

UPM Fray Bentos

ENVIRONMENTAL AND SOCIETAL RESPONSIBILITY 2023



UPM Fray Bentos

The pulp mill is located on the coast of the Rio Uruguay, 5 km away from the city of Fray Bentos.

Construction of this state-of-the-art pulp mill began in 2005. The initial Environmental Authorization for Operation was granted by the authorities on November 8th, 2007. Until June 2020, the environmental authority in Uruguay was the Ministry of Housing, Territorial Planning and Environment (MVOTMA) through the National Direction for the Environment (DINAMA). From June 9th, 2020 the environmental authority is the Ministry of Environment through the National Direction for Quality and Environmental Assessment (DINACEA).

Through the use of modern techniques high quality pulp is efficiently produced, with a significant portion destines for the Asian and European markets.

The annual capacity of the mill is 1.3 million tons of bleached eucalyptus pulp. Wood procurement is under the responsibility of UPM Forestal Oriental, which has been pioneering the development of eucalyptus plantations in Uruguay for almost 35 years, since 1990. UPM has a 91% ownership of the Fray Bentos pulp mill and 100% in UPM Forestal Oriental. The UPM mill complex also accommodates the operations of four chemical plants responsible for supplying bleaching chemicals for the production process. The management of hydrogen peroxide, sodium chlorate, and oxygen falls under the purview of Kemira. Specifically, Kemira operates the hydrogen peroxide and sodium chlorate plants, while the oxygen plant is managed by Linde. In January 2023, ownership of the chlorine dioxide plant was transferred from Kemira to UPM, and subsequently, UPM assumed responsibility for its operation.

Maintenance of pulp mill operations is outsourced to Andritz, which supplied most of the production equipment for the construction of the mill.



Production capacity	1,300,000 ADt		
Personnel	227		
Products	UPM Euca (bleached eucalyptus kraft pulp)		
Side-products	Electricity		
Cerfiticates	EMAS – EU Eco-Management and Audit Scheme ISO 14001 – Environmental Management System ISO 9001 – Quality Management System ISO 50001 – Energy Management System ISO 22000 – Food Safety Management System ISO 45001 – Occupational Health & Management System PEFC Chain of Custody – Programme for the Endorsement of Forest Certification FSC® Chain of Custody – Forest Stewardship Council®		
	All certificates can be found from UPM's Certificate Finder (available at www.upm.com/responsibility)		
Environmental labels	EU Ecolabel Nordic Ecolabel		
	UPM pulp products have the approval for use in EU Ecolabel and Nordic Ecolabel paper products.		



UPM Fray Bentos Environmental and Societal Responsibility 2023 is a supplement to the Corporate Environmental and Societal Responsibility Statement of UPM's pulp and paper mills (available at www.upm.com) and provides millspecific environmental and societal performance data and trends for the year 2023. The annually updated mill supplements and the UPM Corporate Environmental and Societal Responsibility Statement together form the joint EMAS Statement of UPM Corporation. The next Updated UPM Corporate Environmental Statement and also this supplement will be published in 2025.

We deliver renewable and responsible solutions and innovate for a future beyond fossils across six business areas: UPM Fibres, UPM Energy, UPM Raflatac, UPM Specialty Papers, **UPM** Communication Papers and UPM Plywood. As the industry leader in responsibility, we are committed to the UN Business Ambition for 1.5°C and the science-based targets to mitigate climate change. We employ 16,600 people worldwide and our annual sales are approximately EUR 10.5 billion. Our shares are listed on Nasdaq Helsinki Ltd. UPM Biofore - Beyond fossils. www.upm.com



Review of the year 2023

Performance

Fray Bentos pulp mill continued to achieve high level of capacity utiliza-tion in 2023 with steady operations, maintaining its reliability in pulp quality as well as high level of environmental performance, without any permit non-compliances.

