	0	0	0

## 5. Fatality details for this reporting period - Projeto Puma (Jan-Jun/22)

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
0	0	0	0	0

## 6. Non-fatal injuries details for this reporting period - Projeto Puma (Jan – Jun/22)

Own employees or contractor employees?	Total workdays lost	Description of injury	Cause of accident	Corrective measures to prevent reoccurrence	Responsible and deadline for completion		
A	ACA – LOST TIME ACCIDENTS - OWN EMPLOYEES						
Own employee	0						
ACA –	ACA – LOST TIME ACCIDENTS - CONTRACTOR EMPLOYEES						
Contractor Employees	3	Hand burn with the water.	Inadequate risk assessment	Train staff in the correct handling of hot liquids.	Alan Rodrigues de Souza		
Contractor Employees	7	The worker, while moving the piece, pressed the right hand thumb	Manual pipe displacement activity	Safety device manufacturing	Maurício Gualandi Rocha		
Contractor Employees	7	hand pressing during pipe coupling	Inadequate supervision, failure in planning, insufficient process.	Change in work methodology	Marco Antônio Machado Ribeiro		

7. Vehicle collision details for this reporting period - Projeto Puma (Jan – Jun/22)

Own employees or contractor employees?	Cause of collision	Corrective measures to prevent reoccurrence	Responsible and deadline for completion
0	0	0	0

## 8. Training<sup>8</sup> for this reporting period - Projeto Puma (Jan – Jun/22)

Own employees or contractor employees?	Description of training	Number of employees that attended
Own employees	Training in life prevention practice	180
Contractor Employees	Security Induction Training	800

## 2.4 Life and Fire Safety - Projeto Puma (Jan – Jun/22)

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

Fire Safety Verification Activities	Mandatory Frequency	Date(s) Performed	Observed Deficiencies <sup>9</sup>	Corrective Actions and Schedule For Implementation <sup>10</sup>
Approval of the firefighting system	Biannual	22/03/16	Adequacy of defined plant systems	Adequacy of projects according to legislation
Adaptation of alarm systems in the lodging	Month	22/06/22	Inoperative alarm systems	Hiring a company to adapt this systems

Conducting rescue and emergency drills	Quarterly	22/04/23	Team training	Resource forecast
Inspect and certify fire detection and suppression electrical and mechanical systems.	Minimum: Klabin to propose	Monthly	Monthly	Preventive Maintenance
Inspect, refill/recharge portable fire extinguisher	Minimum: Klabin to propose	Monthly	Monthly	Maintenance to comply with legislation

## 2.5 Significant OHS Events - Projeto Puma (Jan – Jun/22)

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				

#### • 3 SIGNIFICANT ENVIRONMENTAL AND SOCIAL EVENTS

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.

So far, there were no significant social events.

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	Not applicable	Not applicable	Not applicable	Not applicable

#### • 4 GENERAL INFORMATION AND FEEDBACK

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 7 press releases divulgated to local press. In majority, notes consisted on information about the jobs for the second phase of the Puma II and adjacent constructions' interferences on the region's day-by-day.

	DATA
RELEASES	
"Projeto Puma II mantém prioridade na contratação de trabalhadores da região em segunda fase de expansão"	11/jan
"Indígena de Ortigueira conclui curso técnico em enfermagem com bolsa de estudos da Klabin"	13/jan
"Gaseificação: mais uma planta sustentável do Puma II"	24/feb
"Klabin aumenta uso de energia limpa ao substituir óleo combustível por gaseificação de biomassa"	10/mar
"Carreta com carga especial pode causar lentidão no trânsito"	10/mar
"Inovação e tecnologia são utilizadas para o combate à dengue em Ortigueira"	22/apr
"Carreta com carga especial pode causar lentidão no trânsito das rodovias da região"	26/may

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 62 media vehicles, 45 websites, 7 radios, 10 newspapers, more than 40 influencers and 20 WhatsApp Groups are monitored daily – except the ones that have different periodicities. Summary of weekly report and press performance report from January to July 2022 in annex.

#### Klabin and support to Municipalities in the Covid-19 pandemic scenario

Since the beginning of the health global crisis, Klabin engaged in the fight against Covid-19 by increasing its compromise of social responsibility and people care, especially in the operations' area of influence. For example, Klabin integrates since March of 2020 the Covid-19 Inter Sectorial Committee, formed by the Municipal and State Secretariat of Health, Municipal Council of Health and the city hospitals (Instituto Doutor Feitosa e Hospital Moura). In the daily meetings there are discussions related to regional infrastructure and follow up of the pandemic situation.

Klabin is aware of the importance of its social role in a difficult moment and, in 2020 and 2021, designated R\$ 12.5 million to the fight against Covid-19 in Paraná State. The actions focus on the health and social assistance areas, in addition to other sectors impacted by the crisis, especially in the regions of Klabin's forestry and industrial operations. Its main investment was related to the works and equipment acquisition that allow the Campaign Hospital in the Regional Hospital installations in Telêmaco Borba. Ten new Intensive Care rooms and 40 other nursery rooms that benefited seven municipalities of the region (Telêmaco Borba, Ortigueira, Imbaú, Curiúva, Reserva, Tibagi and Ventania).

Klabin also donated respirators, medicines and other equipment to region's public hospitals (Regional and Instituto Dr. Feitosa) and Paraná State Health Secretariat, helped in the hiring of professionals and distributed Covid-19 testing, oxygen concentrators, masks, hand sanitizers and other equipment for municipal administrations, neighboring communities and health professionals.

In 2022, the company made donations that include medicines for respiratory syndromes and for hospital use, 9,000 rapid tests to be distributed to neighboring communities and hiring qualified professionals to serve the community. More information about the Campaign Hospital and general donations available in the following links:

#### **Campaign Hospital:**

• https://klabin.com.br/sala-de-noticias/press-release/klabin-entrega-as-obras-do-hospital-de-campanha-de-telemaco-borba/

#### **General Donations 2020:**

- https://klabin.com.br/sala-de-noticias/press-release/doacoes-da-klabin-para-combater-a-covid-19-no-parana-somam-r-2-milhoes/
- https://klabin.com.br/sala-de-noticias/press-release/klabin-apoia-terras-indigenas-de-ortigueira-e-cooperativas-de-reciclagem-no-combate-ao-coronavirus/
- https://klabin.com.br/sala-de-noticias/press-release/klabin-realiza-novas-doacoes-para-combater-o-coronavirus-no-parana/
- https://klabin.com.br/sala-de-noticias/press-release/klabin-doa-10-respiradores-para-o-hospital-regional-de-telemaco-borba/

#### **General Donations 2021:**

- https://klabin.com.br/sala-de-noticias/press-release/klabin-entrega-cinco-mil-testes-ao-parana-e-transfere-mais-profissionais-de-saude/
- https://klabin.com.br/sala-de-noticias/press-release/parceria-entre-governo-e-klabin-garante-mais-5-leitos-de-uti-em-telemaco-borba/
- https://klabin.com.br/sala-de-noticias/press-release/klabin-reforca-seu-compromisso-social-e-destina-mais-9-respiradores-com-monitores-para-cidades-dos-campos-gerais/
- https://klabin.com.br/sala-de-noticias/press-release/klabin-reforca-seu-compromisso-social-e-apoia-a-

compra-de-medicamentos-e-de-bombas-de-infusao-no-parana/

- https://klabin.com.br/sala-de-noticias/press-release/klabin-amplia-doacoes-para-o-combate-a-covid-19-no-parana/
- https://klabin.com.br/sala-de-noticias/press-release/klabin-firma-parceria-com-o-governo-do-estado-do-parana-para-doacao-de-mais-de-95-mil-medicamentos-para-intubacao/

#### **General Donations 2022:**

• https://klabin.com.br/reputacao/press-releases/-/2022-02-21-klabin-reforca-compromisso-com-novas-doacoes-para-o-combate-a-covid-19

#### Project Puma II and the pandemic

With the emergence of Omicron, Puma II Project emphasized communication on the importance of wearing an individual protection mask. In accordance with the request of the Occupational Health team, the mandatory change of mask during the day was established. In the morning the white mask was worn and, in the afternoon, the blue one. The main motto of the campaign at this stage was "The mask is individual; the protection is collective". Also considering the environmental issue, specific bins for mask disposal were installed in strategic locations on the construction site. To stress the campaign, these locations were customized using the same visual language as the rest of the campaign. In this period, as before, the only masks allowed were the disposable triple protection masks, PPF2 or N95.

In order to effectively convey the message to all employees, communication materials were developed to be broadcast on all communication channels: marketing email, wall posters, warning banners, trash can warning sticker, toolbox meetings, website, content for Puma Radio.

When Covid-19 cases started to drop and with the mandatory vaccination for Puma II Project's and Klabin's employees, the way of serving food in the cafeterias returned to normal, that is, each one serving their own food. Considering continuing with Covid-19 prevention care and stressing hygiene matters, communication materials were developed to emphasize the importance of hand hygiene practiced by employees before entering the cafeterias. These warning materials were displayed at the cafeteria entrance.

In the period in which wearing mask was no longer mandatory, cases of Covid-19 rose again in Brazil. As a form of prevention, wearing mask in enclosed places became mandatory again at Klabin units in the state of Paraná and in Puma II Project as well.

In order to properly inform employees about this obligation, the communication team developed materials for all existing platforms in the project: Daily safety talks, murals, corporate TV, Puma Radio, website.

# 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					
MONITORING SITES	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.

MONITORIN	RECEPTO R	UNIT S		MITS 10151	LIMITS IFC Guidelines		LIMITS Adopted by the Project	
G SITES			DAYTIM E	NIGHTTIM E	DAYTIM E	NIGHTTIM E	DAYTIM E	NIGHTTIM E
P1	Residential	dB	55	50	55	45	55	45
P2	Residential	dB	55	50	55	45	55	45
P3	Industrial	dB	70	60	70	70	70	60
P4	Industrial	dB	70	60	70	70	70	60
P5	Residential	dB	55	50	55	45	55	45

MEASURED VALUES	P1		P2		Р3		P4		Р5	
	DAYTIME	NIGHTTIME								
Setembro/2019	44	39	62	40	63	55	65	57	51	39
Novembro/201 9	47	45	51	63	56	48	47	50	53	44
Janeiro/2020	68	62	50	46	71	67	56	48	62	60
Março/2020	36	47	58	42	63	56	57	46	47	45
Julho/2020	49	52	44	47	69	63	67	44	47	51
Dezembro/202 0	50	50	52	51	69	67	55	50	51	46
Março/2021	51	48	52	41	63	58	57	53	47	42
Junho/2021	50	49	47	46	62	55	55	45	47	47
Novembro/202 1	54	53	50	43	61	57	53	49	48	49
Março/2022	50,4	50,1	46,8	43,5	64,0	57,7	66,1	65,1	51,8	46,3
Junho/2022	48,1	52,7	51,5	38,3	66,2	63,9	63,1	57,7	50,3	41,0

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.

