CERTIFICATION REPORT

Alliance for Water Stewardship (AWS)

Audit Number: AO-001410

WSAS WATER STEWARDSHIP ASSURANCE SERVICES

SITE DETAILS

Site: **Mengniu Dairy (Qujing) Co., LTD**

Address: Qingshan Industrial Park, Luliang County, Qujing City, Yunnan Province, 655600, Qujing, Yunnan, P.R. CHINA

Contact Person: yansheng wang

AWS Reference Number: AWS-000771

Site Structure: Single Site

CERTIFICATION DETAILS

Certification status: Certified Gold

Date of certification decision: 2025-Mar-27

Validity of certificate: 2028-Mar-26

AUDIT DETAILS

Audited Service(s): AWS Standard v2.0 (2019)

Audit Type(s): Initial Audit

Audit Start Date: 2024-Dec-23

Audit End Date: 2024-Dec-25

Lead Auditor: Lingyun Yu

Audit team participants:

Lyn Lin

Site Participants:

Wang Chengxiang, Factory Director
Liu Yunkun, Quality manager
Gao Xiaonan, Accountant
Zhang Fengying, Factory Manager
Yu Yangang, Factory Engineer
Li Ruibo, EHS Engineer
Duan Yajun, Factory Engineer
Ma Fuli, Factory Director
Cong Li, Factory Engineer
Yang Junjie, Energy Manager
Guan Weizhong, Energy Manager
Wang Yansheng, Energy Manager

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ADDITIONAL INFO

Summary of Audit Findings: A total of 7 findings were raised during the certification audit, 6 minor non-conformities, and 1 observation.

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 30 days of receipt of the audit report by 22/01/2025.

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

The audit team recommends certification of Mengniu Dairy (Qujing) Co., Ltd. at Gold level pending approval of the corrective actions plan.

Scope of Assessment: The scope of services covers the Initial certification audit for assessing conformity of Mengniu Dairy (Qujing) Co., Ltd. against the AWS International Water Stewardship Standard Version 2.

Mengniu Dairy (Qujing) Co., Ltd. is located in the Qingshan Industrial Park, Lu Liang County, Qujing City, Yunnan Province, with geographical coordinates at 103.6465031°E longitude and 25.0507570°N latitude. The site was established on February 22, 2019.
The water usage at the site is divided into two parts. One part is municipal water (sourced from local reservoirs), which is used for production and domestic purposes at the site. The other part of the incoming water is untreated reservoir water, which is piped into the site and used for landscaping purposes.
The site has one wastewater discharge outlet. Both production and domestic wastewater are channeled into the site's internal wastewater treatment station. After being treated to meet the discharge permit limits, the wastewater is discharged into the municipal wastewater network and further treated by external wastewater treatment infrastructure before being released into the Nanpan River.

The audit was conducted onsite on December 23-25, 2024.
The audit activities included the site visit covering production lines, wastewater treatment plant, chemical warehouse, and IWRA, stakeholder interviews and documents review.

SCORE

75.00

FINDINGS

Observation	1
Minor	6

FINDING DETAILS

Finding No:	TNR-015884
Checklist Item No:	1.4.1
Status:	Open
Finding level:	Observation
Checklist item:	The embedded water use of primary inputs, including quantity, quality and level of water risk within the site's catchment, shall be identified.
Findings:	It is recommended that the site improve the process for identifying indirect water use risks and incorporate internal risks from suppliers (such as supplier management policies, water usage, water sources, wastewater quality, compliance, etc.) into the assessment of indirect water use.

Finding No:	TNR-015885
Checklist Item No:	1.5.5
Status:	In Progress - CA plan approved
Finding level:	Minor
Checklist item:	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.
Findings:	The site has not identified and assessed the status and potential threats to these Important Water-Related Areas (IWRAs) by using scientific information or through stakeholder engagement.
Corrective action:	The site has established the following action plans: 1. Protection of the ecological value of important water-related areas and the conservation of rare species (cormorants, egrets, black waterfowl), with publicity to raise awareness among citizens. 2. Comprehensive collection of water quality and quantity information for the source water basins, as well as their current health status and identification of the current situation, including descriptions of their original functions (Nanpan River Basin, Pearl River Basin, Damchong Reservoir, Lianhuatian Reservoir, Beishan Reservoir). 3. Ecological and environmental protection of the basin (planting trees along the Maihe River to prevent soil erosion). 4. Inviting relevant stakeholders to participate in the identification and improvement of potential threats to important water-related areas, and linking this indicator to performance, reducing performance indicators within the factory.

Finding No:	TNR-015886
Checklist Item No:	1.6.1
Status:	In Progress - CA plan approved
Finding level:	Minor
Checklist item:	Shared water challenges shall be identified and prioritized from the information gathered.
Findings:	The shared water challenge is more based on the site's own investigation and analysis, and the site did not fully consult with stakeholders.
Corrective action:	The site has established the following action plans: 1. Plan to conduct surveys with stakeholders (through visits, questionnaires, and other communication methods) to collect information on water challenges. 2. Plan to consult and identify water challenge information from various perspectives, summarize and analyze it, and provide feedback and improvement on water challenges to relevant stakeholders.

Finding No:	TNR-015882
Checklist Item No:	4.1.3
Status:	In Progress - CA plan approved
Finding level:	Minor
Checklist item:	The shared value benefits in the catchment shall be identified and where applicable, quantified.
Findings:	Only summarizing the common value and benefits of the watershed, without detailed quantification of performance evaluation.
Corrective action:	1. Quantitatively evaluate the water-saving and water quality optimization and transformation within the factory; 2. Performance evaluation of the value generated at the watershed level, external improvement measures, and the results of related activities held;

Finding No:	TNR-015881
Checklist Item No:	4.3.1
Status:	In Progress - CA plan approved
Finding level:	Minor
Checklist item:	Consultation efforts with stakeholders on the site’s water stewardship performance shall be identified.
Findings:	The site has disclosed its water management performance for 2024 on its website, however the site has not yet communicated its water management performance to different types of stakeholders for feedback, such as government, community, surrounding businesses, water infrastructure, suppliers, employees, etc.

Finding No:	TNR-015887
Checklist Item No:	5.4.1
Status:	In Progress - CA plan approved
Finding level:	Minor
Checklist item:	The site's shared water-related challenges and efforts made to address these challenges shall be disclosed.
Findings:	The site has not yet disclosed the shared water challenges and the efforts made to address these challenges.
Corrective action:	The site plans to disclose the shared water challenges within the basin that it has identified, as well as the efforts it has made to address these challenges.