In 2022, during routine maneuvers at the concentrated odorous gases (CNCG) auxiliary boiler, two deflagrations occurred. As a result, the use of methanol as a CNCG boiler support fuel was suspended until safe operation could be assured. The subsequent root cause analysis and corresponding implementation were completed by the end of June 2023. Following these corrective actions, the CNCG boiler resumed operation with methanol as a support fuel.

In 2023, the UPM Fray Bentos mill received two odor complaints from neighbors. On both dates when the mill received these complaints – March 7th and 13th – the production process remained stable, as did the effluent treatment plant. The H_2S detectors situated within the effluent treatment plant yielded no indications of anomalies, and the air quality station positioned proximately to Fray Bentos city similarly indicated no concerns. Consequently, discerning an attributable cause for the occurrence of odors at the mill proved unfeasible.

In 2023, air emissions were maintained at satisfactory levels, and the management of malodorous gases adhered to our internal targets.

UPM Fray Bentos pulp mill is designed to be self-sufficient in electrical consumption through the energy generated by burning black liquor. Due to a turbine malfunction, the mill's electricity generation declined from late August 2022 to July 2023. Consequently, it became necessary to source power from the grid during that period. Furthermore, as a result the annual average, considering both energy sales and consumption, to the grid for 2023 was null. The mill's emissions are within the ranges associated to Best Available Techniques (BAT) as established in the European Commission Implementing Decision of 26 September 2014.

Environmental monitoring

UPM Fray Bentos mill is one of the most monitored pulp mills worldwide, with more than 130 control parameters covering the Uruguay river (water and biology), air, soil, fauna, groundwater, noise, among others.

Environmental monitoring activities, overseen by UPM Fray Bentos and executed by multiple external experts, continue to show, even sixteen years after its inception, that there is no negative impact on the environment related to the operation of the pulp mill.

Transparency

Press releases regarding incidents related to the mill, which could potentially affect the local community are shared with the local press, follow-up commission, Uruguayan environmental authorities as well as published on UPM's corporate website. During 2023 no sessions of the follow-up commission have been convened by the authorities.

In 2023, 12 inspections were carried out by the Scientific Committee (integrated by Uruguayan and Argentinian members) of the Uruguay River Executive Commission (CARU), reaching 146 in total by December 2023. Results of the monitoring carried out during these inspections are available in CARU's website.

Results of the environmental monitoring plan requested by Uruguayan environmental authorities are available in UPM's webpage.

Additional information on compliance with legal requirements can be found on both UPM's corporate website and the official webpage of the Ministry of Environment.

The revised environmental product declaration for Fray Bentos pulp has been released and is accessible to our customers.







Gervasio González Environmental Manager

UPM Fray Bentos Contribution to UN Sustainable Development Goals in 2023



Taxes

Total tax impact approx.

USD **29** million

related to Fray Bentos mill and forestry operations in Uruguay in 2023, including:

- Income taxes on salaries
- Corporate income taxes and Free Trade Zone fees
- Property taxes including real estate tax
- Value Added Tax cost



RESPONSIBLE

CONSUMPTION AND PRODUCTION

Supply chain

of contract raw material spend covered by UPM Supplier and Third Party Code (wood not included).

Waste

22%

of total non-hazardous waste generated in 2023 returns to plantations, used as soil improver.

23%

of total non-hazardous waste generated in 2023 was disposed in landfill.

55%

of total non-hazardous waste generated in 2023 was used for energy recovery.

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18 Projects

promoted by UPM Foundation in 2023 (18 educational programs and 6 community development)

- 81 communities involved
- 190 NGOs in partnership
- over 2,500 participants
- over 190 institutions



Water

Reduction in specific nutrient discharge (per ton of pulp) in effluents during the last 10 years: (Calculated with three year average data, 2011–2013 and 2021–2023)



Total Phosphorus



Total Nitrogen



Certified fiber



of fibre used in pulp production was FSC[®] and/or PEFC certified. UPM's target is to use only certified fibre by 2030.

8 DECENT WORK AND ECONOMIC GROWTH



Environment

environmental observations

By actively doing environmental observations and taking needed actions beforehand, we efficiently prevent environmental deviations.

o environmental rounds

carried out with subcontractors working within UPM Fray Bentos mill premises.