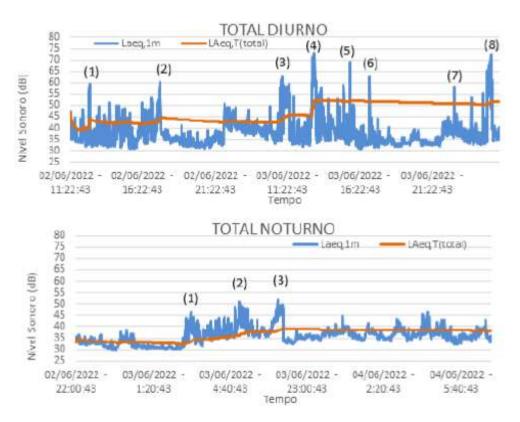
Klabin is participating in municipal discussions, where is being studied to change noise classification in this region to the Industrial Zone, where the current noise limits would be within the standards. Until this report, there were no further information about the discussion.

#### PONTO 01 TOTAL DIURNO 75 70 Loeq,1m -LAeq,T(total) (1) (2)65 (3) Nível Sonoro (dB) 60 55 45 40 55 25 02/06/2022 02/06/2022 02/05/2022 -03/06/2022 03/06/2022 -03/06/2022 10:28:01 15:28:01 20:28:01 10:28:01 15:28:01 20:28:01 Tempo TOTAL NOTURNO 80 Laegim LAeq.T(total) 75 70 (1)65 Nivel Screens (dB) 55 50 45 40 35 30 02/96/2022 03/06/2022 -03/06/2022 -03/06/2022 -04/06/2022 -04/06/2022 -22:00:01 1:20:01 4:40:01 23:00:01 2:20:01 5:40:01

Daytime measurements – the results for sound pressure level are in compliance with the limits adopted by the project. The values show that it is a characteristic condition of the location, with peaks motivated by animal noises, as recorded.

Nighttime measurements – The sound level pressure registered was above the limit adopted by the project. Considering the sounds recorded during the campaign, the peak (1) was related to a constant background noise during the first nighttime monitoring period. Klabin has a record of temporarily openings of the biomass boiler 2 starting valve during the end of the night, which could have a punctual relation with the noise registered. It is important to consider that, during the second nighttime monitoring period (03/06/2022 - 04/06/2022), the trend line was lower and under the limits adopted by the project, which shows that first night constant background noise condition do not necessarily reflects a constant condition of the area or from Klabin's operation, with a significant reduction in sound pressure level.

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

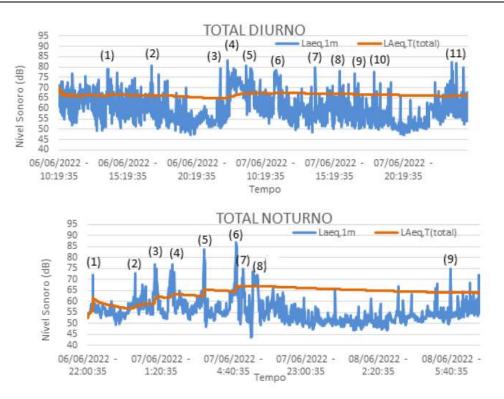


At this location, the results for sound pressure level are under the limits adopted by the project, daytime and nighttime.

Peaks registered during the day are related to people talking, cars, animals and local construction and repair noises (hammer, drill, metal).

During the night, the recording registered peaks motivated by a siren, animals and a car. Even though, it was the lowest sound level pressure registered at the same location during the night, since September 2019.

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

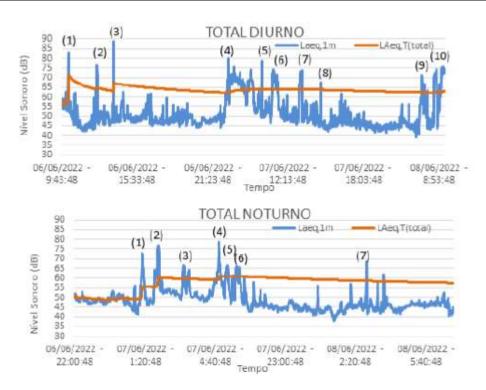


Daytime measurements – the results for sound pressure level are under the limits adopted by the project. The values show that it is a characteristic condition of the location, with steakhouse activities, mechanic/auto shop and other services.

Nighttime measurements – The values show that it is a characteristic condition of the location, with steakhouse activities, mechanic/auto shop and other services. The sound level pressure registered was 3.9 dB above the limit adopted by the project. Considering the sounds recorded during the campaign, peaks were related to rain noise, trucks and motorcycles.

Klabin has no record of significant deviation in industrial process, as verified in the PI System.

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



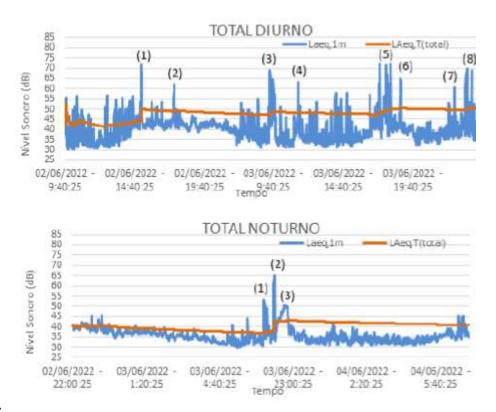
At this location, the results for sound pressure level are under the limits adopted by the project, daytime and nighttime.

Peaks registered during the day are related to people talking, moving trucks, animals, wind and rain noises.

During the night, the sound recording registered peaks motivated mainly by rain noise.

The values show that it is a characteristic condition of the location (waste management center).

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



At this location, the results for sound pressure level are under the limits adopted by the project, daytime and nighttime.

Peaks registered during the day are related to people talking, animals, rain noises and an airplane.

During the night, the sound recording registered peaks motivated mainly by animals.

The values show that it is a characteristic condition of the location, lower than numerical standards.

#### **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 <sup>1</sup> - Reporting Period Jan/2022 through Jun/2022									
Sampling frequency			Numerical	PUMA/Klabin's					
(if not continuous, define	Pollutant	Unit	Standard	Performance,	Maximum	Minimum			
sampling frequency			Adopted by the	Average for the					
below)			Project	reporting period					

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

0 01 (1 12 21 ( 1 11 1	_		n n								
			Recovery Boiler	1							
Semiannual	PM	mg/Nm3	100	30,58	32,03	28,69					
Semiannual	SO <sub>2</sub>	mg/Nm3	100	5,46	5,49	5,43					
Semiannual	NOx	mg/Nm3	470	146,13	150,41	141,70					
Semiannual	TRS	mg/Nm3	15	2,68	3,07	2,45					
Semiannual	H <sub>2</sub> S	mg/Nm3	-	-	-	-					
Biomass Boiler 1											
Semiannual	PM	mg/Nm3	100	4,78	5,21	4,31					
Semiannual	SO <sub>2</sub>	mg/Nm3	-	4,49	4,59	4,42					
Semiannual	NOx	mg/Nm3	500	148,37	159,72	139,08					
Semiannual	TRS	mg/Nm3	-	-	-	-					
Semiannual	H <sub>2</sub> S	mg/Nm3	-	-	-	-					
		•	Lime Kiln I								
Semiannual	PM	mg/Nm3	100	17,60	20,69	14,56					
Semiannual	$SO_2$	mg/Nm3	-	67,33	66,59	67,79					
Semiannual	NOx	mg/Nm3	470	236,30	248,26	214,60					
Semiannual	TRS	mg/Nm3	30	11,05	11,48	10,19					
	Lime Kiln II										
Semiannual	PM	mg/Nm3	100	64,94	80,27	57,24					
Semiannual	SO <sub>2</sub>	mg/Nm3	-	6,0	6,48	5,62					
Semiannual	NOx	mg/Nm3	470	157,30	165,32	145,64					
Semiannual	TRS	mg/Nm3	30	11,0	11,74	10,20					

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 Emission	ns Monitori	ng <sup>2</sup> - Repor	ting Period Jan./2	2022 through Jun/2	022							
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	31,15	32,32	30,55						
Semiannual	SO <sub>2</sub>	mg/Nm3	100	5,42	11,23	2,50						
Semiannual	NOx	mg/Nm3	470	195,30	214,17	182,61						
Semiannual	TRS	mg/Nm3	15	6,69	7,42	6,32						
Semiannual	H <sub>2</sub> S	mg/Nm3	-	-	-	-						
			<b>Biomass Boiler</b>	2								
Semiannual	PM	mg/Nm3	100	6,94	8,56	4,02						
Semiannual	$SO_2$	mg/Nm3	-	1,23	1,24	1,22						
Semiannual	NOx	mg/Nm3	500	116,05	120,07	109,00						
Semiannual	TRS	mg/Nm3	-	-	-	-						
Semiannual	H <sub>2</sub> S	mg/Nm3	-	-	-	-						
	Lime Kiln III											
Semiannual	PM	mg/Nm3	100	4,14	6,0	3,17						
Semiannual	SO <sub>2</sub>	mg/Nm3	-	2,09	2,03	2,05						
Semiannual	NOx	mg/Nm3	470	422,8	443,3	404,7						
Semiannual	TRS	mg/Nm3	30	27,00	27,79	25,67						

 $<sup>^{\</sup>rm 2}$  Provide a scaled facility map showing the precise location of all discharge points.

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 <sup>13</sup>	IFC guideline <sup>14</sup>
Amount of produced pulp	ADt	934.234	
TSP	kg/ADt	0,17	0,5
SO2 as S	kg/ADt	0,03	0,4
NOx as NO2	kg/ADt	1,4	1,5
TRS as S	kg/ADt	0,02	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					
WIONITORING SITES	UTM X (m)	UTM Y(m)				
P1	535.013,88	7.308.093,07				
P2	523.760,76	7.296.052,88				
P3	507.675,72	7.321.976,19				



Location of ambient air quality monitoring points.

