

WATER STEWARDSHIP ASSURANCE SERVICES

Alliance for Water Stewardship (AWS)

Audit Number: AO-000689

SITE DETAILS

Site: **PMI - Otegen Batyr, Almaty (KZ)** Address: 90 Iliyas Zhansugurov st, B40A6M8, Otegen Batyr Village, KAZAKHSTAN Contact Person: Radmila Li AWS Reference Number: AWS-000554 Site Structure: Single Site

CERTIFICATION DETAILS

Certification status: Certified Core Date of certification decision: 2024-Jan-03 Validity of certificate: 2027-Jan-03

AUDIT DETAILS

Audited Service(s): AWS Standard v2.0 (2019) Audit Type(s): Initial Audit Audit Start Date: 2023-Oct-17 Lead Auditor: Ethel Pirola Igoa

Audit team participants: Zhanar Faizuldayeva Ethel Pirola Igoa, Lead Auditor

Site Participants:

Radmila Li, Sustainability Specialist Yuriy Sitnikov, Sustainability Specialist Indira Baigarina, Sustainability Manager Aizhan Zhunussova, Manager Factory Logistics Dinara Titinova, Manager Engineering Adilkhan Nurpeissov, IFMS Supervisor Almaz Japarov, Manufactoring Director Seilbek Omarbekov, Utilities Specialist Sergey Lyavinskov, IFMS Engineer Rinat Zaitov, Manager Sustainability and Planning



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ADDITIONAL INFO

Summary of Audit Findings: A total of 14 findings were raised during the certification audit, 0 major non-conformities, 2 minor non-conformities, 12 observations.

The Client is requested to perform a root cause analysis and define corrective actions for each of the non-conformities and to submit these to WSAS within 60 days of receipt of the audit report by 20-01-2024.

Minor non-conformities must be closed out by the time of the next annual audit.

The audit team recommends certification of PMI Otegen Batyr at Core level pending approval of the corrective actions plan.

CLOSURE OF FINDINGS AND CORRECTIVE ACTION PLAN:

The Client has successfully submitted the corrective action plan addressing all findings. Proof of implementation has been requested for the Minors and this will be evaluated during the Surveillance Audit. The client is requested to upload evidence of implementation prior to the Surveillance Audit.



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Scope of Assessment: The scope of services covers the Initial certification audit for assessing conformity of PMI Otegen Batyr (KZ) against the AWS International Water Stewardship Standard Version 2.

Phillip Morris International (PMI) Otegen Batyr site is in the Ile District of the Almaty Region, Kazakhstan, specifically in the industrial area of Otegen Batyr at approximately 20 km from the City of Almaty. PMK's premises include an area of approximately fifty-one hectares.

The site includes: the administrative building, the production building, the boiler room, the mechanic 's and maintenance rooms, the AC/PC warehouse, the GLPP, the fire depo, the water retention basin, and the water treatment station.

The facility is in the Ile District of the Region of Almaty, specifically in the industrial area of Otegen Batyr at approximately 20 km from the City of Almaty. PMK's premises include an area of approximately 300,000 m2.

PMK's catchment area has an area of approximately 4,600 km2 which includes the following:

- Groundwater catchment area of Pokrovskoye Groundwater Resources (PGWR)
- Surface water catchment area of Malaya Almatinka (Kishi Almaty) River

• Surface water catchment of Sorbulak, Kaskelen and Bolshaya Almatinka which includes the Sorbulak Lake, the Kaskelen and the Bolshaya Almatinka (Ulken Almaty) Rivers.

The audit was conducted onsite between the 17th and the 19th of October 2023. The onsite site visit included the assessment of:

- Pumping station
- Water tanks
- Diesel tanks
- Stormwater basin
- Boilers
- Chillers
- Reverse osmosis unit
- Flavour storage
- Waste management area
- Firefighting station
- Fire training area
- Sewage water manhole
- Production area
- Showers, toilets, and canteen.

FINDINGS

NUMBER OF FINDINGS PER LEVEL

Observation	12
Minor	2



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FINDING DETAILS	
Finding No:	TNR-006959
Checklist Item No:	1.3.2
Status:	Closed
Finding level:	Observation
Due date:	2024-Oct-20
Checklist item:	Site water balance, including inflows, losses, storage, and outflows shall be identified and mapped
Findings:	The site must update diagrams when real measurements for effluent water are available.
Finding No:	TNR-006582
Checklist Item No:	1.3.3
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2024-Nov-20
Checklist item:	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.
Findings:	Site must continue exploring options for measurement of effluent water.
Corrective action:	We will research the legislation rules and technical opportunity together with external technical experts to install effluent water meter.
Finding No:	TNR-006629
Checklist Item No:	1.3.4
Status:	Closed
Finding level:	Observation
Due date:	2024-Nov-20
Checklist item:	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.
Findings:	As there is no local legislation to control parameters for discharge water, the site is recommended to select an internationally accepted water standard to compare against to demonstrate good water stewardship.



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Finding No:	TNR-006998
Checklist Item No:	1.5.3
Status:	Closed
Finding level:	Observation
Due date:	2024-Nov-20
Checklist item:	The catchment water-balance, and where applicable, scarcity, shall be quantified, including indication of annual, and where appropriate, seasonal, variance.
Findings:	For future reports, it would be interesting to include climate change projections and how these could influence water availability in the catchment. Additionally, the site is encouraged to continue communicating and engaging with agencies generating or providing data in order to minimise the error caused by the amount of assumptions and limitations.
Finding No:	TNR-006598
Checklist Item No:	1.5.4
Status:	Closed
Finding level:	Observation
Due date:	2024-Nov-20
Checklist item:	Water quality, including physical, chemical, and biological status, of the catchment shall be identified, and where possible, 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 identified.
Findings:	Site is encouraged to continue communicating and engaging with agencies generating or providing data to gain a deeper understanding of this section.



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Finding No:	TNR-006599
Checklist Item No:	2.3.2
Status:	Closed
Finding level:	Observation
Due date:	2024-Nov-20
Checklist item:	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.
Findings:	The site is encouraged to: * have more projects at catchment level in collaboration with different stakeholders (public, private, social-based). * explore further solutions to solve their metering issues (losses, effluent water), like this, it will be easier to know order of magnitude and establish a baseline to measure efficency and saving projects.
Finding No:	TNR-007002
Checklist Item No:	3.3.1
Status:	Closed
Finding level:	Observation
Due date:	2024-Nov-20
Checklist item:	Status of progress towards meeting water balance targets set in the water stewardship plan shall be identified.
Findings:	At the end of the year, it would be interesting to see the effect of these measures in the water balance of the site.
Finding No:	TNR-006604
Checklist Item No:	3.3.2
Status:	Closed
Finding level:	Observation
Due date:	2024-Nov-20
Checklist item:	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.
Findings:	Site is encouraged to revise water use efficiency/reduce volumetric targets when effluent and reuse water is fully monitored.



