

# Alliance for Water Stewardship Assessment Report Prepared for PHILIP MORRIS BRASIL INDÚSTRIA E COMÉRCIO LTDA.

Prepared by: SGS

SGS Ref.: WAT-106-R1

Version: 1

Date: 10 October 2021

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#### **REPORT DETAILS**

REFERENCE	AWS-000154
CERTIFICATE No	SGS2018_AWS0001 (previous certificate of 1st cycle)
REPORT TITLE	ALLIANCE FOR WATER STEWARDSHIP ASSESSMENT REPORT
DATE SUBMITTED:	10 October 2021
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STATUS	FINAL
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#### 1 EXECUTIVE SUMMARY

The scope of services covers the re-assessment in compliance with the AWS International Water Stewardship Standard Standard Version 2.0 for PHILIP MORRIS BRASIL INDÚSTRIA E COMÉRCIO LTDA. (PMI Brazil) for their Santa Cruz do Sul Factory, Rio Grande do Sul, Brazil. The re-assessment has been completed in compliance with AWS Certification Requirements v 2.0 December 2019 and is a "full" conformity assessment.

Phiip Morris International is a company that manufactures tobacco related products, with more than 80,000 employees. It has operations operations world-wide, and in Brazil they established PHILIP MORRIS BRASIL INDÚSTRIA E COMÉRCIO LTDA.

Given the document review undertaken, verification of evidence and virtual audit performed, SGS recommends that PMI BRAZIL is granted a certificate for a new cycle of 3 years to be AWS "Platinum" Certified to the Version 2.0 of the AWS standards. Next audit will be the yearly surveillance assessment.

There were nil non-conformances raised during the course of the audit process. Four observations were identified during this audit, and the old three previous observation, 2 were closed and 1 shown progress. At the next surveillance in year 2022, the new observations will be reviewed.

#### 2 SCOPE OF ASSESSMENT

The scope of services covers the re-assessment to the AWS International Water Stewardship Standard Standard Version 2.0 for PHILIP MORRIS BRASIL INDÚSTRIA E COMÉRCIO LTDA. (PMI Brazil) for their Santa Cruz do Sul Factory, Rio Grande do Sul, Brazil. For the previous cycle they were certified with CORE level, and now they presented evidence to be awarded platinum level. The assessment has been completed in compliance with AWS Certification Requirements v 2.0 December 2019.

The assessment was conducted during 3 days on site by a Lead & Local AWS assessor hydrogeologist, the 29th – 30th September and 1st October, 2021, supported offsite (virtually) by a Support Auditor, as per shown in the audit plan, and 0.5 days off-site (preliminary review). The geographical scope has been only the Santa Cruz do Sul Factory. The water used is mostly from groundwater from the Guarani aquifer. The site is a tobacco manufacturing, from the receival of cured tobacco, to the cigarette manufacturing.

The audit interviews were held for PMI Brazil and stakeholders over 3 days for their water efficiency projects, WASH activities in the community, etc. PMI Brazil and the stakeholders provided the requested supporting documentation as evidence whilst interviewed.

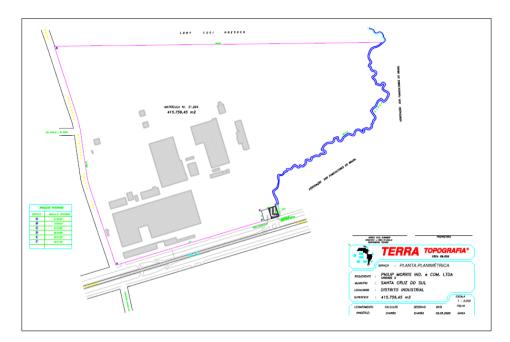
The external stakeholders visited and interviewed onsite were during the audit:

- Tobacco Growers (4 different growers)
- Professors of the University of Santa Cruz do Sul
- Municipality of Vera Cruz (Rio Grande do Sul State)
- Sinditabaco (Union of tobacco growers)

The internal stakeholders visited and interviewed onsite were during the audit: PMI Brazil personnel of different areas, such as:

- Manufacturing Director
- Sustainability,
- Production,
- Operations
- Environmental, etc
- LEAF of Philip Morris Brazil, which is not factory, but the area that coordinates with the tobacco growers and implements the sustainability projects

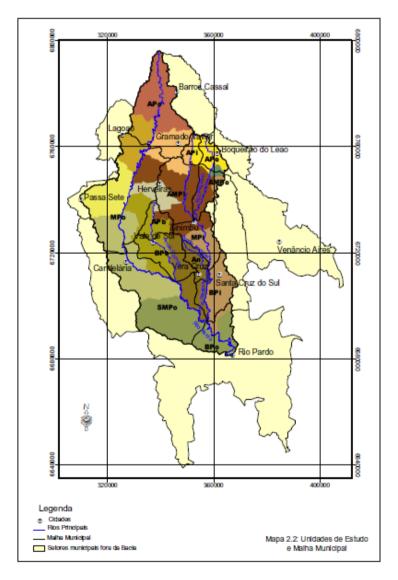
Figure 1: Diagram of the Santa Cruz do Sul Factory



#### 3 DESCRIPTION OF CATCHMENT

They have the document "Bacia Hidrográfica do Rio Pardo" (Pardo river catchment). This document is published by the "Comité Pardo" which is the management committee for the Rio Pardo catchment. It has a full map of the catchment, including all the rivers and water streams. It shows also the sub-catchments and key information. It focuses on superficial water. Nevertheless, the Rio Pardo catchment is one of the contributors to Guarani aquifer replenishment. Note that Philip Morris does not have any withdrawal from the water streams or rivers itself, as it is indirectly at this catchment because of the aquifer use and replenishment for industrial use. Similarly, the effluents are not discharged directly to the rivers, but slowly infiltrated to the underground. For domestic water, they use the water from the public company that uses water from the Pardo catchment.

Figure 2: Map of the Rio Pardo catchment



#### 4 SUMMARY OF SHARED WATER CHALLENGES

"Relatório etapa A – Comite Bacia Pardo" Chapter 2.4 includes a matrix with that lists the shared water challenges per region of the water catchment. These are 17 water challenges associated with water balance, water quality, water related areas and water/land use. Then, in September 2018, the Pardo Catchment Committee released the updated challenges. They highlighted challenges in eco-communication/education, rural sanitation, wastewater treatment, soil management, water quantity & quality, weak governance, climate change, etc.

Table 1: Water Challenges - Main problems associated with water resources at Rio Pardo catchment (updated september 2018 by the Pardo Catchment Committee)

Tabela 2 – Problemas levantados pelos participantes da Oficina						
PROBLEMAS	FOI DIAGNOSTICADO?	TENDÊNCIA				
Falta de educomunicação como estratégica de gestão	Não	Aumentar				
Manutenção inadequada de estradas sem pavimentação	Não	Aumentar				
Falta de saneamento rural	Sim	Aumentar (diminuir depende de políticas públicas)				
Falta de tratamento de esgotos urbanos	Sim	Diminuir				
Redução da disponibilidade hídrica na bacia	Parcialmente, pois atualmente está mais intenso	Aumentar				
Manejo inadequado do solo	Sim	Reduzir (lentamente)				
Erosão	Sim, atualizar, aprofundar causas e consequências	Parcialmente aumentar				
Intervenção em APPs	Sim	Estabilizar				
Baixa qualidade da água	Sim, 2006 - 2016 (sem monitoramento), Qualiágua 2017 (2 pontos)	Aumentar				
Falta de manutenção dos sistemas de tratamento individual	Não	Aumentar				
Baixa eficiência do sistema de tratamento de esgotos domésticos	Não	Diminuir				
Falta de estruturação SERH	Sim	Estabilizar				
Educação ambiental inadequada/descontextualizada	Sim	Estabilizar				
Falta de regularização e fiscalização, irrigação superficial e poços subterrâneos	Sim	Estabilizar				
Falta de confiabilidade nos dados hidrológicos (vazão)	Não	Estabilizar				
Eventos climáticos extremos	Não	Aumentar				
Canalização e retificação de recursos hídricos (excesso)	Não	Aumentar				
Impermeabilização de áreas urbanas	Não	Aumentar				
Avanço de lavouras sobre APPs de nascentes	Sim	Estabilizar				
Contaminação da água por agrotóxicos	Sim	Piorar				
Falta de monitoramento adequado da contaminação da água por agrotóxicos	Não	Estabilizar				
Falta de efetiva fiscalização de	Não	Piorar				
desmatamentos irregulares						
Excessiva drenagem de áreas úmidas	Não	Piorar				
Falta de planejamento de paisagem/regional	Não	Estabilizar				
Falta de programa de Educação Ambiental integrado/ sistêmico	Sim	Estabilizar				

#### 5 INDICATORS CHECKLIST

As per the requirement set out in the AWS certification requirements Section 2.11.3.1 it was prepared a checklist of all the CORE and ADVANCED AWS indicators with the relevant reviewed evidence provided by PMI Brazil and the indicator with which it is associated. The checklists were aligned to the clauses / indicators of the AWS standard Version 2.0. See Annex in this report.

#### 5.1 ADVANCED INDICATORS SCORING

The following point were awarded due to the advanced indicators, achieving "PLATINUM" with 105 points, which is more than the 80 points needed.

			AVAILABLE SCORE	ACHIEVED SCORE
	1.4.	1.4.3 Advanced Indicator     The embedded water use of primary inputs in catchment(s) of origin shall be quantified.	7	7
itand	data collection shall be identified.  1.5.9 Advanced Indicator The adequacy of WASH provision within the catchments of origin primary inputs shall be identified.  1.6.3 Advanced Indicator Future water issues shall be identified, including anticipated impacts a trends  1.6.  1.6.4 Advanced Indicator Potential water-related social impacts from the site shall be identified	Efforts by the site to support and undertake catchment level water-related	7	7
Gather & Understand		The adequacy of WASH provision within the catchments of origin of	4	4
. Gather		Future water issues shall be identified, including anticipated impacts and	3	3
7		1.6.4 Advanced Indicator     Potential water-related social impacts from the site shall be identified, resulting in a social impact assessment with a particular focus on water.	4	4
			25	25

			AVAILABLE SCORE	ACHIEVED SCORE
	2.1.	2.1.2 Advanced Indicator     A statement that explicitly covers all requirements set out in Indicator       2.1.1 and is signed by the organization's senior-most executive or governance body and publicly disclosed shall be identified.	1	1
⊑	the same catchment (which may or may not be under the sale organisational ownership) shall be identified and described.  2.3.4 Advanced Indicator The site's partnership/water stewardship activities with other sites another catchment(s) (either under same corporate structure or wanother corporate site) shall be identified.  2.3.5 Advanced Indicator Stakeholder consensus shall be sought on the site's water stewards plan. Consensus should be achieved on at least one target. A list	The site's partnership/water stewardship activities with other sites within the same catchment (which may or may not be under the same	4	4
ommit & Pla		The site's partnership/water stewardship activities with other sites in another catchment(s) (either under same corporate structure or with	4	4
, 2		Stakeholder consensus shall be sought on the site's water stewardship plan. Consensus should be achieved on at least one target. A list of targets that have consensus and in which stakeholders are involved shall	7	7
	2.4.	2.4.2 Advanced Indicator     A plan to mitigate or adapt to water risks associated with climate change projections developed in co-ordination with relevant public-sector and infrastructure agencies shall be identified.	6	6
			22	22

