

CERTIFICATION REPORT

Alliance for Water Stewardship (AWS)



Audit Number: AO-000700

SITE DETAILS

Site: **Mengniu Dairy - Taian**
Address: 669 Zhongtianmen Road, Tai'an City, Shandong Province, P.R. China, 271000, Taian, Shandong, CHINA
AWS Reference Number: AWS-000618
Site Structure: Single Site

CERTIFICATION DETAILS

Certification status: **Certified Gold**
Date of certification decision: 2023-Oct-11
Validity of certificate: 2026-Oct-10

AUDIT DETAILS

Audited Service(s): AWS Standard v2.0 (2019)
Audit Type(s): Initial Audit
Audit Start Date: 2023-Jul-25
Lead Auditor: Ike Xu (TUV Rheinland)
Audit team participants:
Megan Zhou

Site Participants:
Mengniu Dairy Taian Site, Factory Manager
Mengniu Dairy Taian Site, Assistant Manager - EHS
Mengniu Dairy Taian Site, Operations manager
Mengniu Dairy Taian Site, Engineering Manager
Mengniu Dairy Taian Site, Quality manager
Mengniu Dairy Taian Site, Factory EHS Manager

AUDIT TIMES

Dates	Audit from	Duration	Auditor	Description
2023-Jul-25	09:00:00 - 17:00:00	08:00	Ike Xu (TUV Rheinland)	
2023-Jul-26	09:00:00 - 17:00:00	08:00	Ike Xu (TUV Rheinland)	
2023-Jul-27	09:00:00 - 17:00:00	08:00	Ike Xu (TUV Rheinland)	
2023-Jul-28	09:00:00 - 13:00:00	04:00	Ike Xu (TUV Rheinland)	

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ADDITIONAL INFO

Summary of Audit Findings: A total of three findings were raised during the certification audit, 0 major non-conformities, 2 minor non-conformities, 1 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 29/08/2023.

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

The audit team recommends certification of Mengniu Dairy Taian site at Gold level by receiving all corrective actions addressed by the site.

Scope of Assessment: The scope of services covers the Initial certification audit for assessing conformity of Mengniu Dairy - Taian site against the AWS International Water Stewardship Standard Version 2.

The site is located at the Taian High-tech industrial development zone, Taian city, Shandong province, China with a total area of 380 acres. The site includes 13 production lines with two of beverage and eleven of yogurt, contributing a total production of 421 tons daily. Main facilities of the site include one production workshop, one power workshop, one shared hazardous waste warehouse and one shared chemical warehouse. ETP, canteen and dormitory are not owned or operated by Taian site.

The facility is located in the Mouwen River catchment, originating at the foot of the mountain of Spin Mountain in the southeast of Gangcheng District, Jinan City, Shandong Province, and flows westward through Gangcheng District, Laicheng District and Tai'an City of Jinan City, and then joins with the Chaiwen River at Dawenkou in Tai'an City, which is called the Dawen River. The estimated length is 119.5 kilometers, and the total watershed area is estimated to be 2,698.96 square kilometers.

The audit was conducted onsite from Jul 25 to 28, 2023.

The onsite site visit included the assessment of Mengniu Dairy - Taian site.

The following external stakeholders were interviewed during the audit: local environmental protection bureau, water authority, water supply facility, ETP, employees, suppliers, neighborhood companies, communities, etc.

SCORE

61.00

FINDINGS

Observation	1
Minor	2

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FINDING DETAILS

Finding No:	TNR-005565
Checklist Item No:	2.4.1
Status:	Closed
Finding level:	Minor
Due date:	2023-Jul-31
Checklist item:	A plan to mitigate or adapt to identified water risks developed in co-ordination with relevant public-sector and infrastructure agencies shall be identified.
Findings:	The site does not develop a mitigation and adaption plan according to different priority of water risk.
Corrective action:	1 <input type="checkbox"/> Organize the priority sorting of plant water risks within the plant 2 <input type="checkbox"/> Establish the mitigation and adaptation plan according to the priority of water risks. 3 <input type="checkbox"/> Communicate the mitigation and adaptation plan with stakeholders.
Finding No:	TNR-005516
Checklist Item No:	3.6.1
Status:	Closed
Finding level:	Minor
Due date:	2023-Aug-15
Checklist item:	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.
Findings:	the main parameter of drinking water outlet was not tested within the site.
Corrective action:	The site conducted drinking water test at the outlet of production workshop, canteen and dormitory, The test results showed conformity to national drinking water standard.
Finding No:	TNR-006161
Checklist Item No:	3.7.1
Status:	Open
Finding level:	Observation
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 will need to include indirect water use targets in the WS Plan for future improvement.

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Report Details

Report	Value
Report prepared by	Ike Xu
Report approved by	Mia Antoni-Naidoo
Report approved on (Date)	11 October 2023

Surveillance

Proposed date for next audit
2024-Jul-15

Stakeholder Announcements

Date of publication	Location
24/06/2023	https://a4ws.org/wp-content/uploads/2023/07/AWS-000618-Mengniu-2023-Stakeholder-Announcement.pdf
20/06/2023	https://www.mengniu.com.cn/news/zbxx/detail/52708.html
20/06/2023	https://www.tuv.com/content-media-files/greater-china/about-us/downloads/terms-and-conditions-and-certification-regulations/aws-stakeholder-announcement-mengniu-taian.pdf

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Catchment Information

Catchment Information

The Yellow River is the second largest river in China. It originates from the northern foot of Ba Yan Ka La Mountain in Qinghai Plateau about Gu Zong Li Basin, meanders eastward, crosses the Loess Plateau and the Huanghuaihai Great Plain, and injects into the Bohai Sea. The total length of the main stream is 5,464 kilometers, with a water surface difference of 4,480 meters. The total area of the basin is 795,000 square kilometers (including 42,000 square kilometers of inland flow area).

The water quality of the Yellow River is becoming more and more polluted. Among them, the main stream of the Yellow River shows category IV water quality, with a length of 1,878.5 kilometers, accounting for 34.4% of the total length of the main stream. The water quality of major tributaries of Class I, II and III water quality accounts for only 41% of the evaluated river lengths, and 59% of the river lengths have poor or very poor water quality.