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Finding No:	TNR-007459
Checklist Item No:	3.7.1
Status:	Closed
Finding level:	Observation
Due date:	2024-Nov-20
Checklist item:	Evidence that indirect water use targets set in the water stewardship plan, as applicable, have been met shall be quantified.
Findings:	The site is encouraged to update this section when more data is available.
Finding No:	TNR-007004
Checklist Item No:	4.1.2
Status:	Closed
Finding level:	Observation
Due date:	2024-Nov-20
Checklist item:	Value creation resulting from the water stewardship plan shall be evaluated.
Findings:	The site is encouraged to explore more options to quantify value creation.
Finding No:	TNR-007005
Checklist Item No:	4.1.3
Status:	Closed
Finding level:	Observation
Due date:	2024-Nov-20
Checklist item:	The shared value benefits in the catchment shall be identified and where applicable, quantified.
Findings:	The site is encouraged to explore more options to quantify shared value benefits.

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Finding No:	TNR-007006
Checklist Item No:	4.4.1
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2024-Nov-20
Checklist item:	The site's water stewardship plan shall be modified and adapted to incorporate any relevant information and lessons learned from the evaluations in this step and these changes shall be identified.
Findings:	Site to update this section when more feedback is obtained. They will need to demonstrate the evolution of the plan and identify the changes.
Corrective action:	The water stewardship plan will be updated constantly according to stakeholder feedback. The questionnaire will be sent in advance in order to have time to take into account in the Water Stewardship Plan. Stakeholders' questionnaire feedback assessment evaluation will be standard activity of preparation of Water Stewardship Plan.
Finding No:	TNR-006607
Checklist Item No:	5.3.1
Status:	Closed
Finding level:	Observation
Due date:	2024-Nov-20
Checklist item:	A summary of the site's water stewardship performance, including quantified performance against targets, shall be disclosed annually at a minimum.
Findings:	Site to include more detail on performance against targets (figure or percentage) in next years' report.
Finding No:	TNR-006609
Checklist Item No:	5.4.2
Status:	Closed
Finding level:	Observation
Due date:	2024-Nov-20
Checklist item:	Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be identified.
Findings:	Site is encouraged to engage in more water-related projects at catchment level with different stakeholder groups.



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Report Details

Report	Value	
Report prepared by	Ethel Pirola Igoa	
Report approved by	Juan Carlos Ceron	
Report approved on (Date)	20-11-2023	
Surveillance		
Proposed date for next audit 2024-Oct-15		
Stakeholder Announcements		

Date of publicationLocation08/08/2023PMI Global Webpage
(https://www.pmi.com/markets/kazakh
stan/en)20/07/2023Sent to stakeholders01/08/2023AWS and WSAS webpagesCommentTranscript from the local auditor.



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Catchment Information

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PMK is located in the Ile District of the Region of Almaty, specifically in the industrial area of Otegen Batyrat approximately 20 km from the City of Almaty. PMK's premises include an area of approximately 300,000

m2.

Mountains up to 4,000 m above sea level (a.s.l) and higher dominate the Southern part of the $\mathsf{PMK}\xspace's$

catchment area. Areas with elevation between 550 to 650 m a.s.l are in the North and North-Center of PMK's

catchment area. PMK is located at an altitude of approximately 630 m a.s.l. The topographic elevations in the

area of Almaty vary from 650 a.s.l in the North to more than 1,500 m a.s.l in the South.

Quaternary and Neogene aquifers are located at depth of 100-700 m b.g.l. Upper aquifers, until 150 m b.g.l,

in City of Almaty and in its close surroundings, are contaminated with nitrate, sulphate, fluoride, manganese,

beryllium, lead, aluminum, strontium, zinc, nickel, boron, total petroleum hydrocarbons, phenols and

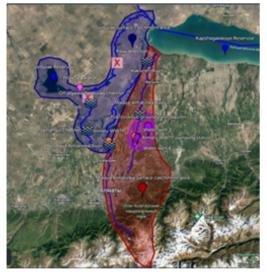
pesticides caused by long-term industrial, agricultural, and municipal activities in the area.

PMK's catchment area has an area of approximately 4,600 km2 which includes the following: • Groundwater catchment area of Pokrovskove Groundwater Resources (PGWR)

Surface water catchment area of Malaya Almatinka (Kishi Almaty) River

• Surface water catchment of Sorbulak, Kaskelen and Bolshaya Almatinka which includes the

Sorbulak Lake, the Kaskelen and the Bolshaya Almatinka (Ulken Almaty) Rivers.



PMK catchment.jpg



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Client Description and Site Details

Client/Site Background

Phillip Morris International (PMI) Otegen Batyr site is located in the Ile District of the Almaty Region, Kazakhstan, specifically in the industrial area of Otegen Batyr at approximately 20 km from the City of Almaty. PMK's premises include an area of approximately 51 hectares.

The site includes: the administrative building, the production building, the boiler room, the mechanic 's and maintenance rooms, the AC/PC warehouse, the GLPP, the fire depo, the water retention basin and the water treatment station.

Potable water supply and wastewater discharge are provided by the Municipal Service Provider Almaty Vodokanal (Almaty Su). For potable water provision,

Almaty Vodokanal abstracts groundwater from the Pokrovskoye Groundwater Resources (PGWR) via private groundwater wells to neighbouring settlements and to key water users such as the Almaty Thermal Power Plant No. 3.

Almaty Vodokanal's Water Treatment Plant (WTP) is located at Bolshaya Almatinka (Ulken Almaty) River, at approximately 0.7 km from PMK.

Wastewaters flow from PMK to the Municipal Wastewater Treatment Plant (WWTP) of Almaty Vodokanal,

successively to Sorbulak Lake and Ile River. Process and sanitary wastewaters are initially pumped to the local wastewater pumping station, located at approximately 1 km from PMK, and successively to the WWTP of Almaty Vodokanal, located at approximately 12 km from PMK.

Treated wastewaters are then discharged to Sorbulak Lake, located at approximately 32 km from the WWTP of Almaty Vodokanal, used as a clarifier, via open canal with earth bed. Lastly, water from Sorbulak Lake is discharged into the Ile River, at approximately 47 km from Sorbulak Lake, via open canals with earth bed. PMK's storm waters are however discharged directly through a small canal to Malaya Almatinka (Kishi Almaty) River after on-site treatment.



Site layout.jpg



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Summary of Shared Water Challenges

Summary of Shared Water Challenges

The site has identified the following shared water challenges in consultation with other stakeholders:

- Future increase in degrading superficial/groundwater quality
- Scarcity/baseline water stress
- Future increase in scarcity/baseline water stress
- Lack/limited access to drinking water, sanitation and/or hygiene structures
- Lack/inadequate/failure of water-related infrastructures
- Lack/limited Stakeholder engagement/internal governance
- Lack/inadequate superficial/groundwater data availability (data gaps)
- Loss/degradation of IWRAs
- Changes and/or scrutinity in water-related regulations and legal enforcement
- Losses due to leakages
- Increasing water provision costs
- Tightening withdrawal limits
- Degraded quality of superficial/groundwater bodies
- Lack/limited recognition of IWRAs for cultural/social/religious importance
- Flooding
- Future increase in flooding
- Landslides

0.1 General Requirements for Single Sites, Multi-Sites and Groups 0.1.1 Eligibility Criteria 0.1.1.1 The site(s) occupy one catchment OR an exception has been granted. Yes Comment The aquifer belongs to the Malaya Almatinka surface catchment area. 0.1.1.2 The scope of the proposed certification shall be under the control of a single management system. Yes Comment The site operates under a single management system. The scope of the proposed certification shall be homogeneous with 0.1.1.3 respect to primary production system, water management, product or Yes service range, and the main market structures. Comment The scope of the certification has been homogeneous.