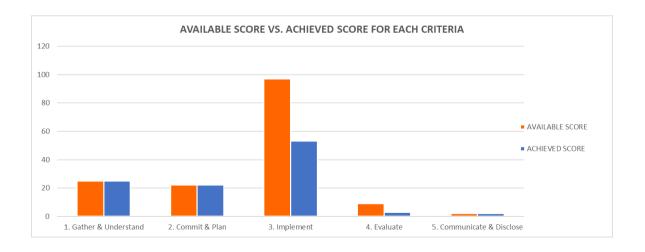
			AVAILABLE SCORE	ACHIEVED SCORE
		3.1.3 Advanced Indicator Evidence of improvements in water governance capacity from a site-selected baseline date shall be identified.	2	2
	3.1.	3.1.4 Advanced Indicator     Evidence from a representative range of stakeholders showing consensus that the site is seen as positively contributing to the good water governance of the catchment shall be identified.	2	
	3.3.	3.3.4 Advanced Indicator The total volume of water voluntarily re-allocated (from site water savings) for social, cultural and environmental needs shall be quantified.	6	
	3.5.	3.5.2 Advanced Indicator Evidence of completed restoration of non-functioning or severely degraded Important Water-Related Areas including where appropriate cultural values from a site-selected baseline date shall be identified. Restored areas may be outside of the site, but within the catchment.	6	6
		3.5.3 Advanced Indicator Evidence from a representative range of stakeholders showing consensus that the site is seen as positively contributing to the healthy status of Important Water-Related Areas in the catchment shall be identified.	2	
		3.6.3 Advanced Indicator A list of actions taken to support the provision to stakeholders in the catchment of access to safe drinking water, adequate sanitation and hygiene awareness shall be identified.	5	5
#	3.6.	3.6.4 Advanced Indicator In catchments where WASH has been identified as a shared water challenge, evidence of efforts taken with relevant public-sector agencies to share information and to advocate for change to address access to safe drinking water and sanitation shall be identified.	4	4
3. Implement	3.7.	3.7.3 Advanced Indicator Actions taken to address water related risks and challenges related to indirect water use outside the catchment shall be documented and evaluated.	7	5
		3.9.6 Advanced Indicator Achievement of identified best practice related to targets in terms of good water governance shall be quantified.	8	8
		3.9.7 Advanced Indicator Achievement of identified best practice related to targets in terms of sustainable water balance shall be quantified.	8	8
		3.9.8 Advanced Indicator Achievement of identified best practices related to targets in terms of water quality shall be quantified.	8	
		3.9.9 Advanced Indicator Achievement of identified best practices related to targets in terms of the site's maintenance of Important Water-Related Areas have been implemented.	8	8
	3.9.	3.9.10 Advanced Indicator Achievement of identified best practice related to targets in terms of WASH shall be quantified.	4	4
		3.9.11 Advanced Indicator     A list of efforts to spread best practices shall be identified.	3	3
		3.9.12 Advanced Indicator A list of collective action efforts, including the organizations involved, positions of responsible persons of other entities involved, and a description of the role played by the site shall be identified.	14	
		3.9.13 Advanced Indicator  Evidence of the quantified improvement that has resulted from the collective action relative to a site-selected baseline date shall be identified and evidence from an appropriate range of stakeholders linked to the collective action (including both those implementing the action and those affected by the action) that the site is materially and positively contributing to the achievement of the collective action shall be identified.	10	
			97	53

			AVAILABLE SCORE	ACHIEVED SCORE
ıate	4.1.	4.1.4 Advanced Indicator A governance or executive-level review, including discussion of shared water challenges, water risks, and opportunities, and any water-related cost savings or benefits realized, and any relevant incidents shall be identified.	3	3
4. Evaluate	4.3.	4.3.2 Advanced Indicator The site's efforts to address shared water challenges shall be evaluated by stakeholders. This shall include stakeholder reviewing of the site's efforts across all five outcome areas, and their suggestions for continual improvement.	6	
			9	3

		AVAILABLE SCORE	ACHIEVED SCORE
cate &	5.3.2 Advanced Indicator The site's efforts to implement the AWS Standard shall be disclosed in the organization's annual report.	1	1
. Communicate Disclose	5.3.3 Advanced Indicator Benefits to the site and stakeholders from implementation of the AWS Standard shall be quantified in the organization's annual report.	1	1
ည်		2	2

CLASSIFICATION 105 AWS Platinum

AWS Platinum
≥ 80



#### 6 AUDIT FINDINGS AND OPPORTUNITIES FOR IMPROVEMENT

There were nil CARs at this audit, only 4 new observations raised. At last audit, there was also nil CARs, and 3 observations raised which were reviewed and evidence checked at this audit. The new observations were raised for future improvement, which will be reviewed at next audit.

- 6.1 AUDIT FINDINGS AND OPPORTUNITIES FOR IMPROVEMENT (Previous Audit)
  - Observation 01 2020 (clause 1.2.1): The site could refine technically which should be the boundary for the sphere of influence, which may be due to confined / unconfined wells, as currently it was selected the distance of 1km of radio.

**Closed 2021:** This answer cannot be achieved only by using public available data. For now, PMI has found an external stakeholder who has a deep well in the same geological context. Groundwater chemical data were made available to compare a year time period between PMI and stakeholder wells.

- Observation 02 2020 (clause 1.3.2): For traceability purposes, it could be searched possible records of 25 years ago of the well #2.
  - **Progress 2021:** Last 6 months a systematic communication with the regulator agency responsible for this kind of information was made without a definitive answer. The process of consultation still open.
- Observation 03-2020 (clause 2.1.1): To update the AWS information of PMB (Philip Morris Brasil) at the market webpage <a href="https://www.pmi.com/markets/brazil/en">https://www.pmi.com/markets/brazil/en</a>

**Closed 2021:** Webpage updated with new documents published.

#### 6.2 AUDIT FINDINGS AND OPPORTUNITIES FOR IMPROVEMENT (New Audit)

- Observation 01 2021 (clause 1.3.4): The hydrogeological comparative analysis among the internal underground water wells, and reference external underground water wells, should be tabulated in graphics of time vs concentration.
- Observation 02 2021 (clause 1.5.3): The catchment report focusses mostly on the superficial water, nevertheless, it should be gathered further information of the

interphase between the Rio Pardo catchment and the Guarani aquifer. The information should consider the overall aquifer local water reserves, replenishment and extractions, as it is a larger aquifer that is below several countries and catchments.

- Observation 03 2021 (clause 1.5.4): It should be considered to conduct further studies to identify the geological reason of the highly basic pH (>9).
- Observation 04 2021 (clause 2.4.1): At the site visit to the underground water wells of the site, it was confirmed that they are protected, however, not completely invulnerable.

#### 7 SUMMARY

In reviewing the evidence presented by PMI Brazil, it was confirmed that they maintain and improved their water stewardship system appropriately through the interviews and visits to the plant and the stakeholders. This was accompanied with the documentary evidence and actions to address the changes to version 2.0.

There were nil new non-conformances raised, and nil from last audit.

Observations were made during the audit, these are to be considered as areas for improvement which will be reviewed in future surveillance audit.

#### 8 OPPORTUNITIES FOR IMPROVEMENT

• Opportunity for improvement 01 - 2021 (clause 4.3.1): To establish a systematic approach to gather stakeholders' feedback, in order to facilitate the evaluation of the responses.

#### 9 CONCLUSIONS AND RECOMMENDATIONS

Given the evidence reviewed and the virtual audit performed, SGS recommends that PMI Brazil gets recertified for a new cycle, but with an AWS Platinum Certified, version 2.0.

#### 10 REFERENCES

- Commitment letter
- Integrated Management System Policy
- Diagram Santa Cruz do Sul Factory
- Satellite map of surrounding area
- Map of Rio Pardo catchment
- "Bacia Hidrográfica do Rio Pardo" (Pardo river catchment) and presentation of update
- Water Stewardhsip Strategy / Plan
- Records fo communications with stakeholders
- Emergency and Resiliennce plans
- Water Balance
- LEAF presentation about projects with the farmers
- · Project information for the water efficiency at site
- Meeting Minutes of Comité Pardo
- Statutory document of creation of AGEPARDO of 2020, and records of meetings 2021
- · Licenses for each of the 3 water wells
- Monitoring records for each well
- Laboratory tests of external lab for water potability
- Annual Report disclosed at webpage
- Other support documents

#### **ANNEX CHECKLIST**

Clause	Details	Yes	No	Comments/Evidence
1	GATHER AND			
	UNDERSTAND			
1.1	Gather information to define the site's physical scope for water stewardship purposes, including: its operational boundaries; the water sources from which the site draws; the locations to which the site returns its discharges; and the catchment(s) that the site affect(s) and upon which it is reliant.			
1.1.1	The physical scope of the site shall be mapped, considering the regulatory landscape and zone of stakeholder interests, including: - Site boundaries; - Water-related infrastructure, including piping network, owned or managed by the site or its parent organization; - Any water sources providing water to the site that are owned or managed by the site or its parent organization; - Water service provider (if applicable) and its ultimate water source; - Discharge points and waste water service provider (if applicable) and			There have not been physical changes at the site since last audit, therefore the site boundaries continue the same.  They have the document "Planta limites Unidade II" which is a map showing the facilities buildings, the boundaries and the area which is 415 759.45 m2, with the registration number 31.264. It shows the neighbours which are:  • A minor water stream to the north, with the neighbour AFUDBRA (Association of tobacco producers of Brazil) across.  • the surrounding streets to the east and south,  • a neighbour to the west, who is a private land of an individual  They have the document "Civil U2 master" which is a detailed plant diagram that draws internally each of the buildings of the facility. The diagram was updated in June 2020 to show the new biogas boiler area, and that Cast Leaf Area is now not operational.  Internally, they have prepared "Civil Map with Monitoring points" which facilitates the monitoring plan, as it provides the links. It was updated with all the points mapped with pictures which is an improvement. They prepared the new document "RD 438 Reservatórios de Aqua" which lists shows all the water reservoirs on the site, and the characteristics with pictures.

Clause	Details	Yes	No	Comments/Evidence
	ultimate receiving water body or bodies; - Catchment(s) that the site			At the IMS Manual it is explained the scope of the management system, the processes and activities involved, which are requirements of ISO 14001 and OHSAS 18001.
	affect(s) and is reliant upon for water.			The internal document "PO SIG OPS 007 Diretriz de água Unidade II" (AWS Guideline) has been updated to version the 30 <sup>th</sup> October 2020. It shows the water distribution within the site, especially the water re-use and water discharge points. It has a satellite map of the facility, where it was marked the boundaries and the key locations:
				<ul> <li>Wastewater discharge points</li> </ul>
				<ul> <li>Municipal supply point with water meter</li> </ul>
				<ul> <li>Groundwater wells (3)</li> </ul>
				<ul> <li>Septik tank (1)</li> </ul>
				• Septik tank – connect with WWTP (3)
				The municipal water provider is CORSAN who treats water of Pardinho river.
				The groundwater wells are coded by the local body that grants the licenses. The 3 groundwater wells are tubular. The water is from the "Formación Geológica Santa Maria" which belongs to the "Sistema Aquífero Guaraní" (Guarani aquifer). This aquifer is located among several countries:
				<ul> <li>Central-south of Brazil,</li> </ul>
				<ul> <li>Paraguay,</li> </ul>
				<ul> <li>Uruguay</li> </ul>
				<ul> <li>North of Argentina</li> </ul>
				East of Bolivia
				The information about the Aquifer is at the document "Relatório etapa A – Comite Bacia Pardo" prepared in 2006 by a consultant company. It is available at the webpage www.comitepardo.com.br
				The same document "Directriz AWS" is used for effluent discharges.
				The effluents of the site are treated in an Aerobic / Anaerobic WWTP which includes physico-chemical primary, secondary and tertiary steps. Then, when the water achieves the regulatory thresholds, it can be released to the water stream.
				They have the license for this purpose called "Licencia Operação N° LO 05781-2020", renewed the 25/09/2020 and valid until 16/01/2025 which includes the water stream recognized by its geography coordinates. This water stream is the affluent "Arroio das Pedras" (stream of the stones).