	Air Quality Monitoring Campaigns
Seasons of the year	Monitoring Period
AUTUMN	04/19/2018 through 05/30/2018 – Completed 05/24/2019 through 06/24/2019 – Completed 06/16/2021 through 07/01/2021 – Completed
WINTER	09/06/2019 through 09/22/2019 – Completed  June/2022 – Waiting for report
SPRING	10/16/2018 through 11/17/2018 – Completed 12/01/2020 through 12/18/2020 – Completed 11/28/2021 through 12/18/2021 - Completed
SUMMER	03/11/2020 through 03/27/2020 – Completed 03/23/2022 through 03/29/2022 – 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.

The methodology and the location of the sampling points were reported to the Paraná Environmental Institute at the PCA. Since the first monitoring campaign from 2022 (March), all three locations were monitored simultaneously. The report will be sent after the campaign.

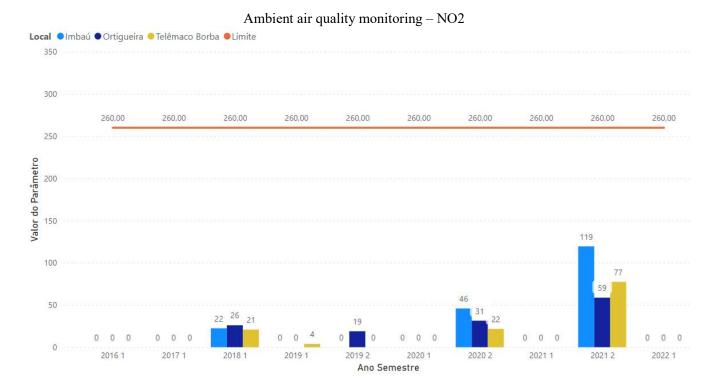
<sup>&</sup>lt;sup>15</sup> Please provide a scaled map showing the precise location of all monitoring points.

					RE	SULTADOS					Classificação
Ponto	Data do Monitoramento	NO2 - 1h (μg/m3)	SO2 - 24h (µg/m3)	MP10 - 24h (μg/m3)	MP2,5 - 24h (µg/m3)	PTS - 24h (µg/m3)	ERT - 1h (μg/m3)	O3 - 8h (µg/m3)	CO - 8h (ppm)	H2S - 1h (ppm)	da Qualidade do Ar IQA
	23/03/2022	<l.d.< td=""><td><l.d.< td=""><td>24,7</td><td>11,0</td><td>47,1</td><td><l.d.< td=""><td>4,5</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>24,7</td><td>11,0</td><td>47,1</td><td><l.d.< td=""><td>4,5</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	24,7	11,0	47,1	<l.d.< td=""><td>4,5</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	4,5	< 1	< 1	Boa
	24/03/2022	<l.d.< td=""><td><l.d.< td=""><td>7,7</td><td>5,0</td><td>13,9</td><td><l.d.< td=""><td>6,9</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>7,7</td><td>5,0</td><td>13,9</td><td><l.d.< td=""><td>6,9</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	7,7	5,0	13,9	<l.d.< td=""><td>6,9</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	6,9	< 1	< 1	Boa
P1	25/03/2022	<l.d.< td=""><td><l.d.< td=""><td>11,3</td><td>4,7</td><td>21,1</td><td><l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>11,3</td><td>4,7</td><td>21,1</td><td><l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	11,3	4,7	21,1	<l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	<l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	< 1	< 1	Boa
Telêmaco	26/03/2022	<l.d.< td=""><td><l.d.< td=""><td>10,2</td><td>4,9</td><td>16,8</td><td><l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>10,2</td><td>4,9</td><td>16,8</td><td><l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	10,2	4,9	16,8	<l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	<l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	< 1	< 1	Boa
Borba	27/03/2022	<l.d.< td=""><td><l.d.< td=""><td>13,3</td><td>5,4</td><td>21,5</td><td><l.d.< td=""><td>0,5</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>13,3</td><td>5,4</td><td>21,5</td><td><l.d.< td=""><td>0,5</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	13,3	5,4	21,5	<l.d.< td=""><td>0,5</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	0,5	< 1	< 1	Boa
	28/03/2022	<l.d.< td=""><td><l.d.< td=""><td>15,8</td><td>6,1</td><td>27,1</td><td><l.d.< td=""><td>41,9</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>15,8</td><td>6,1</td><td>27,1</td><td><l.d.< td=""><td>41,9</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	15,8	6,1	27,1	<l.d.< td=""><td>41,9</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	41,9	< 1	< 1	Boa
	29/03/2022	<l.d.< td=""><td><l.d.< td=""><td>24.1</td><td>10.1</td><td>42.6</td><td><l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>24.1</td><td>10.1</td><td>42.6</td><td><l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	24.1	10.1	42.6	<l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	<l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	< 1	< 1	Boa
	23/03/2022	<l.d.< td=""><td><l.d.< td=""><td>40,4</td><td>20.8</td><td>69,9</td><td><l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>40,4</td><td>20.8</td><td>69,9</td><td><l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	40,4	20.8	69,9	<l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	<l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	< 1	< 1	Boa
	24/03/2022	<l.d.< td=""><td><l.d.< td=""><td>8,5</td><td>4,2</td><td>12,6</td><td><l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>8,5</td><td>4,2</td><td>12,6</td><td><l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	8,5	4,2	12,6	<l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	<l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	< 1	< 1	Boa
P2	25/03/2022	<l.d.< td=""><td><l.d.< td=""><td>8,3</td><td>4,9</td><td>10,1</td><td><l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>8,3</td><td>4,9</td><td>10,1</td><td><l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	8,3	4,9	10,1	<l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	<l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	< 1	< 1	Boa
Imbaú	26/03/2022	<l.d.< td=""><td><l.d.< td=""><td>33,5</td><td>22,5</td><td>123,5</td><td><l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>33,5</td><td>22,5</td><td>123,5</td><td><l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	33,5	22,5	123,5	<l.d.< td=""><td><l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	<l.d.< td=""><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	< 1	< 1	Boa
	27/03/2022	<l.d.< td=""><td><l.d.< td=""><td>60,0</td><td>25,7</td><td>163,2</td><td><l.d.< td=""><td>8,2</td><td>&lt; 1</td><td>&lt; 1</td><td>Regular</td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>60,0</td><td>25,7</td><td>163,2</td><td><l.d.< td=""><td>8,2</td><td>&lt; 1</td><td>&lt; 1</td><td>Regular</td></l.d.<></td></l.d.<>	60,0	25,7	163,2	<l.d.< td=""><td>8,2</td><td>&lt; 1</td><td>&lt; 1</td><td>Regular</td></l.d.<>	8,2	< 1	< 1	Regular
	28/03/2022	<l.d.< td=""><td><l.d.< td=""><td>81,2</td><td>31,1</td><td>199,2</td><td><l.d.< td=""><td>20,1</td><td>&lt; 1</td><td>&lt; 1</td><td>Regular</td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>81,2</td><td>31,1</td><td>199,2</td><td><l.d.< td=""><td>20,1</td><td>&lt; 1</td><td>&lt; 1</td><td>Regular</td></l.d.<></td></l.d.<>	81,2	31,1	199,2	<l.d.< td=""><td>20,1</td><td>&lt; 1</td><td>&lt; 1</td><td>Regular</td></l.d.<>	20,1	< 1	< 1	Regular
	29/03/2022	<l.d.< td=""><td><l.d.< td=""><td>41,5</td><td>17,7</td><td>74,7</td><td><l.d.< td=""><td>29,8</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>41,5</td><td>17,7</td><td>74,7</td><td><l.d.< td=""><td>29,8</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	41,5	17,7	74,7	<l.d.< td=""><td>29,8</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	29,8	< 1	< 1	Boa
	23/03/2022	<l.d.< td=""><td><l.d.< td=""><td>25,0</td><td>7,1</td><td>64,1</td><td><l.d.< td=""><td>37,9</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>25,0</td><td>7,1</td><td>64,1</td><td><l.d.< td=""><td>37,9</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	25,0	7,1	64,1	<l.d.< td=""><td>37,9</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	37,9	< 1	< 1	Boa
	24/03/2022	<l.d.< td=""><td><l.d.< td=""><td>9,2</td><td>6,4</td><td>20,9</td><td><l.d.< td=""><td>37,4</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>9,2</td><td>6,4</td><td>20,9</td><td><l.d.< td=""><td>37,4</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	9,2	6,4	20,9	<l.d.< td=""><td>37,4</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	37,4	< 1	< 1	Boa
P3	25/03/2022	<l.d.< td=""><td><l.d.< td=""><td>8,4</td><td>4,0</td><td>16,2</td><td><l.d.< td=""><td>33,6</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>8,4</td><td>4,0</td><td>16,2</td><td><l.d.< td=""><td>33,6</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	8,4	4,0	16,2	<l.d.< td=""><td>33,6</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	33,6	< 1	< 1	Boa
Ortigueira	26/03/2022	<l.d.< td=""><td><l.d.< td=""><td>11,5</td><td>5,4</td><td>19,7</td><td><l.d.< td=""><td>36,6</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>11,5</td><td>5,4</td><td>19,7</td><td><l.d.< td=""><td>36,6</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	11,5	5,4	19,7	<l.d.< td=""><td>36,6</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	36,6	< 1	< 1	Boa
Jguenu	27/03/2022	<l.d.< td=""><td><l.d.< td=""><td>20,1</td><td>7,5</td><td>33,8</td><td><l.d.< td=""><td>39,7</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>20,1</td><td>7,5</td><td>33,8</td><td><l.d.< td=""><td>39,7</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	20,1	7,5	33,8	<l.d.< td=""><td>39,7</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	39,7	< 1	< 1	Boa
	28/03/2022	<l.d.< td=""><td><l.d.< td=""><td>16,0</td><td>6,3</td><td>28,9</td><td><l.d.< td=""><td>40,4</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>16,0</td><td>6,3</td><td>28,9</td><td><l.d.< td=""><td>40,4</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	16,0	6,3	28,9	<l.d.< td=""><td>40,4</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	40,4	< 1	< 1	Boa
	29/03/2022	<l.d.< td=""><td><l.d.< td=""><td>18,9</td><td>7,1</td><td>35,5</td><td><l.d.< td=""><td>40,9</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<></td></l.d.<>	<l.d.< td=""><td>18,9</td><td>7,1</td><td>35,5</td><td><l.d.< td=""><td>40,9</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<></td></l.d.<>	18,9	7,1	35,5	<l.d.< td=""><td>40,9</td><td>&lt; 1</td><td>&lt; 1</td><td>Boa</td></l.d.<>	40,9	< 1	< 1	Boa
	CONAMA nº 1/2018	260	125	120	60	240	n/a	140	9	n/a	

# **Critical review:**

This monitoring campaign conducted in March 2022 present very good results, where all 3 locations attend legal limits of air quality, for all parameters analyzed. A point to be considered, even that the values are attending legal limits, is the historical trend of high values of PTS, MP10, MP2,5 in Imbaú – P2, from local sources. Campaign conducted in June/2022 – Waiting for report.