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1	STEP 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: Yes 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 ultimate receiving water body or bodies; Catchment(s) that the site affect(s) and is reliant upon for water.
Comment	The site has provided several documents as evidence for this indicator: * Three (3) presentations showing and explaining the site boundaries, the water related infrastructure, the water and wastewater service provider (Vodokanal), the waste water treatment plant in the region (Almaty SU) and the withdrawal and discharge points. It includes the ultimate water source (groundwater Pokrovskoe aquifer through 4 artesian wells, shared with the city and other industrial partners) and the ultimate water receiving body (Sorbulak right bank channel). * A document with title 'PMK general layout map' where the site boundaries, buildings and assets are shown and labeled. * Seven (7) technical drawings showing the water-related infrastructure. It includes assets and piping for the different water related networks (supply, storm, waste, fire). * A GIS file (and a screenshoot of it) of the catchment area that the site affects (Sorbulak, Kaskelen and Ulken Almaty catchments) and is reliant upon for water (Kishi Almaty River (indirectly) and Pokrovskoye groundwater aquifer). * Several official documents with related evidence. Additionally, the site has provided a spreadsheet showing all the water related assets onsite with the status of the maintenace tasks.
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 identified. This yes Yes 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 challenges; - 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 and influence.



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Comment	The site has provided the following documents as evidence for this indicator: * A very comprehensive spreadsheet with title 'PMK stakeholder list and memorandum' consisting of 4 tabs: -Methodology: description of the methodology used to identify and engage with stakeholders. -List of stakeholders: 45 stakeholders listed with an analysis in terms of description, location, shared water challenges, water demand, interest and engagement. It includes national, regional and local authorities, other public institutions (health, service providers), private sector (other industries), employees, NGOs, a minority comittee and an association and a university. Additionally, it indicates: whether the stakeholder is inside or outside the considered catchment area; track of stakeholder consultation; stakeholder engagement based on their level of interest and influence. - Memorandum: an extension of the stakeholder engagement where more detail is provided in terms of exchanges, type of communication,, expected outcomes and contact of reference. - Summary: an overview of the engagement with the top 15 stakeholders, distinguishing between partnership, coallition, collaboration or networking (for these top 15, it is mostly collaboration). * A presentation with a compliation of stakeholder communication (1.2.1 Evidence of external communication). * A folder with the actual communication, both internal and external (emails, letters). * Two (2) DHL delivery reports.
1.2.2	Current and potential degree of influence between site and stakeholderImage: Construct of the site is a stakeholdershall be identified, within the catchment and considering the site'sYesultimate water source and ultimate receiving water body for wastewater.Yes
Comment	The site has provided a spreadsheet with title 'PMK stakeholder list and memorandum', where under tab '1. List', there is an analysis of the mutual interest and power to influence of the site with each of the stakeholders. Based on this, the site has decided the best way to engage wth the different stakeholders.
1.3	Gather water-related data for 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.
Comment	The site has provided three documents as evidence for this indicator: * The PMK emergency response plan, which includes flood, diesel spill, water leaks and water disruption response plans. * The PMK spill response training: a presentation with the content of the spill response training. The site indicates that if the spill is more than 50 liters they call the emergency team (external, part of the fire department). * The PMK spill prevention procedure.
1.3.2	Site water balance, including inflows, losses, storage, and outflows shallQbe identified and mappedObs.
Comment	The site has provided a presentation showing: * The Sankey diagram for the site, which gives an overview of the site's water balance with figures from 2022. * A scheme of the water uses, recycle and losses. * A note explaining why the site currently does not have a meter for effluent water and must pay for an estimated figure of 52% of effluent water. *The tables with raw data for the fore-mentioned Sankey and scheme diagrams. *A calculation of the water used for routine maintenance for fire safety.

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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.
Comment	Apart from the Sankey diagram above, the site has provided a presentation with the title 'PMK water consumption and seasonality trend'. In it, water consumption and it's seasonality is shown in different graphs for the period 2018-2022. Additionally, there is a graph with the water ratio per m3/mio cigarret equivalent (that shows a considerable improvement since 2020) and the raw data used for the calculations. Additionally, during the audit, the site showed the spreadsheet with all the data and calculations. Please, also see 1.3.2 for comments on this indicator. Despite this being a good exercise, the site needs to continue exploring options to measure the effluent water and be able to have a real picture of the actual water balance. <i>Finding No: TNR-006582</i>
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.Q Obs.
Comment	The site indicates that they don't have a mandatory obligation to carry out water analyses. Nonetheless, the site carries out water analysis for incoming and outgoing water as good practice. The site has provided a folder with the title Water IN with the resultss from the analysis provided by Vodokanal on a quarterly basis (upon request). As a secondary water consumer, PMK receives water from the water supplier in good quality, as evidenced by the quarterly potable water measurements conducted by the Vodokanal (1.3.4 - a2. Vodokanal potable water analysis)
	On a voluntary basis, PMK has a water treatment plant, where UV lamps are installed, through which water flows from Vodokanal. Water tests are carried out on a daily, weekly, monthly, quarterly and annual basis to ensure the reliability of the water provided. The algorithm for checking the values by time is specified in the FMC Procedure IQAMG025R and IENBP001R (Frequency 1.3.4 - a1. PMK potable water analysis and monitoring frequency - Отчёт по водным анализам).
	Also on voluntary basis PMK conducts wastewater analysis of sewage drains (evidence saved in 1.3.4 - b. Water OUT). The site does not have any national requirements, but they make an annual analysis of both retention basin and the sewage outlet. This year also to the external ditch.
	The site is currently working with the legal department regarding the possibility of reusing water from the stormwater basin for irrigation needs. If so, qualitative indicators would be established.
	There is not a water-related challenge that would be a threat to good water quality status for people or environment
1.3.5	Potential sources of pollution shall be identified and if applicable,Image: Comparison of the state of the sta
Comment	The site has provided a presentation showing a map with the areas storing potential polluting substances and then a slide per area describing the type of substances, the pollution prevention strategy or solution in place and photos to illustrate it. Additionally, the site has enclosed the Declaration of Environmental Impact dated November 2021, where a list of declared amount of emissions of pollutants into the air is provided to the Department of Natural Resources of Almaty Region.