Located on the right bank of the lower reaches of the Yellow River, the Dawen River is the largest tributary of the lower reaches of the Yellow River and the only large-scale river in Tai'an. The main stream originates from Taizi Village, Huangzhuang Town, Gangcheng District, Laiwu City, flows through Laiwu City, Daiyue District of Tai'an City, Taishan District, Feicheng City, Ningyang County, Dongping County, Wenshang County of Jining City and other counties, and is injected into Dongping Lake at Makou Village of Dongping County, and then discharged into the Yellow River by Qinghemen of Dongping Lake, and Chenshankou Lake Outlet Lock, with the total length of 231 km (the section of the river within the territory of Tai'an City is 179.24 km long), and the watershed area is 8,944km² (The watershed area in Tai'an City is 6093.2km²).

The water quality of Dawen River is always in a mildly polluted state, and according to Tai'an City's "Circular on the Status of Water Environment Quality of Key Rivers and Progress of the Construction of Key Water Pollution Control Projects", the main characteristic pollutants are total nitrogen, ammonia nitrogen, chemical oxygen demand and total phosphorus.

The Mouwen River originates at the foot of the mountain of Spin Mountain in the southeast of Gangcheng District, Jinan City, Shandong Province, and flows westward through Gangcheng District, Laicheng District and Tai'an City of Jinan City, and then joins with the Chaiwen River at Dawenkou in Tai'an City, which is called the Dawen River. The estimated length is 119.5 kilometers, and the total watershed area is estimated to be 2,698.96 square kilometers.

Mouwen River water volume seasonal changes, in order to intercept the flood development of agriculture, the basin built numerous reservoirs, in addition to the main tributaries of the Yingwen River area, there are CaiShan Reservoir, HuShan Reservoir, Daye Reservoir, Qiaodian Reservoir, YangJiaHeng Reservoir, Hulushan Reservoir, GouLi Reservoir, Pidgeon House Reservoir, Pidgeon House Reservoir, ShengLi Reservoir (TianYiYuan), and so on. The famous Shengli Drainage Canal, since the main rely on the Shengli Drainage Canal from the right bank of the Mouwen River to divert water, crossing 27 large and small rivers and 8 highways such as Yingwen, Shiwen, etc., into the Shengli Reservoir.

Mouwen River is located in the area of high-tech zone, the cross-section monitoring quality is among the worst in Tai'an City. The main pollutants include five-day biochemical oxygen demand, ammonia nitrogen, chemical oxygen demand and total phosphorus.

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2.11.2_maps_and_name_of_catchment.png

Client Description and Site Details

Client/Site Background

Mengniu Dairy Tai'an Limited Liability Company was registered in November 2003 and formally put into production in early April 2004, with a cumulative total investment of 2.5 billion yuan, covering an area of 380 acres, with three major production workshops and 49 production lines, integrating ambient, low-temperature and iced products as a comprehensive production base, with a daily production capacity of 2,550 tons, 14 series, and 149 items.

In 2013, Mengniu Dairy Products (Tai'an) Co., Ltd. was registered and established (low temperature), as of December 2022, the cumulative output of low temperature is 869,600 tons, the output value is 8,755 million yuan, and the amount of tax payment is 240 million yuan. 2022 output is 75,500 tons, the output value is 740 million yuan, and the operating income is 690 million yuan.

The products of the factory are divided into three categories: stirred fermented milk, active lactobacillus beverage, and charcoal-flavored fermented milk, with a total of 13 production lines: 2 beverages, 11 stirred yogurts, 36 items, 34 SKUs, and a daily production capacity of 421 tons.



1.1 Site boundaries.jpg

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Summary of Shared Water Challenges

Summary of Shared Water Challenges

Water resources shortage: the city's multi-year average (1956-2016) total local water resources is 1,601.82 million m³, and the per capita water resources possession is 282m³, which is insufficient in the total amount of water resources, and the per capita water resources possession is on the low side.

Water quality: 1. Wastewater from industrial and agricultural production activities around the watershed is discharged into the river leading to water quality pollution;

2. Insufficient maintenance of municipal facilities and damage to water pipelines lead to secondary pollution of tap water;

3. The location of the factory is newly built, and the water supply plant is also a new supporting water plant in the park.

The plant is newly built, and the water supply plant is also a newly built water supply plant in the park, and the water pipeline network and other municipal facilities in the park are relatively new, so it is not easy for water quality pollution to occur.

Climate change: water resources regulate the climate. In recent years, the global climate has gradually deteriorated, with frequent occurrence of extreme weather, and the basin where the plant is located is no exception, with more hot weather in summer and uneven distribution of precipitation.

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 site only cover one catchment: Dawenhe catchment.

0.1.1.2 The scope of the proposed certification shall be under the control of a single management system.



Yes

0.1.1.3 The scope of the proposed certification shall be homogeneous with respect to primary production system, water management, product or service range, and the main market structures.



Yes

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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:*

- 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.



Yes

Comment The site provided layout of the site and several maps that shows the position of the site and water-related infrastructure, which shows:
The site's boundary is Mengniu Dairy Products (Tai'an) Co., Ltd. located in Zhongtianmen Street, High-tech Zone, Tai'an City, Shandong Province, including 1 main workshop, 2 cold storage rooms, 1 raw and auxiliary material warehouse and auxiliary facilities.
The piping network diagram of the site shows the location of discharge points and tap water input points at the site. The water supply service provider is Tai'an Water Supply Company, the water source is Huangqian Reservoir, groundwater (Tobu Water Source, Jiuxian Water Source) and Xiaonanmen Reservoir and Caishan Reservoir are backup water sources, Huangqian Reservoir can meet the demand, and there is no need to use backup water sources.
The site's effluent from the Wastewater treatment plant is discharged to the No. 2 Wastewater Treatment Plant of Tai'an City, and then discharged into the Panwen River, through the Muwen River into the Dawen River and finally into the Yellow River, and part of it is discharged to the Phoenix River Wastewater Treatment Plant and then enters the Phoenix Lake.
The catchment where the site located Muwen River Basin and the Huangqian Reservoir as the drainage of the low-temperature Tai'an plant and the watershed boundary of the water-dependent area.

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 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.