Employment

UPM Fray Bentos employed

227

people directly.



Air

Reduction in TRS emissions per ton of pulp:

27%

Calculated comparing 2023 to 2022 performance.



Safety

Total Recordable Injury Frequency (TRIF):



per million hours worked (Process areas: UPM employees & Contractors).

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Reported Safety Walks and Inspections. Safety walks are conducted with the aim of improvement.

Safety observations Safety observations: identification of potentially unsafe working environment or unsafe working.

Health 100%

Workplace health risk assessments

- 29% voluntary workers participated in the influenza vaccination program
- 35% voluntary workers participated in the DETOX Nutritional program



Biodiversity

UPM is the first private company in Uruguay to manage an area within the National System of Protected Areas.



of formal conservation areas are managed by UPM, covering native forest, grasslands, wetlands, riparian zones and palm areas.



Renewable energy

of the energy produced in UPM Fray Bentos during 2023 came from renewable sources.



8 DECENT WORK AND ECONOMIC GROWTH



Emissions into the air remained at very good levels, with all parameters within the conditions of the environmental permit.

Handling of malodorous gases from production

Process was in accordance with 2023 internal targets.

On two occasions, the recovery boiler experienced tripping incidents. In both cases, the auxiliary boiler CNCG was undergoing maintenance, leaving no backup for burning concentrated odorous gases (or CNCG). The first incident occurred when one of the slot temperature sensors failed sending an instant trip pulse to the functioning turbine. As the pressure reduction stations and the recovery boiler start-up valve were not working properly it resulted in disruptions to the steam network and ultimately leading to a recovery boiler trip. The second recovery boiler trip of the year was caused by an electric failure in the tertiary fan. None of these events resulted in any external complaints.

Due to the deflagrations at the CNCG auxiliary boiler in 2022, this auxiliary boiler operated with fuel oil until the end of June 2023. Subsequently, the operation with methanol as a support fuel in that boiler was safely ensured. Throughout the breach period, methanol was combusted in the recovery boiler.

In 2023, UPM Fray Bentos mill received two odor complaint from neighbors. On both occasions the production process was stable, and no events or odor emissions were detected at the effluent treatment plant. Consequently, it



Fuel oil consumption



was discarded that the mill could be the source of the odor.

Despite the potential nuisance to people, odors originated at the pulp mill do not pose any potential risk of harm to the environment or human health. The mill continues to proactively inform to the community, local press, national stakeholders and members of the follow-up commission when there will be a planned activity that might cause emissions of odorous compounds to the air, as well as answering openly all related questions from stakeholders. In 2023, 6 press releases were published.

UPM Fray Bentos monitors ambient air quality since 2005. Results to date show that the operation of the pulp mill has no significant effect on the concentrations of pollutants in the air. Concentration of all measured parameters have remained below limits established by Uruguayan environmental authorities and within the limits established in the environmental permit and BAT.

Nitrogen oxides, NO_x





Electricity suppled to the national grid



UPM Fray Bentos acquires raw water from the Uruguay river. Operations in 2023 required about 0.98 m³ of water per second and generated about 0.69 m³ per second of treated effluent.

Water

CLEAN WATER AND SANITATION

6

Since April 2023, the capacity for sludge extraction and dewatering from the primary clarifier has been significantly increased to address cases of high demand. This strategic investment aims to mitigate specific instances that, if left unresolved within a short timeframe, could lead to implications such as the generation of odors due to the decomposition of accumulated sludge at the bottom of the primary clarifier. To achieve this, high capacity sludge extraction pumps were installed at the base of the primary clarifier and an additional sludge extraction system with a belt press as its central unit was integrated. This enhancement ensures both high system availability and stability, allowing for proper operation even during unforeseen situations that could alter the nature of the primary sludge.