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1.3.6	On-site Important Water-Related Areas shall be identified and mapped, including a description of their status including Indigenous cultural values.	⊘ Yes
Comment	 The site has provided the following documents as evidence for this indicator: *A spreadsheet with two tabs: 1. Methodology: where the rationale and sources of inspiration for the methodology a explained. 2. IWRAs risk assessment: where twelve (12) IWRAs are listed and categorized accord the water related risk and the biodiversity related risk, both on site and for the catchm (2) of the areas are on-site: the green area and the stormwater basin. The status, rat quantified (due to the lack of data nor obligation to do so) has been described. * A screenshoot of the map showing the on-site IWRAs, and the corresponding origin file 	ording to nent. Two her than
	file.	
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.	⊘ Yes
Comment	The site has provided a spreadsheet with title 'PMK true cost of water' where the site made the exercise of calculating different water-related costs and revenues. It include technical and maintenance costs but also innovation and social and/or community-bac costs. Additionally, value creation is described and quantified when possible. See also 2.3.2 and 4.1.2.	es
1.3.8	Levels of access and adequacy of WASH at the site shall be identified.	⊘ Yes
Comment	The site has provided a presentation with a list of WASH facilities onsite, enclosing p location and date of the information. On an additional spreadsheet, the site has calcu- number of WASH facilities taking into account number of workers per shift. The site has also included a self assessment for evaluating the site's Access to Water Sanitation and Hygiene (WASH) as well as the Respect of Human Rights to Water at Sanitation (HRWS). Finally, the site has provided the internal and external cleaning logbooks, the pest co desinfection service level agreement and the canteen sanitary and epidemiological	ilated the er, nd
1.4	assessment carried out by the Ministry of Health in June 2017. 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.	⊘ Yes
Comment	The site has provided a spreadsheet with title 'PMK indirect water use'. In it, the meth used and the list of all raw materials and services used by the site are shown, indicat whether they are in the same catchment or outside of the catchment. The site has ide 52 primary input providers within the site's catchment and 1 outside. Water quantity a quality is shown where available. Additionally, the site has enclosed a presentation with title 'PMK stakeholder question indirect water use', sent both to internal and external stakeholders, where the type of water-related questions have been translated to English. Finally, the site has provided a folder with the compliation of answers to questionnair they got feedback from the different companies.	nodology ing entified and nnaire on
1.4.2	The embedded water use of outsourced services shall be identified, and	
	where those services originate within the site's catchment, quantified.	Yes



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Comment	The site indicates that only Vodokanal (the water supplier) is in the same catchment. The site waiting for feedback from this service provider. The site has additionally included the energy provider (Almatyenergosbyt) but this last one outside of the site's catchment (so no need to quantify for core certification).	
	Please, see 1.4.1 as well.	
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.	⊘ Yes
Comment	The site has provided a presentation with an overview of different catchment water governance initiatives at national, regional and local level, including screenshots, source at a brief explanation for each. The local auditor did not have any comments. These include:	
	 *Draft of Concept for the development of the water industry of the Republic of Kazakhstan 2023-2029. * Water code of kazakhstan (2003), currently under revision. *Committee on Water Resources of the Ministry of Ecology and Natural Resources of the Republic of Kazakhstan. * Anti-Corruption and formation of anti-corruption behavior in the entities of the quasi-public sector in Almaty Su (the local waste water treatment company). * Official media publication of Akim's of Almaty social network - initiative of eco-activists to keep Almaty clean and green. * Akimat of Almaty city - informing on an initiative to water the trees with water that does no interfere with water availability for public consumption. 	С
1.5.2	Applicable water-related legal and regulatory requirements shall be identified, including legally-defined and/or stakeholder-verified customary water rights.	⊘ Yes
Comment	The site has indicated that they use the Redonline system to ensure compliance with legal requirements (of which they recieve weekly notifications). PMI KZ is a secondary water user so most of the legal requirements apply to Vodokanal (primary water user). The environmental permit of the site only includes air emissions, no mention to water discharge nor wastes. The site has the obligation to check the water meters (verified for commercial purposes, the get random inspections). The environmental code changed in 2021 but the site is category 3 - only declaration, not environmental impact assessment. The water code will change in 2025 but preliminary assessment does not imply changes to the site, since they will come to Vodokanal as primuser. The site has provided a presentation briefly explaining the Redonline system and the applicable legislation. The local auditor did not have any comments. Please, see also indicator 2.2.1.	ey full
1.5.3	The catchment water-balance, and where applicable, scarcity, shall be quantified, including indication of annual, and where appropriate, seasonal, variance.	Q Obs.



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Comment	The site has enclosed a report that they have commisioned to an external consultant (HPC). The report looks comprehensive, and the assumptions, limitations and calculations look reasonable given the context. The study includes geological and hydrogelogical information of the catchment area and an analysis of the infows, outflows and change in storage volume. The conclusion is that, for the time being and the data available, the water inflows are higher than the outflows, resulting in abundant water in the catchment (thus, there is not water scarcity in the area). For future reports, it would be interesting to include climate change projections and how these could influence water availability in the catchment. Additionally, the site is encouraged to continue communicating and engaging with agencies generating or providing data in order to minimise the error caused by the amount of assumptions and limitations.
1.5.4	Water quality, including physical, chemical, and biological status, of the catchment shall be identified, and where possible, 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 identified.Q Obs.
Comment	The site has provided a presentation where information from different open sources has been gathered. Despite the considerable effort carried out by the site, the information available online is not very exhaustive: the results presented only reflect global quality status (ecological and chemical). The site is therefore encouraged to continue communicating and engaging with agencies generating or providing data to gain a deeper understanding of this section.
1.5.5	Important Water-Related Areas shall be identified, and where appropriate, mapped, and their status assessed including any threats to Yes people or the natural environment, using scientific information and through stakeholder engagement.
Comment	 The site has provided the following documents as evidence for this indicator: *A spreadsheet with two tabs: 1. Methodology: where the rationale and sources of inspiration for the methodology are explained. 2. IWRAs risk assessment: where twelve (12) IWRAs are listed and categorized according to the water related risk and the biodiversity related risk, both on site and for the catchment. Ten (10) of the areas are at catchment level. The catchment area is broad so the site has narrowed down a selection. The justification for the selection of the different IWRAs has been explained under column AO. The status, rather than quantified (due to the lack of data) has been described. * A screenshoot of the map showing the IWRAs at catchment level, and the corresponding original kmz file.
1.5.6	Existing and planned water-related infrastructure shall be identified,Image: Comparison of the structure shall be identified,including condition and potential exposure to extreme events.Yes
Comment	The site has provided a presentation where information and photos on existing and planned infrastructure at catchment level has been compiled. It includes an analysis of potential exposure to extreme events from the WWF water risk tool.
1.5.7	The adequacy of available WASH services within the catchment shallImage: Comparison of the catchment shallbe identified.Yes
Comment	The site has provided a presentation where information and photos on WASH facilities and exisiting and planned infrastructure at catchment level has been compiled. It includes the source of the data, population figures and coverage percentages at urban, rural and national level.
1.6	Understand current and future shared water challenges in the catchment, by linking the water challenges identified by stakeholders with the site's water challenges.