Clause	Details	Yes	No	Comments/Evidence
				The water stream "Arroio das Pedras" is not connected upstream with any river, as it is practically formed by rainwater and discharge from farms, industrial and residential areas.  Downstream, the "Arroio das Pedras" continues to flow for around 8 km until it discharges to the "Rio Pardinho". Then, the Rio Pardinho is an affluent to the "Rio Pardo" which later provides to other rivers within the Rio Grande do Sul State. The final point is the Atlantic Ocean at the Brazil coast.  The septic tanks are either connected to the WWTP or are isolated and emptied by a waste management contractor and disposed off-site at regulated facilities six-monthly.
1.2	Understand relevant stakeholders, their water-related challenges, and the site's ability to influence beyond its boundaries.			
1.2.1	Stakeholders and their water-related challenges shall be identified. The process used for stakeholder identification shall be identification shall be identified. This process shall:  - Inclusively cover all relevant stakeholder groups including vulnerable, women, minority, and Indigenous people;  - Consider the physical scope identified, including stakeholders, representative of the site's ultimate water source and ultimate receiving water body or bodies;  - Provide evidence of stakeholder consultation on water-related interests and			They have the spreadsheet for AWS "Lista de Partes Interesadas FSGQ 002". Each stakeholder is listed, these were mainly:  PMB Management Areas, Workers, Visitors  PMI (Corporate)  Local community and neighbours  Water supplier  Suppliers and contractors  Tobacco growers  Local Authorities (Environmental Secretariat of the Municipality)  FEPAM (state environmental agency)  Brazilian regulators and authorities  Unions of tobacco sector  Consumers / Clients  Universities  Industrial neighbours  NGOs  It is used for their integrated management system (including water), listing each stakeholder or interested party, classified as internal/external, and the reasons for their inclusion and the challenges or requirements related to each of them.  At the chapter 3.1.5 of the "Diretriz de Agua" it is explained the Sphere of Influence that are the stakeholders within 1 km of radius from the site.

Clause	Details	Yes	No	Comments/Evidence
	- Note that the ability and/or willingness of stakeholders to participate may vary across the relevant stakeholder groups; - Identify the degree of stakeholder engagement based on their level of interest			Observation 01 - 2020: The site could refine technically which should be the boundary for the sphere of influence, which may be due to confined / unconfined wells, as currently it was selected the distance of 1km of radio.  Closed 2021: This answer cannot be achieved only by using public available data. For now, PMI has found an external stakeholder who has a deep well in the same geological context. Groundwater chemical data were made available to compare a year time period between PMI and stakeholder wells.  The Comité Pardo has an overall Stakeholders identification through the "Comité Bacia Pardo"
122	and influence.	$\square$		catchment plan". Note that in this external document there is no direct mention of the inclusivity for: vulnerable, women, minority and indigenous people.  To confirm that the stakeholder mapping and challenges were appropriate, several Stakeholders were visited on the first and the second audit. The first audit, it was visited the committee of Rio Pardo at the Santa Cruz do Sul University, a sample of the tobacco farmers, a Recreational Park, and also projects were visited in conjunction with the local authorities and NGOs. During the second audit, it was visited further stakeholders, such as the municipality of Sinimbu, a sample of tobacco farmers that implemented the chemical management with the LEAF department. Also, at the audit, it was interviewed virtually the global supply chain team of PMI that handles the procurement of tobacco, components and packaging materials. It was also interviewed virtually the SENAI innovation institute, as they are cooperating for a water-related project with PMI Brazil. Finally, it was interviewed the implementers of the "Project Caxambu" for the zone of Santa Catarina, through LEAF.  The site had included women in their projects, for example: "Mais Campo Pink" program that is a woman inclusivity project. It is training for women regarding Safe Working Conditions.
1.2.2	Current and potential degree of influence between site and stakeholder shall be identified, within the catchment and considering the site's ultimate water source and ultimate receiving water body for wastewater.			At the chapter 3.1.5 of the "Diretriz de Agua" it is explained the Sphere of Influence that are the stakeholders within 1 km of radius from the site. They are classified by Power and Influence, and potential actions.  The evaluation is high, medium or low for each criterion (power and influence). As a result, there is an action proposed for each stakeholder.
1.3	Gather water- related data for			

Clause	Details	Yes	No	Comments/Evidence
	the site, including: water balance; water quality, Important Water-Related Areas, water governance, WASH; water-related costs, revenues, and shared value creation.			
1.3.1	Existing water- related incident response plans shall be identified.			Their Integrated Management System Manual includes the water stewardship, and it was supported with the document created "Directriz AWS". Furthermore, they created another document "Plano de Contingencia de Agua / PO EHS EHS 0001 Plano de Contingência de Água" which is for incidents response, such as a sudden water shortage from the public service or other interruptions related to the internal water wells, and lists all reservoirs, which was last updated 29 <sup>th</sup> October 2020. For other type of incidents such as chemical spills, they use their procedures of ISO 14001 and OHSAS 18001.
1.3.2	Site water balance, including inflows, losses, storage, and outflows shall be identified and mapped.			They have the document "2.3.3 Gráfico dos pocos (hyrographs)" which has a diagram for each of the 3 underground wells showing the data of weekly water level for more than 10 years (well #3 DRH 507 c1 and well #4 DRH 507-2004 Quadra de Tenis - AAPM) and 3 years (well #1 DRH 1562 well). The data shows that the water level is relatively stable through the years. Note that more than 25 years ago, it was drilled a well #2, but it was of saline water, therefore, it was closed and never used.
				Observation 02 - 2020: For traceability purposes, it could be searched possible records of 25 years ago of the well #2.  Progress 2021: Last 6 months a systematic communication with the regulator agency responsible for this kind of information was made without a definitive answer. The process of consultation still open.
				In 2020, the site used 75% of underground water, 6% was the use of rainwater, and 9% was of municipal water (CORSAN), and reuse was 10%. The water from production / operations, is then reused in toilets, boilers, cleaning of floors, etc.
				For outputs, about 59% is evaporated because of the heating at the tobacco manufacturing. 34% goes into the WWTP for reuse and effluent. 7% goes with the product.

Clause	Details	Yes	No	Comments/Evidence
1.3.3	Site water balance, inflows, losses, storage, and outflows, including indication of annual variance in water usage rates, shall be quantified. Where there is a water-related challenge that would be a threat to good water balance for people or environment, an indication of annual high and low variances shall be quantified.			The water balance for Unit II was initially conducted in February 2018 by the environmental consultancy SANITEC. In 2019 and 2020, it was calculated by the site, with improvements in precision each year as they are installing more meters. The results are that the entries are mostly from the 3 underground wells, the municipal water, the reuse/recycled water and the rain water. As the tobacco leaf has a very low humidity when it arrives to site, it does not affect the balance.  In 2021, it was presented the water balance using the data of the full year 2020. The total external entries for 2020 were 46,080 m3, which correspond to:  • Water wells: 3823.63 • Municipal water: 4560.00 • Rainwater collected: 3284.17  The reused water is 4859.10 m3 in 2020.  The site reduced its total water input, as in 2018, the total external entries were 64189 T and in 2019 they were 46,383 m3  For outputs, about 59% is evaporated because of the heating at the tobacco manufacturing. 34% goes into the WWTP for reuse and effluent. 7% goes with the product.
1.3.4	Water quality of the site's water source(s), provided waters, effluent and receiving water bodies shall be quantified. Where there is a water-related challenge that would be a threat to good water quality status for people or environment, an indication of annual, and where appropriate, seasonal, high and low variances shall be quantified.			The main water input is through the 3 underground water wells, for which it is tested: coliforms, chloride, hardness, ph, total dissolved solids, inorganic substances (plumb, fluoride and nitrates), alkalinity and conductivity. The tests were conducted independently by the "Instituto de qualidade ambiental" and results of the 3 underground wells were provided:  Test result N° 2111/20 – A of 6th May 2020 / Water well DRH 507  Test result N° 2112/20 – A of 6th May 2020 / Water well DRH 508  Test result N° 2113/20 – A of 11th May 2020 / Water well DRH 1562  The municipal water is stored in tanks, for which it is tested sixmonthly: coliforms and sterichia coli. The tests were conducted independently by the "Instituto de qualidade ambiental" and results of the water quality were provided. It was sampled the results of one of the tanks:  Test result N° 3707/20 - A of 25th August 2020  For the water effluents, they have a program in a matrix "Medicao e Monitoramento" (Measuring and Monitoring) as this is a legal requirement. It also includes some voluntary testing. Some tests are conducted in-house and some tests are independently conducted by third parties.

Clause	Details	Yes	No	Comments/Evidence
				Septic tank sludge is collected and disposed through an external company approved by government. The monitoring matrix includes the 2 septik tanks to establish the frequency for the cleaning of the tanks.  Hazardous effluents (such as WWTP solids) are also collected by approved government companies.  Observation 01 - 2021: The hydrogeological comparative analysis among the internal underground water wells, and reference external underground water wells, should be tabulated in graphics of time vs concentration.
1.3.5	Potential sources of pollution shall be identified and if applicable, mapped, including chemicals used or stored on site.			They have a procedure for chemicals which is also used for ISO 14001 and OHSAS 18001 "Cadastro e Rotulagem de Productos Quimicos".  They have a list of all chemicals with a diagram of storage used on site at the intranet. Prior to be purchased, they need to be approved the first time by the environment, health & safety area. MSDS are available for each chemical, and also all the requirements of storage and use are to be fulfilled.  During the site visit, it was checked that the chemical storage is appropriately protected from leaking into water streams or soil, as it is in especially designed rooms for contention against spills. The site advised that they did not have any spill that could have polluted the water.
1.3.6	On-site Important Water-Related Areas shall be identified and mapped, including a description of their status including Indigenous cultural values.			They don't have any IWRA on-site.  Nevertheless, they have implemented a project "Environmental Recovery Green Area Unit 2":  Maintenance of the green area within the premises of Unit 2, with monitoring of health, maintenance of stakes, elimination of invasive species. The KPI is to maintain the 114 species.
1.3.7	Annual water- related costs, revenues, and a description or quantification of the social, cultural, environmental, or economic water- related value generated by the site shall be identified and used to inform the evaluation of the plan in 4.1.2.			<ul> <li>They have the spreadsheet "Custo de Agua".</li> <li>This includes:</li> <li>Cost of Municipal water use (CORSAN)</li> <li>Monitoring (water testings and calibration)</li> <li>Electricity for the water pumps</li> <li>Tanks cleaning</li> <li>Separately, they have the costs of:</li> <li>Chemicals used for Water &amp; Wastewater treatment from the SAP system at a spreadsheet "Produtos quimicos"</li> </ul>

Clause	Details	Yes	No	Comments/Evidence
				The site does not sell water, or waste water or related services, therefore, there is no revenue generated on those.  At the "2021 Water Stewardship Plan", it has been added the Value Creation which describes each of the 3 pillars values generated (Economic, environmental and social) either qualitative or quantitative, for each of the actions associated with the targets.
1.3.8	Levels of access and adequacy of WASH at the site shall be identified.			During the site visit, it was confirmed that the workers, have access to safe water, sanitation and hygiene, as this is also a requirement of the federal regulation for factories in Brazil.  Also, there is an annual test of water for drinking, hygiene and sanitation purposes conducted independently by the "Instituto de qualidade ambiental" and results were provided, and conclusions say it was compliant with the regulations:  • Test result "Agua Potabilidade – Predio (refeitorio)" N° 0337/21 – A of 29th January 2021  • Test result "Agua Potabilidade – Predio (refeitorio)" N° 0337/21 – B of 29th January 2021
1.4	Gather data on the site's indirect water use, including: its primary inputs; the water use embedded in the production of those primary inputs the status of the waters at the origin of the inputs (where they can be identified); and water used in out-sourced water-related services.			
1.4.1	The embedded water use of primary inputs, including quantity, quality and level of water risk within the site's catchment, shall be identified.			They have prepared the document "PMB Indirect Water Matrix". There, it is identified the 2 main which are:  • Tobacco growers (suppliers), of the same catchment as PMI.  • Tobacco processing (outsourced service). This is conducted by another tobacco international company at their own facility which is in the same town as PMI.  At the matrix, it is shown the estimated water footprint values (green, blue and grey) for the tobacco growers. Those values were taken from

Clause	Details	Yes	No	Comments/Evidence
				the webpage of the Water Footprint Network. This is multiplied by the annual m3, providing the total water use.  Other primary inputs are the Packaging Materials. PMI Headquarters is researching for the supplier performance related to water, as they have global procurement. The PMI Headquarter team was interviewed virtually at the audit. The key materials are films, paper, carton, acetate, etc.
1.4.2	The embedded water use of outsourced services shall be identified, and where those services originate within the site's catchment, quantified.			1.4.1 explained the outsourced service.  Indirect water use of the tobacco processing outsourced service was calculated for the new period. Data was collected with Stakeholder Universal Leaf and updated in the file.
1.4.3	Advanced Indicator  The embedded water use of primary inputs in catchment(s) of origin shall be quantified.			The Global PMI procurement area and the LEAF area of PMI conducted a study of the water footprint of the embedded water use for the tobacco growing world-wide, and for the key raw materials such as boxes and paper products. Locally, it was quantified the tobacco volume, and the water consumption as well as the percentage of tobacco growers using irrigation. The growers of 128 municipalities of the Pardo catchment and the Taquari-Antas catchment were part of the evaluation.
1.5	Gather water- related data for the catchment, including: water governance, water balance, water quality, Important Water- Related Areas, infrastructure, and WASH			
1.5.1	Water governance initiatives shall be identified, including catchment plan(s), water-related public policies, major publicly-led initiatives under way, and relevant goals to help inform site of possible opportunities for water stewardship collective action.			They have the document "Bacia Hidrográfica do Rio Pardo" (Pardo river catchment). This document is published by the "Comité Pardo" which is the management committee for the Rio Pardo catchment. It has a full map of the catchment, including all the rivers and water streams. It shows also the sub-catchments and key information. It focuses on superficial water. Nevertheless, the Rio Pardo catchment is one of the contributors to Guarani aquifer replenishment.  Note that PMB does not have any withdrawal from the water streams or rivers itself, as it is indirectly at this catchment because of the aquifer use and replenishment. They use the municipal water for human use only.