Yes

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Comment	The site had established process for stakeholder identification. The site provided a list of identified stakeholders, including other companies belonging to the Mengniu Taian site, around the community, schools, neighborhoods, hospitals, communities, surrounding companies, suppliers, governments, commercial tenants, around villages, NGOs and associations. The site through telephone interviews, online survey and site visits to understand stakeholder consultation on water-related interests and challenges.	
1.2.2	<i>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.</i>	Yes
Comment	The site has analysis the degree of influence between site and stakeholders and rated for each stakeholder, which included in the stakeholders list.	
1.3	<i>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.</i>	
1.3.1	<i>Existing water-related incident response plans shall be identified.</i>	Yes
Comment	The site has published a comprehensive emergency response plan, which included situations like chemical leakage, wastewater leakage and hazardous waste leakage.	
1.3.2	<i>Site water balance, including inflows, losses, storage, and outflows shall be identified and mapped</i>	Yes
Comment	The site has drawn a water balance map which shows the water inflows, losses, storage, and outflows of each manufacture process and auxiliary facilities.	
1.3.3	<i>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.</i>	Yes
Comment	The site is equipped with a flow meter of total water intake and total steam inflow, and the production and domestic water are measured separately, and the "secondary water unit" has an exemplary rate of 100%, a metering rate of 100%, and an accuracy level that meets the standard requirements; The installation rate of the main water equipment (facilities) reaches 100%, and the metering rate is accurate and meets the standard requirements. The site carried out a water balance test, during the test, there was no abnormal leakage in the company's water system, the production operation was basically stable, and the test results included water consumption, drainage, circulating water volume, etc., which can represent the current water level of the enterprise. The site measures water consumption monthly to reflect annual variance.	
1.3.4	<i>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.</i>	Yes

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Comment	<p>The site has provided several recent testing reports about water source(s), provided waters, effluent and receiving water bodies, included:</p> <ol style="list-style-type: none"> 1) Report on the Water Quality of Centralized Domestic Drinking Water Source (Tai'an Ecological and Environmental Protection Bureau) 2) Testing report of drinking water and water provided 3) Testing report of Mengniu Tai'an wastewater treatment plant discharge 4) Testing report of Phoenix River (Phoenix Lake wastewater treatment plant drains into the Pan River) and Wen River (Tai'an second wastewater treatment plant), the ultimate receiving water body <p>According to the interview, the site monitor effluent every quarter, an online wastewater monitoring system is installed, according to the wastewater testing report, all pollutant discharge meet demand.</p>	
1.3.5	<i>Potential sources of pollution shall be identified and if applicable, mapped, including chemicals used or stored on site.</i>	 Yes
Comment	<p>According to the site visit and risk control layout, the site has identified potential source of pollution in the site and mapped it with layout of the site. The potential source of pollution identified included chemical storage area and areas where concentrated liquid ammonia storage and used. The hazardous waste warehouse is managed by Mengniu Dairy and is not within this boundary.</p>	
1.3.6	<i>On-site Important Water-Related Areas shall be identified and mapped, including a description of their status including Indigenous cultural values.</i>	 Yes
Comment	<p>According to the site tour and interview, there are two IWRA which is out of the site, Daiyue District Tianshuo Lake Water Conservancy Scenic Area and Tai'an Tianping Lake Water Park in the site.</p>	
1.3.7	<i>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.</i>	 Yes
Comment	<p>The site has provided a water-related costs table, which presents the water used quantity and water-related costs per tones water. The water-related costs per tones water is 8.41 CNY, which included water resource tax, water fee, energy fee and water pretreatment fee. The site also does water saving benefit statistics, which shows water saving project and benefit from it.</p>	
1.3.8	<i>Levels of access and adequacy of WASH at the site shall be identified.</i>	 Yes
Comment	<p>The site evaluated its level of access and adequacy of WASH by using WBCSD tool. According to the site tour, the site provided drinking water, washing room, cleaning toilet, hand washing basin area for all employees. The site hired cleaners to clean toilet and hand washing basin area every day.</p>	
1.4	<i>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.</i>	
1.4.1	<i>The embedded water use of primary inputs, including quantity, quality and level of water risk within the site's catchment, shall be identified.</i>	 Yes

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Comment	The main raw materials of the product of the site are milk and packaging materials, the suppliers are ranches and packaging material company. The ranches and most packaging materials company are in the different catchment with the site. The site questionnaire to suppliers to understand their water-related situation, included water quantity, water cost, product capacity, what catchment they belong to and wastewater discharge. The site use WWF to understand catchment risk of suppliers, which included water shortage, floor, water quality, status of ecosystem services and environment. The site inquired about environmental violations of suppliers through the NGO website.	
1.4.2	<i>The embedded water use of outsourced services shall be identified, and where those services originate within the site's catchment, quantified.</i>	 Yes
Comment	Outsourced service expenditure accounts for less of the supplier's expenditure and does not need to be investigated after assessment.	
1.4.3	<i>Advanced Indicator The embedded water use of primary inputs in catchment(s) of origin shall be quantified.</i>	 Yes
Comment	The site questionnaire to ranches and packaging material supplier to understand their water-related situation, which included products capacity and water quantity. And the site calculated how many waters used per tones milks and how many water used per tones packaging materials. So, the site can know the water use of primary inputs in the raw materials.	
Score	7	
1.5	<i>Gather water-related data for the catchment, including water governance, water balance, water quality, Important Water-Related Areas, infrastructure, and WASH</i>	
1.5.1	<i>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.</i>	 Yes
Comment	The site has gathered water-related data for the catchment and summarized as a Catchment Report. The water governance initiatives identified including: 1) Planning for the Protection of the Ecological Environment in the Yellow River Basin 2) Action Plan for Ecological Protection and Management of the Yellow River 3) Measures for the Supervision and Inspection of Water Conservation in Shandong Province (Trial) 4) Regulations on Water Resources of Shandong Province 5) Special Plan for Ecological Protection and High-quality Development of Water Conservancy in the Yellow River Basin of Tai'an City The site can understand water stewardship opportunities from above public plan.	
1.5.2	<i>Applicable water-related legal and regulatory requirements shall be identified, including legally-defined and/or stakeholder-verified customary water rights.</i>	 Yes