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1.6.1	Shared water challenges shall be identified and prioritized from the information gathered.	✔Yes
Comment	The site has provided a questionnaire where water challenges are listed and can be rated according to magnitude of impact and frequency of occurrence. Additionally, the questionna provides the possibility of indicating potential root cause(s) and potential initiative(s) to address them.	ire
	The questionnaire has been shared amongst a broad list of stakeholders (24) and the answers have been compiled in a comprehensive spreadsheet. The spreadsheet is divided into the following tabs: Questionnaire	
	Challenges vs stakeholder Challenges vs root cause Priorization	
	Mitigation actions Existing sector efforts and Outcomes.	
	This last tab provides a summary of all the above for the selected 17 water challenges. These include: degrading water quality, increasing baseline water stress, access to WASH structures, status of water-related infrastruture, stakeholder engagement, data availability, degradation of IWRAs, changes in water related regulations and legal enforcement, losses due to leakages, increasing water provision costs, flooding and landslides.	se
	The outcomes have been plotted against frequency and magnitude for a more visual effect.	
	Additionally, the site has provided copy of all the questionnaires where they got feedback.	
1.6.2	Initiatives to address shared water challenges shall be identified.	✓Yes
Comment	Initiatives include: water saving technologies, desalination, water/wastewater/purification technologies, improved use/storage of chemicals, water/wastewater reuse and recycling, smart irrigation technologies, switch to less water intensive crops, limited use of agricultural chemicals, water quality monitoring, flood prevention, alarm system for anomaly detection, water metering, infrastructure monitoring and maintenance, water smart/efficient products, rainwater harvesting, re-allocation of water, funding and government efforts, corporate level commitments and developments, research, public-private partnerships, data sharing and biomonitoring. See also Water Stewardship Plan under 2.3.2.	
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.	✔Yes
Comment	The site has provided a spreadsheet compiling water risks and water-related oportunities. These are categorized per type (physical, reputational or regulatory) and against probability and severity. The analysis includes the risk or opportunity, the business impact and potentia countermeasures. A colour system visually indicates the severity against the probability for the risks (low, medium, serious, catastrophic) or the positive impact against the probability for the opportunities (insignificant, medium, significant, maximum).	
1.7.2	Water-related opportunities shall be identified, including how the site may participate, assessment and prioritization of potential savings, and business opportunities.	✓Yes



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Comment	The site has provided a spreadsheet compiling water risks and water-related oportunities. These are categorized per type (physical, reputational or regulatory) and against probability and severity. The analysis includes the risk or opportunity, the business impact and potential countermeasures. A colour system visually indicates the severity against the probability for the risks (low, medium, serious, catastrophic) or the positive impact against the probability for the opportunities (insignificant, medium, significant, maximum).	
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.	⊘ Yes
Comment	The site has provided a spreadsheet where best practice are indicated per AWS outcome. For the section on best practice for water governance the site has included: Disclosure of relevant water data. Engagement with organizations and relevant stakeholders on water-related matters. Promoting multi-stakeholder technical tables, workshops, webinars. Collaboration with public sector agencies Availability to collaborate in water-related governance plans and policies when possible.	
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.	✔Yes
Comment	For the section on best practice for water balance the site has included: -Water balance studies on-site and at catchment level. -Water-saving trainings amongst employees. -Increase in water meters on-site. -Implement innovative water saving or optimizing technlogies. -Maintenance and replacement of water infrastructure to minimize leaks and ruptures. -Monitoring activities. -Risk assessment and evaluation of future trends and mitigation solutions.	
1.8.3	Relevant sector and/or catchment best practice for water quality shall be identified, including rationale for data source.	✔Yes
Comment	For the section on best practice for water quality the site has included: -Investigating the potential installation of water-related infrastructures on-site. -Periodically replace, maintain and/or monitor water-related structures. -Monitoring campaigns on additional water quality parameters. -Periodic maintenance and monitoring campaigns on waste and/or wastewater storage structures. -Correct storage and containment of substances that may impact the water quality.	
1.8.4	Relevant catchment best practice for site maintenance of Important Water-Related Areas shall be identified.	✔Yes
Comment	For the section on best practice for IWRAs the site has included: -Contribution to tree planting campaigns, possibly with relevant stakeholders. -Technical tables with governance bodies on potential corrective actions or conservation plans for IWRA maintenance or restoration. -Monitoring program to observe any changes on identified catchment IWRAs.	
1.8.5	Relevant sector and/or catchment best practice for site provision of equitable and adequate WASH services shall be identified.	⊘ Yes



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Comment

For the section on best practice for WASH the site has included: -Provision of sufficient supplies of safe drinking water for all workers.

-Provision of sufficient and adecuate toilets and washrooms.

-Provision of showers for workers who may not have adequate infrastructures and provision at home.

- Engagement of relevant institutional stakeholder to assess and discuss equal access to potable water and sanitary conditions to improve the quality of life in rural areas.

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2	STEP 2: COMMIT & PLAN - Commit to be a responsible water steward and
	develop a Water Stewardship Plan
2.1	Commit to water stewardship by having the senior-most manager in 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.
Comment	The site has provided a document dated March 2023 signed by Japarov Almaz, Director Manufacturing KZ & CAS which includes all the mentioned commitments, in English, Kazakh and Russian. Additionally, the site has provided copy of the internal communication (email) dated May 2023 where the document was (internally) publicly disclosed.
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.Ves
Comment	The site has provided a presentation showing the legal compliance register and monitoring system that they use (Red-on-line system, worldwide system at corporate level for PMI). According to this presentation, each week the system sends a notification saying if something has changed in the legal documents and there are professionals available to help with difficult issues. Additionally, the site has provided a spreadsheet showing the flow evaluation for compliance, indicating the pathway, the responsability and providing some explanation for each. As stated in 1.3.4, for the time being, the site does not need to submit data for water and wastewater management to regulatory agencies.
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, and goals of the organization towards good Yes water stewardship in line with this AWS Standard.
Comment	The site has provided a document in Russian, Kazakh and English with no date but signed by the Director of Manufactoring, Almaz Japarov, where the Water Stewardship Strategy of PMK is presented. In it, the mission, the vision and the main goals are outlined