Finding No:	TNR-015888
Checklist Item No:	5.4.2
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2025-Dec-22
Checklist item:	Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be identified.
Findings:	The site has not fully established a communication mechanism with stakeholders, including identifying shared water challenges together with stakeholders and communicating its efforts to address these challenges to a broader range of stakeholder groups, such as communities, neighboring businesses, water supply infrastructure, suppliers, and employees, in order to obtain a wider range of feedback.
Corrective action:	The site plans to conduct diversified collection through various forms (online group feedback, questionnaire surveys, visits) to comprehensively gather shared water challenges identified with relevant stakeholders. The site plans to regularly communicate with stakeholders about the efforts made on water challenges and obtain feedback for continuous improvement.

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Report Details

Report	Value
Report prepared by	Lingyun Yu
Report approved by	Leong Siew Mui
Report approved on (Date)	24/3/2025

Surveillance

Proposed date for next audit
2025-Dec-22

Stakeholder Announcements

Date of publication	Location
24/10/2024	https://www.mengniu.com.cn/contact/detail/21109.html
23/10/2024	https://a4ws.org/wp-content/uploads/2024/10/AWS-000771_Single-site_StakeholderAnnouncement_V3.0-billingual.pdf
23/10/2024	https://www.tuv.com/content-media-files/greater-china/about-us/downloads/aws-000771_single-site_stakeholderannouncement_v3.0-billingual.pdf

Catchment Information

Catchment Information

The Nanpan River Basin is a significant geographical and hydrological region in China, located primarily in the southwestern part of the country. It is an important sub-basin of the Pearl River system and plays a crucial role in the ecological, economic, and social development of the region.

Geographical Significance:

The Nanpan River Basin covers a substantial area and includes parts of several provinces, including Yunnan and Guizhou. The basin is characterized by its diverse topography, which includes mountains, plateaus, and plains. This diversity contributes to the rich natural resources and biodiversity found within the region.

Hydrology:

The Nanpan River is a major tributary of the Pearl River and is known for its significant water flow and contribution to the overall water system. The river originates from the highlands and flows through various terrains before joining the Pearl River. The basin's hydrological system is vital for water supply, irrigation, and flood control.

Ecology and Environment:

The Nanpan River Basin is home to a variety of ecosystems, including forests, wetlands, and rivers, which support a wide range of flora and fauna. The region's ecological health is essential for maintaining biodiversity and ensuring the sustainability of water resources. However, the basin also faces environmental challenges such as water pollution, deforestation, and habitat degradation, which require ongoing conservation efforts.

Economic Importance:

The basin is economically significant, supporting agriculture, industry, and urban development. The availability of water resources has facilitated the growth of these sectors, contributing to the region's economic prosperity. The river also plays a role in transportation and energy production, further enhancing its economic value.

Cultural and Historical Context:

The Nanpan River Basin has a rich cultural heritage, with a history that dates back thousands of years. The region has been a cradle of civilization, influencing art, literature, and traditional practices. The river has been a source of livelihood and inspiration for local communities, shaping their cultural identity.

Challenges and Management:

The Nanpan River Basin faces several challenges, including water scarcity, pollution, and the impacts of climate change. To address these issues, integrated water resource management strategies have been implemented. These strategies include water conservation, pollution control, and ecological restoration projects. Additionally, efforts are being made to enhance the resilience of the basin to climate change through adaptive management practices.

In summary, the Nanpan River Basin is a region of great ecological, economic, and cultural importance. Its sustainable management is essential for ensuring water security, preserving the environment, and supporting the region's development.

Catchment boundary.png

Client Description and Site Details

Client/Site Background

Mengniu Dairy (Qujing) Co., Ltd. is situated in Qingshan District of Luliang Industrial Park, located in Qujing City, Yunnan Province. It is a wholly -owned subsidiary of Mengniu Group. The site started construction in December 2019, and was put into production in July 2021. The factory design brings together the 20 -year experience of Mengniu, and draws on the most advanced concepts and technologies in the world's dairy industry. Through the application of a large number of digital systems such as MES, SAP, WMS, LIMS, EAM, and Energy Management System, the interconnection within the entire process of production is realized, and based on algorithm application of data collection, intelligent linkage and fully transparent management of the production process are achieved, so that each package of products can realize one -click intelligent traceability. It is currently the most advanced, intelligent, and environmentally-friendly factory of Mengniu Group.

At the same time, the production lines are provided by the world's most advanced aseptic filling machine manufacturers, which can produce four different varieties of diary products, sterilized milk, mixed milk, milk beverage, and fermented milk. The factory covers an area of 298 acres and 117,300 square meters' construction area. At present, 6 production lines are put into the first phase of normal temperature production, with a daily production capacity of 550 tons, directly solving the employment of 450 people (including the pasture).

The water usage at the site is divided into two parts. One part is municipal water (sourced from local reservoirs), which is used for production and domestic purposes at the site. The other part of the incoming water is untreated reservoir water, which is piped into the site and used for landscaping
purposes.

The site has one wastewater discharge outlet. Both production and domestic wastewater are channeled into the site's internal wastewater treatment station. After being treated to meet the discharge permit limits, the wastewater is discharged into the municipal wastewater network and further treated by external wastewater treatment infrastructure before being released into the Nanpan River.

Site boundary.png

Summary of Shared Water Challenges

Summary of Shared Water Challenges

The site identified the following shared challenges within the catchment by conducting surveys, including:

1. Drought-induced water scarcity is quite evident.
2. Pollution in some water bodies still persists.
3. Insufficient infrastructure for domestic wastewater treatment in rural areas.
4. Climate change leads to frequent extreme weather events.

The site has prioritized the shared water challenges based on the severity and urgency of the issues, with the sequence numbers from 1 to 4 indicating decreasing levels of priority.

0.1	**General Requirements for Single Sites, Multi-Sites and Groups**	
0.1.1	*Eligibility Criteria*	
0.1.2		
0.1.2.1	*Have any water source locations and water-related discharge locations been visited during the audit, if so, which and where? If none were visited please provide justification.*	No
Comment	Due to the water sources and the final wastewater discharge points being controlled by water supply and wastewater treatment infrastructure, which are located at a considerable distance from the site, and constrained by the audit schedule, the audit team is unable to visit these external areas.	
0.1.1.1	*The site(s) occupy one catchment OR an exception has been granted.*	Yes
Comment	The site occupies one catchment.	
0.1.1.2	*The scope of the proposed certification shall be under the control of a single management system.*	Yes
Comment	The scope of the proposed certification is under the control of a single management system.	
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
Comment	The scope of the proposed certification is homogeneous with respect to primary production system, water management, product or service range, and the main market structures.	