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Comment	<p>The site has gathered water-related data for the catchment and summarized as a Catchment Report. The water-related legal and regulatory requirement identified cover the following topics: water governance, environmental impact assessment, pollutant discharge, water resources extraction and utilization, drinking water safety and sanitation and so on. The site also summarized main clauses of regulations identified that related with water and available for the site.</p> <p>Same regulations in the Catchment report listed below:</p> <ul style="list-style-type: none"> 1□ Regulations on discharge permit Administration 2□ Water Law of the People's Republic of China 3□ Law of the People's Republic of China on the Prevention and Control of Water Pollution 4□ Detailed Rules for the Implementation of the Law of the People's Republic of China on the Prevention and Control of Water Pollution 5□ Notice of the State Council on the issuance of the action plan for the prevention and control of water pollution 	
1.5.3	<p><i>The catchment water-balance, and where applicable, scarcity, shall be quantified, including indication of annual, and where appropriate, seasonal, variance.</i></p>	 Yes
Comment	<p>The site has gathered water-related data for the catchment and summarized as a Catchment Report, which included catchment water balance.</p> <p>The site's water source is Huangqian reservoir. Huangqian Reservoir is located in the upper reaches of Shiwen River, a tributary of the Dawen River, with a basin area of 292Km², a total reservoir capacity of 8248×104m³, and Xingli reservoir capacity of 5913×104m³. The river length is 21.1 km, the average slope of the mainstream is 0.00940m/m, the basin shape is fan-shaped, the shape coefficient is 0.66, the density of the river network is 0.26, the average width of the watershed is 13.8 km, the bending coefficient of the river channel is 1.57, and the shape of the river section is rectangular.□□</p> <p>The average precipitation of the city in 2021 was 1023.2mm, equivalent to a total precipitation of 7.942 billion m³, and the precipitation was 14.1% higher than that in 202 and 47.2% more than the same period of the previous year.</p>	
1.5.4	<p><i>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.</i></p>	 Yes
Comment	<p>The site has gathered water-related data for the catchment and summarized as a Catchment Report, which included catchment water quality.</p> <p>The water quality of the upper reaches of the Muwen River (He Xiaozhuang) is Class III, and the water quality of the Dawen River section (Daicunba Wangtai Bridge) is Class III.</p> <p>The area where Phoenix Lake, Panhe River and Muwen River are located is a high-tech zone, and the cross-sectional monitoring quality is the worst in Tai'an City. The main pollutants include five-day biochemical oxygen demand, ammonia nitrogen, chemical oxygen demand and total phosphorus.</p>	
1.5.5	<p><i>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.</i></p>	 Yes
Comment	<p>Important water-related areas are identified via government published documents and stakeholder engagement. Sample IWRA's included: Tianyi Lake Water Conservancy Scenic Area, Tai'an Tianping Lake Water Park, Phoenix Lake Park. The site maps the location of important water-related areas and sites and where they are located in the watershed.</p> <p>The site collected public information from IWRA's governing body and assessed IWRA's status. Currently, all IWRA's status are good.</p>	
1.5.6	<p><i>Existing and planned water-related infrastructure shall be identified, including condition and potential exposure to extreme events.</i></p>	 Yes

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Comment	According to the "Circular on the Status of Water Environmental Quality of Key Rivers in Tai'an City and the Progress of Construction of Key Water Pollution Prevention and Control Projects", the planning status of surrounding water conservancy facilities is displayed, and the site has determined the existing and planned water-related infrastructure. The water-related infrastructure identified by the site includes: Caishan Reservoir, Hushan Reservoir, Daye Reservoir, Qiaodian Reservoir, Yangjiaheng Reservoir, Hulushan Reservoir, Gouli Reservoir, Lugelou Reservoir, Fenghuanghu Sewage Treatment Plant, Tai'an Second Sewage Treatment Plant. The site also identified the condition and potential exposure to extreme events of the water related infrastructure from this document.	
1.5.7	<i>The adequacy of available WASH services within the catchment shall be identified.</i>	 Yes
Comment	According to the water quality status report of Tai'an drinking water source, the water quality is good to meet the surrounding drinking water demand, and the treatment capacity of Phoenix Lake Wastewater Treatment Plant and Tai'an Second Wastewater Treatment Plant meets the wastewater treatment requirements of the factory. The site collected the water quantity and quality of the water supply of the water company, visited the villages to understand the villagers' feelings about the WASH in the river basin, and the government's efforts in recent years in the laying of rain sewer pipe networks, the construction of public toilets, and the supply of running water.	
1.5.8	<i>Advanced Indicator Efforts by the site to support and undertake catchment level water-related data collection shall be identified.</i>	 Yes
Comment	In order to understand the water quality of Phoenix Lake and the discharge of wastewater treatment plant, the site sampled the discharge of Phoenix Lake water and Phoenix River wastewater treatment plant, and the test indicators included chemical oxygen demand and PH value, according to the test report, the number of sampling points was required.	
Score	4	
1.5.9	<i>Advanced Indicator The adequacy of WASH provision within the catchments of origin of primary inputs shall be identified.</i>	 N/A
Comment	The site does not perform this indicator.	
1.6	<i>Understand current and future shared water challenges in the catchment, by linking the water challenges identified by stakeholders with the site's water challenges.</i>	
1.6.1	<i>Shared water challenges shall be identified and prioritized from the information gathered.</i>	 Yes
Comment	Shared water challenges were identified and prioritized as per the communication/consultation with the stakeholder and information from catchment report. The site collected catchment information and analyzed the catchment on which the site depends and the main water challenges affecting the basin, ranked by importance discussed in the process: water scarcity, water quality issues, river health and landscape facilities, climate change mitigation and adaptation.	
1.6.2	<i>Initiatives to address shared water challenges shall be identified.</i>	 Yes