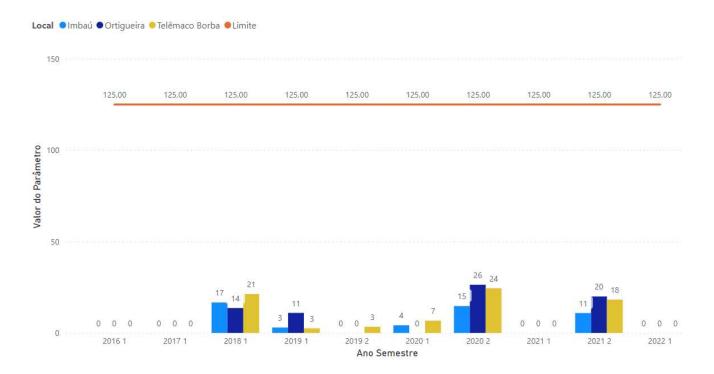
The results of the monitoring campaigns are shown in the graphs below:



# **Critical review:**

The results for the NO2 parameter demonstrate compliance in all campaigns.

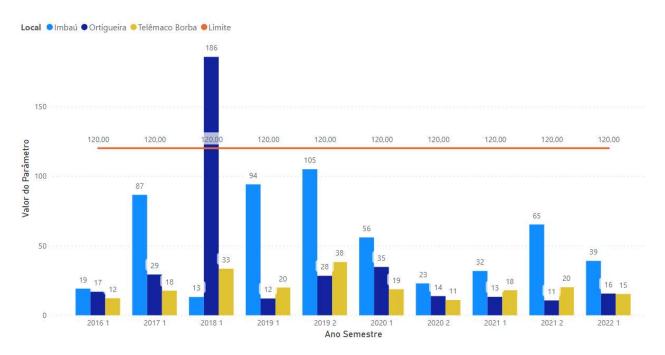
# Ambient air quality monitoring - SO2



# **Critical review:**

The results for the SO2 parameter demonstrate compliance in all campaigns.

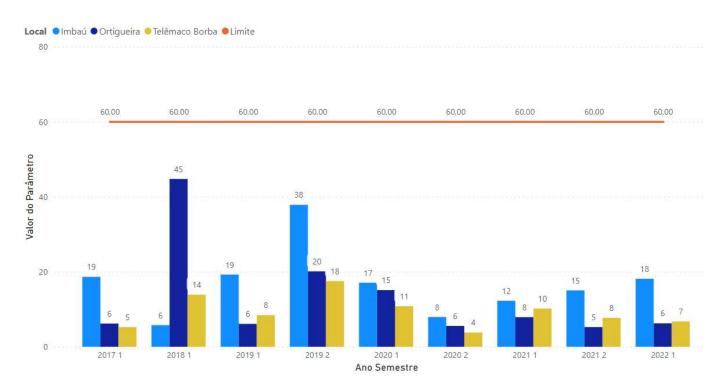
# Ambient air quality monitoring – PM10



#### **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 overshoot 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.

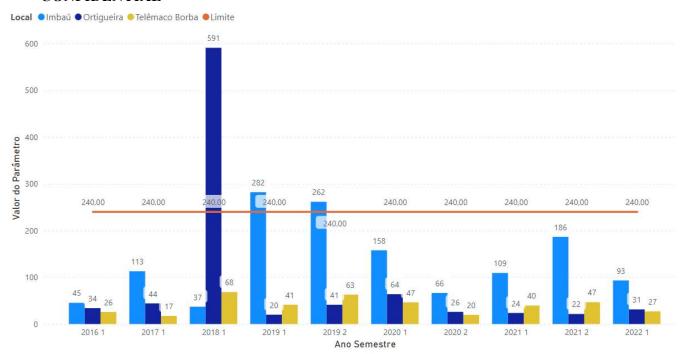
# Ambient air quality monitoring – PM 2,5



# **Critical review:**

The results for the PM 2,5 parameter demonstrate compliance in all campaigns.

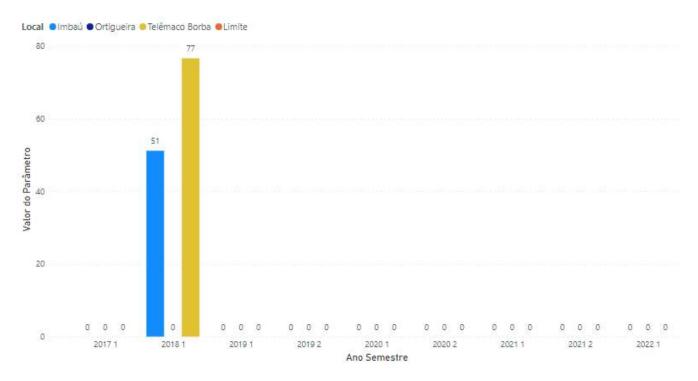
Ambient air quality monitoring - TSP



#### **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 overshoot 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.

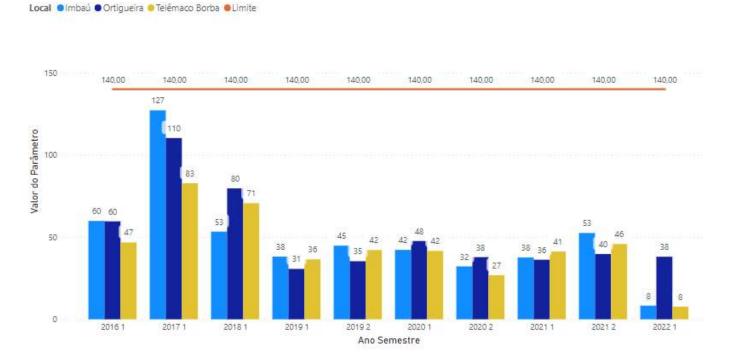
# Ambient air quality monitoring - TRS



# **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.

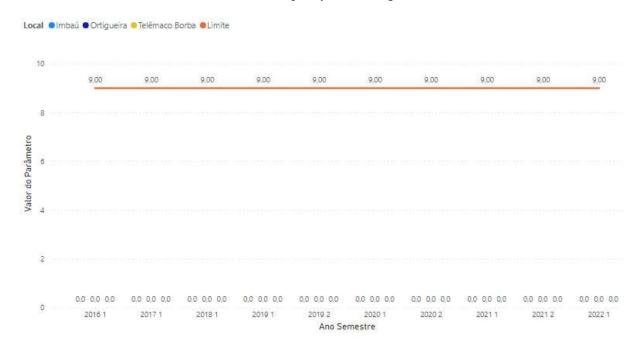
# Ambient air quality monitoring - O3



# **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.

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
Fortnightly	рН	-	6 -9	7,03	7,41	6,60
Fortnightly	Flow	m3/h	7400	5828	6470	4622
Fortnightly	Temperature increase	°C	Max. 40	26,00	31,22	21,09
Fortnightly	COD	mg/L	230	131	222	25
Fortnightly	$BOD_5$	mg/L	30	10	26	2
Semiannual	AOX	mg/L	-	<0,0405*	-	-
Fortnightly	Total Phosphorus	mg/L	0,30	0,17	0,27	0,03
	Total Nitrogen Ammoniacal	mg/L	20	0,94	5,00	0,06
Fortnightly	TSS	mg/L	100	46,86	83,30	20,00
Semiannual	Dioxins/furans	μg/L	-	< 0,000016*	-	-

<sup>\*</sup>The results are performed every six months, this being the one presented from the 2nd semester of 2021. 1st semester 2022 not available.

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 <sup>17</sup>	IFC guideline (bleached pulp) <sup>18</sup>	IFC guideline (unbleached pulp) <sup>19</sup>
Amount of produced pulp (unbleached)	ADt	100.495,00		
Amount of produced pulp (bleached)	ADt	833.739,00		
Flow <sup>20</sup>	m3/ADt	26,6	50	25
рН	-	7,03	6-9	6-9
TSS	kg/ADt	1,00	1,5	1
COD	kg/ADt	3,78	20	10
BOD5	kg/ADt	0,60	1	0.7
AOX	kg/ADt	*	0,25	-
Total N <sup>21</sup>	kg/ADt	0,04	0,2	0.2
Total P	kg/ADt	0,01	0,03	0.02

<sup>\*</sup>Regarding the results of Dioxins/furans and AOX, we had a laboratory change where only the CONAMA 430/11 parameters where considered. It's being provided with the laboratory an additional sampling for these parameters in specific, to be reported complementary as soon as the results are available. A formal factsheet was opened with action plan (internal Puma procedure).

## 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.

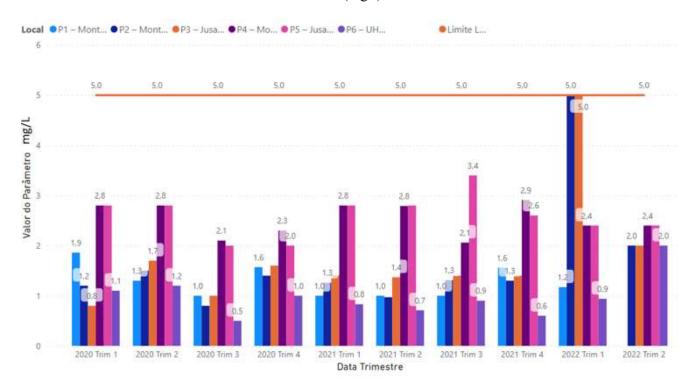
Please provide Brazilian maximum levels in Brazilian units in the table below. Individual tables are needed for each monitoring point.



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 2<sup>nd</sup> trimester of 2022.