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 draws a site boundary map, which identifies the site boundary information and the layout within the site. The site also collects information on the destination of its wastewater discharge, the location of the final receiving water body, the location of water service providers, and their water sources. The site has developed the following maps: • Map of site boundaries with the source of water supply and discharge points of wastewater. • Map of water-related infrastructures at the site such as pipeline, and wastewater treatment plant. • Map of the water plant including Da Ba Chong Water Plant, Bei Shan Water Plant, Song Shan Water Plant, and Lian Hua Tian Water Plant, along with their ultimate water sources (Da Ba Chong Reservoir, Lian Hua Tian Reservoir, Bei Shan Reservoir, and Pu Shan Reservoir), municipal wastewater treatment plant (Guozhen Environmental Technology Co., Ltd.), and its ultimate receiving water body (Nanpan River). • Map of stormwater discharged point and receiving water body(Nanpan River) • Map of the catchment that the site affects and is reliant upon for water.	
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

Comment

The site has established a stakeholder engagement procedure and has identified stakeholders such as the government, employees, NGOs, surrounding residents, suppliers, infrastructures, and surrounding companies.
The site has developed an analysis table of stakeholders and has established diversified communication channels with different stakeholders, such as phone calls, e-mails, meetings, questionnaires, visits, etc.

1.2.2 *Current and potential degree of influence between site and stakeholder shall be identified, within the catchment and considering the site's ultimate water source and ultimate receiving water body for wastewater.*

Yes

Comment

The site has developed an analysis table of stakeholders, and the degree of influence between the site and stakeholders has been identified for each stakeholder.

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.*

Yes

Comment

The site has developed a series of water-related incident response plans that include multiple scenarios. Such as:
1. Comprehensive emergency plan for sudden environmental incidents, which identifies the response process for emergency situations related to environmental pollution, including topics such as wastewater, chemicals, hazardous waste, air emissions, etc, The plan was registered with Qujing Ecological Environment Bureau, 5530322-2022-09-L;
2. Comprehensive emergency plan for production safety, including response procedures for natural disasters (such as drought, floods, rainstorms, and earthquakes);
3. Emergency response process for chemical spills;
4. Emergency plan related to water supply;
5. Emergency Plan for Wastewater Treatment Station;
6. Food Safety Emergency Management Measures, S\CS060-9.2.3-1-2023-0

The site prepares an emergency drill plan every year, which includes all the drill needs planned for the year (including water-related emergency drills), and the drill topics, participants, drill time, etc. are defined.

1.3.2 *Site water balance, including inflows, losses, storage, and outflows shall be identified and mapped*

Yes

Comment

• The site has installed a digital water meter system to measure water consumption in real-time in various key departments (such as boilers, pure water stations, cooling water towers, canteen, and workshop), and analyze water consumption and trends every month and carries out a water balance analysis every year.
• The site has recorded the income and input and output data via meter or estimation and developed a water balance map based on the data. The water balance map reflected the water inflows, losses, reuses, and outflows.

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.*

Yes

Comment

• The site has installed a digital water meter system to measure water consumption in real-time in various key departments (such as boilers, pure water stations, cooling water towers, canteen, and workshop), and analyze water consumption and trends every month and carries out a water balance analysis every year.
• The site has recorded the income and input and output data via meter or estimation and developed a water balance map based on the data. The water balance map reflected the water inflows, losses, reuses, and outflows.
The water balance of 2024 was 0.7% (As of November).

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.*	Yes

Comment

The site has developed a water quality monitoring inventory, which includes monitoring requirements for sewage, incoming water, drinking water, recycled water, and pure water for production, including monitoring points, monitoring methods, pollutant names, monitoring frequency, and control standards. For example:
- Industrial and domestic wastewater:
• Both industrial and domestic wastewater are treated by the on-site wastewater treatment system and then combined wastewater will be discharged to the off-site wastewater treatment station for further treatment. According to the requirements of the wastewater discharge permit, the site regularly entrusts a third-party laboratory to test the discharged wastewater;
• The site has installed online monitoring facilities at the wastewater discharge outlet to monitor pH, COD, ammonia nitrogen, TN, and TP in real time;
• Internal laboratory conducts daily testing of industrial wastewater discharge outlet and wastewater treatment processes.
- Drinking water
• The site annually commissions a third-party laboratory to test the quality of incoming water, in accordance with its internal standard: T/CS-2.3.6-4-2023-4, which is stricter than the national standard GB 5749-2022, Health Standards for Drinking Water.
• The internal laboratory conducts daily tests on pure water and softened water prepared by the water treatment system.
• The site provides employees with free drinking water and is equipped with 16 water dispensers. The water source comes from the site's own pure water system. The site has established a water quality testing plan, with the internal laboratory conducting daily/quarterly tests on the quality of pure water. Semi-annually, a third-party laboratory is commissioned to test the quality of pure water, in accordance with standard: GB 4789.
Environmental water quality
• The site annually commissions a third-party laboratory to test the water quality of the important water body within the basin, the Nanpan River (the final receiving water body for the site's rainwater and wastewater). Sampling points are located approximately 10 km upstream and 1 km downstream of the municipal wastewater treatment plant's effluent outlet. The test parameters include: pH, ammonia nitrogen, total nitrogen (TN), biochemical oxygen demand (BOD), chemical oxygen demand (COD), and petroleum hydrocarbons. The reference standard is the GB 3838 National Surface Water Quality Standards.

1.3.5	*Potential sources of pollution shall be identified and if applicable, mapped, including chemicals used or stored on site.*	Yes

Comment

The site has identified potential sources of pollution such as the Wastewater conveyance pipeline network, chemical storage and usage, wastewater tanks, and storage of hazardous waste, and relevant measures to prevent and control contamination have been taken including strengthening management, establishment of secondary containment, and emergency response. In addition, the site has mapped the identified potential sources of pollution.

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

As per the site tour, document review, and interview, no IWRA is within the site.