In 2023, the phosphorous annual average load was within the permit limit (60 kg/d) as well as the internal monthly average (55 kg/d), 44.9 kg/d. The good phosphorous removal performance achieved and maintained over the last few years are the result, among other things, of the continuous effort to optimize the operation of the phosphorus removal system since its start-up in 2015.

Water quality monitoring results show that there is no significant variation between the sampling points located upstream and downstream from the mill that could be caused by the mill

Biological oxygen demand, BOD,



Phosphorus, P





operation. Variation in time is similar in all sampling points, either reference points or near receptors of the mill's effluents. It was agreed with authorities to reduce the frequency of the Uruguay river water and fish analyses from original frequency based on the monthly results obtained from 2005 until 2019.

Fish monitoring has been carried out twice a year since 2005 and since 2020 the frequency was reduced to annual as results continue to show that there is no diminishment in the variety of fish species, biomass or abundance in the zone of influence of UPM Fray Bentos mill's effluent discharge with respect to the reference area during baseline studies. Furthermore, no differences were found in the situation at all three study areas, either upstream or downstream from the mill. The condition of fish caught has been observed to be good without any macroscopic deformities or abnormalities. There are no differences in the general condition of fish caught from the different study areas. Up to this point exposure monitoring has revealed no concentration values of chlorophenolic substances, phytosterols or resin acids in bile that suggest an impact of the UPM Fray Bentos pulp mill that could have repercussions on indicators of condition like Gonadosomatic index or Hepatosomatic index. The same happened with the concentrations of dioxins and PCBs, in muscle of the studied species, these values continued to be always low and below the maximum limits recommended by international organizations, Health-Canada, 2010, and by regional regulations, CARU's Digest 2020. 2023 fish monitoring study results suggest that there is no impact in the diversity, abundance and biomass of the fish community in the areas that receive



effluents from the UPM Fray Bentos pulp mill. So far, there is no history of negative effects of effluents from pulp mills that use BAT on the fish community, and the monitoring carried out in Uruguay river waters does not represent an exception.

Adsorbable organic halogen compounds, AOX



Nitrogen (inorganic), N



Effluent flow (process wastewater)



Chemical oxygen demand, COD



Total suspended solids, TSS



The UPM Fray Bentos landfill site is located inside the mill complex. In 2023 the landfill received 23,690 t of waste on dry basis. This amount represents 23% of total non-hazardous waste generated at the Fray Bentos mill premises during 2023. Green liquor dregs represented 84% of the total dry weight of solid waste bound for the landfill site.

In 2023, as part of the efforts to minimize waste destined for landfills, the Biosludge dryers' improvement projects were successfully executed, allowing for the introduction of phosphorous sludge to the dryers. As a result, a new product called "mixed sludge PS" was produced at UPM Fray Bentos mill. This mixed sludge consists of phosphorous sludge and secondary sludge (or Biosludge). The "mixed sludge PS" can serve as an alternative fuel source or be utilized as a soil amendment. In 2023, it was produced 2,895 t of mixed sludge PS dry basis.

Furthermore, in 2023, the possibility of utilizing Biosludge as an alternative fuel in cement mills was successfully explored. This achievement provides an alternative purpose for dry Biosludge beyond its original disposal, such as using it as a soil amendment in plantations.

In 2023, 37% of the mixed sludge PS and Biosludge generated at the mill was used as an external fuel at a cement plant, while the rest was utilized as a soil amendment in plantations.

Additionally, in 2023, 75% of wood waste (mainly bark and wood fines) was used for energy recovery. The increase of about 39 percentage points compared to 2022 in wood waste used for energy recovery is mainly because most of this residue is burned at the Paso de los Toros biomass boiler. Furthermore, in 2023, 22% of wood waste continues to be returned to plantations as soil amendments along with sludge from the primary clarifier. In 2020 Rio Negro city hall installed a waste sorting site where, through social cooperative, authorized sorters handle the following materials for subsequent commercialization: paper and cardboard, plastic, combustible waste, and metals. In 2023, UPM Fray Bentos mill delivered a total of 386 t of paper, cardboard, plastics and combustible waste

The generation of hazardous waste in 2023 amounted to 103 t, representing 0.10% of total waste. About 21% corresponded to used oil and water – hydrocarbon mix primarily resulting from maintenance works.