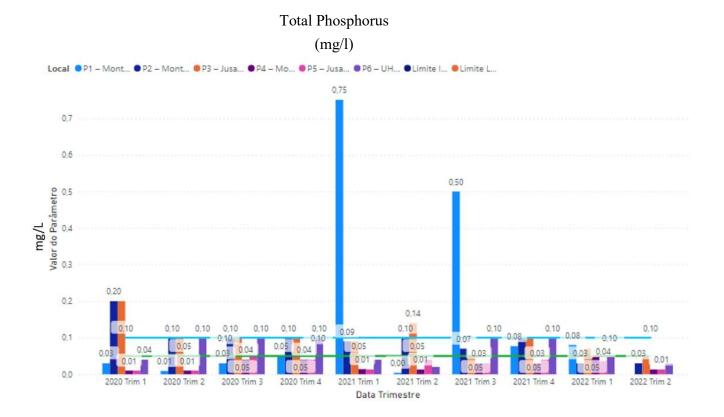


# **Critical review:**

The results for parameter BOD demonstrate compliance in all campaigns.

The results in P1 are provided by UHE Tibagi and until closing of this report, they have not been made available for  $2^{nd}$  trimester of 2022.

Regarding the peaks identified in P2 and P3 during the 1<sup>st</sup> trimester 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) are presented below, showing 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.



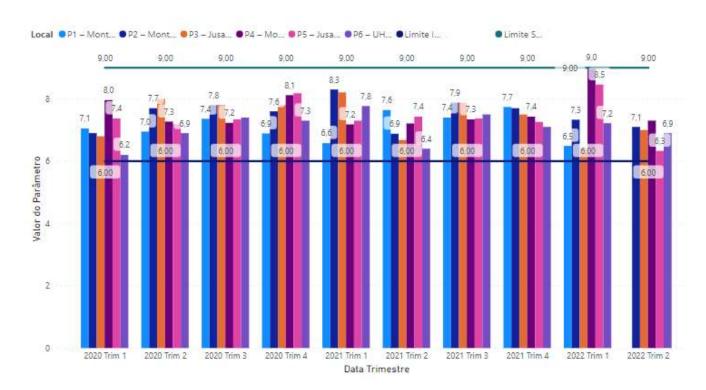
#### Critical review:

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 sewer release, 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. 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 2<sup>nd</sup> trimester of 2022.

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





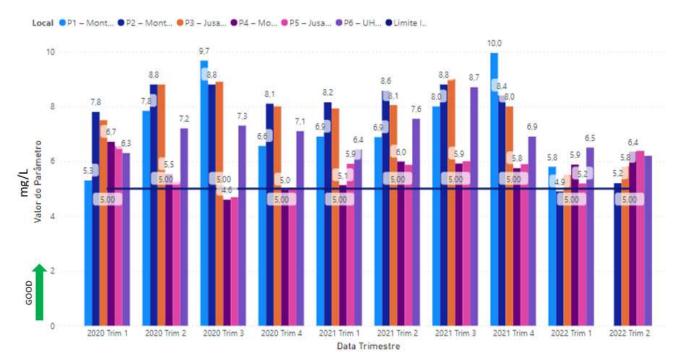
#### **Critical review:**

The results for pH demonstrate compliance in all campaigns, except in P4 - Upstream Puma during 1<sup>st</sup> trimester of 2022, with the value of 9.03. Considering an upstream result, it has no relation with Puma operation.

The results in P1 are provided by UHE Tibagi and until closing of this report, they have not been made available for 2<sup>nd</sup> trimester of 2022.

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

# Dissolved Oxygen (mg/l)



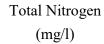
#### **Critical review:**

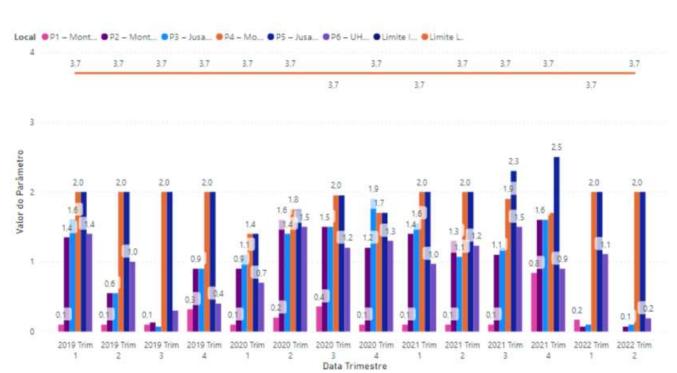
The result for Dissolved Oxygen was below the Brazilian regulatory limits for points upstream and downstream of Puma in 3Q 2020. This shows that there is a contribution from the municipality or rural area between Monte Alegre and Puma. In other monitoring campaigns, the results demonstrate compliance.

During 1<sup>st</sup> trimester 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).

The results in P1 are provided by UHE Tibagi and until closing of this report, they have not been made available for 2<sup>nd</sup> trimester of 2022.

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





# **Critical review:**

The results for parameter Total Nitrogen demonstrate compliance in all campaigns.

The results in P1 are provided by UHE Tibagi and until closing of this report, they have not been made available for  $2^{nd}$  trimester of 2022.

Please provide summary of groundwater sampling results at the pulp mill site during the reporting period and compare them to Brazilian groundwater limits.<sup>23</sup>

The parameters aluminum and iron are components found in the natural formation of the region's soil, where they are found in concentrations higher than the normative limit, especially during dry season when groundwater column is lower. Both parameters are usually identified with high values every semester, in different locations.

Regarding the other results for points 4 and 5, it is already taking place an analysis re-evaluation. It is important to consider that it is not a recurrence from previous campaigns, being punctual results.

All the data is reported to Paraná Environmental Agency (Instituto Água e Terra) periodically.

			P1	P2	Р3	P4	P5	P6	P7	P8	P9
Parameters	CONAMA 420	Units	Upstream of	Near to	East Pluvial	Near to	Near to	Upstream of Wastewater	Near to	Near to	Near to Waste
T drameters	CONTAINA 120	0	Product Area	Chemical Plant	Lagoon	Causticizing	Biomass Boiler	Treatment	Emergency Lagoons	Secondary Decantador	Segregation
Alumínio	3500	μg/L	58	280	1011	301	13433	Plant 186	Dry	Dry	Plant 511
Antimônio	5	µg/L	< 0,5000	< 0,5000	< 0,5000	< 0,5000	< 0,5000	< 0,5000	Dry	Dry	< 0,5000
Arsênio	10	μg/L	< 0,5000	< 0,5000	0,5650	< 0,5000	2,3	< 0,5000	Dry	Dry	< 0,5000
Bário	700	μg/L	< 5,0	22	144	38	137	11	Dry	Dry	73
Boro	500	μg/L	< 250	< 250	< 250	< 250	< 250	< 250	Dry	Dry	< 250
Cádmio	5	μg/L	< 0,5000	< 0,5000	< 0,5000	< 0,5000	< 0,5000	< 0,5000	Dry	Dry	< 0,5000
Chumbo	10	μg/L	< 5,0	< 5,0	< 5,0	39	29	< 5,0	Dry	Dry	< 5,0
Cobalto	70	μg/L	< 0,5000	1,1	4,5	< 0,5000	12	< 0,5000	Dry	Dry	1,8
Cobre	2000	μg/L	7,2	< 2,5	4,0	4,3	45	11	Dry	Dry	19
Cromo	50 2450	μg/L	< 5,0	< 5,0	< 5,0	< 5,0 309	7,8 10447	< 5,0	Dry	Dry	< 5,0 544
Ferro Manganês	400	μg/L μg/L	124 18	312 27	1081 202	20	1311	243 24	Dry Dry	Dry Dry	44
Mercúrio	1	μg/L			< 0,050000		0,70500	< 0,050000	Dry	Dry	< 0,050000
Molibdênio	70	μg/L	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	Dry	Dry	< 5,0
Níquel	20	µg/L	< 5,0	< 5,0	< 5,0	< 5,0	16	< 5,0	Dry	Dry	< 5,0
Nitrato (como N)	10000	μg/L	178	186	< 110	< 110	13442	160	Dry	Dry	419
Prata	50	μg/L	< 2,5	< 2,5	< 2,5	< 2,5	< 2,5	< 2,5	Dry	Dry	< 2,5
Selênio	10	μg/L	< 0,5000	< 0,5000	< 0,5000	< 0,5000	9,7	< 0,5000	Dry	Dry	< 0,5000
Zinco	1050	μg/L	69	33	56	43	119	94	Dry	Dry	80
Benzeno	5	μg/L	< 1,0	< 1,0	< 1,0	< 1,0	< 1,0	< 1,0	Dry	Dry	< 1,0
Estireno	20	μg/L	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	Dry	Dry	< 5,0
Etilbenzeno	300	μg/L	< 1,0	< 1,0	< 1,0	< 1,0	< 1,0	< 1,0	Dry	Dry	< 1,0
Tolueno	700	μg/L	< 1,0	< 1,0	< 1,0	< 1,0	< 1,0	< 1,0	Dry	Dry	< 1,0
Xilenos Benzo(a)antraceno	500 1,75	μg/L	< 3,0 < 0,15	< 3,0 < 0,15	< 3,0 < 0,15	< 3,0 < 0,15	< 3,0 < 0,15	< 3,0 < 0,15	Dry Dry	Dry Dry	< 3,0 < 0,15
Benzo(a)pireno	0,7	μg/L μg/L	< 0,150	< 0,150	< 0,150	< 0,150	< 0,150	< 0,150	Dry	Dry	< 0,150
Dibenzo(a,h)antraceno	0,18	μg/L	< 0,0400	< 0,0400	< 0,0400	< 0,0400	< 0,0400	< 0,0400	Dry	Dry	< 0,130
Fenantreno	140	µg/L	< 0,150	< 0,150	< 0,150	< 0,150	< 0,150	< 0,150	Drv	Dry	< 0,150
Indeno(1,2,3,cd)pireno	0,17	μg/L	< 0,150	< 0,150	< 0,150	< 0,150	< 0,150	< 0,150	Dry	Dry	< 0,150
Naftaleno	140	μg/L	< 0,150	< 0,150	< 0,150	< 0,150	< 0,150	< 0,150	Dry	Dry	< 0,150
MonoClorobenzeno	700	μg/L	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	Dry	Dry	< 5,0
1,2-Diclorobenzeno	1000	μg/L	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	Dry	Dry	< 5,0
1,4-Diclorobenzeno	300	μg/L	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	Dry	Dry	< 5,0
Triclorobenzeno	20	μg/L	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	Dry	Dry	< 5,0
Hexaclorobenzeno	1	μg/L	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	Dry	Dry	< 5,0
1,1-Dicloroetano	280	μg/L	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	Dry	Dry	< 5,0
1,2-Dicloroetano 1,1,1-Tricloroetano	10 280	μg/L μg/L	< 5,0 < 1,0	< 5,0 < 1,0	< 5,0 < 1,0	< 5,0 < 1,0	< 5,0 < 1,0	< 5,0 < 1,0	Dry Dry	Dry Dry	< 5,0 < 1,0
Cloreto de Vinila	5	μg/L μg/L	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	Dry	Dry	< 5,0
1,1-Dicloroeteno	30	μg/L	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	Dry	Dry	< 3,0
1,2-Dicloroeteno (cis+trans)	50	µg/L	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	Dry	Dry	< 5,0
Tricloroeteno	70	μg/L	< 2,0	< 2,0	< 2,0	< 2,0	< 2,0	< 2,0	Dry	Dry	< 10
Tetracloroeteno	40	μg/L	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	Dry	Dry	< 5,0
Diclorometano	20	μg/L	< 10	< 10	< 10	< 10	< 10	< 10	Dry	Dry	< 5,0
Clorofórmio	200	μg/L	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	Dry	Dry	< 2,0
Tetracloreto de Carbono	2	μg/L	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	Dry	Dry	< 3,0
2-Clorofenol	10,5	μg/L	< 20	< 20	< 20	< 20	< 20	< 20	Dry	Dry	< 20
2,4-Diclorofenol	10,5	μg/L	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	Dry	Dry	< 5,0
3,4-Diclorofenol	10,5	μg/L	< 1,6	< 1,6	< 1,6	< 1,6	< 1,6	< 1,6	Dry	Dry	< 1,6
2,4,5-Triclorofenol 2,4,6-Triclorofenol	10,5	μg/L	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	Dry	Dry	< 0,10
2,3,4,5-Tetraclorofenol	200 10,5	μg/L	< 0,11 < 5,0	< 0,11 < 5,0	< 0,11 < 5,0	< 0,11 < 5,0	< 0,11 < 5,0	< 0,11 < 5,0	Dry Dry	Dry Dry	< 0,11 < 5,0
2,3,4,6-Tetraclorofenol	10,5	μg/L μg/L	< 2,0	< 2,0	< 2,0	< 2,0	< 2,0	< 2,0	Dry	Dry	< 2,0
Pentaclorofenol	9	μg/L	< 2,0	< 2,0	< 2,0	< 2,0	< 2,0	< 2,0	Dry	Dry	< 2,0
Cresóis Totais	175	µg/L	< 2,0	< 2,0	< 2,0	< 2,0	< 2,0	< 2,0	Dry	Dry	< 2,0
Fenol	140	µg/L	< 2,0	< 2,0	< 2,0	< 2,0	< 2,0	< 2,0	Dry	Dry	< 2,0
Di(2-etilhexil)ftalato	8	μg/L	< 2,0	< 2,0	< 2,0	< 2,0	< 2,0	< 2,0	Dry	Dry	< 2,0
Dimetil Ftalato	14	μg/L	< 6,0	< 6,0	< 6,0	< 6,0	< 6,0	< 6,0	Dry	Dry	< 6,0
Aldrin + Dieldrin	0,03	μg/L	< 2,0	< 2,0	< 2,0	< 2,0	< 2,0	< 2,0	Dry	Dry	< 2,0
Endrin	0,6	μg/L	< 2,0	< 2,0	< 2,0	< 2,0	< 2,0	< 2,0	Dry	Dry	< 2,0
p,p'-DDT + p,p'-DDD + p,p'-DDE	2	μg/L	< 2,0	< 2,0	< 2,0	< 2,0	< 2,0	< 2,0	Dry	Dry	< 2,0
HCH Beta	0,07	μg/L	-			_		< 0,020000	Dry	Dry	< 0,020000
Lindano (g-BHC)	2	μg/L		•	-	-	-	< 0,010000	Dry	Dry	< 0,010000
PCB's (soma 7/lista holandesa)	3,5	μg/L	< 0,030000	< 0,030000	< 0,030000	< 0,030000	< 0,030000	< 0,030000	Dry	Dry	< 0,030000