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 water-related costs sheet was provided for review, including:
1. Water supply costs
2. Cost of wastewater discharge rights
3. Cost of Water/Wastewater Treatment (including electricity of pumps, consumables, depreciation and maintenance of facilities, etc.)
4. Water/wastewater quality testing. Operation and maintenance of wastewater online testing facilities
5. Environmental training, frugal project investment, stakeholders' collaboration
6. AWS related expenses
The water-related revenues included: Income from frugal projects and the social, cultural, environmental, and economic water-related value generated by the site.

1.3.8 *Levels of access and adequacy of WASH at the site shall be identified.*

Yes

Comment

• As per the Evaluation Report on the Effectiveness of Occupational Disease Hazard Control (May 2023) The WASH facilities in the site area, such as the restaurant, workshops, etc. comply with the requirements of the Hygiene Standards for Industrial Enterprises (GBZ 1-2002).
• The site installs water purification facilities in workshops and office areas, providing drinking water to employees. The water purification facilities were regularly maintained.
• The site has established a water quality testing plan, with the internal laboratory conducting daily/quarterly tests on the quality of pure water. Semi-annually, a third-party laboratory is commissioned to test the quality of pure water, in accordance with standard: GB 4789.
• The site also provides sufficient toilets to workers, and regular cleaning was conducted. Necessary equipment like handwash and tissue were also provided.
• The site performed the assessment of the WASH level as per WBCSD. The result is satisfied.

1.4 *Gather data on the site's indirect water use, including: its primary inputs; the water use embedded in the production of those primary inputs the status of the waters at the origin of the inputs (where they can be identified); and water used in out-sourced water-related services.*

1.4.1 *The embedded water use of primary inputs, including quantity, quality and level of water risk within the site's catchment, shall be identified.*

No

Comment

The site identified and screened the top 14 suppliers with transaction amounts that accounted for 98 percent of the cost (A total of 12 suppliers provided feedback).
and through the investigation, the site collected water consumption information from suppliers. Moreover, the site also evaluates the risk of indirect water based on the WWF water risk screening tool.

Finding No: TNR-015884

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

Comment

The site also collects the water consumption of its outsourced services such as hazardous waste and non-hazardous waste disposal units through interviews/ questionnaires.

1.4.3 *Advanced Indicator*
The embedded water use of primary inputs in catchment(s) of origin shall be quantified.

Yes

Comment	The site identified and screened the top 14 suppliers with transaction amounts that accounted for 98 percent of the cost (A total of 12 suppliers provided feedback). and through the investigation questionnaires, the site evaluates the risk of indirect water based on the WWF water risk screening tool. Via the data of suppliers' total water consumption, production volume, and production volume proportion, the site could calculate the embedded water use of the main suppliers. The total annual water consumption of the 12 suppliers is approximately 800,000 tons. The embedded water use of materials is about 400000 tons by calculation (based on data provided by the 12 suppliers)
Score	7

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: Water governance initiatives were identified in the Catchment Background Survey Report by the site. The initiatives included national, provincial, and local levels, including the catchment development plan, industrial development plan, environmental and ecological conservation plan, etc.

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: Applicable water-related legal and regulatory requirements were collected and listed. The site checks and updates the list annually.

1.5.3 *The catchment water-balance, and where applicable, scarcity, shall be quantified, including indication of annual, and where appropriate, seasonal, variance.* Yes

Comment

The Catchment Background Survey Report provides a detailed analysis of the water balance for Qujing City which covers the area of the catchments. The water balance in the catchment is analyzed based on the rainfall (mm), precipitation (m3), surface water resources (m3), groundwater resources(m3), water diversion (m3), displacement(m3), storage(m3), consumption(m3), total water supply (m3) and total water consumption(m3). All the data is collected from government websites and published reports.
The site has collected water balance data for Qujing City from 2021 to 2023, and the annual differences and trends are available.
According to the Qujing City Water Resources Bulletin published by the Qujing City Water Affairs Bureau, the total water resources of the city are 6.639 billion cubic meters, which is 34.8% less than the previous year and 48.4% less than the long-term average. The water production modulus of the city is 230,000 cubic meters per square kilometer, and the runoff coefficient is 0.33, with a per capita water resource possession of 1,167 cubic meters. The spatial distribution of annual precipitation in the province is uneven, with the measured annual precipitation ranging from 247.0 to 3,846.5 millimeters. The low-value areas with annual precipitation below 600 millimeters are mainly distributed in the northern and central arid and hot river valleys and basin areas, primarily covering the northern and northwestern parts of Diqing Prefecture, the northern and southern parts of Lijiang City, the eastern and northern parts of Dali Prefecture, most parts of Chuxiong Prefecture, the northern and southern parts of Kunming City, the central and southern parts of Qujing City, the western part of Zhaotong City, most parts of Yuxi City, and the northern and central parts of Honghe Prefecture.

In 2023, Yunnan Province's surface water resources were 150.2 billion cubic meters, with a runoff depth of 391.4 millimeters, which is 29.8% less than the long-term average, indicating a dry year. The surface water resources in Yuxi, Kunming, Qujing, and Chuxiong were 51.1% to 44.1% less than usual.

In 2023, Yunnan Province's groundwater resources were 533.1 billion cubic meters, which is 24.1% less than the long-term average. Among the administrative divisions, the annual groundwater resources in all 16 prefectures (cities) were less than the long-term average, with Kunming, Chuxiong, Qujing, and Yuxi being 51.0% to 40.7% less than usual.

In 2023, the off-channel water usage in Yunnan Province was 162.3 billion cubic meters, a decrease of 0.7% compared to the previous year. Among this, agricultural water usage was 113.9 billion cubic meters, an increase of 2.0% compared to the previous year; industrial water usage was 13.13 billion cubic meters, a decrease of 8.0% compared to the previous year; domestic water usage was 26.39 billion cubic meters, a decrease of 5.0% compared to the previous year; and ecological environment water usage was 8.842 billion cubic meters, a decrease of 11.0% compared to the previous year.

Agricultural water usage accounted for 70.2% of the total water usage, industrial water usage accounted for 8.1%, domestic water usage accounted for 16.3%, and ecological environment water usage accounted for 5.4%.

Overall, the distribution of water resources within the basin is uneven, and there is a general state of water scarcity. Due to the impact of climate change, precipitation has shown a decreasing trend in recent years, exacerbating the trend of water resource shortage.