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Comment	In response to the shortage of water resources, the site has formulated measures to save water, reuse reclaimed water, and promote low-water-consuming products and low-water-consuming production processes. In response to water quality challenges, the site formulates measures to meet pollution discharge standards, save pollution and reduce emissions, and establish internal monitoring capabilities. In view of the health of the river, , the site has developed plans such as voluntary river patrols and beach clean-up activities. In response to climate change, the factory has formulated plans to adapt to climate change and mitigate climate change and promote the construction of green factories.	
1.6.3	<i>Advanced Indicator</i> <i>Future water issues shall be identified, including anticipated impacts and trends</i>	 Yes
Comment	By investigating water-related data from the past year, such as the Tai'an Water Resources Bulletin, the site identify future water resources problems in the basin and predict future development at the basin level.	
Score	3	
1.6.4	<i>Advanced Indicator</i> <i>Potential water-related social impacts from the site shall be identified, resulting in a social impact assessment with a particular focus on water.</i>	 N/A
Comment	The site does not perform this indicator.	
1.7	<i>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.</i>	
1.7.1	<i>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.</i>	 Yes
Comment	The site breaks down water challenges into corresponding water risk scenarios, classifies and scores them. Water risks can be divided into three categories: physical, legal, and reputational, and the priority of water risks is obtained according to the probability of occurrence and the severity score after occurrence. According to the WWF Water Risk Filter analysis, the overall water risk of the low-temperature Tai'an plant is high, according to the analysis of the WRI Aqueduct's water risk map, the current water risk of the low-temperature Tai'an plant is high, and it will continue to deteriorate by 2030. The risk includes water shortage threat from water supply source, water demand increasing, etc.	
1.7.2	<i>Water-related opportunities shall be identified, including how the site may participate, assessment and prioritization of potential savings, and business opportunities.</i>	 Yes
Comment	The site analyzes the water opportunities that might arise if each water risk is properly addressed. The site estimates the potential revenue and benefit of each opportunity and ranks the opportunities by importance and revenue score. The opportunities include increase the reuse of reclaimed water, participate in water conservation programs and government-led emission reduction programs.	
1.8	<i>Understand best practice towards achieving AWS outcomes: Determining sectoral best practices having a local/catchment, regional, or national relevance.</i>	
1.8.1	<i>Relevant catchment best practice for water governance shall be identified.</i>	 Yes

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Comment The site has provided a list of all the work they are doing towards Best Practice for good water governance already performed.
The site develops a detailed, concrete and feasible water sustainable management plan, implements each action in the plan and regularly reviews and updates the progress and results of the actions. The site applied for a national green factory and won the water-saving enterprise and Shandong Province Contract Water-saving Management Enterprise and was included in the typical enterprise of Tai'an Water-saving City.
The site has also provided a list of Best Practices including national standard, industrial standard and actions which has been undertaken by other dairy companies in support of Good Water Governance.

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 The site has provided a list of all the work they are doing towards Best Practice for good water balance already performed.
The site commissioned a third party to make a water balance analysis report, implemented effective water-saving measures and achieved water-saving effects, and won the title of contract water-saving management enterprise in Shandong Province.
Compared with 2018-2020, the site reduced the amount of water per ton to 3.68, a decrease of 51.5%.
The site has also provided a list of Best Practices including national standard, industrial standard and actions which has been undertaken by other dairy companies in support of Good Water balance.

1.8.3 *Relevant sector and/or catchment best practice for water quality shall be identified, including rationale for data source.*  **Yes**

Comment The site has provided a list of all the work they are doing towards Best Practice for good water quality already performed.
The site tests drinking water and groundwater source water to understand its water quality. The factory's container cleaning water, CIP tank cleaning water, etc. are recycled in the cleaning process, and the site will reuse the concentrated water from the pure water station for the bag breaking process, and in the future, the excess concentrated water will be used to reduce dust and reduce wastewater discharge.
The site has also provided a list of Best Practices including national standard, industrial standard and actions which has been undertaken by other dairy companies in support of Good Water quality.

1.8.4 *Relevant catchment best practice for site maintenance of Important Water-Related Areas shall be identified.*  **Yes**

Comment The site has provided a list of all the work they are doing towards Best Practice for IWRA already performed.
The site held beach clean-up activities and river patrols to patrol the surrounding water bodies. The site visited Huangqian Reservoir, Phoenix Lake and its surroundings, and invited surrounding enterprises and nearby villages to participate in government flood control drills and beach clean-up activities.
The site has also provided a list of Best Practices including actions which has been undertaken by other companies in support of IWRA.

1.8.5 *Relevant sector and/or catchment best practice for site provision of equitable and adequate WASH services shall be identified.*  **Yes**

Comment The site has provided a list of all the work they are doing towards Best Practice for WASH already performed.
The site provided clean and hygienic drinking water, washbasins, toilets and showers to employees on site. The site also assesses the toilet configuration, and the result shows the site meets demand.
The site has also provided a list of Best Practices including national standard, industrial standard and actions which has been undertaken by other dairy companies in support of Good WASH.

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2		STEP 2: COMMIT & PLAN - Commit to be a responsible water steward and develop a Water Stewardship Plan
2.1	<i>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.</i>	
2.1.1	<i>A signed and publicly disclosed site statement OR organizational document shall be identified. The statement or document shall include the following commitments:</i> <ul style="list-style-type: none"> - 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. 	 Yes
Comment	The president of Mengniu group signed the commitment letter on sustainable water stewardship and the site director also signed the commitment letter. All the requirements including planning and disclosure, communication with stakeholders and resources allocations are mentioned in the commitment letter.	
2.1.2	<i>Advanced Indicator</i> <i>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.</i>	 Yes
Comment	The site has disclosed the statement letter from the corporate and site level at the entrance of the site as well as corporate website.	
Score	1	
2.2	<i>Develop and document a process to achieve and maintain legal and regulatory compliance.</i>	
2.2.1	<i>The system to maintain compliance obligations for water and wastewater management shall be identified, including:</i> <ul style="list-style-type: none"> - Identification of responsible persons/positions within facility organizational structure - Process for submissions to regulatory agencies. 	 Yes
Comment	The site maintained environmental and occupational hygiene system manual that describe water compliance obligations. Detailed requirements are specified in the document "compliance management procedures".	
2.3	<i>Create a water stewardship strategy and plan including addressing risks (to and from the site), shared catchment water challenges, and opportunities.</i>	
2.3.1	<i>A water stewardship strategy shall be identified that defines the overarching mission, vision, and goals of the organization towards good water stewardship in line with this AWS Standard.</i>	 Yes