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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.	Q Obs.
Comment	The site has provided a spreadsheet with title '2.3.2 - 4.1 PMK WS Plan + Evaluation' as evidence for this indicator. It presents two tabs, one with the methodology and the other with an extended WS Plan an its corresponding evaluation of performance. Regarding the WS Plan, the site presents the water risks and challenges in line with the risk identified under 1.7. and the actions in line with the best practices listed under 1.8, covering all the points to be complied for under this indicator (measurement, monitoring, actions, timeframes, budget, responsible person and link to AWS outcome). The site has distinguish between technological and innovation or social and community actions. Some examples include: *Good water governance: engagement with different stakeholders, awareness campaigns, participation in different events and participation in existing relevant stakeholder groups. *Good water balance: investigation on water saving actions and technologies, awarenes raising amongst employees and local farmers *Good water quality: monitoring of water quality both on-site and in the nearby ditches and engagement with farmers to reduce use of chemical fertilizers. * IWRAs: tree planting campaigns and clean up events. * Safe WASH for all: awareness raising, investigation on improved WASH on-site and at catchment level and event on water-related topics.	ks J
	Additionally, the percentage of achievement is indicated and assigned a colour to make it more visual.	
	The site is encouraged to: * have more projects at catchment level in collaboration with different stakeholders (public, private, social-based). * explore further solutions to solve their metering issues (losses, effluent water), like this, it be easier to know order of magnitude and establish a baseline to measure efficency and saving projects.	
2.4	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.	⊘ Yes
Comment	The site has provided a presentation describing three initiatives part of their plan to mitigate adapt to the identified water risks in coordination with relevant public sector and infrastructuragencies, mainly: * The stakeholder AWS workshop organized by PMK in August 2023 with different stakeholders to discuss water-related issues and discuss on the shared water challenges (from the questionnaires mentioned under 1.6). * Visit to the Almaty SU WWTP: requested by the site and pending answer from the infrastructure stakeholder. * Proposal to join the Water Working Group of the Association of Environmental Organizations of Kazakhstan. At the time of the audit the site was invited to participate in or of the seminars of their Water Working Group.	ure

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3	STEP 3: IMPLEMENT - Implement the site's stewardship plan and improve impacts
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. Yes
Comment	The site has provided a presentation showing the actions both taken and planned and both internal and external to support good catchment governance. These include: -Support to best irrigation practices with farmers -Biogas installation for waste recycling for farmers -Communication session for internal governance -Water week launched by PMK from the 24-28th of July 2023 -Stakeholder workshop carried out on the 3rd of August 2023 as explained under indicator 2.4.1 The requested visit to the Almaty SU WWTP as mentioned under 2.4.1 The proposal to join the Water Working Group of the Association of Environmental Organizations of Kazakhstan, as indicated under 2.4.1 The slides include a description, photos and copy of communications where pertinent.
3.1.2	Measures identified to respect the water rights of others includingIndigenous peoples, that are not part of 3.2 shall be implemented.
Comment	The site has provided a slide explaining that there are no indigenous groups in Kazakhstan, including the sources of this information. Additionally, they mention: 'Regarding local citizens PMK and the Otegen batyr village (the village where the site is located) are sharing the same water provider. But it is legislatively established that the population has a priority in the supply of drinking water. Therefore, in the company's risks we have highlighted the possible future decrease in water due to the increase in the local population. At the territory of PMK there are implemented and planned projects for vulnerable groups, for example PM Kazakhstan is already occupied with conditioning of a toilet for disabled personnel and now plans to install a shower room in the building of contractors.'
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. Yes



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Comment	The site indicates that they do have a system to maintain compliance obligations for wate and	er
	wastewater management, as explained under 2.2.1, but they actually do not need to subrany analysis	nit
	to regulatory agencies, they do it as best practice and preventively.	
	Additionally, the site explains the following: 'While PMK is a secondary water user (doesn't withdraw water by its own), many regulate requirements are not applicable to it.	ory
	The regulation of the methods, volumes and frequency of water abstraction is based on t service	he
	contract with water supplier. Regulation of discharge is also described in the contract. Water tariffs are regulated at the legislative level, then published on the official site. Wate tariffs are	r
	therefore not specified in contracts with the water supplier.	
	Drinking water quality requirements are applicable to the primary water user (Vodokanal service	-
	provider), but on its side, PMK according to the schedule conducts daily, weekly, monthly analyses.	,
	Rainwater requirements are also not set for the PMK, but on a voluntary basis, the PMK conducts	
	annual measurements in a rainwater basin, and plans also include measurements in the ditch.'	
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.	⊘ Yes
Comment	The site has provided a slide explaining that there are no indigenous groups in Kazakhsta including the sources of this information. Additionally, they mention:	an,
	'Regarding local citizens PMK and the Otegen batyr village (the village where the site is located) are sharing the same water provider. But it is legislatively established that the population has a priority in the supply of drinking water. Therefore, in the company's risks have highlighted the possible future decrease in water due to the increase in the local population.	we
	At the territory of PMK there are implemented and planned projects for vulnerable groups example PM Kazakhstan is already occupied with conditioning of a toilet for disabled personnel and now plans to install a shower room in the building of contractors.'	, for
3.3	Implement plan to achieve site water balance targets.	
3.3.1	Status of progress towards meeting water balance targets set in the	Q

water stewardship plan shall be identified.

Obs.



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Comment	The site has provided a presentation showing the actions both taken and planned and both internal and external to support sustainable water balance. These include: -Water reuse from the rain and groundwater collection basin -Mixer sensor tap and aerators installation to reduce potable water use -Poster installation for manual tap closure in restrooms -Centerlines and Shiftly Check lists implementation Automatic water pump control system -Use of a water saving floor cleaning machine by RFM service provider -Installation of local water meter in adiabatic humidification on Chiller -Return of wastewater from reverse osmosis -New process for tobacco waste utilization -Water consumption optimization on Steam generation -Water consumption control in Daily meetings -Support of best irrigational practices for farmers in the Chilik area. When you then go to the WS Plan (indicator 2.3.2) you can see the status of progress of each. The site has an average of 61% of status of progress on this indicator. At the end of the year, it would be interesting to see the effect of these measures in the wate balance of the site.	
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.	Q Obs.
Comment	Despite the fact that the study on catchment water balance does not give indication of curre water scarcity, water scarcty/stress has been identified as a (potential) shared water challenge, therefore the site is making efforts to prevent it/avoid it. Please, aditionally see 3.3.1 for comments on this indicator. Site to improve when effluent, and reuse water is fully monitored.	ent
3.3.3	Legally-binding documentation, if applicable, for the re-allocation of water to social, cultural or environmental needs shall be identified.	⊘ Yes
Comment	There is no legally-binding documentation to re-allocate water.	
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.	v Yes
Comment	The site has provided a presentation showing the actions both taken and planned and both internal and external to support good water quality. These include: - UV lamps condition control and periodic replacement - Water filter replacement in coffee corners -Biogas installation for waste recycling for farmers in the Chilik area -Water quality analysis on the rainwater collection basin -Water quality analysis on the surface water of the neighboring ditches When you then go to the WS Plan (indicator 2.3.2) you can see the status of progress of ea (under column V Target achievement (%)).	
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.	Yes
Comment	Water quality is a shared water challenge but the legislation in the country is not restrictive this sense yet. Since the indicators are baseline and preventive it will not be possible for the moment to quantify any improvement.	
3.5	Implement plan to maintain or improve the site's and/or catchment's Important Water-Related Areas.	