Clause	Details	Yes	No	Comments/Evidence
				The site also has a license "LU 00190-2018 Aplicação de Efluente" valid till 20/06/2023. to water the gardens with the WWTP effluents, however, this has not implemented yet as they would need to have additional testing & controls.
1.5.2	Applicable water-related legal and regulatory requirements shall be identified, including legally-defined and/or stakeholder-verified customary water rights.			They have a legal consultant "IUSNATURA" that provides a webportal with all the applicable legislation for environmental and H&S. In this webportal, it can be searched by topic, theme, or specific regulation.  For water, it has the following sub-categories:
1.5.3	The catchment water-balance, and where applicable, scarcity, shall be quantified, including indication of annual, and where appropriate, seasonal, variance.			The "Diretriz AWS" document, chapter 3.1.1 describes the catchment, the users and the population.  "Relatório etapa A – Comite Bacia Pardo" is the catchment plan prepared for the River Pardo Committee, which is a committee that includes members of the government, unions, industry, agriculture, academia, representatives of the communities, etc. PMB currently is member of this Committee.  This public report includes a catchment plan and significant initiatives and water-related policy goals. These are organized in a timeline of 12-year plan detailing the economic investments needed for each action.  According to Relatório etapa A, the Pardo River Basin availability varies related to spatial locations (sub river basins). Areas with more human activities represent higher risk on water quality and quantity. The critical sub river basin is middle and lower portion of the Basin. Some general patterns of concerns related to River Basin users are classified as critical, middle or lower. The most critical points highlights are the poor management of protect areas, ciliary forest deficit and banks erosion followed by inadequate soil uses, considered as middle critical point.  Relatorio etapa A points out that the River Basin future trends are strongly related to structural and not-structural actions of River Basin

Clause	Details	Yes	No	Comments/Evidence
				With regards to the water catchment of Rio Pardo, the document "Relatório etapa A – Comite Bacia Pardo" at chapter 3.3.2 "water balance based in consumptions" explains the catchment calculations based on the temporality which is the Dry season and Wet season. The study includes the superficial water, as well as the return underground water.
				The results of the study indicate that for the catchment, the water balance is sustainable most of the year, but for the area PBI where Santa Cruz do Sul is located, it is under significant deficit concentrated in the summer months of December & January.
				There is a new office for the Comité Bacia Pardo which reviewed the Relatorio and updating the key topics, such as risks that was the priority. The "Comitê Pardo" updated the plan called "Bacia Hidrográfica do Rio Pardo - Plano de Bacia – 1ª Aproximação, Setembro de 2018" reviewing the data for risks at slides 48-50 with the table containing the problems and the slides 51-54 with the proposed solutions.
				Note that the municipal water supplier Corsan withdraw water from the Rio Pardinho catchment, so the municipal water use at the site, depends of this catchment.
				The use of the municipal water at the site is only for food preparation and dish washing, human use, etc.
				Observation 02 - 2021: The catchment report focusses mostly on the superficial water, nevertheless, it should be gathered further information of the interphase between the Rio Pardo catchment and the Guarani aquifer. The information should consider the overall local aquifer water reserves, replenishment and extractions, as it is a larger aquifer that is below several countries and catchments.
1.5.4	Water quality, including physical, chemical, and biological status, of the catchment shall be identified, and where possible,			They have the monitoring water quality results of each of the 3 underground water wells. They have a matrix "Medicao e Monitoramento RD 010 - Medição e Monitoramento Ambiental Unidade II" where they summarize all the legal requirements, responsibilities, frequency and parameters to be analysed.
	quantified. Where there is a water-related challenge that would be a threat to good water quality status for people or environment, an indication of			The main water input is through the 3 underground water wells, for which it is tested: coliforms, chloride, hardness, ph, total dissolved solids, inorganic substances (plumb, fluoride and nitrates), alkalinity and conductivity. The tests were conducted independently by the

Clause	Details	Yes	No	Comments/Evidence
	annual, and where appropriate, seasonal, high and low variances shall be identified.			<ul> <li>"Instituto de qualidade ambiental" and results of the 3 underground wells were provided:</li> <li>Test result N° 2111/20 – A of 6<sup>th</sup> May 2020 / Water well DRH 507</li> <li>Test result N° 2112/20 – A of 6<sup>th</sup> May 2020 / Water well DRH 508</li> <li>Test result N° 2113/20 – A of 11<sup>th</sup> May 2020 / Water well DRH 508</li> <li>Test result N° 2113/20 – A of 11<sup>th</sup> May 2020 / Water well DRH 1562</li> <li>On march, 2005, data of the "Relatório etapa A – Comite Bacia Pardo, Pardo River Basin availability was in balance although water quality already represented a concern for basin users.</li> <li>Observation 03 - 2021: It should be considered to conduct further studies to identify the geological reason of the highly basic pH (&gt;9).</li> </ul>
1.5.5	Important Water-Related Areas shall be identified, and where appropriate, mapped, and their status assessed including any threats to people or the natural environment, using scientific information and through stakeholder engagement.			<ul> <li>"Relatório etapa A – Comite Bacia Pardo" identifies 6 IWRAs for the Pardo Catchment, describing the status at the time of the study (2005) and conclusions on future general perspectives.</li> <li>"Diretriz AWS", chapter 3.1.2 describes the IWRAs. It lists the same 6 IWRAs with their current area in hectares. Of them, only 2 are within Santa Cruz do Sul region, which are: <ul> <li>Cinturao verde de Santa Cruz do Sul (forest area)</li> <li>Parque Natural Municipal da Gruta do Indio (recreational park)</li> </ul> </li> </ul>
1.5.6	Existing and planned water-related infrastructure shall be identified, including condition and potential exposure to extreme events.			"Relatório etapa A – Comite Bacia Pardo" provides information on current or projected sufficiency of water to meet the needs of the catchment. Chapter 2.4 includes the problems related to water resources and the exposure to extreme events such as floods and drought.
1.5.7	The adequacy of available WASH services within the catchment shall be identified.			The Municipality of Santa Cruz do Sul provides a high level of water and effluent management to the community in general. Further regions of the state, have a lower level of WASH, especially in the rural areas and poverty urban areas. For example in Porto Alegre metropolitan area, about 60% of the population does not have full WASH"

Clause	Details	Yes	No	Comments/Evidence
1.5.8	Advanced Indicator Efforts by the site to support and undertake catchment level water-related data collection shall be identified.			PMI Brazil tested the undergound water of a location 5km from the site as a referential point, for understanding better the water parameters at the catchment and compare with their test results.  Evidences were verified comparing the analytical results of the external reference well (production well of a stakeholder called Premium) upstream of the PMB groundwater catchment area. The results between wells did not show important differences with the exception of Ph values for which there are no maximum reference values. Also the 90 days plan foresees the monitoring of aquifer water collection for hydrogeochemical quality control from wells of partner local producers that can may enable the correlation of better quality water with a given aquifer system.
1.5.9	Advanced Indicator The adequacy of WASH provision within the catchments of origin of primary inputs shall be identified.			The Taquari-Antas and the Pardo are catchments part of a mayor watershed that share partially their boundaries. Most of the tobacco growers that supply to the factory are located at the Taquari-Antas catchment. There is a WASH challenge there related to the drinking water as the fluoride content is higher than the acceptable thresholds in 64% of the samples collected in tobacco growers who has groundwater sources. The Taquari-Antas catchment committeee indicated that the fluoride content was a concern since 2012, but no action was taken. The effects in the humans is a potential dental disease called "fluorosis" that has no cure. It was verified in the field that the partnership with the local university UNISC. There is a permanent dialogue and development with financial and logistical support for the implementation of pilots for the purification of fluoride naturally present in groundwater captured by some production wells belonging to rural producers who have links with the PMB. A field survey was carried out where a tobacco producer, and PMB supplier, allowed the installation of a fluoride filter in his home that reduces the fluoride concentration from 3.86 mg/L to 0.02 mg/L. The degree of efficiency of the fluoride filters is monitored with monthly collections that could be seen to be performed properly analyze fluoride and other potability parameters. For now one filter is operative and a second pilot is expected to be implemented soon.
1.6	Understand current and future shared water challenges in the catchment, by linking the water challenges identified by stakeholders with the site's			

Clause	Details	Yes	No	Comments/Evidence
	water challenges.			
1.6.1	Shared water challenges shall be identified and prioritized from the information gathered.			"Relatório etapa A – Comite Bacia Pardo" Chapter 2.4 explains the problematic of the catchment. Then, the table 6.2 specifies the 17 shared water challenges per region, associated with water balance, water quality, water related areas and water/land use. They have been evaluated as high, medium and low and therefore, prioritized accordingly. The matrix has been added to the "Diretriz AWS" document.
1.6.2	Initiatives to address shared water challenges shall be identified.			Chapter 7 of the "Relatório etapa A – Comite Bacia Pardo" if for the future perspectives. It proposes initiatives to address the challenges, which are: reduction of specific consumption, adequacy of periods of demand, planning of occupation of risk areas (subject to floods), retention and damping of flood spikes and regularization of flows, actions to improve water quality, among others.
1.6.3	Advanced Indicator Future water issues shall be identified, including anticipated impacts and trends			PMI Brazil started with a socio-environmental baseline review "Diagnostico Socio-Ambiental" through the NGO "Produzindo Certo". This was conducted in collaboration with the University of Santa Cruz do Sul and Sinditabaco which is the tobacco growers union. This baseline review was undertaken at 123 tobacco growers. A pilot was conducted previosuly for the region of Venancio Aires, and as it was successful, the project was launched. For year 2021 the target if evaluating the Rio Grande do Sul tobacco growers, and in 2020, they will evaluate the Santa Catarina and Paraná tobacco growers. It starts with a "Diagnostico de Propriedad Rural" which is an evaluation at each tobacco farm of the land use and soil coverage, the biomass and conservation of APP (Areas de Protección Permanente).  Future water issues identified are the high levels of fluoride and pesticides which impact the water quality, and that the trend of the pesticides can increase if there is no sustainable agriculture. It was verified in the field that the action of the 'Produzindo Certo' teams are able to identify opportunities with tobacco producers to anticipate problems related to water quality, or the suitability of the profile of some of them for the implementation of pilot projects such as of fluoride. As an example, the partnership with Sinditabaco results in the annual collection of containers used in the action of pesticide use. The project has been in existence for 20 years and is a pioneer in Brazil. 2020 data indicate a collection of 17.7 million packages in the three states covered by the program (Paranã, Rio Grande do Sul and Santa Catarina), with an investment of R\$\$17.7 million reais. The degree of control of the packaging collection process is high, as it uses a daily and online control system