# 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		Mou	nth Qua	ntity (to	nne)		Method of Storage, Handling	Method of Recycling, Reuse or			
	Jan	Feb	Mar	Apr	May	Jun	and/or Treatment	<u>Disposal</u> <sup>25</sup>			
Sand	743	509	476	1074	638	592	Dumpster	Recycling			
Biomass	36	0	2	0	0	0	Dumpster	Composting			
Sweep Biomass Wood Stock	1988	1122	1766	1228	1935	2316	Dumpster	Composting			
Lime Gray	216	129	212	57	102	140	Dumpster	Agricultural and forestry use			
Sulphate Ashes	0	0	0	0	2	0	Dumpster	Agricultural and forestry use			
Biomass ash	1976	1213	2055	2571	2392	2462	Dumpster	Agricultural and forestry use			
Burnt Lime	45	498	499	909	386	397	Dumpster	Agricultural and forestry use			
Dregs	1354	632	1688	1817	1437	1482	Dumpster	Agricultural and forestry use			
Grits	164	186	303	411	264	281	Dumpster	Agricultural and forestry use			
Caustic Mud	0	2994	3020	1153	5	1070	Dumpster	Agricultural and forestry use			
Sand Sludge - PMAD	116	60	137	169	121	93	Dumpster	Recycling			
Primary Sludge (Fiber Disposal)	2864	2711	4867	3908	4167	3807	Dumpster	Recycling			
Secondary Sludge (Biological)	4542	2384	6267	6011	5957	5500	Dumpster	Composting			
Tertiary Sludge (Chemical)	3217	1561	3111	3035	3388	3193	Dumpster	Agricultural and forestry use			
Pinus Reject - Stick	14	37	38	97	138	109	Dumpster	Energy use			
Pinus Reject - Knot	36	13	23	17	29	56	Dumpster	Energy use			
Eucalyptus Reject	14	37	38	97	138	109	Dumpster	Energy use			
Eucalyptus Tailings	2	17	13	11	85	26	Dumpster	Energy use			
Wood	12	12	18	11	21	9	Dumpster	Reuse and Energy			
Metal	3	12	18	16	13	10	Dumpster	Recycling			
Organic waste	42	78	47	52	45	46	Dumpster	Recycling			

Paper	31	14	32	52	48	134	Dumpster	Recycling
Plastic	5	5	16	5	6	8	Dumpster	Recycling
Junk Waste	234	479	484	159	207	216	Dumpster	Landfill
Ground	0	0	0	0	11	0	Dumpster	Reuse
Inert / Concrete / Rubble	19	173	20	35	28	614	Dumpster	Reuse

GENERATION OF SOLID WASTE – PARANAGUÁ PORTS											
Solid Waste Type		Mounth Quantity (tonne) <u>Method of Storage</u> , <u>Method of Recycling</u> ,									
	Jan	Fev			Handling and/or Treatment	Reuse or Disposal <sup>25</sup>					
Non-recyclable	1,62	2,45	1,4	1,6	3,78	0,7	Dumpster	Private landfill			
Recyclable	3,6	4,36	3,75	6,4	3,7	6,3	Dumpster	Recycling			

Solid		GENERATION OF NON-HAZARDOUS SOLID WASTE – PUMA II PROJECT							
Waste Type		Month Quantity (tons) Solid Waste Type							
JF -	Jan	Feb	Mar	Apr	May	Jun	Total 1 SEM 2022	Method of Storage	Method of Treatment
Organic	32,27	40,67	31,63	26,15	31,92	32,04	194,68	Dumpster	Composting
Non- recyclable	14,15	12,88	10,66	11,76	12,58	9,62	71,65	Dumpster	Private Landfill
Paper	18,63	44,64	16,91	13,99	18,14	12,80	125,11	Dumpster	Recycling
Plastic	18,83	14,11	18,99	13,21	18,17	11,75	95,06	Dumpster	Recycling
Metal	11,01	16,24	16,70	32,77	14,97	13,94	105,63	Dumpster	Recycling
Wood	81,48	49,79	74,00	50,24	68,38	55,10	378,99	Dumpster	Biomass
Glass	0,105	0,320	1,430	0,650	0,27	0,23	3,00	Steel Drum	Recycling
Concrete	167,73	103,35	259,46	207,58	224,04	179,35	1141,51	Dumpster	Reuse
Total (t/month)	344,21	282,00	429,78	356,35	388,47	314,83	2115,64	-	-

**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

PUMA/Klabin is required to monitor methods of collection, storage and disposal of hazardous materials<sup>26</sup>, 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	Class	Generation	Maximum	
(Name and Number UN/CAS)	or	January-June 2022	Quantity	
	divisio	(tonne)	Stored on	
	$n^3$		Site	
			(tonne)	
Hazardous Waste Produced				
Chemical Product Packaging (Paints, Solvents And				
Resins) –	9	0		
IBAMA n° 15 02 02				
PPE's	9	1,328		
IBAMA n° 15 02 02	,	1,320		
Fluorescent lamps	2	1,54		
IBAMA n° 20 01 21		1,5 .		
Flammable Liquids (Paints, Solvents, Glues and Fuel)	3	0,02		
IBAMA n° 20 01 13		0,02	50,00	
Stacks	6	33,02		
IBAMA n° 16 06 04		22,02		
Various Contaminated Solids (Tows, Cloths, Filters And	_			
Etc)	9	0,12		
IBAMA n° 15 02 02				
Soil Contaminated with Oil and Grease	9	48,54		
IBAMA n° 19 13 01	-	,		
Electronic Scrap	6	0,91		
IBAMA n° 16 02 16	-	J, J I		