Solid waste to industrial landfill



Management of crises and exceptional situations

Constant awareness of environmental issues is an integral part of UPM Fray Bentos mill's way of working. All employees are responsible for the effects their own field of operation has on the environment. Production Manager is responsible for the environmental performance. The Environmental Manager coordinates environmental issues within the company, with authorities and with other partners. As part of the Operational Environmental Management Plan, UPM Fray Bentos mill has a contingency plan approved by Uruguayan environmental authorities which describes the internal procedures to follow in case of environmental contingencies related to the mill operations as well as responsibilities and communication flowchart.

Safety Manager, together with the mill's Safety Supervisor and the Fire Chief, plans and supervises health & safety activities within the



Fray Bentos mill Organization



company, with authorities and partners. The mill has an operation plan and a program of activities setting out goals, safety targets and plans for achieving them. In the event of an emergency response, UPM Fray Bentos mill has a fire brigade made up of seventy brigadiers including mill engineers and technicians from UPM and other companies working within the mill boundaries (Andritz, Kemira, Linde). The brigadiers are strategically distributed in five shifts in accordance with the mill's operations. The fire brigade is continuously trained by qualified personnel. In 2023, ninety-four training sessions were carried out. Furthermore, drills of emergency situations are planned and conducted during the year. Aiming safety preparedness, in 2023, a series of training sessions were conducted. These sessions covered various critical topics, including fire extinguishment, rescuing victims from elevated locations, responding to chemical incidents involving casualties, collapsed structure rescue operations, confined space rescue techniques, and the installation of a pump in the river.



Societal responsibility

The UPM Foundation was established over 15 years ago in Fray Bentos with the aim of supporting community development. As UPM's operations grew, the foundation expanded and refined its vision to become an instrument for long-term community strengthening. To achieve this, the foundation drives projects and provides educational training scholarships within the country. All these initiatives are led by prominent organizations in their respective fields. In 2023 the UPM Foundation carried out eighteen projects in collaboration with fifteen partner

organizations across eighty-one localities, benefiting over 2,500 individuals. Specifically, in 2023, in the surrounding areas of Fray Bentos, eight projects were executed, involving more than 800 participants. Notably, among these initiatives the 'Agrolab Project' stands out."

"Agrolab Proyect" – carried out in partnership with the "Univerdidad de la Empresa" (University of Business) The Agrolab project aimed to promote teacher and student training in the field of sciences. In

the city of Fray Bentos, participation included High schools 1, 2, and 3, the Escuela Agraria (the Agricultural School), and the Instituto de Alta Especialización (Institute of High Sprecialization) involving a total of over 450 individuals. Additionally, the project extended to Pueblo Grecco within the Río Negro department and to the city of Palmitas in Soriano, engaging approximately 100 additional people.

Biodiversity

UPM's eucalyptus plantations in Uruguay: Managing diverse landscapes – Biodiversity and native species protection.

In Uruguay, where plantations thrive on grasslands previously used for cattle grazing, the biodiversity values of the area have been assessed prior to establishing plantations. UPM has taken significant measures to protect biodiversity through its global biodiversity program, which has been in place since 1998. Since 2020, this program has incorporated a set of core targets: developing a nature conservation area network, maintaining, and enhancing endemic and threatened species populations and controlling and decreasing the invasion of exotic woody species populations.

Furthermore, in 2022, UPM Uruguay integrated the launch of the new UPM global Forest Action program, which considers regional regulations, requirements, and guidelines related to forest management. As part of this initiative, UPM added three new conservation areas to its Natural Conservation Areas Network, resulting in a total of 35 Conservation and High Conservation Value areas (collectively referred to as formal conservation areas). These areas are strategically distributed across different eco-regions where UPM operates in Uruguay, covering over 14,000 hectares. The conservation work is conducted in close collaboration with local environmental organizations and third-party experts, with the aim of expanding protected areas within UPM and sustaining the company's long-term biodiversity program.