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.*

Yes

Comment	The Catchment Background Survey Report provides a detailed analysis of water quality for the catchment. The site obtained the related information from the government website. (Mainly from the Environmental and Ecological Bureau). The data includes the water quality of the water source, the final discharged water body, and the water from the municipal water plant. The data will be published monthly or annually, therefore, the annual variances could be identified. From the statistical data of the three years from 2021 to 2023, the water quality of the main rivers in the basin has been improving year by year, with Class Three and above water quality accounting for 87.7%, 90.5%, and 94.6% respectively. The main items affecting the water quality of the river sections are Chemical Oxygen Demand (COD), permanganate index, total phosphorus, and biochemical oxygen demand (BOD). The overall water quality of the lakes is good, with Class Three water quality reaching 82.2%, 86.7%, and 83.3% respectively. The compliance rate of centralized drinking water sources is also increasing year by year.	
1.5.5	*Important Water-Related Areas shall be identified, and where appropriate, mapped,and their status assessed including any threats to people or the natural environment, using scientific information and through stakeholder engagement.*	No
Comment	The site has identified Important Water-Related Areas (IWRAs) within the basin through stakeholder surveys and searches of official reports, which mainly include significant reservoirs (water sources) and important rivers. ***Finding No: TNR-015885***	
1.5.6	*Existing and planned water-related infrastructure shall be identified, including condition and potential exposure to extreme events.*	Yes
Comment	The Catchment Background Survey Report lists the existing and planned water-related infrastructure, including water supply, drainage, wastewater treatment, and emergency response at the catchment level, as well as water-related objectives published by the government. Based on the available information, periodic reductions in rainfall have led to years of drought in Yunnan. Yunnan is currently experiencing a water-scarce year. The government has implemented a series of measures to ensure water supply within the basin, such as strengthening the layout of water supply networks, adopting intermittent water supply measures in severely water-scarce areas, and enhancing the interconnection pipelines between reservoirs to ensure cross-regional water transfer when needed.	
1.5.7	*The adequacy of available WASH services within the catchment shall be identified.*	Yes

Comment

The facility obtained the WASH status in Qujing City from the official report released by the authorities including the tap water penetration rate, wastewater treatment rate and other data. Based on the collected information, the WASH (Water, Sanitation, and Hygiene) situation in Qujing city is characterized by the following features:
1. The coverage rate of tap water in both urban and rural areas of Qujing has exceeded 86%.
2. The centralized treatment rate of urban sewage in Qujing city has reached 98%. The collection and treatment of sewage in rural areas are still relatively lacking, but Qujing City has set governance targets and action plans for the management of rural domestic sewage and is currently implementing them.
3. The overall condition in terms of personal hygiene and public health in Mudanjiang city is good.

In summary, the coverage rate of tap water in the basin has reached a relatively high level, especially in rural areas, where the construction of centralized and decentralized water supply projects has effectively addressed the drinking water issues. Meanwhile, local authorities are continuously working to improve the water quality compliance rate and optimize the water supply structure in both urban and rural areas, providing residents with safer and more reliable drinking water.
The centralized treatment rate of wastewater in urban areas is relatively high, but the wastewater treatment rate in rural areas is only 38.7%. The collection and treatment of wastewater in rural areas still need to be strengthened. Local authorities have made positive progress in the governance of rural black and odorous water bodies. As of May 2024, nine rural black and odorous water bodies have been successfully treated and passed acceptance inspections. However, the task of black and odorous water body governance remains challenging.

1.5.8 *Advanced Indicator*
Efforts by the site to support and undertake catchment level water-related data collection shall be identified.

Yes

Comment

The site annually commissions a third-party laboratory to test the water quality of the important water body within the basin, the Nanpan River (the final receiving water body for the site's rainwater and wastewater). Sampling points are located approximately 10 km upstream and 1 km downstream of the municipal wastewater treatment plant's effluent outlet. The test parameters include: pH, ammonia nitrogen, total nitrogen (TN), biochemical oxygen demand (BOD), chemical oxygen demand (COD), and petroleum hydrocarbons. The reference standard is the GB 3838 National Surface Water Quality Standards.

Score 6

1.5.9 *Advanced Indicator*
The adequacy of WASH provision within the catchments of origin of primary inputs shall be identified.

Yes

Comment

The site has identified adequacy of WASH provision within the catchments of origin of primary inputs including the coverage of safety drinking water supply, the coverage of wastewater treatment, the rate of security disposal of municipal solid waste, and public facilities and environmental sanitation in urban districts.

Score 4

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.*

1.6.1 *Shared water challenges shall be identified and prioritized from the information gathered.*

No

Comment	The site identified the following shared challenges within the catchment by conducting surveys, including: 1. Drought-induced water scarcity is quite evident. 2. Pollution in some water bodies still persists. 3. Insufficient infrastructure for domestic wastewater treatment in rural areas. 4. Climate change leads to frequent extreme weather events. The site has prioritized the shared water challenges based on the severity and urgency of the issues, with the sequence numbers from 1 to 4 indicating decreasing levels of priority. ***Finding No: TNR-015886***	
1.6.2	*Initiatives to address shared water challenges shall be identified.*	Yes
Comment	In response to the aforementioned shared water challenges, the site has identified measures to address them, including the public initiatives and site's action plan.	
1.6.3	*Advanced Indicator* *Future water issues shall be identified, including anticipated impacts and trends*	N/A
Comment	The facility does not perform this indicator.	
1.6.4	*Advanced Indicator* *Potential water-related social impacts from the site shall be identified, resulting in a social impact assessment with a particular focus on water.*	N/A
Comment	The facility does not perform this indicator.	
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 identified its water risks and summarized them in a spreadsheet. They categorized the water risk into physical risk, regulatory risk, and reputation risk. The spreadsheet that lists the water risks faced by the site. The site scored the frequency of the risk and severity of the impact and then multiplied two scores to evaluate the level of the risk. The potential costs, business impact, and control measures are also included in the spreadsheet.	
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
Comment	The site has identified a total of 16 water-related opportunities across three dimensions: water balance, water quality, and climate change adaptation considering how the site may participate. The potential value includes cost saving, image enhancement, sustainability of enterprise operation, and customer trust, and ranked their importance.	
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 identified relevant catchment best practices for water governance including:
• Collaborate with peer organizations and stakeholders to promote sustainable water management;
• A comprehensive water stewardship plan that is routinely reviewed and updated;
• Training of employees on the principles of water stewardship;
• Engaging with peer organizations and stakeholders to promote water stewardship;
• Communicating on its own water stewardship to set a leading example to others.