Parameters	PUMA/Klabin's Method of	PUMA/Klabin's Method of
(Same Parameters as Above)	Storage, Handling and/or Treatment <sup>4</sup>	Disposal <sup>5</sup>
Hazardous Waste Produced		
Chemical Product Packaging		
(Paints, Solvents And Resins) –	Steel Drum	Private Solid Waste Landfill
IBAMA n° 15 02 02		
PPE's	Steel Drum	D.:4. C-1: 1 W-4- I 1611
IBAMA n° 15 02 02	Steel Dium	Private Solid Waste Landfill
Fluorescent lamps	Steel Drum	Dtiti
IBAMA n° 20 01 21	Steel Dium	Decontamination
Flammable Liquids (Paints,		
Solvents, Glues and Fuel)	Steel Drum	Private Solid Waste Landfill
IBAMA n° 20 01 13		

Hazardous Materials Management Summary – Paranaguá Ports					
Hazardous Material	Class or division <sup>6</sup>	Generation	Maximum Quantity		
(Name and Number UN/CAS)		Jan-Jun 2022	Stored on Site		
		(tonne)	(tonne)		
Hazardous Waste Produced					
Miscellaneous hazardous materials (IBAMA nº 17 09 03)	9	2,26	5		

Parameters	PUMA/Klabin's Method of		PUMA/Klabin's Method
(Same Parameters as Above)	Storage, Handling and/or Treatment <sup>7</sup>		of Disposal <sup>8</sup>
Hazardous Waste Produced			
Miscellaneous hazardous materials (IBAMA nº 17 09 03)	Steel Drum		Industrial Solid Waste Landfill
Parameters	PUMA/Klabin's Method of	PUMA/Klabin's Method o	
(Same Parameters as Above)	Storage, Handling and/or Treatment <sup>4</sup>	Disposal <sup>5</sup>	
Stacks IBAMA n° 16 06 04	Steel Drum	Private Solid Waste Landfill	
Various Contaminated Solids (Tows, Cloths, Filters And Etc) IBAMA n° 15 02 02	Steel Drum	Private Solid Waste Landfil	
Soil Contaminated with Oil and Grease IBAMA n° 19 13 01	Steel Drum	Private Solid Waste Landfill	
Electronic Scrap IBAMA n° 16 02 16	Steel Drum	Pı	rivate Solid Waste Landfill

Наг	Hazardous Materials Management Summary – Puma II Project (tonne)								
Hazardous Material (Name and Number UN/CAS)	Class or division <sup>9</sup>	Jan	Feb	Mar	Apr	May	Jun	Total	Maximum Quantity Stored on Site
Hazardous Waste – Ge	neration								
Miscellaneous hazardous materials (IBAMA nº 17 09 03)	9	16,60	39,71	20,70	23,96	23,82	12,70	137,49	50,00
Hazardous Waste – Dis	sposal for Ir	dustrial	Solid Wa	aste Lanc	lfill				
Miscellaneous hazardous materials (IBAMA nº 17 09 03)	9	0	8,93	50,72	0	0	6,86	66,51	-
Hazardous Waste – Dis	sposal for C	o-proces	sing						
Miscellaneous hazardous materials (IBAMA nº 17 09 03)	9	13,42	0	0	17,17	30,43	0	61,02	-
Hazardous Waste – Storage									
Miscellaneous hazardous materials (IBAMA nº 17 09 03)	9	3,18	33,96	3,94	10,73	4,12	9,96	9,96	50,00

<sup>&</sup>lt;sup>9</sup> 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.)

# • 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".

# **PUMA I**

# Workforce ok

Type of employee	Total Number for	Category of employee		
	Reporting Period Puma I	Total Number for Reporting Period		
		Men: 1.341	Management level: 107 (Managements, Cordinators and Supervisors)	
<u>Direct employees</u>	<u>1767</u>	Female:426		
			Workers: <b>1.300</b> (Operators and maintainers)	
		Men: <b>848</b>	Management level: 70	
Contracted employees <sup>1</sup>	<u>1187</u>	Female: 339	Workers: 117	

Contracted directly by the Klabin

	Reporting Period	Category of employee  Total Number for Reporting  Period		
Supply Chain employees	47	Men: 36 Female: 11	Management level: 1 Cordinator and 1 Supervisor  Workers: Analystis, Administrative and	

# Worker's organization

Workers organization	Description
Trade unions or worker organizations/committee in workplace	SINDICATO DOS TRABALHADORES NA INDÚSTRIA DE PAPEL, CELULOSE e PASTA DE MADEIRA PARA PAPEL E PAPELÃO DE ORTIGUEIRA - PR
Meetings with workers' organization representatives in workplace	<ul> <li>Number of meetings: 06 (six)</li> <li>Name of Trade union or worker organization: Sindicatos dos Trabalhadores do Papel de Ortigueira</li> <li>Frequency of meetings: One a month</li> </ul>

Workers organization	Description
Collective bargaining agreements	<ul> <li>Agreement signed on: Four agreements signed. Profit Sharing (Participação nos Resultados); General Stop Manangement (Parada Geral); Relay Shift (Turno de revezamento); Base date agreement (Acordo da data-base)</li> <li>Parties signing agreement: Company and employee union</li> <li>Number of employees covered under collective bargaining agreement: 1.583 (one thousand five hundred eighty three)</li> </ul>

#### **6.2 Community Relations**

#### **Antropic 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 of 2016. After this, its members defined to change the frequency – once every four months. This situation kept until May of 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.

From March to June of 2022, there were 4 Anthropic Monitoring Committee meetings, as described below:

Date	Description	Public (Including Klabin's staff)	Location
03/31/22	Anthropic Monitoring Committee Meeting	17	Ortigueira

04/28/22	Anthropic Monitoring Committee Meeting	7	Telêmaco Borba
05/26/22	Anthropic Monitoring Committee Meeting	13	Imbaú
06/30/22	Anthropic Monitoring Committee Meeting	11	Ortigueira

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 of 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.

### 03/31/2022 Meeting - Ortigueira

About 17 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 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, only the ones caused by the pandemic scenario, especially in Social Assistance and Education sectors.

Meeting report in annex.

#### 04/28/22 Meeting – Telêmaco Borba

About 7 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.

#### 05/26/22 Meeting - Imbaú

About 13 people logged in, such as municipal secretariats and officials of Ortigueira, Telêmaco Borba and City Halls, the Health and Educational Regional Nucleolus and Military Police Force.

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.

#### 06/30/22 Meeting - Ortigueira

About 13 people logged in, such as municipal secretariats and officials of Ortigueira, Telêmaco Borba and Imbaú City Halls, the Health and Educational Regional Nucleolus and Civil Police Force.

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.

Have there been any grievances lodged by members of the community or local authorities against the Company? Please describe

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 directly to Klabin and how the issues were managed.

• Klabin Ombudsman and summary of grievances

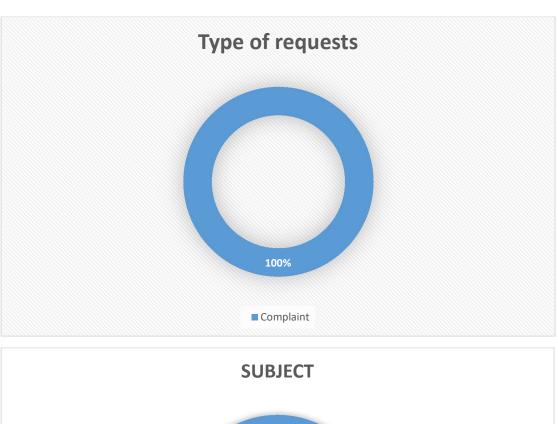
The ombudsman consists in a group of communication tools in which the objective is to develop the company's dialogue and relation with the population of its area of influence – considering the Puma and Monte Alegre mills, Forestry and the projects (such as Puma II).

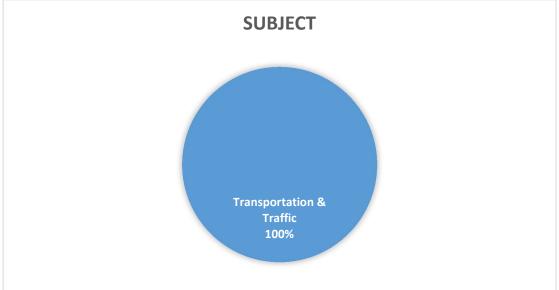
The requests received by e-mail (faleklabinpr@klabin.com.br), phone calls (0800 728 0607) or Social Media (Facebook and WhatsApp) are monitored periodically in order to provide quick response and avoid conflicts of information.

Complaints related to Puma Mill and Project Puma II received from the community from January 1 to June 30, 2022:

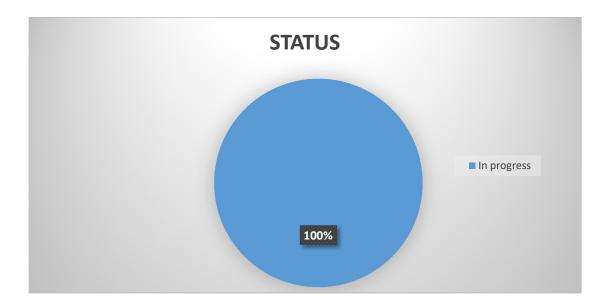
Channel	Total
Phone Call – 0800 (toll-free)	1

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 the 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

Trimestral meetings with the neighboring rural communities (Campina dos Pupos, Volta Grande, Colônia Augusta Vitória, Lageado Bonito) and urban areas of Ortigueira, Telêmaco Borba and Imbaú (members of associations, Municipal Councils, religious leaders, etc.). The reunions objective is to present the Project Puma II, clarify questions and identify community demands.

The meetings would occur during the year, but due to the pandemic scenario and the World Health Organization's (WHO) recommendations, they had to be postponed. Klabin Staff maintain direct contact with stakeholders via telephone, WhatsApp and other communication channels. Remote meetings were not an option due to unstable internet connection, especially in the rural area. In addition, there are the Anthropic Monitoring Committee meetings – which contains members of the City Halls and Municipal Councils. Two of the public sector's responsibilities in the Committee are to bring demands and repass information to their citizens.

The meetings are scheduled to resume in the second half of 2022.

#### • 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, but all of the predicted ones during the year were canceled due to the pandemic scenario and the World Health Organization's (WHO) recommendations.

#### • Minuto Klabin (Radio) and Puma Radio

Klabin Minute is a radio show 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: Ortigueira, Telemaco Borba, Imbaú, Curiúva, Tibagi, Ibaiti, Sapopema, Reserva, Ponta Grossa, Jaguariaíva, Palmeira, Cândido de Abreu, Rosário do Ivaí, São Jerônimo da Serra, and Sengés. The program lasts 1 minute. It provides information about the company's economic, environmental and social activities. The show broadcast frequency is daily and continuous, determined by contract between Klabin and each of the radio companies.