Clause	Details	Yes	No	Comments/Evidence
				positioning systems for trucks and data update such as quantity of packages/location/day
1.6.4	Advanced Indicator Potential water-related social impacts from the site shall be identified, resulting in a social impact assessment with a particular focus on water.			The "Diagnostico Socio-Ambiental" covers also the social impacts like slavery work and child labor, or fair salary for salaried employees. A full assessment is conducted for each tobacco grower every 3 years. The score is from 0 to 100 for each of the issues evaluated. If there are no conformities identified, or partial deviations, an action plan is established together with the NGO "Produzindo Certo".  There are two consistent evidence relating water care and social impact: the pilot of fluoride filters with producers, and the payment of environmental services for the preservation of springs within rural properties of agricultural producers within the area of direct influence and indirect effect of the SCS PMB.
1.7	Understand the site's water risks and opportunities: Assess and prioritize the water risks and opportunities affecting the site based upon the status of the site, existing risk management plans and/or the issues and future risk trends identified in 1.6.			
1.7.1	Water risks faced by the site shall be identified, and prioritized, including likelihood and severity of impact within a given timeframe, potential costs and business impact.			They have the document "FSIG 002 - SIG Riscos e Oportunidades" (Risk and Opportunities Evaluation) which is a matrix for risks for the site. Each of these risks is evaluated by severity, frequency and controls effectiveness.  If the risk is higher than a threshold, there is a mitigation plan. On this matrix, 6 risks were over the threshold, and all of them had action plans in development for 2020 and for 2021. These 6 risks were regarding: operations alignment with strategy, suppliers' specifications in contracts, interested parties' expectations, disclosure to community / society, localization of the facility and dependence of underground water, compliance with regulations and protocols.
1.7.2	Water-related opportunities shall be identified, including how the site may participate, assessment and prioritization of potential savings,			With the same document "FSIG 002 - SIG Riscos e Oportunidades", they identified the Opportunities. The 2021 Water Stewardship Plan show the following opportunities to be actioned:  • Reduce the water losses • Communication of water action to stakeholders / community

Clause	Details	Yes	No	Comments/Evidence
	and business opportunities.			<ul> <li>Better soil management for tobacco growers</li> <li>Industrial innovation</li> <li>Improvements to water balance</li> </ul>
1.8	Understand best practice towards achieving AWS outcomes: Determining sectoral best practices having a			
	local/catchment, regional, or national relevance.			
1.8.1	Relevant catchment best practice for water governance shall be identified.			The best practice in Santa Cruz do Sul and the region is to participate of the Rio Pardo Committee.
1.8.2	Relevant sector and/or catchment best practice for water balance (either through water efficiency or less total water use) shall be identified.			The best practice in the tobacco sector is to compare best practices from different countries of the same company and benchmark with the tobacco industry.
1.8.3	Relevant sector and/or catchment best practice for water quality shall be identified, including rationale for data source.			The factories of the sector and/or catchment conduct water tests for quality of the groundwater and of the municipal water. Usually, they have WWTP for the effluents to comply with the local regulation.  The tobacco companies have joint efforts with the farmers to improve water quality.
1.8.4	Relevant catchment best practice for site maintenance of Important Water- Related Areas shall be identified.			The best practice for maintenance / improvement of IWRAS would be to protect an area on-site, and/or to support the protection of areas in the catchment. As Brazil has a high biodiversity, the companies tend to support programs related to nature, forest, biodiversity, water streams.
1.8.5	Relevant sector and/or catchment best practice for site provision of equitable and adequate WASH services shall be identified.			The sites best practice in the sector and the catchment is to provide WASH services within their facilities.
2	COMMIT AND PLAN			
2.1	Commit to water stewardship by having the senior-most manager in			

Clause	Details	Yes	No	Comments/Evidence
	charge of water at the site, or if necessary, a suitable individual within the organization head office, sign and publicly disclose a commitment to water stewardship, the implementation of the AWS Standard and achieving its five outcomes, and the allocation of required resources.			
2.1.1	A signed and publicly disclosed site statement OR organizational document shall be identified. The statement or document shall include the following commitments:  - That the site will implement and disclose progress on water stewardship program(s) to achieve improvements in AWS water stewardship outcomes  - That the site implementation will be aligned to and in support of existing catchment sustainability plans  - That the site's stakeholders will be engaged in an open and transparent way  - That the site will allocate resources to implement the Standard.			Commitments at PMI Corporate webpage (in English):      PMI Environmental Commitment v1.2/30.06.2020, which includes: "Manage water sustainably by reducing the water use and effluent discharges from our factories; assessing water risks where we operate; implement water stewardship at all our factories and working with stakeholders in shared watersheds towards the five water stewardship outcomes (good water governance, sustainable water balance, good water quality, healthy status of high conservation value areas, and access to water for sanitation and hygiene (WASH)"    https://www.pmi.com/resources/docs/default-source/sustainability-reports-and-policies/pmi%27s-environmental-commitment.pdf?sfvrsn=c0c191b5_4    AWS Commitment statement (in portuguese): This statement was prepared covering all the requirements of the AWS standard. It is in Portuguese and signed by the Operations Director and the Sustainability Manager for the factory Santa Cruz do Sul and updated to V3 on the 22nd March 2021. This is published at the its webpage: https://pmidotcom3-prd.s3.amazonaws.com/docs/default-source/brazil-market-page/compromisso-%C3%A1gua.png?sfvrsn=2fea0b4_4  And included in the Sustainability Report of PMB

Clause	Details	Yes	No	Comments/Evidence
				https://www.pmi.com/resources/docs/default-source/brazil-market-page/relat%C3%B3rio-desustentabilidade-pmb-2020.pdf?sfvrsn=f86726b7_4
				Observation 03-2020: To update the AWS information of PMB at the market webpage https://www.pmi.com/markets/brazil/en
				Closed 2021: Webpage updated with new documents published.
2.2	Develop and document a process to achieve and maintain legal and regulatory compliance.			
2.2.1	The system to maintain compliance obligations for water and wastewater management shall be identified, including: Identification of responsible persons/positions within facility organizational structure Process for submissions to regulatory agencies.			They have a legal consultant "IUSNATURA" that provides a webportal with all the details applicable legislation.  It also has a system for verifying compliance using life questions and with the ability to upload evidences.  Furthermore, this legal consultant conducts a yearly internal legal compliance audit to the site. This is also a requirement of ISO 14001.  It was checked the "legal compliance audit" response of September 2020. There was one internal non-conformity which was to register on the electronic platform SIOUT of the authority, about the 4 monitoring wells of the recreation club area of the company, which are used only for monitoring purpose, as they are not wells in use. They addressed through uploading the electronic application and now they appear the 4 water wells at the SIOUT
2.3	Create a water stewardship strategy and plan including addressing risks (to and from the site), shared catchment water challenges, and opportunities.			
2.3.1	A water stewardship strategy shall be identified that defines the overarching mission, vision,			They have the long-term strategy "Compelling Business Needs" for most sites of the world in PMI that is a diagram with KPIs associated and includes sustainability. This document is the business strategy and is updated yearly.  The CBN specifies 3 key objectives to water:  • water monitoring in a monthly basis

Clause	Details	Yes	No	Comments/Evidence
	and goals of the organization towards good water stewardship in line with this AWS Standard.			<ul> <li>increase reuse of water</li> <li>increase number of people listened/attended/involved in AWS</li> </ul>
2.3.2	A water stewardship plan shall be identified, including for each target:  - How it will be measured and monitored  - Actions to achieve and maintain (or exceed) it  - Planned timeframes to achieve it  - Financial budgets allocated for actions  - Positions of persons responsible for actions and achieving targets  - Where available, note the link between each target and the achievement of best practice to help address shared water challenges and the AWS outcomes.			The "2021 Water Stewardship Plan" was developed in an excel. There are columns for:  indicator actions owner contributor KPI investment AWS outcomes associated value generated (environmental, social and economic) priority timeframe through weekly monitoring  The actions proposed are aligned to the shared water challenges / risks and opportunities. The content of the action plan was reviewed and there were clear benefits for water stewardship  For this year, the new tool is called "90 days plan 2021 Water Stewardship", so, it is a living tool where it is tracked the next 90 days coming, and keeps the history of the previous.  On the document FISG 002 – AWS Riscos e Oportunidades there is a detailed analysis for each risk and opportunity identified
2.3.3	Advanced Indicator The site's partnership/water stewardship activities with other sites within the same catchment (which may or may not be under the same organisational ownership) shall be identified and described.			The site participates of the Catchment Committee of Rio Pardo, and of the AGE Pardo Committee which is a partnership specific for water stewardship at the catchment level. Furthermore, they held meetings with suppliers of the same catchment such as ULT (Universal Leaf Tobacco) factory and Premium Tabacos do Brazil which is a local company. More directly, the site interacts with another factory (Premium) to exchange information on the analytical results of groundwater from production wells, as they share the same aquifer. The data is processed in the form of graphs where all wells are represented. The graph is time versus concentration with respect to the parameter of interest in mg/L.
2.3.4	Advanced Indicator The site's partnership/water stewardship			The site has meetings with the Taquari-Antas catchment for planning and implementing the WASH project.  The department of External Affairs of PMB participated in several events to engage with

Clause	Details	Yes	No	Comments/Evidence
	activities with other sites in another catchment(s) (either under same corporate structure or with another corporate site) shall be identified			sites and stakeholders of other catchments. They also published with the International Water Association the article "Business Transformation as a gateway to sustainability" in the book "Sustainable Industrial Water Use". Besides, the site is motivating L'oreal for implementing water stewardship at their office building in Rio de Janeiro.  Corporatively, the site is helping PMI Mexico and PMI Argentina to achieve and maintain their AWS certifications.
2.3.5	Advanced Indicator Stakeholder consensus shall be sought on the site's water stewardship plan. Consensus should be achieved on at least one target. A list of targets that have consensus and in which stakeholders are involved shall be identified.			CORSAN (government water supplier agency), Santa Cruz do Sul University, and PMI achieved concensus that the target of improving the WASH conditions in the Pardo catchment and in the Taquari-Antas catchment are necessary since long time ago. The voluntary participation of 120 tobacco farmers in Taquari-Antas Catchment is a demonstration of the level of involvement of the stakeholders.
2.4.1	Demonstrate the site's responsiveness and resilience to respond to water risks			
2.4.1	A plan to mitigate or adapt to identified water risks developed in co-ordination with relevant public-sector and infrastructure agencies shall be identified.			They have the document "Plano de Contingencia de Agua", code PO EHS EHS 0001. This is a very complete responsive plan for water related risks. They identified and describe how to respond to:  • water shortage of municipal water,  • underground water polluted,  • water infrastructure breakage.  Note that flood is a low risk at the zone, therefore, there was no need to prepare a plan for floods. A hypsometric map of Santa Cruz do Sul was shown to demonstrate the risk zones for flooding.  Also, they have preventive maintenance for pipelines, tanks, and other water infrastructure at the site for avoiding any potential incident.  The site has the document "Plano de Resilencia de Agua" which is a specific plan for resilience, code PO EHS EHS 0002. The key topics for resilience identified are:  • water shortage at Santa Cruz do Sul and the factory site,

Clause	Details	Yes	No	Comments/Evidence
				local infrastructure deterioration.
				Observation 04 - 2021: At the site visit to the underground water wells of the site, it was confirmed that they are protected, however, not completely invulnerable.
2.4.2	Advanced Indicator  A plan to mitigate or adapt to water risks associated with climate change projections developed in coordination with relevant public-sector and infrastructure agencies shall be identified.			They also started an innovation process with osmosis for recirculating the water that will reduce in 20% the consumption of the groundwater which represents 75.5% of the total site consumption. They have a resilience plan in case there is less availability of water due to climate change which includes 2 additional actions which are to reduce water use from the server CORSAN, through bringing the things of the canteen pre-made. Also, through reducing the air conditioning.
3	IMPLEMENT			
3.1	Implement plan to participate positively in catchment governance.			
3.1.1	Evidence that the site has supported good catchment governance shall be identified.			the 9th January 2020 the AGEPARDO "Association for better management of Rio Pardo catchment". This will facilitate the implementation of projects.  PMB participates from the AGEPARDO meetings. It was provided the last meeting minute "Ata N° 02/2021" which met the 17th August 2021.  The site supported good catchment governance through the actions shown at "2021 Water Stewardship Plan". These are: Implementation of local systems for water limits consumption  Communication channel with all: Green Card tool for good water usage  Publication of book chapter (Sustainable Industrial Water Use: Perspectives, Incentives,  and Tools   eBooks Gateway   IWA Publishing (iwaponline.com)  "Program for Receiving Empty Pesticide containers:  SindiTabaco is the entity that represents the common interests of its 15 member companies and is strongly active in issues related to the sustainability of the production chain, in regulatory matters and in the visibility of the sector.  Projeto "quintais" / Backyards Project: The Organic Fruit "quintais" Project