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3.5.1	Practices set in the water stewardship plan to maintain and/or enhanceCthe site's Important Water-Related Areas shall be implemented.Ye) es
Comment	The site has provided a presentation showing the actions both taken and planned and both internal and external to mantain or enhance IWRAs. These include: - Clean-up event for World environment day - Tree planting campaign on-site -Maintenance of a recreational area for employees -Clean up day with employees and partners.	
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 Ye workers onsite shall be identified and where applicable, quantified.) es
Comment	The site has provided a presentation with a list of WASH facilities onsite, enclosing photos, location and date of the information. On an additional spreadsheet, the site has calculated the number of WASH facilities taking into account number of workers per shift. The site has also included a self assessment for evaluating the site's Access to Water, Sanitation and Hygiene (WASH) as well as the Respect of Human Rights to Water and Sanitation (HRWS). Finally, the site has provided the internal and external cleaning logbooks, the pest control desinfection service level agreement and the canteen sanitary and epidemiological assessment carried out by the Ministry of Health in June 2017.	
3.6.2	Evidence that the site is not impinging on the human right to safe water and sanitation of communities through their operations, and that traditional access rights for indigenous and local communities are being respected, and that remedial actions are in place where this is not the case, and that these are effective.) es
Comment	The site has provided a slide explaining that there are no indigenous groups in Kazakhstan, including the sources of this information. Additionally, they mention: 'Regarding local citizens PMK and the Otegen batyr village (the village where the site is located) are sharing the same water provider. But it is legislatively established that the population has a priority in the supply of drinking water. Therefore, in the company's risks we have highlighted the possible future decrease in water due to the increase in the local population. At the territory of PMK there are implemented and planned projects for vulnerable groups, for example PM Kazakhstan is already occupied with conditioning of a toilet for disabled personnel and now plans to install a shower room in the building of contractors.'	
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 stewardshipCplan, as applicable, have been met shall be quantified.Ob	•
Comment	The site has provided a presentation with the actions taken regarding indirect water use. These include: -Indirect water use data gathering questionnaire -Water KPI target achievement -IFMS contractors involvement -Stakeholder AWS workshop Since the site is at an early stage of the implementation of the indirect water targets, it is not possible to provide quantifiation yet.	



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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.	⊘ Yes
Comment	The site has provided a presentation with the actions taken regarding indirect water use. These include: -Indirect water use data gathering questionnaire -IFMS contractors involvement -Stakeholder AWS workshop Since the site is at an early stage of the implementation of the indirect water targets, it is no possible to provide quantifiation yet.	t
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.	✔Yes
Comment	The site has provided a presentation where they have complied the evidences of engageme with Almaty SU (waste water service) and Vodokanal (water supply service). Additionaly, the site has provided a copy of the questionnaire shared with this regard.	ent
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.	✔Yes
Comment	The site has provided a presentation showing the actions both taken and planned and both internal and external to support good catchment governance. These include: -Support to best irrigation practices with farmers -Biogas installation for waste recycling for farmers -Communication session for internal governance -Water week launched by PMK from the 24-28th of July 2023 -Stakeholder workshop carried out on the 3rd of August 2023 as explained under indicator 2.4.1 The requested visit to the Almaty SU WWTP as mentioned under 2.4.1 The proposal to join the Water Working Group of the Association of Environmental Organizations of Kazakhstan, as indicated under 2.4.1 When you then go to the WS Plan (indicator 2.3.2) you can see the status of progress of each.	
3.9.2	Actions towards achieving best practice, related to targets in terms of water balance shall be implemented.	⊘ Yes



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Comment	The site has provided a presentation showing the actions both taken and planned and both internal and external to support sustainable water balance. These include: -Water reuse from the rain and groundwater collection basin -Mixer sensor tap and aerators installation to reduce potable water use -Poster installation for manual tap closure in restrooms -Centerlines and Shiftly Check lists implementation Automatic water pump control system -Use of a water saving floor cleaning machine by RFM service provider -Installation of local water meter in adiabatic humidification on Chiller -Return of wastewater from reverse osmosis -New process for tobacco waste utilization -Water consumption optimization on Steam generation -Water consumption control in Daily meetings -Support of best irrigational practices for farmers in the Chilik area. When you then go to the WS Plan (indicator 2.3.2) you can see the status of progress of each.
3.9.3	Actions towards achieving best practice, related to targets in terms of water quality shall be implemented.Image: Complemented stargets in terms of Yes
Comment	The site has provided a presentation showing the actions both taken and planned and both internal and external to support good water quality. These include: - UV lamps condition control and periodic replacement - Water filter replacement in coffee corners -Biogas installation for waste recycling for farmers in the Chilik area -Water quality analysis on the rainwater collection basin -Water quality analysis on the surface water of the neighboring ditches
	When you then go to the WS Plan (indicator 2.3.2) you can see the status of progress of each (under column V Target achevement (%)).
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 Yes implemented.
Comment	The site has provided a presentation showing the actions both taken and planned and both internal and external to mantain or enhance IWRAs. These include: - Clean-up event for World environment day - Tree planting campaign on-site -Maintenance of a recreational area for employees -Clean up day with employees and partners.
	When you then go to the WS Plan (indicator 2.3.2) you can see the status of progress of each.
3.9.5	Actions towards achieving best practice related to targets in terms of WASH shall be implemented.Image: Comparison of the start of t
Comment	The site has provided a presentation with a list of WASH facilities onsite, enclosing photos, location and date of the information. On an additional spreadsheet, the site has calculated the number of WASH facilities taking into account number of workers per shift. The site has also included a self assessment for evaluating the site's Access to Water, Sanitation and Hygiene (WASH) as well as the Respect of Human Rights to Water and Sanitation (HRWS). Finally, the site has provided the internal and external cleaning logbooks, the pest control desinfection service level agreement and the canteen sanitary and epidemiological assessment carried out by the Ministry of Health in June 2017. Additionally, the site has established 8 actions in their water stewardship plan, related to WASH. When you then go to the WS Plan (indicator 2.3.2) you can see the status of progress of each.

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4	STEP 4: EVALUATE - Evaluate the site's performance.	
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.	✔Yes
Comment	The site has uploaded their WS Plan (see also 2.3.2), which includes a section on evaluatio of each target. This is done on a quarterly basis, checking the action and the advances mad The site, being at an early stage of their implementation cannot provide an exhaustive evaluation yet but has set the basis for a good follow up.	
	Some samples include: *Good water governance: engagement with different stakeholders, awareness campaigns, participation in different events and participation in existing relevant stakeholder groups. / Status: accomplished *Good water balance: investigation on water saving actions and technologies, awareness raising amongst employees and local farmers / Status: accomplished *Good water quality: monitoring of water quality both on-site and in the nearby ditches and engagement with farmers to reduce use of chemical fertilizers. / Status: accomplished * IWRAs: tree planting campaigns and clean up events. / Status: accomplished * Safe WASH for all: awareness raising, investigation on improved WASH on-site and at catchment level and event on water-related topics. / Status: accomplished	
4.1.2	Value creation resulting from the water stewardship plan shall be evaluated.	Q Obs.
Comment	The site has uploaded their WS Plan (see also 2.3.2), which includes a section on value creation for each target. This has been done distinguishing between site and catchment and respectively if it implies an economic, an environmental or a social or cultural value creation Some examples include: water savings, economic saving, leading by example, better understanding, improved relationship, just to mention a few. Despite this being a good start, the site is encouraged to explore more options to quantify value creation.	
4.1.3	The shared value benefits in the catchment shall be identified and where applicable, quantified.	Q Obs.
Comment	The site has uploaded their WS Plan (see also 2.3.2), which includes a section on value creation of each target. This has been done distinguishing between site and catchment and respectively if it implies an economic, an environmental or a social or cultural shared value benefit. Some examples include: better communication with relevant stakeholders, data sharing, better understanding, awareness raising, just to mention a few. Despite this being a good start, the site is encouraged to explore more options to quantify value creation at catchment level.	
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.	⊘ Yes