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 identified relevant sector and/or catchment best practices for water balance including:
• Establish a water management system by using the digital water meter network to monitor the water consumption and trends of various departments and production lines in real time.
• Refer to the first-level (most stringent) standard for water consumption in the cleaner production standard.
• The water consumption per unit product has reached the advanced level of the industry water quota within the basin as published by the official authorities.

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 identified relevant sector and/or catchment best practices for water quality, such as:
• Establishing stricter internal wastewater discharge standards than the requirements of the pollution discharge permit: The relationship between the company's internal water quality control standards and the discharge permit limits is as follows:
COD: Internal control target, 150mg/L; Permitted limit, 500mg/L
NH3-N: Internal control target, 25mg/L; Permitted limit, 45mg/L
T-P: Internal control target, 5mg/L; Permitted limit, 8mg/L
T-N: Internal control target, 35mg/L; Permitted limit, 70mg/L
• Refer to the first-level (most stringent) standard for annual COD emission volume in the cleaner production standard.

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

Yes

Comment

The site has identified best practices related to Important Water Related Areas (IWRA). Such as:
• Conduct health and biodiversity surveys on IWRA
• Promotion and protection of important water-related areas (IWRA)
• Support maintenance of off-site Important Water Related Areas (IWRA) in good condition
• Carry out collective action to advocate for the restoration or protection 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 identified relevant sector and/or catchment best practices for site provision of equitable and adequate WASH services including:
• Voluntary sections of GBZ 1-2010 Hygienic standards for the design of industrial enterprises
• WBCSD self-assessment tool

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.*	✓ Yes
Comment	A water stewardship commitment to follow all the AWS core criteria has been signed by the top manager of the site. The commitment has been displayed on group's website. https://www.mengniu.com.cn/contact/detail/22123.html	
2.1.2	*Advanced Indicator* *A statement that explicitly covers all requirements set out in Indicator 2.1.1 and is signed by the organization's senior-most executive or governance body and publicly disclosed shall be identified.*	✓ Yes
Comment	A water stewardship commitment to follow all the AWS core criteria has been signed by the top manager of the site. The commitment has been displayed on group's website. https://www.mengniu.com.cn/contact/detail/22123.html	
Score	1	
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.*	✓ Yes
Comment	The site produced an organizational chart of plant responsibility distribution and a team appointment letter for the Sustainable water management benchmarking and certification project. The site has also established a procedure to ensure the operation of the site meet the provisions of relevant laws, regulations and other requirements.The site continuously tracks updates on relevant laws and regulations, as well as other compliance requirements, and prepares quarterly identification reports on laws, regulations,and compliance requirements, which are pushed to various internal departments.	
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 water stewardship in line with this AWS Standard.*	✓ Yes

Comment	The site has developed a water stewardship strategy and announced it on its official website. The strategy expounds Mengniu's long-term plan for water stewardship in terms of standardized management, corporate social responsibility and implementation of best practices, including: Strategy - Dairy responsibility for common prosperity, environmentally friendly green environment. Mission - Multiple responsibilities to enhance human well-being, protect the ecological environment and promote economic and social development. Vision - greener, more nutritious, more intelligent. Goal - To market demand-oriented, the pursuit of quality and safety, quality and efficiency, energy

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.

Yes

Comment	The has developed a Water Stewardship Plan (Year 2023), which specifies targets, required actions, measurement, status, effectiveness evaluation, accountable and deadline, etc.The Water Stewardship Plan is associated with five main outcomes of AWS, including good water governance, sustainable water balance, good water quality status, IWRA and WASH,such as: Water Management: Schedule AWS Share wrap-up meetings in 2024 and conduct monthly 2024 water outage drills. Water balance: Add the sterile tank condensate pipe recovery pipe to the filling machine cleaning water tank for external cleaning of the filling machine. Water quality: The original design clarifier has a diameter of 3 meters and a height of 2.8 meters, and the precipitation time of the effluent is 1.9 hours; after the transformation, the precipitation time of the diameter of 3 meters and a height of 4 meters is 2.9 hours, and the precipitation time of the sewage is extended by 1 hour, and the effluent is better. Before the transformation, the effluent SS35mg/L is generally below 20mg/L, and the effluent is clearer. WASH: Drinking water quality is tested twice a year. Important water-related areas: Organize cleanup activities in the upper reaches of Nanpan River basin.

2.3.3 *Advanced Indicator*
The site's partnership/water stewardship activities with other sites within the same catchment (which may or may not be under the same organisational ownership) shall be identified and described.

N/A

Comment	The site does not perform this indicator in this audit.

2.3.4 *Advanced Indicator*
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.

Yes

Comment	The site regularly organizes vendor trainings on AWS. Share site AWS management manuals, water-related information, and water management plans with suppliers to raise awareness and drive supplier implementation of sustainable water management improvement plans. The site shares the site's AWS management manual, water-related information and water management plan with its group siblings outside the basin to raise awareness and drive its sustainable water management improvement plan.
Score	4

2.3.5	*Advanced Indicator* *Stakeholder consensus shall be sought on the site's water stewardship plan. Consensus should be achieved on at least one target. A list of targets that have consensus and in which stakeholders are involved shall be identified.*	N/A
Comment	The site does not perform this indicator in this audit.	
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	In response to the problem of water risk, the site has developed a series of emergency plans, emergency plans for the emergency, emergency plan for the rainy season, the production safety emergency plan, the special emergency plan for the chemical accident, the damage of the chemical, the emergency plan for the leakage of the chemical leak, the emergency plan for the chemical leak, and the food safety emergency plan. The emergency plan has been filed to the relevant department. We will maintain regular communication with the relevant government departments and receive water supply, drainage and sewage treatment contingency plans.	
2.4.2	*Advanced Indicator* *A plan to mitigate or adapt to water risks associated with climate change projections developed in co-ordination with relevant public-sector and infrastructure agencies shall be identified.*	Yes
Comment	The site has formulated a series of emergency plans to deal with water risks, including drought emergency plan, rainy season flood prevention emergency plan, flood emergency plan, rainstorm emergency plan and earthquake emergency plan.At the same time, maintain close communication with relevant government departments, and put emergency plans on record to relevant government departments.	
Score	6	

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 usually actively maintains communication with water-related government departments to implement water-related issues.Actively participate in water protection conferences organized by the Environmental Protection Agency.Regarding the AWS project, we agreed to visit Luliang County Environmental Protection Bureau and conducted consultation and discussion on water-related issues such as water balance, water quality, reservoir and river length.Leaders of the Water Bureau came to the site to conduct research on water projects.The site visited the Luliang Meteorological Bureau and compiled the report.