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Comment	The site developed its overall water stewardship strategy as: 1) Pilot the certification of sustainable water management, water resource demonstration, and water balance testing, and promote the certification of 2 factories through AWS sustainable water management. 2) Organize the Group's sustainable water management training and empowerment, and promote the Group's sustainable water management capacity building. 3) Carry out the implementation of process water-saving and water-saving projects, horizontally cover the source, transmission, use, storage and other processes, and apply section, ladder, return, replenishment and other methods vertically 4) Regularly monitor the company's water consumption and density. 5) Explore dairy water footprint measurement projects. 6) Regularly draw and update the Group's water risk map.	
2.3.2	<i>A water stewardship plan shall be identified, including for each target:</i> - <i>How it will be measured and monitored</i> - <i>Actions to achieve and maintain (or exceed) it</i> - <i>Planned timeframes to achieve it</i> - <i>Financial budgets allocated for actions</i> - <i>Positions of persons responsible for actions and achieving targets</i> - <i>Where available, note the link between each target and the achievement of best practice to help address shared water challenges and the AWS outcomes.</i>	 Yes
Comment	The site developed water stewardship plan, covering the aspects of water balance, water quality, IWRA, water governance, water related climate change, etc. Each goal is defined clearly and set up various measures according to the 2.3.2 requirements.	
2.3.3	<i>Advanced Indicator</i> <i>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.</i>	 Yes
Comment	The site initiated several actions in cooperation with other organizations as follows: 1) Organize stakeholder participation in water-related training and communication meetings 2) Participate in government flood control exercises 3) Organize beach clean-up activities for the government and stakeholders (Hoang Qian Reservoir, Wen River) 4) Organize government and stakeholder river patrols (Phoenix River)	
Score	4	
2.3.4	<i>Advanced Indicator</i> <i>The site's partnership/water stewardship activities with other sites in another catchment(s) (either under same corporate structure or with another corporate site) shall be identified.</i>	 Yes
Comment	The site initiated the "Enterprise connected - Water sustainable protection of nature Public welfare together" activity project, Mengniu Tianjin Factory wetland protection as a water connected project to carry out the theme of "cherish wetlands, harmonious coexistence of human and nature" wetland punch activities.	
Score	4	
2.3.5	<i>Advanced Indicator</i> <i>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.</i>	 N/A
Comment	The site does not perform this indicator.	
2.4	<i>Demonstrate the site's responsiveness and resilience to respond to water risks</i>	

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2.4.1	<i>A plan to mitigate or adapt to identified water risks developed in co-ordination with relevant public-sector and infrastructure agencies shall be identified.</i>	 No
Comment	The site regularly communicates with the government and public authorities about mitigate or adapt to identified water risks developed, but there are no documents and records. Finding No: TNR-005565	
2.4.2	<i>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.</i>	 N/A
Comment	The site does not perform this indicator.	

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3	STEP 3: IMPLEMENT - Implement the site's stewardship plan and improve impacts		
3.1	<i>Implement plan to participate positively in catchment governance.</i>		
3.1.1	<i>Evidence that the site has supported good catchment governance shall be identified.</i>		Yes
Comment	The site conducted visit to water supply authority to receive their recommendations on site and catchment water governance as well as the measures towards water related challenges. The site also actively participated in water related emergency drill (flood, typhoon, etc.) organized by local government and industrial park.		
3.1.2	<i>Measures identified to respect the water rights of others including Indigenous peoples, that are not part of 3.2 shall be implemented.</i>		Yes
Comment	The water rights are respected under legal and regulatory mechanisms.		
3.1.3	<i>Advanced Indicator Evidence of improvements in water governance capacity from a site-selected baseline date shall be identified.</i>		Yes
Comment	The site developed an AWS management system manual to support water governance improvement.		
Score	2		
3.1.4	<i>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.</i>		N/A
Comment	The site did not perform this indicator.		
3.2	<i>Implement system to comply with water-related legal and regulatory requirements and respect water rights.</i>		
3.2.1	<i>A process to verify full legal and regulatory compliance shall be implemented.</i>		Yes
Comment	The site developed the process "Applying safety and environmental laws and regulations management process" (document no.: S-17.5.1-13-2017-0) to examine the conformity of the regulations. Meanwhile, the water related laws and regulations were up to date during audit.		
3.2.2	<i>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.</i>		Yes
Comment	The water rights are not part of legal or regulatory requirements in this region.		
3.3	<i>Implement plan to achieve site water balance targets.</i>		
3.3.1	<i>Status of progress towards meeting water balance targets set in the water stewardship plan shall be identified.</i>		Yes
Comment	The site developed 9 water balance measures in 2023 water stewardship plan and all of them have been completed, including pasteurization improvement program, replacing auto temp reduction by natural temp reduction of fermentation tank, etc.		

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3.3.2	<i>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.</i>	 Yes
Comment	Water scarcity was identified shared challenge. The site developed an annual water efficiency target in Year 2023 of about 4 tonnes water per tonne product. The target was breakdown by month and by department.	
3.3.3	<i>Legally-binding documentation, if applicable, for the re-allocation of water to social, cultural or environmental needs shall be identified.</i>	 Yes
Comment	No legally-binding documentation is issued by local government authorities to the site for the re-allocation of water to social, cultural or environmental needs.	
3.3.4	<i>Advanced Indicator The total volume of water voluntarily re-allocated (from site water savings) for social, cultural and environmental needs shall be quantified.</i>	 N/A
Comment	The site did not perform this indicator.	
3.4	<i>Implement plan to achieve site water quality targets</i>	
3.4.1	<i>Status of progress towards meeting water quality targets set in the water stewardship plan shall be identified.</i>	 Yes
Comment	The site developed production water test plan and conducted water test regularly according to the plan. Meanwhile, the site developed original water and softened water quality standards. The discharge water to industrial park ETP was tested according to the plan.	
3.4.2	<i>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.</i>	 Yes
Comment	Water quality was identified shared challenge. The site identified the discharge water standards and developed its own water quality standard for fulfil water quality requirements. The site keeps improve production process and upgrade utilities to achieve water saving and reduce contaminants into the wastewater. As per the wastewater monitoring result, the average concentration of COD and Ammonia nitrogen were 10% and 20% of the discharge limit respectively in 2022.	
3.5	<i>Implement plan to maintain or improve the site's and/or catchment's Important Water-Related Areas.</i>	
3.5.1	<i>Practices set in the water stewardship plan to maintain and/or enhance the site's Important Water-Related Areas shall be implemented.</i>	 Yes
Comment	No Important Water-Related Areas was presented in the site. The site identified the catchment's IWRA such as drinking water source and conducted regular visits to monitor the status. Garbage pick-up actions were also conducted twice a year around drinking water source to maintain the good status of IWRAs.	
3.5.2	<i>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.</i>	 N/A
Comment	The site did not perform this indicator.	