In 2022, a group of researchers and students from the Faculty of Sciences at the University of the Republic in Uruguay proposed and led a project to conduct the first spider study in the Esteros and Algarrobales of the Uruguay River. This study focused on a specific type of environment: blanqueales with Chaco influence.

With just two sample collection campaigns, five priority species for conservation were identified, the *Prodidomidae* family was documented for the first time, and seven new species for the



Lumptibiella chacoensis (Salticidae). Photo Damián Hagopián

country were recorded, one of which belonging to the forementioned family.

The results are remarkable, revealing a composition of species that are rare or absent in other parts of the country and are closely related to the Chaco and Alto Paraná Forest in Argentina.

There were eight guilds, 32 families, and 172 spider species/morphospecies recorded. Additionally, the research group compiled the first list of spider species for the Protected Area of Esteros and Algarrobales of the Uruguay River. Among the families, *Salticidae* (20), *Araneidae* (14), and *Theridiidae* (10) exhibited the highest specific richness.

With the presence of national authorities, the mayor of Río Negro and representatives from the National System of Protected Areas, a visitor center was inaugurated on October 2023 in the protected area of Esteros and Algarrobales along the Uruguay River, in the department of Río Negro.

The new center is designed to receive groups of visitors interested in exploring the area and its natural treasures. It also includes facilities for



Aglaoctenus lagotis (Lycosidae) Photo Agustina Serafín

accommodating researchers and hosting on-site meetings with research equipment.

Within the area, there are two trails that allow visitors to explore various conservation environments. These areas are known for their rich biodiversity, housing hundreds of native plant and animal species, many of which are conservation priorities. Over 900 species have been identified in the area through annual monitoring efforts. The trails cover approximately three kilometers, providing opportunities to observe a wide range of species and ecosystems.



Environmental parameters

The figures related to production as well as raw material and energy consumption are published as aggregated figures on group level in the UPM Corporate Environmental and Societal Responsibility Statement.

		2021	2022	2023
Production capacity	Pulp	1,300,000 t	1,300,000 t	1,300,000 t
Raw materials	Wood	1)		
and additives	Pulping and bleaching chemicals			
	Biogenic fuels	92%	91%	92%
	Fossil fuels	8%	9%	8%
Emission to air	Carbon dioxide, CO ₂ (on-site fossil emisssions, scope 1) ³⁾ Carbon dioxide, CO ₂ (fossil emissions from purchased	137,036 t	154,132 t	155,526 t
	energy, scope 2) ⁴	2,132 t	13,145 t	27,240 t
	Nitrogen oxides, NO ₂	1,779 t	1,525 t	1,471 t
	Sulphur dioxide, SO	46 t	26 t	19 t
	Particulates Total	235 t	149 t	164 t
	Reduced sulphur, TRS	8 t	10 t	10 t
Water intake	Process and cooling water	30,125,282 m ³	30,500,127 m ³	30,915,965 m ³
Discharges to water	Process wastewater	22,092,935 m ³	22,078,755 m ³	21,677,934 m ³
	Process wastewater quality indicators			
	– Biochemical oxygen demand, BOD ₅ ⁵⁾	206 t	229 t	181 t
	– Chemical oxygen demand, COD	5,282 t	4,949 t	4,961 t
	 Suspended solids, TSS 	200 t	156 t	148 t
	– Nitrogen, N (total)	49 t	51 t	53 t
	– Phosphorus, P (total)	10 t	14 t	17 t
	– Adsorbable organic halogen compounds, AOX	52 t	49 t	52 t
Waste ²⁾	Non-hazardous waste			
	Waste to recycling, energy recovery and/or composting			
	– Sludges	14,495 t	15.085 t	12.203 t
	– Bark and wood waste	59.164 t	64.413 t	66.003 t
	– Green liquor dreas	_	2 t	199 t ⁷
	– Metals	532 t	2.51 t	266 t
	– Others	218 t	439 t	505 t
	Waste to landfill and incineration w/o energy recovery			
	- Green liquor dreas	23 097 t	18 175 t	19 793 t
	- Sludges	6 113 +	3 8/3 +	3 705 t
	– Others	1,685 t	207 t	348 t
Hazardous waste		109 t	148 t	103 t
Total use of land		553 ha	553 ha	553 ha
	Total sealed area	53 ha	53 ha	53 hg
	Total nature-oriented area on site	500 ha	500 ha	500 hg
	Total nature-oriented area off-site ⁶⁾	1 550 hg	1 550 ha	1 550 ha