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Comment	The site has indicated that there have been no external compliance violations this year. Incidents are discussed in their DDS (daily direction settings) meetings. The site has provided two documents as evidence for this indicator: * An email from the Manager of Engineering at the site dated 26/07/2023 confirming that	
	'there was no water-related violation or disruption which posed risk and threat to human or ecosystem in 2022.	
	PM Kazakhstan did not have any penalties, non-conformities according to the water legislation from authorities.'	
	* Copy of the report of the inspection of the state of the water supply system of the site carrie out in November 2022 by the Kazenergonaldaka. The report indicates that:	;d
	'Tests of water samples showed full compliance of quality requirements of the Sanitary Rules "Sanitary and epidemiological requirements for water sources, places of water intake for household and drinking purposes, household and drinking water supply, places of cultural an domestic water use and safety of water bodies.' Additionally, the report includes some operational recommendations to keep those standards.	
	Additionally, the site has provided a presentation describing the systems they have in place for follow up of different kinds of incidents: * The BOS-behavioural observations platform	
	* The Sustainability Reporting Platform - Almaty Incident Portal * The site DDS (direct daily settings)	
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.	✔Yes
Comment	The site has provided a presentation where the questions from the questionary sent to stakeholders are shown, translated to English. Some of the questions are specifically on performance.	
	Aditionally, the site has provided six (6) evidences of this stakeholder communication and feedback.	
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 step and these changes shall be identified.	🛪 ess
Comment	The site has indicated that they revise the WSP (evaluation) quarterly and update it when an update paragraphic	d
	where necessary. The site is only receiving feedback from stakeholders now, so it is work in progress. <i>Finding No: TNR-007(</i>	006

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5	STEP 5: COMMUNICATE & DISCLOSE - Communicate about water stewardship and disclose the site's stewardship efforts	
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.	⊘ Yes
Comment	The site has provided: * A document presenting the water-related internal governance team, including persons at corporate and local level and external consultants. * Another document presenting the PMK AWS team. The site has shown that water-related internal governance is included in their WS report. This report has been sent to external stakeholders on the 2nd of October 2023. Additionally, it has been sent internally via email on the 29th of September 2023.	
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.	⊘ Yes
Comment	The site indicates that 5.2.1 is united with the 5.3.1 & 5.4 documents to produce the WS Report. The WS Report gathers some of the projects from the WSP. It includes contribution to the AWS outcomes. The WS Plan was communicated during the stakeholders event held on the 3rd of August 2023. Additionally, the site has enclosed a copy of the WS Report, in English and in Russian, and folder with evidence of disclosure (DHL and emails).	la
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.	Q Obs.
Comment	The site indicates that performance is mentioned in the WS Report under each project as finished or ongoing. Since the report has been already sent to stakeholders, quantified performance against targets will be added in next year's report.	
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.	
5.4.1	The site's shared water-related challenges and efforts made to address these challenges shall be disclosed.	✔Yes
Comment	During the audit, the site mentioned the projects of cleaning of ditches with neighbouring companies, the action in Ile-Alatau National Park and the action at the airport lake as effort made under this indicator. Some of them are mentioned in the WS Report and others can be found in the presentation under 5.4.2.	
5.4.2	Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be identified.	Q Obs.



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Comment	The site has provided a presentation where the following actions in support to public-sector agencies are explained: *Clean-up event (2023) *Sustainability report and Chiliki farmers rural social program (until 2019) *Pumping station property transfer to state body (2015). Despite this being good examples, the site is encouraged to engage in more water-related projects at catchment level with different stakeholder groups.	
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.	⊘ Yes
Comment	The site has not had water-related compliance violations this year.	
5.5.2	Necessary corrective actions taken by the site to prevent future occurrences shall be disclosed if applicable.	⊘ Yes
Comment	The site has not had water-related compliance violations this year.	
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.	✔Yes
Comment	The site has not had water-related compliance violations this year.	

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Photographic Evidence from Audit



Waste area 1 (after loading).png



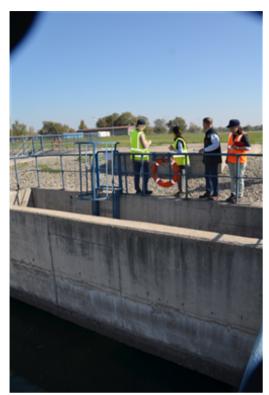
AC.PC warehouse - eye washing system.JPG



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Rain water basin.JPG



Water tank 2 fire safety .JPG



Reverse Osmosis unit.jpg



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Boiler House - Diesel pump.JPG



BWT Area Water Pumps 1.JPG



Fire Pumps 2.JPG



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Fire machine.JPG



Boiler House - Condensate tank.JPG



Waste area 2 (after loading).png



Rain Water Basin 3.JPG



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Rain water basin 1.JPG



BWT Area Meters.JPG



Production Building Chiller side view.jpg



WATER STEWARDSHIP ASSURANCE SERVICES

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Water treatment station and water tanks top view.JPG



Boiler House - RO Water Distribution point.JPG



Heating point - Consumer Meters .JPG



WATER STEWARDSHIP ASSURANCE SERVICES

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Boiler House - NaCl Tanks.JPG



Main Heating Distribution Room.JPG



Heating point - Condensate Tank and Pumps.JPG



Boiler House - RO 2.JPG



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Water treatment plant & Fire pumps entrance.jpg



BWT Area Pipes and Filters.JPG



dressing room - WASH posters.png



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Fire Pumps 1.JPG



AC.PC warehouse - barrel tub.JPG



Boiler House - Feed water tank.JPG



Rain water basin 4.JPG



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Disel Tanks.jpg



Comment

t The site has provided the photos of the site visit.



Waste area1 (loading period).JPG



Boiler House - Softners.JPG



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Boiler House - RO.JPG



AC.PC warehouse - racking system.JPG



Waste area2 (loading period).JPG



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Boiler .jpg



Boiler House - Sand and Boiler.JPG



BWT Area UV Lamps and Pumps.JPG



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BWT Area Water Pumps.JPG



Boiler House - Chemical dosing pumps.JPG



BWT Area Irrigation Meter.JPG



Sewage water manhole 2.JPG



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Sewage water manhole.JPG