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3.5.3	<i>Advanced Indicator</i> <i>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.</i>	 N/A
Comment	The site did not perform this indicator.	
3.6	<i>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.</i>	
3.6.1	<i>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.</i>	 No
Comment	The site provided sufficient toilets, shower room and drinking water plots to employees. However, the main parameter of drinking water outlet was not tested within the site. Finding No: TNR-005516	
3.6.2	<i>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.</i>	 Yes
Comment	No evidence showed 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.	
3.6.3	<i>Advanced Indicator</i> <i>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.</i>	 N/A
Comment	The site did not perform this indicator.	
3.6.4	<i>Advanced Indicator:</i> <i>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.</i>	 N/A
Comment	The site did not perform this indicator.	
3.7	<i>Implement plan to maintain or improve indirect water use within the catchment:</i>	
3.7.1	<i>Evidence that indirect water use targets set in the water stewardship plan, as applicable, have been met shall be quantified.</i>	 Obs.
Comment	The site did not have indirect water targets in the plan yet. The site send questionnaire to suppliers to understand their water-related situation, included water quantity, water cost, product capacity, what catchment they belong to and wastewater discharge. The site use WWF to understand catchment risk of suppliers, which included water shortage, floor, water quality, status of ecosystem services and environment.	
3.7.2	<i>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.</i>	 Yes

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Comment	The site organized a meeting in May 2023 with raw materials suppliers to introduce the AWS program and requirements for suppliers. After the meeting, the site organized garbage pickup at the water source of the site,	
3.7.3	<i>Advanced Indicator</i> <i>Actions taken to address water related risks and challenges related to indirect water use outside the catchment shall be documented and evaluated.</i>	 N/A
Comment	The site did not perform this indicator.	
3.8	<i>Implement plan to engage with and notify the owners of any shared water-related infrastructure of any concerns the site may have.</i>	
3.8.1	<i>Evidence of engagement, and the key messages relayed with confirmation of receipt, shall be identified.</i>	 Yes
Comment	The site conducted multiple measures to launch the communication: 1. provided AWS questionnaire to governmental agencies to receive their feedback; 2. face to face meeting with governments, suppliers to share project outputs. The feedback included regular communications, keeping achieve superior water saving in future operation, maintaining good quality of discharged water, etc.	
3.9	<i>Implement actions to achieve best practice towards AWS outcomes: continually improve towards achieving sectoral best practice having a local/catchment, regional, or national relevance.</i>	
3.9.1	<i>Actions towards achieving best practice, related to water governance, as applicable, shall be implemented.</i>	 Yes
Comment	The site actively participated in water resource emergency drill organized the water authority. The site also organized its own flooding emergency drill in Apr 2023.	
3.9.2	<i>Actions towards achieving best practice, related to targets in terms of water balance shall be implemented.</i>	 Yes
Comment	The site conducted several actions to improve water balance goals, such as: 1) improve the water efficiency of primary and secondary water in production workshop; 2) the disinfection water is reused for CIP process to reduce water consumption; 3) process upgrade to reduce fresh water and alkali washing time.	
3.9.3	<i>Actions towards achieving best practice, related to targets in terms of water quality shall be implemented.</i>	 Yes
Comment	The site took several actions to achieve better water quality by: 1) apply more stringent internal wastewater discharge standard than national wastewater discharge standard and keep compliance with internal standard: 2) tap water pipeline preventive maintenance to avoid contamination.	
3.9.4	<i>Actions towards achieving best practice, related to targets in terms of the site's maintenance of Important Water-Related Areas shall be implemented.</i>	 Yes
Comment	The site organized garbage picking activity at the Huangqian reservoir, which is the drinking water protection source of the catchment.	
3.9.5	<i>Actions towards achieving best practice related to targets in terms of WASH shall be implemented.</i>	 Yes
Comment	The site delivered questionnaire to surrounding residences for their WASH information collection for the preparation for further improvement. The site also performed WASH facilities matching verification within the factory, to ensure those facilities were in good condition and maintain better WASH performance.	

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3.9.6	<i>Advanced Indicator</i> <i>Achievement of identified best practice related to targets in terms of good water governance shall be quantified.</i>	 N/A
Comment	The site did not perform this indicator.	
3.9.7	<i>Advanced Indicator</i> <i>Achievement of identified best practice related to targets in terms of sustainable water balance shall be quantified.</i>	 Yes
Comment	The site developed a Smart Energy Management System specific for accurate electricity and water management. In details, the System achieves equipment level water input and output online monitoring. Water consumption and efficiency are monitored, analyzed and water saving potential are identified during the process.	
Score	8	
3.9.8	<i>Advanced Indicator</i> <i>Achievement of identified best practices related to targets in terms of water quality shall be quantified</i>	 Yes
Comment	The site developed internal water discharge standard, which was around 2/3 in concentration compared to compliance standards. The site provided wastewater test report, showing their following internal standard requirements.	
Score	8	
3.9.9	<i>Advanced Indicator</i> <i>Achievement of identified best practices related to targets in terms of the site's maintenance of Important Water-Related Areas have been implemented.</i>	 N/A
Comment	The site did not perform this indicator.	
3.9.10	<i>Advanced Indicator</i> <i>Achievement of identified best practice related to targets in terms of WASH shall be quantified.</i>	 Yes
Comment	The site conducted WASH facility fitness assessment such as faucets, drinking water filtration machines to evaluate their sufficiency and effectiveness. The site requested 9 main material suppliers to evaluate their own WASH conditions according to WBCSD evaluation tools. According to WBCSD questionnaire, most suppliers were at medium implementation level but not supplier got full score.	
Score	4	
3.9.11	<i>Advanced Indicator</i> <i>A list of efforts to spread best practices shall be identified.</i>	 N/A
Comment	The site did not perform this indicator.	
3.9.12	<i>Advanced Indicator</i> <i>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.</i>	 Yes
Comment	The main collective action the site organized was garbage pick-up at Dawen river and Fenghuang river, which are the receiving water body within the catchment. Ms. Shi of HR department organized the activity and governmental agencies and suppliers representatives as well as over 20 employees were engaged in the activity.	
Score	8	

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3.9.13	<p><i>Advanced Indicator</i></p> <p><i>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.</i></p>
Comment	<p>The site did not perform this indicator.</p>