¹⁾ See UPM Corporate Environmental and Societal Responsibility Statement for more information.

²⁾ Dry weight

³¹ The increase in carbon dioxide emissions within scope 1 (when compared to the 2021 data) can be attributed to increased fuel oil consumption. This increase occurred because the CNCG auxiliary boiler was unavailable for burning methanol during part of the year, and there was a turbule failure that persisted until mid-2023. For further information please see air section.
⁴⁾ In 2023 UPM purchased more energy than usual as a consequence of the turbine failure.

⁵) Fray Bentos permission reefers to BOD₅. BOD₇ can be estimated (209 t for 2023).

Corresponds to Mafalda protected area, included in the National System of Protected Areas as a requirement for the mill's environmental authorization. This area is managed by UPM Forestal Oriental.



Environmental objectives

Among the objectives set for 2024, the following can be highlighted:

- Continue transparent and effective proactive communication of environmental issues to all stakeholders.

- Contribute to UPM's corporate commitment to environmental responsibility.

- Promote environmental awareness within the mill, its main suppliers and partners, and all subcontractors working in mill area.

- Comply with the key environmental indicators defined for 2024 (see below).

- Renew the environmental authorization for operation (AAO)

Performance against internal targets in 2023

	TARGET	PERFORMANCE*	
COD discharge to the river (annual average)	≤ 5 kg/ADt	Achieved	Stable operation
Effluent discharge to the river (annual average)	≤ 20 m³/ADt	Achieved	Stable operation
Total phosphorus discharge to the river (monthly average)	≤ 55 kg/d	Achieved	Optimization of phosphorous removal and stable operation
Availability of strong odorous gases handling (annual average)	≥ 99.9%*	Achieved	Stable operation
Availability of mild odorous gases handling (annual average)	≥ 99.5%	Achieved	Stable operation
Amount of permit exceedances	None	Achieved	Investment on stormwater ponds and stable operations

* see page 6 for more details

Internal targets for 2024

	TARGET	FOCUS ACTIONS	
COD discharge to the river (annual average)	≤ 5 kg/ADt	Stable operations without significant disturbances	
Effluent discharge to the river (annual average)	≤ 20 m³/ADt	Stable operations without significant disturbances	
Total phosphorus discharge to the river (annual average)	≤ 55 Kg/d	Continue optimizing cleaning process, keeping good performance in phosphorous precipitation system	
Availability of strong odorous gases handling (annual average)	≥ 99.9%	Stable operation without significant disturbances	
Availability of mild odorous gases handling (annual average)	≥ 99.5%	Stable operation without significant disturbances	
Amount of permit exceedances	None	Stable operations	



Revalidation statement

As an accredited environmental verifier (FI-V-0001), Inspecta Sertifiointi Oy has examined the environmental management system and UPM Fray Bentos Environmental and Societal Responsibility 2023 statement as well as the information concerning UPM Fray Bentos in the Updated UPM Corporate Environmental and Societal Responsibility Statement 2023.

On the basis of this examination, the environmental verifier has herewith confirmed on 2024-05-17 that the environmental management system, the UPM Fray Bentos Environmental and Societal Responsibility 2023 statement and the information concerning UPM Fray Bentos in the Updated UPM Corporate Environmental and Societal Responsibility Statement 2023 are in compliance with the requirements of the EMAS Regulation (EC) No 1221/2009.

UPM Fray Bentos

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