Clause	Details	Yes	No	Comments/Evidence
				privileges technically and conceptually the principles of ecologically-based production, not recommending the use of pesticides to control pests, diseases or invaders. To disseminate information, the technical team conducts technical visits to beneficiaries during the first three years of implementation and management of the Quintais. After the onset of the pandemic, a communication channel was created with beneficiaries and a technical support team for assistance via whatsapp and telephone.  Train 100% of the unit 2 population in the Corporate Sustainability Instruction: Training aimed at improving the population's knowledge in environmental sustainability, good use of water, chemical products, among other unit sustainability topics.
3.1.2	Measures identified to respect the water rights of others including Indigenous peoples, that are not part of 3.2 shall be implemented.			The "Relatório etapa A – Comite Bacia Pardo" was an inclusive research, that identified all stakeholders of the catchment. Water quality was one of the key topics as it affects availability for the people.
3.1.3	Advanced Indicator Evidence of improvements in water governance capacity from a site-selected baseline date shall be identified.			They prepared an organizational chart showing the baseline team (2018-2019) involved in water governance in one color, and the increase in the team for the period 2020-2021. The new involvement is from areas of LEAF, neighbours association, other catchment committees, third party hydrologist, global envrionmental PMI manager and other sites experts.  PMB has established since January 2021 a systematic approach to improve the governance "called 90 days plan 2021". Summarizing it consists in a 3 months control actions with objective tasks with responsible "owner", budget, deadline and outcomes specifically related to AWS. Related to their own water source for example the outputs were: a) Field incursions with the purpose of improving the surroundings of Plant II on geological mapping, b) Search for additional information to that available in SIAGAS/CPRM (Brazilian public institutions that have geological and hydrogeological data) which is linked to the drilling of existing wells in the industrial unit and within the surroundings 5 km, Hydrogeochemical monitoring of groundwater from wells belonging to producers linked to Philip Morris.
3.1.4	Advanced Indicator Evidence from a representative			No sufficient actions for fully achieving points.  The site received a certificate from the Global Team of PMI for supporting in the

Clause	Details	Yes	No	Comments/Evidence
	range of stakeholders showing consensus that the site is seen as positively contributing to the good water governance of the catchment shall be identified.			implementation of other sites. However, it is expected that the consensus of stakeholders not directly related to the PMB will be reached through opinion polls, or the approval of technical articles in the scientific community. A strategy is being designed in this direction.
3.2	Implement system to comply with water-related legal and regulatory requirements and respect water rights.			
3.2.1	A process to verify full legal and regulatory compliance shall be implemented.			The water licenses for each of the 3 underground water wells were shown at the audit. They were issued by "Secretaria do Medio Ambiente – Departamento de Recursos Hidricos" of the Rio Grande do Sul state. It includes the ratio threshold for each of them in m3/day. The licences details are:  • N° 1562 / 2012, of 27th Sept 2012 for 168m3/d  • N° 508 / 2004, of 12th August 2004 for 128m3/d  • N° 507 / 2012, of 12th August 2004 for 280m3/d  Since the start of 2018, there is a new law for Brazil to register the water licenses through input of the authorized water volume of extraction per water well. This is a new tool of the government to control and manage better the licenses, as well as for traceability. The site showed the records that on 31/01/2018 they entered the data and there is a confirmation letter from the "Secretaria do Ambiente e Desenvolvimento Sustentável" of Rio Grande do Sul (local environmental agency).  For the municipal water CORSAN which is a public company of the local government, they receive monthly invoices which validates that they are authorized for the water use.  For water management, they have an operation license N° 05781/2020 which applies for the WWTP granted by FEPAM from 25/09/2020 to 16/01/2025. Chapter 4 of this license is for liquid effluents treatment and specifies the threshold parameters for waste water quality prior to discharge to water bodies. Furthermore, the license is also for nature conservation,

Clause	Details	Yes	No	Comments/Evidence
				monitoring of water wells, and other environmental topics.  As they are not located in an IWRA, they do not need a license associated to that topic.
3.2.2	Where water rights are part of legal and regulatory requirements, measures identified to respect the water rights of others including Indigenous peoples, shall be implemented.			The site has the licenses necessary for the underground water, which is the requirement for operation in Brazil.
3.3	Implement plan to achieve site water balance targets.			
3.3.1	Status of progress towards meeting water balance targets set in the water stewardship plan shall be identified.			The site water balance targets are tracked at the "2021 Water Stewardship Plan". The specific actions associated to the target:  Reuse of WWTP water for cooling tower and boiler  Usage of rain water for primary process climatization  Reuse of WWTP water for toilet  Double flushing toilet (large/small flush)  Reduction in the use of water in the Canteen year after year: With awareness and actions to mitigate losses, obtain a reduction of at least 1% per year.  Installation of 13 electronic water meters: According to outputs water balance, the installation of 13 new meters aims to have more accurate data for the mass balance.  Installation of access blocks in the unit's water tanks: Action aimed at preserving drinking water in 6 water tanks.  Development of the Digital Water Balance: Aiming at real-time monitoring of the unit 2 mass balance with supervisory data.  Monitoring 100% of Green Cards issued: Monitor and seek management support in 100% of cards issued, especially those related to the good use of water.  The KPI for tracking is the Total Water Consumption [m³/Mio Cig] and the reduction was achieved as follows (adjusted with the new methodology more precise):  2019: 5.90  2020: 3.83  2021: 3.29

Clause	Details	Yes	No	Comments/Evidence
3.3.2	Where water scarcity is a shared water challenge, annual targets to improve the site's water use efficiency, or if practical and applicable, reduce volumetric total use shall be implemented.			N/A, as there is no water scarcity situation detected
3.3.3	Legally-binding documentation, if applicable, for the re-allocation of water to social, cultural or environmental needs shall be identified.			N/A, as in their case, there is no legally-binding documents that request the re-allocation fo water to social, cultural or environmental needs.
3.3.4	Advanced Indicator The total volume of water voluntarily reallocated (from site water savings) for social, cultural and environmental needs shall be quantified.			No actions related to this.
3.4	Implement plan to achieve site water quality targets.			
3.4.1	Status of progress towards meeting water quality targets set in the water stewardship plan shall be identified.			<ul> <li>The site water quality targets are tracked at the "2021 Water Stewardship Plan". The key actions are to:</li> <li>Zero fines and</li> <li>No major non-conformity at the legal compliance audit.</li> <li>"Responsible Leaf" Program: based on providing a personalized socioenvironmental diagnosis of the properties, and based on that, putting together an appropriate action plan for each tobacco producer.</li> <li>"Auéra" program: protect biodiversity in the area of family farming, conserving natural resources in accordance with the United Nations Organization's sustainable development goals.</li> <li>Program for Receiving Empty Pesticide containers, developed in a pioneering way for over 20 years and benefiting more than 117 thousand tobacco farmers in Rio Grande do Sul and Santa Catarina states.</li> </ul>

Clause	Details	Yes	No	Comments/Evidence
				They have a document "Planilha Medicao e Monitoramento" which is a monitoring and measurement matrix. It details in each column: type of water, what is monitored, the location, frequency, area responsible, analysis/testing to be undertaken, and associated regulation.
				Test results checked at the audit were all compliant with maximum permissible thresholds.
				It is monitored: 3 underground wells, process water, municipal water entry (several parametres), water tanks, water stream (before and after release), waste water treatment effluent, and others.
				The main water input is through the 3 underground water wells, for which it is tested: coliforms, chloride, hardness, ph, total dissolved solids, inorganic substances (plumb, fluoride and nitrates), alkalinity and conductivity. The tests were conducted independently by the "Instituto de qualidade ambiental" and results of the 3 underground wells were provided:
				<ul> <li>Test result N° 2111/20 – A of 6<sup>th</sup> May 2020 / Water well DRH 507</li> </ul>
				<ul> <li>Test result N° 2112/20 – A of 6<sup>th</sup> May 2020 / Water well DRH 508</li> </ul>
				<ul> <li>Test result N° 2113/20 – A of 11<sup>th</sup> May 2020 / Water well DRH 1562</li> </ul>
				The municipal water is stored in tanks, for which it is tested sixmonthly: coliforms and sterichia coli. The tests were conducted independently by the "Instituto de qualidade ambiental" and results of the water quality were provided. It was sampled the results of one of the tanks:
				<ul> <li>Test result N° 3707/20 - A of 25<sup>th</sup> August 2020</li> </ul>
				The water output is the effluent treated at the waste water treatment plant, for which it is tested: coliforms, colour, DBO5, CDO, phosphorous, total nitrogen, odour, oils, solids, foam, floating material, temperature and pH. The tests were conducted independently by the "Instituto de qualidade ambiental" and results were provided:
				<ul> <li>Test result N° 4446/20 - A of 22<sup>nd</sup> October 2020</li> </ul>
3.4.2	Where water quality is a shared water challenge, continual improvement to achieve best practice for the site's effluent shall be identified and where applicable, quantified.			N/A, as water quality / effluents of the site is not currently a challenge, however, they are making efforts to expand to their supply chain, so it is in improvement with tobacco farmers, as described in this report.

Clause	Details	Yes	No	Comments/Evidence
3.5	Implement plan to maintain or improve the site's and/or catchment's Important Water-Related Areas.			
3.5.1	Practices set in the water stewardship plan to maintain and/or enhance the site's Important Water-Related Areas shall be implemented.			<ul> <li>At the "2021 Water Stewardship Plan", the specific actions associated were:</li> <li>"Auéra" program: protect biodiversity in the area of family farming, conserving natural resources in accordance with the United Nations Organization's sustainable development goals.</li> <li>"Responsible Leaf" Program: based on providing a personalized socioenvironmental diagnosis of the properties, and based on that, putting together an appropriate action plan for each tobacco producer.</li> <li>On the first audit, it was visited the "Cintarao verde de Santa Cruz do Sul" and the "Parque Natural Municipal da Gruta do Indio". The forest area is a habitat for vegetation and fauna. The Recreational Park includes waterfalls and it is a meeting place for the community. Also, it was visited a project implemented at farms, to prevent the cattle to pollute the water streams as well as minimizing the agriculture nearby, promoting the growth of the native species. This has the objective to protect the riparian areas of the water streams, avoid erosion and enhance resilience. PMB joined as member of this project in 2018. Farmers must be approached for a voluntary participation as they are contributing</li> </ul>
3.5.2	Advanced Indicator Evidence of completed restoration of nonfunctioning or severely degraded Important Water-Related Areas including where appropriate cultural values from a site-selected baseline date shall be identified. Restored areas may be outside of the site, but within the catchment.			with their own land to protect the water streams. The started implementing a project with AGEPARDO which is the association created in 2020 to improve the Pardo catchment. The project is about recoverig 300m of a riparian forest up to March 2022. PMB is the only private company participating in AGEPARDO, but they are looking for other companies to get associated.  Wihtin the site, there is also an ongoing restoration program for the native vegetation (mata atlántica) of 17 hectares. The diagnostic was in 2014, and since 2017 started the gradual restoration. Nowadays, they are also removing the exotic specimens that are invasive. The total of species at the site are more than 100 and they are healty. They provide an annual report to SEMA (Secretaria Estatal de Medio Ambiente) with the status and description of the vegetation and the maintenance.  During the site visit, it was explained at the interviews by the stakeholders that AGEPARDO also recently recommended a project to recover 300m of the river banks of the Pardo River, a projects of R\$ 300.000 (U\$ 127,000) as part of

Clause	Details	Yes	No	Comments/Evidence
				the environmental compensation of CORSAN, city hall and state government for the construction of Lagoa Dorada (artificial water storage system in the city of Santa Cruz do South for dry seasons).
3.5.3	Advanced Indicator  Evidence from a representative range of stakeholders showing consensus that the site is seen as positively contributing to the healthy status of Important Water-Related Areas in the catchment shall be identified.			No sufficient actions for fully achieving points.  "The ANA (Autoridad Nacional de Agua de Brazil) was awarded as part of the program "Produtor de Agua (water producer)"" for their project of ""protector das aguas"" at Veracruz area.  The CEBDS (Sustainable Development Council of WBCSD Brazil) included in their webpage the description of the project ""Protetor da Águas".
3.6	Implement plan to provide access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers at all premises under the site's control.			
3.6.1	Evidence of the site's provision of adequate access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers onsite shall be identified and where applicable, quantified.			There is an annual test of water for drinking, hygiene and sanitation purposes conducted independently by the "Instituto de qualidade ambiental" and results were provided, and conclusions say it was compliant with the regulations:  • Test result "Agua Potabilidade – Predio (refeitorio)" N° 0337/21 – A of 29th January 2021  • Test result "Agua Potabilidade – Predio (refeitorio)" N° 0337/21 – B of 29th January 2021  Furthermore, the company conducts a monthly water quality test of the CORSAN water input which is the only source used for human consumption at the site.  During the site visit, it was confirmed that the workers, have access to safe water, sanitation and hygiene, as this is also a requirement of the federal regulation for factories in Brazil.
3.6.2	Evidence that the site is not impinging on the human right to safe water and sanitation of			The local communities mostly have access to safe drinking water and sanitation either with effluents to the public supplier or septic tanks. Nevertheless, there are areas that need support to improve their WASH.