N/A

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4 STEP 4: EVALUATE - Evaluate the site's performance.		
4.1	<i>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.</i>	
4.1.1	<i>Performance against targets in the site's water stewardship plan and the contribution to achieving water stewardship outcomes shall be evaluated.</i>	✓ Yes
Comment	The site completed water stewardship plan and evaluated the performance in multiple areas, such as progress, cost saving, contribution to relevant stakeholders.	
4.1.2	<i>Value creation resulting from the water stewardship plan shall be evaluated.</i>	✓ Yes
Comment	The cost saving in the measures of water balance and water quality was identified and evaluated, and the intangible value in water governance and WASH was also assessed.	
4.1.3	<i>The shared value benefits in the catchment shall be identified and where applicable, quantified.</i>	✓ Yes
Comment	The site has evaluated the shared value benefits in the catchment, which included: 1) The site helped 9 suppliers to evaluate their WASH status, 2) Organized 45 employees and other stakeholders for garbage pick around drinking water source, 3) Organized 5 events for stakeholder water related knowledge and practice sharing and education. etc..	
4.1.4	<i>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.</i>	↓ N/A
Comment	The site does not perform this indicator.	
4.2	<i>Evaluate the impacts of water-related emergency incidents (including extreme events), if any occurred, and determine the effectiveness of corrective and preventative measures.</i>	
4.2.1	<i>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.</i>	✓ Yes
Comment	The site prepared the annual emergency incident summary report to review the overall performance. No water related emergency incident was happened in 2022.	
4.3	<i>Evaluate stakeholders' consultation feedback regarding the site's water stewardship performance, including the effectiveness of the site's engagement process.</i>	
4.3.1	<i>Consultation efforts with stakeholders on the site's water stewardship performance shall be identified.</i>	✓ Yes
Comment	The site conducted AWS performance communication meeting with stakeholders such as government, suppliers and employees and requested questionnaire feedback.	

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4.3.2	<i>Advanced Indicator</i> <i>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.</i>	 Yes
Comment	The site conducted communication meeting and questionnaire from government and suppliers and received their feedback on continuous improvement. Generally the governmental agencies were satisfied with the site's achievement in AWS outcomes and recommended the site to keep pursued more ambitious water saving goals in futur	
Score	6	
4.4	<i>Evaluate and update the site's water stewardship plan, incorporating the information obtained from the evaluation process in the context of continual improvement.</i>	
4.4.1	<i>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.</i>	 Yes
Comment	This is initial assessment and the site developed unique version of water stewardship plan. Based on particular water balance projects in the plan, the site modified and renewed the contents based on 2022 actions.	

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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 disclosed the AWS program organizational structure at the bulletin board of the site's entrance.	
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 conducted communication meeting with governments, suppliers and employees about water stewardship plan and the measures. The questionnaire feedback forms were provided.	
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.	Yes
Comment	The site disclosed 2022 water stewardship plan at the beginning of 2023 at the at the bulletin board of the site's entrance and the company website: https://www.mengniu.com.cn/news/zbxx/detail/52621.html .	
5.3.2	Advanced Indicator The site's efforts to implement the AWS Standard shall be disclosed in the organization's annual report.	Yes
Comment	Mengniu Group released its 2022 ESG report, which includes and quantifies the efforts and benefits of the site's implementation of water management according to AWS standards, such as water governance, water savings, percentage of water reuse, etc.	
Score	1	
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.	Yes
Comment	Mengniu Group released its 2022 ESG report, which includes and quantifies the efforts and benefits of the site's implementation of water management according to AWS standards, such as water governance, water savings, percentage of water reuse, etc.	
Score	1	
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

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Comment	The site disclosed water stewardship plan in its official website, which includes efforts dealing with water related challenges, such CIP water saving program, brown water reuse, etc. Shared water challenges were disclosed in official website as well.	
5.4.2	<i>Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be identified.</i>	 Yes
Comment	The site disclosed its communication with governmental agencies, water related survey with surrounding residences and catchment garbage pickup activities in its official website.	
5.5	<i>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.</i>	
5.5.1	<i>Any site water-related compliance violations and associated corrections shall be disclosed.</i>	 Yes
Comment	The site did not have any water-related violation.	
5.5.2	<i>Necessary corrective actions taken by the site to prevent future occurrences shall be disclosed if applicable.</i>	 Yes
Comment	The site did not have any water-related violation.	
5.5.3	<i>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.</i>	 Yes
Comment	The site did not have any water-related violation.	

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Photographic Evidence from Audit

✓
Yes



Wastewater treatment process.jpg



Hazardous waste warehouse entrance.jpg



Water source - Huangqian reservoir 1.jpg

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Drinking water outlet at canteen.jpg



The site's wastewater sewage.jpg

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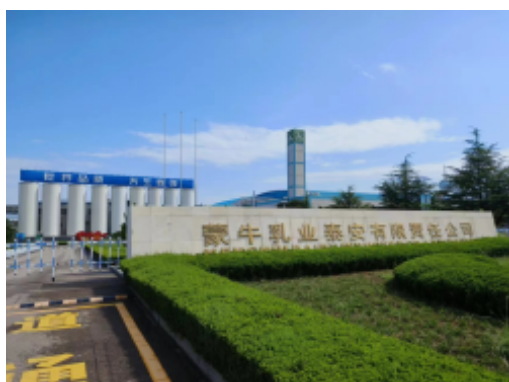
Water source - Huangqian reservoir 2.jpg



The site, water source and wastewater receiving body.png



Wastewater outlet sign.jpg



The site entrance.jpg

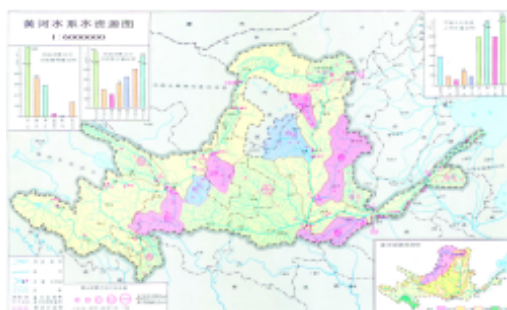
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Wastewater outlet with online monitoring.jpg



Catchment map.png



Aeration tank in ETP.jpg

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Hazardous waste warehouse.jpg



AWS disclosure board at the site entrance.jpg



Water source garbage pickup activity.jpg



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Secondary condensement tank in ETP.jpg