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 employees life stories.

Puma Radio is available in the main living areas of Puma II Project: Social Center, cafeterias of the Project and residential buildings Bandeirantes and Capital do Papel. The radio is also played on buses transporting the contractor's employees from their homes to Puma II Project every day. In addition to these areas, Puma Radio's website and application are available so that workers can access the program on their cell phone or laptop.

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

#### **Matas Sociais**

It supports the familiar agriculture and helps small rural producers in all the production steps, since environmental adequacy to products commercialization in local markets. Also offers capacitation actions involving agricultural management, organic production and environmental education, among others. Since 2015, the program has assisted over 600 properties, having more than 2,000 people involved.

After an interview with the participants, more than 70% of them affirmed that their income raised after the participation in Matas Sociais – 45% of those noticed an increment of 20 to 60% in their properties' income. In addition, half of them affirmed their network is now bigger and show better sales performance and production raise – registered in 57% of the consulted properties. Nowadays, their production is found in schools, Klabin Mills restaurants, and in local markets. There is a highlight in environmental issues as well: the utilization of pesticides reduced for 66% of the producers that now seek for new alternatives with the help of Matas Sociais' consultants.

In 2022, Matas Sociais expanded to other municipalities in the States of Paraná and Santa Catarina, totaling 17 municipalities assisted by the program, 12 in Paraná (Telêmaco Borba, Imbaú, Ortigueira, Reserva, Cândido de Abreu, Curiúva, Sapopema, São Jerônimo da Serra, Tibagi, Ventania, Rio Branco do Ivaí and Jaguariaíva), and 5 in Santa Catarina (Otacílio Costa, Correia Pinto, Lages, Palmeira and Ponte Alta).

Klabin supported the establishment of the Center for Family Agriculture Cooperatives in the Center-North Region of Paraná, formed by five cooperatives that are partners of the Matas Sociais program and almost 900 members from 34 municipalities in Paraná.

Headquartered in Telêmaco Borba, the center was established with the purpose of joining forces for the production and trading of food, seeking new markets, competitive prices, exchange of experiences and optimization of services. Management is shared among the cooperatives which make decisions to expand the presence of local producers in the market.

#### Semeando Educação

Created in 2017, the program offers consultant services to public schools directors and teachers, sharing methods and tools to improve the scholar management indicators, including formations about leadership and school community participation. Since 2019, the focus is on the Municipal public schools.

Semeando Educação embrances 4 fronts: Educational management – Support and qualification of the municipal secretariat management in order to improve the resource application in teaching and learning process and action direction seeking better pedagogical results; Pedagogical practices and evaluation – education network professional team reflection to develop pedagogical practices that are useful for student learning; Training for education professionals and managers – to promote continuous training of the education network professionals on school management, early childhood education and early years of elementary school; Physical infrastructure and teaching resources – diagnosis and strategic planning of each school unit.

In 2022 the program was expanded to 7 more municipalities: Congonhinhas, Rio Negro and Dr. Ulysses (Paraná), Ponte Alta and Palmeira (Santa Catarina), Angatuba and Itararé (São Paulo). It was also possible to carry out actions and face-to-face meetings to replan the annual actions in all territories assisted.

In total, 22 thousand students, 146 schools and more than a thousand teachers impacted by Semeando Educação.

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

#### **Public Management Support**

The Public Management and Strategic Planning Support Program began in 2017 with the construction of Puma I Project and was present in three municipalities of Campos Gerais region (Telêmaco Borba, Imbaú and Ortigueira). In 2019, it expanded to four more municipalities in Paraná (Curiúva, Reserva, Sapopema and Tibagi).

In 2021 - 2022 the program was expanded to other municipalities in Paraná (Rio Negro, Paranaguá and Ventania), Santa Catarina (Otacílio Costa, Correia Pinto and Lages), Pernambuco (Goiana) and São Paulo (Angatuba); totaling 15 municipalities assisted by the program.

Strategic planning is based on supporting municipalities with the preparation of the Multiannual Plan (PPA 2022-2025), which must be consistent, participatory, strategic and transparent, and for the technical development of programs, actions, goals, indicators and budget. The work involves all the municipal secretariats and adopts a participatory methodology, using a group discussion facilitation tool.

A novelty implemented in the Public Management Support Program is the follow-up of IPS - Social Progress Index - indicators in each municipality. Launched in Paraná in 2020, the IPS is an index that has been used around the world to measure and compare social progress and to direct investments, both in the public and private areas.

Program's results are available in annex.

# **Program of Solid Waste**

The initiative, which was created in 2012 and is conducted in partnership with the Intermunicipal Consortium Caminhos do Tibagi in six municipalities in Paraná, had its scope expanded in 2021 when it added the ViraSer Program by consultancy Gaia Social. Focusing on recycling professionals, the new program aims at providing leadership development and productive efficiency in cooperatives and associations, in addition to fostering environmental education and fairer trading, stimulating sales and increasing workers' income.

Program's results are available in annex.

# Support to Qualification in Forestry Operations

Investment of R\$ 23 Million (construction, technical laboratories, engineering executive projects for building, library and equipment's' adaptation).

In December 2021, the school's first graduation ceremony took place. Total of 34 graduates of subsequent courses (for those who have completed high school) in Forest Machinery Operations and Heavy Machinery Maintenance received their diplomas. As a clear sign of the program's benefits in relation to the job market, all graduates have already been admitted to the Internship Program at Klabin.

Students joined the vocational school in February 2020, but had to take a break due to the COVID-19 pandemic and returned to school at a safer time, following strict safety protocols against the virus.

The State Forestry and Agriculture Vocational Training Center of Ortigueira was inaugurated in 2020 with the goal of becoming a benchmark in training forestry operators and mechanics. The school also offers the Agribusiness program.

Currently, there are 284 active students in three technical courses (Agribusiness, Forestry Operations and Maintenance of Heavy Machinery).

#### 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.

#### Artistic Gymnastics Project in Telêmaco Borba

Partnership with Municipality of Telêmaco Borba that guarantees sports development, contributing in the physical and cultural formation of young people in the region. There are 100 girls from 5 to 14 years-old training for free.

Klabin supports the Project in the gym's infrastructure management, such as carpets, fans and other resources. Besides this, hires the coach, Juliano Fulas, and collaborates in external events by paying hotel, transport, Food and Beverages expenses.

For resumption of face-to-face classes in 2022, the Artistic Gymnastics Center is preparing itself for an Internal Gymnastics Festival, which will take place in July, counting with the participation of 100 athletes. The weeks have been hectic, with several rehearsals, aimed at familiarizing children with this event.

# Social Educative Project Encantos do Imbaú

The Project is hold by the Serviço e Convivência e Fortalecimento de Vínculos in the Centro de Convivência do Idoso of the Municipal Secretariat of Social Assistance of Imbaú. Klabin's supports it by hiring the professional musicians that conduce the elderly coral and the guitar, flute, percussion and keyboard lessons for 200 participants. Even though in times of social distancing measures, the project is still going, the professors and students are in touch through online lessons and classes, contributing to sociocultural interaction, creativity, motor coordination and musical language development.

In June 2022, a special presentation was made by the participants of this project, highlighting the resumption of face-to-face activities after almost two and a half years of remote activities.

#### The Indigenous Basic Environmental Plan (PBAI)

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.

It is in course since 2017 Scholarship Management actions in University, Technical and Qualification Studies. Currently, there are 30 students, 19 from TI Queimadas and 11 from TI Tibagy-Mococa.

In March of 2020, according to World Health Organization (WHO) and FUNAI's recommendations, the visits to Indigenous Lands (TI) were suspended. Only essential services were allowed, according to official document number 419 (article third, paragraph 5<sup>th</sup>). Klabin's teams worked in actions regarding the Program of Revitalization of the Kaingang Education and Culture in 2021 (Scholarship Management actions). Klabin has developed some actions at the location regarding Covid-19 prevention: PCR testing at the communities in September and December of 2020, mask and food supplies donations in 2020, 2021 and 2022.

In 2021, 7 students completed technical courses or higher education.

In 2022, with the resumption of activities and a decline of COVID-19 cases, meetings and alignments with the anthropologist responsible for monitoring the PBAI were resumed.

A summary of all PBAI's actions during the current year is attached to the ESCR.

#### • 7 DATA INTERPRETATION AND CORRECTIVE MEASURES

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

Monitoring	Cause for	Corrective	Completion date	Cost/USD	%Comple
parameter that	monitoring	action plan and			t e/ Status
exceeds	parameter	responsibility			
Brazilian or IFC	exceeding				
guidelines					
Does not apply					

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

Item #	Basis of Applicable Requirements	Key Aspect	Key Corrective Actions	Evidence / Product	Priorit y	Deadline for Completion	Progress Status
13 14 13			Present updated social baseline for PUMA II and associated Social Investment Plan activities.	Scaled/Updated Social Investment Plan	HIGH	Three months after Closing	CLOSED
18 6 18			Develop disciplinary procedures, and procedures to respond and investigate sexual harassment and gender-based violence (GBV) complaints. Assure mandatory training for contractors' workers and management. Assign a team of qualified individuals to handle sexual harassment and GBV complaints using a survivor- centered approach and ensuring confidentiality.	conformation of a dedicated team to investigate/follow-up sexual harassment/GBV incidents.	HIGH	One Month after Closing	CLOSED.
26 9 24		Sexual	Engage the	Engagement with third- party GBV specialized organization(s) and/or networks.	HIGH	One month after Closing	Ongoing  Potential to have it closed during the next mission

		and in hotspots		1		
		along				
		transportation				
		corridors.				
		Identify, across				
		the Project's area				
		of influence, gaps				
		in psychosocial,				
		medical, police				
		and judicial				
		response services				
		to GBV survivors				
		and present them				
		to the Anthropic				
		Monitoring				
		Committee to				
		provide support				
		and continuously				
		find ways of				
		strengthening				
		these services.				
30 13 28	Organization		Updated		Three Months	Ongoing
			communication/training		after Closing	
		aining regarding	plan.			Potential to
		procedures of				have it
		relationship with				closed
		traditional groups				during the
		and communities				next
		(indigenous and				mission.
		non-indigenous) -				
		mainly for drivers				Primeiro
		and workers in				video
		patrimonial				produzido
		security.				anexado às
						evidências.