Clause	Details	Yes	No	Comments/Evidence
	communities through their operations, and that traditional access rights for			The site WASH targets are tracked at the "2021 Water Stewardship Plan". Their targets for the community are:  Increase water quality for contracted formers own consumption, through filters.
	Indigenous and local communities			farmers own consumption, through filters installation, and spring water protection
	are being respected, and that remedial actions are in place where this is not the case, and			<ul> <li>"Responsible Leaf" Program: based on providing a personalized socio- environmental diagnosis of the properties, and based on that, putting together an appropriate action plan for each tobacco producer.</li> </ul>
	that these are effective.			<ul> <li>Collect water samples at Venâncio Aires</li> <li>Present results UNISC: 2 filters in Q3/2021</li> </ul>
				The previously initiated projects to achieve the target, prior to Venancio Aires were:
				- Watershed project in Sinimbú:  16 farmers already contemplated by the initiative (PMB) and water analysis done before the implementation of the protection. Waiting to finalize all the protection (10 more) and to analyze water quality after the implementation ir order to check the improvements which is in delay due to Covid moment.
				- <u>Project in Caxambú</u> All caxambú already implemented and water analysis done before the implementation. Waiting for the Covid moment finish in order to start new water sample collection to analyze the benefits and quality improvements.
				During the previous audit, it was visited a project at the Sinimbu council, which is focused on WASH, as it is to provide safe drinking water for the homes that are not connected to the public water network.
3.6.3	Advanced Indicator  A list of actions taken to support the provision to stakeholders in the catchment of access to safe drinking water, adequate sanitation and hygiene awareness shall be identified.			The site has a list of actions taken to support the provision to stakeholders in the catchment of access to WASH
3.6.4	Advanced Indicator In catchments where WASH has been identified as a shared water			PMI Brazil implemented with the LEAF area a for testing the underground water for identifying if there is high fluoride content and then installing fluoride filters at family homes, at community water fountains and at local schools of the Taquari-Antas catchment. It was shown

Clause	Details	Yes	No	Comments/Evidence
	challenge, evidence of efforts taken with relevant public- sector agencies to share information and to advocate for change to address access to safe drinking water and sanitation shall be identified.			the results of after and before the filter in 2 families that got the filters installed. The legal limit is 1.5 mg/l, and before the filter both families had a flouride level over 3, and after the filter it is 0.02 to 0.05. Filters are a project designed by the local university UNISC, an ancient concern very well know for the scientific community, but not enough budget or students to implement.
3.7	Implement plan to maintain or improve indirect water use within the catchment.			
3.7.1	Evidence that indirect water use targets set in the water stewardship plan, as applicable, have been met shall be quantified.			The site product suppliers that are critical are the tobacco growers as it is the key raw material for production, and the outsourced tobacco processors which are only used when it is needed.  The indirect targets are tracked at the "2021 Water Stewardship Plan". Their targets are:  Include another 119 municipalities in the list of Indirect water consumption  PMB without Plastic Cups Program: Ensure the supply of cups and bottles to the entire population without the generation of plastic waste and landfill in its generation.  Presentation of AWS Report to Service Providers: Present water report to all fixed service providers of unit 2 in Santa Cruz.
3.7.2	Evidence of engagement with suppliers and service providers, as well as, when applicable, actions they have taken in the catchment as a result of the site's engagement related to indirect water use, shall be identified.			Tobacco Growers: Brazil have the tobacco growing in Paraná, Santa Catarina and Rio Grande do Sul. The growers have tobacco growing, and the rest is other products, and the total of land farm of about 15,000 ha. PMB have more than 5,000 tobacco producers. To cover this large scope, PMB has more than 40 technical advisors that conduct around 6 visits per year per farm, with minimal 4 visits yearly. Additionally, they got 2 new technical advisors for sustainability. When the technical advisors identify a critical problem to any of the topics covered, they raise a "prompt action" request, such as direct water pollution or affection to water resources environmental areas. The industry of tobacco has created a new program called STP (Sustainable Tobacco Program) of more than 200 tobacco members, which replaces the previously implemented GAP (good agriculture practices). The STP includes 4 pillars: Governance, Labour, Environment and

Clause	Details	Yes	No	Comments/Evidence
				Social. The environmental Pillar includes protection of water resources and land pollution.
				They created a LEAF Water Strategy of "Leaf Water Vision" and "Leaf Water Mission". They have the targets to 2025
				<ul> <li>Farmers and workers with access to drinkable water – 100%</li> </ul>
				<ul> <li>"Water Guardian" which includes a payment for environmental services.</li> </ul>
				<ul> <li>"Watershed" for recuperating the springwater Caxambú and Sinumbú.</li> </ul>
				<ul> <li>"Mas Campo PINK" started in 2017, and now it has 1,438 women trained in this program. The focus is the inclusion of woman. The themes are sustainability, chemical use (pesticides and agrochemicals), PPE, H&amp;S and Working Conditions.</li> </ul>
				<ul> <li>"Mas Campo" –The same scope for Mas Campo Pink, but for all farmers. Around 14,000 people were trained in since it started in 2016.</li> </ul>
				<ul> <li>"Empty Chemical Container Collection Program" which is of the association of tobacco industry of around 15 companies. It started in 2000. It has 100% of PMB farmers participation. More than 17 million packages were collected since the beginning.</li> <li>H&amp;S in CPA storage products: For</li> </ul>
				chemicals at the farm. The target is to have at CY 2020, the 100% of involvement.
				<ul> <li>"Solid and Water Conservation Technique", is a soil preparation soil to preserve soil and water. It started with 19% of farmers adopting it in 2011, and now it is about 78% for 2021.</li> </ul>
				Outsourced tobacco processor: The PMB water team visited again the outsourced tobacco processor on the 16 <sup>th</sup> April 2019. Nevertheless, outsourcing is sporadic.
				Packaging Materials: Films, paper, carton, acetate, etc: 48 of the 70 key suppliers responded the poll, which included questions about water sources, efficiency, stewardship, etc.
3.7.3	Advanced Indicator Actions taken to			Sufficient actions for achieving points partial points (5 of 7).
	address water related risks and challenges related to indirect water use outside the			"Responsible LEAF" is applicable to all the catchments where tobacco is grown for PMB whic are in Rio Grande do Sul state and also other states such as Santa Catarina, Paraná and Bahia. The project "Protector das aguas"

Clause	Details	Yes	No	Comments/Evidence
	catchment shall be documented and evaluated.			(Water Guardian) of the localities of Sinimbu, Venancio Aires and Veracruz was extended to 33 new tobacco growers having 96 in total in 2021, with 81 water springs protected. In the future it will expand to Santa Catarina, area of Caxambú, to implement water filters to improve the water quality of the water springs. Efforts for efficient irrigation were also undertaken in the northeast of Brazil (Bahia) that has more water scarcity. Local risk assessment were established to idenfity water related risks and challenges of the tobacco growing which is the indirect water use. A new action taken is the installation of the fluoride filters at the Taquary-antas cathment. Also, the LEAF department provides on-going cooperation with the tobacco growers for collecting the pesticides containers in partnership with the union SINDITABACO, as well as training on best practices for sustainable tobacco growing.  PARTIAL score of 5, as actions could be taken as well for other materials such as packaging and ingredients.
3.8	Implement plan to engage with and notify the owners of any shared water-related infrastructure of any concerns the site may have.			
3.8.1	Evidence of engagement, and the key messages relayed with confirmation of receipt, shall be identified.			N/A as they do not have shared water infrastructure. All the infrastructure is only of PMB (3 underground wells and the WWTP). The municipal water infrastructure is of CORSAN which is a government company
3.9	Implement actions to achieve best practice towards AWS outcomes: continually improve towards achieving sectoral best practice having a local/catchment, regional, or national relevance.			
3.9.1	Actions towards achieving best practice, related to water governance, as applicable, shall be implemented.			PMI Brazil participates from the Rio Pardo Committee. The LEAF department presented the "Sustainable Tobacco Program" that was recently implemented in collaboration with most of the tobacco companies globally. This is the best practice for the tobacco industry and Santa Cruz do Sul and the region is one of the key places of

Clause	Details	Yes	No	Comments/Evidence
				the world to produce the tobacco as all the brands are located there.
3.9.2	Actions towards achieving best practice, related to targets in terms of water balance shall be implemented.			The PMI sites of the region have a benchmark for each site to compare best practices, the project is called "Green office in LAC"
3.9.3	Actions towards achieving best practice, related to targets in terms of water quality shall be implemented.			They have WWTP for the effluents to comply with the local regulation.
3.9.4	Actions towards achieving best practice, related to targets in terms of the site's maintenance of Important Water-Related Areas shall be implemented.			PMI has joint efforts with the farmers to improve water quality.
3.9.5	Actions towards achieving best practice related to targets in terms of WASH shall be implemented.			PMI supports the protection of areas in the catchment, for biodiversity and water bodies. This is in collaboration with the farmers and the community.
3.9.6	Advanced Indicator Achievement of identified best practice related to targets in terms of good water governance shall be quantified.			The site achieved fully the targets related to governance for the year 2020-2021: Continue participating in the Pardo Catchment Committee and AGEPARDO, training the staff and canteen supplier in good water practices. Through the LEAF department, training the farmers and their families in erosion, chemical management, good water practices, etc.
3.9.7	Advanced Indicator  Achievement of identified best practice related to targets in terms of sustainable water balance shall be quantified.			The benchmark for water quality is to have the reverse osmosis treatment. The site is implementing a project in collaboration with the technologic institute SENAI of the government for constructing in 2021 a plant of reverse osmosis for 100% of the water treated at the WWTP, so after this osmosis, 50% of this water is recuperated for use in the boilers and cooling towers. This represents a water saving of 20% of the water used from the underground water wells. The other 50% after the osmosis that is not recuperated, continues going to the river. Through the variety of projects implemented at the site, the water consumption per product reduced 63% from 2010 to 2020.
3.9.8	Advanced Indicator Achievement of identified best practices related			Through the osmosis treatment, there is also a filtering process that improves the water quality discharged. Therefore, it will be measured the impact, their discharge reduction estimations are around 60%.