3.1.2 *Measures identified to respect the water rights of others including Indigenous peoples, that are not part of 3.2 shall be implemented.* — Yes

Comment: The water rights are respected under legal and regulatory mechanisms, and there is no indigenous people in the catchment area.

3.1.3 *Advanced Indicator*
Evidence of improvements in water governance capacity from a site-selected baseline date shall be identified. — Yes

Comment: The baseline year is 2023.
In 2024, the site began to collect relevant information and basin information in May, and conducted research on government visits and drinking water sources simultaneously.
The AWS Water Management manual was written in July, followed by an AWS internal promotion meeting the following month.
Supplier training on AWS management manual in July.
In August, the World Rivers Day tour to pick up garbage and commissioned water quality testing.
Summarize the objectives and performance of the water management plan at the end of the year and conduct internal pre-review meetings.

Score: 2

3.1.4 *Advanced Indicator*
Evidence from a representative range of stakeholders showing consensus that the site is seen as positively contributing to the good water governance of the catchment shall be identified. — Yes

Comment: The site has conducted a questionnaire on the supplier's training session, including the aws project. The aws system management manual was distributed to employees and released the questionnaire. In the community, the poster was introduced, and the aws project was introduced to the surrounding residents, and the questionnaire was carried out. Provide and share the aws project for the water related government. From the recovery questionnaire, the response of the person and the wechat reply, the stakeholders are able to express the positive contribution of the site to the good water resources management in the basin.
The site also received the following honors: the green factory of yunnan province, the national green factory, the water water type enterprise, the ZWTL ms waste zero landfill management system certificate.

Score: 2

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
Comment	The site has established the "Qujing Factory 2024 Environmental Laws and Regulations List" to collect and update water-related laws and regulations on a regular basis (every March/once a year), and make a judgment on compliance according to the situation of the site.	
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	Implement system to comply with water-related legal and regulatory requirements and respect water rights.	
3.3	*Implement plan to achieve site water balance targets.*	
3.3.1	*Status of progress towards meeting water balance targets set in the water stewardship plan shall be identified.*	Yes
Comment	At the water balance level, five projects have been completed.For example, the condensate pipe recovery pipe of the aseptic tank in the pretreatment workshop is added to the cleaning tank of the filling machine for external cleaning of the filling machine.1,800 tons of water was saved, and the income was about 45,600 yuan.	
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.*	Yes
Comment	The site's water consumption per ton of product production in 2024 decreased by 20.53% compared with 2023, and the water-saving measures have achieved remarkable results.	
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	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	*Advanced Indicator* *The total volume of water voluntarily re-allocated (from site water savings) for social, cultural and environmental needs shall be quantified.*	N/A
Comment	The site does not perform this indicator.	
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.*	Yes
Comment	There are four plans on water quality, of which one has been completed and three are on a long-term basis.It includes the preventive maintenance of the tap water network in the factory, the regular cleaning and testing of the factory storage tank, the detection of the concentration of the factory waste water outlet index and the improvement of the waste water treatment facilities.	
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 as a common water challenge.Plans for water quality: Improvements to wastewater treatment facilities at The site.The original clarifier has a diameter of 3 meters and a height of 2.8 meters, and the precipitation time of the effluent is 1.9 hours. After the transformation, the precipitation time of the clarifier with a diameter of 3 meters and a height of 4 meters is 2.9 hours, and the precipitation time of the sewage is extended by 1 hour, and the effluent is better. Before the transformation, the effluent SS35mg/L is generally below 20mg/L, and the effluent is clearer.Save 98,000 yuan.The wastewater discharge is stable and up to standard, the COD discharge value standard is 160mg/L (the national standard is 500mg/L), and the actual discharge of the site is 35mg/L.	
3.5	*Implement plan to maintain or improve the site's and/or catchment's Important Water-Related Areas.*	
3.5.1	*Practices set in the water stewardship plan to maintain and/or enhance the site's Important Water-Related Areas shall be implemented.*	Yes
Comment	The site has organized some activities in the basin, such as, on September 24, 2024, the site invited the water authority to carry out the cultural and water exploration operations of the river basin in the Nanpan river basin of Luliang county, as well as the world river day net beach activity. On September 13, 2024, Mengniu dairy was monitored in the downstream water quality of the Nanpan river.	
3.5.2	*Advanced Indicator* *Evidence of completed restoration of non-functioning or severely degraded Important Water-Related Areas including where appropriate cultural values from a site-selected baseline date shall be identified. Restored areas may be outside of the site, but within the catchment.*	N/A
Comment	The site does not perform this indicator.	
3.5.3	*Advanced Indicator* *Evidence from a representative range of stakeholders showing consensus that the site is seen as positively contributing to the healthy status of Important Water-Related Areas in the catchment shall be identified.*	N/A
Comment	The site does not perform this indicator.	
3.6	*Implement plan to provide access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers at all premises under the site's control.*	
3.6.1	*Evidence of the site's provision of adequate access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers onsite shall be identified and where applicable, quantified.*	Yes
Comment	The site has a complete toilet plot process and detailed record of the table, and there is a clear standard labeling and water conservation identification on the scene. The site is satisfied and meets the relevant requirements of gbz1-2010, and the relevant requirements of gbz1-2010 sanitary design standard for industrial enterprisesand site also set up enough water dispensers to provide water for employees, and the water dispenser has a regular maintenance and replacement of the filter core, and the water dispenser is regularly maintained and replaced, and the water water is tested regularly, and the test report results are consistent with the standard.	
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.*	Yes