Clause	Details	Yes	No	Comments/Evidence
	to targets in terms of water quality shall be quantified.			
3.9.9	Advanced Indicator  Achievement of identified best practices related to targets in terms of the site's maintenance of Important Water-Related Areas have been implemented.			PMI Brazil launched in 2019 the "Programa Auéra" which is for biodiversity and agroforestry systems. Embrapa is the government company of biodiversity hired for implementing the project. The first year, 2019, was to conduct a preassessment, then in 2020 training was provided. In 2021, a full assessment was just finished, and results will be presented shortly. In 2022 it is expected to initiate the sustainable farm actions. One important element of this project are the "Planes de Intervención" which are actions to remove invasive species and to create ecological corridors.  Another key action is the certification of the use of sustainable and traceable wood for the tobacco curing. This is for the wood grown at the tobacco farms (60-70%), and the purchased externally (30-40%).
3.9.10	Advanced Indicator Achievement of identified best practice related to targets in terms of WASH shall be quantified.			It was achieved best practice at the site, as well as efforts were demonstrated to improve the WASH situation in their catchment and nearby catchments.  The result of incentives to producers not directly related to the hydrographic sub-basin where the plant is situated was verified. Specifically, a 4.2-hectare property on which there is a spring, the P-11 (out of a total of 82 springs in the project) whose flow is estimated at 28m3/ day. The project is an evolution of PMI's WASH project, which resulted in the payment of environmental services made together with other stakeholders as CORSAN. The spring supplies water to the Arroio Andréias system that belongs to the Rio Pardinho sub-basin of the Rio Pardo basin.
3.9.11	Advanced Indicator A list of efforts to spread best practices shall be identified.			The site created a "Best Practice Sharing Form" which is a tool to share best practices related to the water stewardship outcomes and to the steps of the standard, including the estimated cost and the description of the benefit to the economic, environmental, social and cultural. Then, the site lists these best practices identified, and train the teams in the shared best water practices.
3.9.12	Advanced Indicator  A list of collective action efforts, including the organizations involved, positions of responsible persons of other entities involved, and a description of the role played by the site shall be identified.			No actions were identified

Clause	Details	Yes	No	Comments/Evidence
3.9.13	Advanced Indicator Evidence of the quantified improvement that has resulted from the collective action relative to a site-selected baseline date shall be identified and evidence from an appropriate range of stakeholders linked to the collective action (including both those implementing the action and those affected by the action) that the site is materially and positively contributing to the achievement of the collective action shall be identified.			No evidence were identified
4	EVALUATE			
4.1	Evaluate the site's performance in light of its actions and targets from its water stewardship plan and demonstrate its contribution to achieving water stewardship outcomes.			
4.1.1	Performance against targets in the site's water stewardship plan and the contribution to achieving water stewardship outcomes shall be evaluated.			For Evaluation, Measurement and Improvement, they have the Manual for the management and performance of the integrated management system "Programa de gestão (manual de qualidade, saúde, segurança, AWS e meio ambiente)"  At this manual, in chapter 9.3, it indicates to conduct an Annual Management Review "Análise Crítica Pela Direção. In addition, they have monthly meetings for KPI review and daily meetings of production. During the audit, the auditors attended part of this meeting virtually.
4.1.2	Value creation resulting from the water stewardship			The value creation of the water stewardship is shown at the "2021 Water Stewardship Plan". It has a column for the criteria:

Clause	Details	Yes	No	Comments/Evidence
	plan shall be evaluated.			<ul><li>Environmental</li><li>Social</li><li>Economical</li></ul>
4.1.3	The shared value benefits in the catchment shall be identified and where applicable, quantified.			The shared value benefit are included in these columns as they are related to the Shared Water Challenge and the scope is also for the projects with eh stakeholders. It quantifies the external parties involved, such as the suppliers, beneficiaries of the project, etc.
4.1.4	Advanced Indicator A governance or executive-level review, including discussion of shared water challenges, water risks, and opportunities, and any water-related cost savings or benefits realized, and any relevant incidents shall be identified.			The PMI Brazil site manager has a monthly meeting with all the PMI sites of the Latinamerica and Canada region for evaluating the performance of each site. One of the topics discussed in each agenda is water stewardship plans. The leader of the region for the water topics is the site manager of Brazil.  Also, the sustainability managers of each PMI site of the Latinamerica and Canada region meet each week to discuss water as one of the key topics.  PMB has established since January 2021 a systematic approach to improve the governance "called 90 days plan 2021". Summarizing it consists in a 3 months control actions with objective tasks with responsible "owner", budget, deadline and outcomes specifically related to AWS.
4.2	Evaluate the impacts of water-related emergency incidents (including extreme events), if any occurred, and determine the effectiveness of corrective and preventative measures.			
4.2.1	A written annual review and (where appropriate) root-cause analysis of the year's emergency incident(s) shall be prepared and the site's response to the incident(s) shall be evaluated and proposed preventative and corrective actions and mitigations against future incidents shall be identified.			Incidents and status of corrective / preventive action are reviewed at the annual Integrated Management Review Meeting.

Clause	Details	Yes	No	Comments/Evidence
4.3	Evaluate stakeholders' consultation feedback regarding the site's water stewardship performance, including the effectiveness of the site's engagement process.			
4.3.1	Consultation efforts with stakeholders on the site's water stewardship performance shall be identified.			Consultation efforts with stakeholders were also reviewed at the annual Integrated Management Review Meeting.  Opportunity for improvement 01 - 2021: To establish a systematic approach to gather stakeholders' feedback, in order to facilitate the evaluation of the responses.
4.3.2	Advanced Indicator The site's efforts to address shared water challenges shall be evaluated by stakeholders. This shall include stakeholder reviewing of the site's efforts across all five outcome areas, and their suggestions for continual improvement.			No actions were identified
4.4	Evaluate and update the site's water stewardship plan, incorporating the information obtained from the evaluation process in the context of continual improvement.			
4.4.1	The site's water stewardship plan shall be modified and adapted to incorporate any relevant information and lessons learned from the evaluations in this			The site's water stewardship plan was updated since 2020 as a result of the COVID situation.

Clause	Details	Yes	No	Comments/Evidence
	step and these changes shall be identified.			
5	COMMUNICATE & DISCLOSE			
5.1	Disclose water- related internal governance of the site's management, including the positions of those accountable for legal compliance with water- related local laws and regulations.			
5.1.1	The site's water- related internal governance, including positions of those accountable for compliance with water-related laws and regulations shall be disclosed.			The site disclosed their 3rd Annual AWS Report "Water Stewardship - Relatório de Performance de Água 2020 Philip Morris Brasil Manufatura Santa Cruz Do Sul – 2020". This is published at the PMB webpage: http://pmidotcom3-prd.s3.amazonaws.com/docs/default-source/brazil-market-page/af-relat%C3%B3rio-da-%C3%A1gua-2020.pdf?sfvrsn=9fbf84b4 4  The first section of the report, indicates the Brazil Manufacturing Director and the Positions Accountable for legal compliance related to water that is the Manager of Safety and Environmental Manager  Globally, at the webpage of PMI, there is also a progress report for water stewardship at: https://www.pmi.com/sustainability/reporting-on-sustainability/water-stewardship-progress-2020
5.2	Communicate the water stewardship plan with relevant stakeholders.			
5.2.1	The water stewardship plan, including how the water stewardship plan contributes to AWS Standard outcomes, shall be communicated to relevant stakeholders.			The disclosure of the water stewardship performance since last audit was through:  • Annual Report published  • Golden lake sustainability article,  • Water Day 2020 post,  • Water Efficiency campaign,  • "Cartao Verde" improvement cards,  • Facebook awareness posts,  • Project SENAI engagement,  • Speaker at Water Congress in Copenhagen.

Clause	Details	Yes	No	Comments/Evidence
				<ul> <li>Speaker at IWA (International Water Association) Conference in Guayaquil.</li> <li>Participants at the Roundtable panel at the Rio Water Week</li> </ul>
5.3	Disclose annual site water stewardship summary, including the relevant information about the site's annual water stewardship performance and results against the site's targets.			
5.3.1	A summary of the site's water stewardship performance, including quantified performance against targets, shall be disclosed annually at a minimum.			The "Water Stewardship - Relatório de Performance de Água 2020 - Philip Morris Brasil Manufatura Santa Cruz Do Sul", presents a summary of the water performance. It provides the results of the water balance 2020 study in a graphic way and advised that there was a 63% reduction since the base year 2010.
5.3.2	Advanced Indicator  The site's efforts to implement the AWS Standard shall be disclosed in the organization's annual report.			In the "Water Stewardship - Relatório de Performance de Água 2020 - Philip Morris Brasil Manufatura Santa Cruz Do Sul", they disclose the site efforts to implement and maintain the AWS standard.  Also, for communicating the PMB performance and to conduct a consultation about challenges, risks and opportunities related to water, there was a meeting the 16th March 2021 with the Pardo Catchment Committee, and the 25th June 2021 they had a meeting wiht the Taquari-Antas Catchment Committee.  They also had meetings with suppliers the 11th June 2021, as well as with another company that is considering implementing AWS in another catchment.  Internally within the Philip Morris affilates, Brazil provides support to other factories and they had weekly meetings.  Furthermore, there were meetings with Sinditabaco the 24th June and with the Universtiy of Santa Cruz do Sul the 1st April.  1st October a complement to a global scale manufacturing organization chart was shown. In which the structure of people who respond to water challenges can be seen. In this one, PMI's global VP is at the top, and is the signer of the manufacturing policy, and therefore the
5.3.3	Advanced Indicator	$\boxtimes$		In the "Water Stewardship - Relatório de Performance de Água 2020 - Philip Morris Brasil Manufatura Santa Cruz Do Sul", they quantified

Clause	Details	Yes	No	Comments/Evidence
	Benefits to the site and stakeholders from implementation of the AWS Standard shall be quantified in the organization's annual report.			the benefits to the site and to the stakeholder. To the site, they reported a reduction of 63% compared to 2010 of water consumption per product unit. Also, that 15% of the water is reused within the operation and explained the innovation of the osmosis to reuse the water. This leaves more water available for the site and for the stakeholders. Also, it is included in the anual report a summary of the projects with the community which in 2020 were for protecting the watershed IWRAs and for WASH in the catchments.  At the 2020 GRI report presented the internal projects and reductions at the site, and the catchment actitivies with the benefits. PMI is signatory of the Global Compact.
5.4	Disclose efforts to collectively address shared water challenges, including: associated efforts to address the challenges; engagement with stakeholders; and co-ordination with public-sector agencies.			The "Water Stewardship - Relatório de Performance de Água 2020 - Philip Morris Brasil Manufatura Santa Cruz Do Sul", summarizes the key projects that they implemented or participated with stakeholders, and some of them had the co-ordination with public-sector such as the municipalities.  • Project SENAI with the government entity for sustainable industrial development  • Watershed – Springwater Protection for improving the water quality for consumption.  • Support to the Pardo Catchment Committee through AGEPARDO  • Responsible LEAF Project and Produzindo Certo.
5.4.1	The site's shared water-related challenges and efforts made to address these challenges shall be disclosed.			The "Water Stewardship - Relatório de Performance de Água 2020 - Philip Morris Brasil Manufatura Santa Cruz Do Sul", summarizes the key projects that they implemented or participated with stakeholders, and some of them had the co-ordination with public-sector such as the municipalities.  • Project SENAI with the government entity for sustainable industrial development  • Watershed – Springwater Protection for improving the water quality for consumption.  • Support to the Pardo Catchment Committee through AGEPARDO  • Responsible LEAF Project and Produzindo Certo.
5.4.2	Efforts made by the site to engage stakeholders and coordinate and support publicsector agencies shall be identified.			The projects explained in the "Water Stewardship - Relatório de Performance de Água 2020 - Philip Morris Brasil Manufatura Santa Cruz Do Sul", disclose the participation of stakeholders, such as municipalities, farmers, ANA, etc.

Clause	Details	Yes	No	Comments/Evidence
5.5	Communicate transparency in water-related compliance: make any site water-related compliance violations available upon request as well as any corrective actions the site has taken to prevent future occurrences.			
5.5.1	Any site water- related compliance violations and associated corrections shall be disclosed.			They didn't have any non-compliance violation related to water
5.5.2	Necessary corrective actions taken by the site to prevent future occurrences shall be disclosed if applicable.			They didn't have any non-compliance violation related to water
5.5.3	Any site water- related violation that may pose significant risk and threat to human or ecosystem health shall be immediately communicated to relevant public agencies and disclosed.			They didn't have any non-compliance violation related to water