Comment	No evidence is showed that the site is impinging on the human right to safe water and sanitation of communities through their operations according to the interviews with the site's employees, local community and local government authorities.	
3.6.3	*Advanced Indicator* *A list of actions taken to support the provision to stakeholders in the catchment of access to safe drinking water, adequate sanitation and hygiene awareness shall be identified.*	Yes
Comment	In order to support stakeholders in gaining awareness of safe drinking water, adequate sanitation and hygiene within The watershed, The site has launched a program of outreach activities to ensure that employees with financial difficulties have access to safe and pure water.The activity guarantees the health of the poor employees and improves their quality of life.Five water fountains and three water purifiers will be given to employees at the site during 2024.	
Score	5	
3.6.4	*Advanced Indicator:* *In catchments where WASH has been identified as a shared water challenge, evidence of efforts taken with relevant public-sector agencies to share information and to advocate for change to address access to safe drinking water and sanitation shall be identified.*	N/A
Comment	The site does not perform this indicator.	
3.7	*Implement plan to maintain or improve indirect water use within the catchment:*	
3.7.1	*Evidence that indirect water use targets set in the water stewardship plan, as applicable, have been met shall be quantified.*	Yes
Comment	The site surveyed 11 of its 11 suppliers and analyzed their water usage according to the questionnaire and collected their plumbing improvement projects.	
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 queried the violation records of 14 suppliers on the IPE platform, found the violation records of two suppliers on the IPE Public Environmental Monitoring network, and urged them to rectify and revoke the records. In the end, the suppliers completed the rectification and revoke the records.	
3.7.3	*Advanced Indicator* *Actions taken to address water related risks and challenges related to indirect water use outside the catchment shall be documented and evaluated.*	Yes
Comment	The site queries 14 vendors' violations of the ipe platform, and finds two suppliers in the ipe public environment supervision network, and the inspection and cancellation records are pushed, and the final supplier has completed the rectification and withdrew. The site also regularly conducts online training of suppliers, and promotes the active use of water-saving actions by suppliers.	
Score	7	
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 Shared the water supply system with wechat, where the water authority had given the share of the site. The environmental protection agency has also given positive share to the site and suggested some Suggestions. The chat record screenshot is the voucher.
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 developed the Qujing Plant AWS Management Manual to guide the AWS project.The site also received the following honors: Yunnan Green Factory, National Green Factory, Water saving Enterprise, ZWTL MS Zero Waste Management System certificate.
3.9.2	*Actions towards achieving best practice, related to targets in terms of water balance shall be implemented.* ✓ Yes
Comment	The site completed adding the sterile tank condensate pipe recovery pipe to the filling machine cleaning water tank for external cleaning project of the filling machine.The site completed the sterilization machine pump cooling water consumption of sterilization machine recycling and other projects. The water consumption per ton of Qujing plant in 2024 is 3.94 tons/ton, 0.194 tons lower than the central target of 4.134 tons/ton, 0.94 tons/ton higher than the target of 3 tons/ton for the general value of Yunnan water quota (liquid milk) of DB53/T 168-2013, and 1.56 tons/ton lower than the industry standard of 5 tons/ton.
3.9.3	*Actions towards achieving best practice, related to targets in terms of water quality shall be implemented.* ✓ Yes
Comment	The site completed the project to transform the sedimentation tank of the wastewater treatment station: The original clarifier has a diameter of 3 meters and a height of 2.8 meters, and the precipitation time of the effluent is 1.9 hours. After the transformation, the precipitation time of the clarifier with a diameter of 3 meters and a height of 4 meters is 2.9 hours, and the precipitation time of the sewage is extended by 1 hour, and the effluent is better. Before the transformation, the effluent SS35mg/L is generally below 20mg/L, and the effluent is clearer. The sewage is discharged to a stable standard, and the COD emission value standard is 160mg/L (the national standard is 500mg/L), which is far lower than the national standard limit.
3.9.4	*Actions towards achieving best practice, related to targets in terms of the site's maintenance of Important Water-Related Areas shall be implemented.* ✓ Yes
Comment	The site annually commissions a third-party laboratory to test the water quality of the important water body within the basin, the Nanpan River (the final receiving water body for the site's rainwater and wastewater). Sampling points are located approximately 10 km upstream and 1 km downstream of the municipal wastewater treatment plant's effluent outlet. The test parameters include: pH, ammonia nitrogen, total nitrogen (TN), biochemical oxygen demand (BOD), chemical oxygen demand (COD), and petroleum hydrocarbons. The reference standard is the GB 3838 National Surface Water Quality Standards.
3.9.5	*Actions towards achieving best practice related to targets in terms of WASH shall be implemented.* ✓ Yes
Comment	The WASH installations fully comply with the national "Hygienic Standards for the Design of Industrial Enterprises" (GBZ 1-2010).The site also conducts WBCSD self-assessment to evaluate the level of onsite WASH. The result is satisfied. The site itself commissions a third-party testing company to test the water quality twice a year, and according to the test report, all meet the national standards.

3.9.6	*Advanced Indicator* *Achievement of identified best practice related to targets in terms of good water governance shall be quantified.*	Yes
Comment	The site compiled aws management manual in the qujing factory to guide the development of the aws project. The site also received the following honors: the green factory of yunnan province, the national green factory, the water water type enterprise, the ZWTL ms waste zero landfill management system certificate.	
Score	8	
3.9.7	*Advanced Indicator* *Achievement of identified best practice related to targets in terms of sustainable water balance shall be quantified.*	Yes
Comment	The water consumption of The site per ton of product production in 2024 decreased by 20.53% compared with 2023, which is obviously water-saving. In 2024, the water consumption per ton of Qujing plant is 3.94 tons/ton, 0.194 tons lower than the central target of 4.134 tons/ton, and 1.56 tons/ton lower than the industry standard of 5 tons/ton.	
Score	8	
3.9.8	*Advanced Indicator* *Achievement of identified best practices related to targets in terms of water quality shall be quantified*	Yes
Comment	The site completed the project to transform the sedimentation tank of the wastewater treatment station: The original clarifier has a diameter of 3 meters and a height of 2.8 meters, and the precipitation time of the effluent is 1.9 hours. After the transformation, the precipitation time of the clarifier with a diameter of 3 meters and a height of 4 meters is 2.9 hours, and the precipitation time of the sewage is extended by 1 hour, and the effluent is better. Before the transformation, the effluent SS35mg/L is generally below 20mg/L, and the effluent is clearer. The sewage is discharged to a stable standard, and the COD emission value standard is 160mg/L (the national standard is 500mg/L), which is far lower than the national standard limit.	
Score	8	
3.9.9	*Advanced Indicator* *Achievement of identified best practices related to targets in terms of the site's maintenance of Important Water-Related Areas have been implemented.*	N/A
Comment	The site does not perform this indicator.	
3.9.10	*Advanced Indicator* *Achievement of identified best practice related to targets in terms of WASH shall be quantified.*	Yes
Comment	The site itself commissions a third-party testing company to test the water quality twice a year, and according to the test report, all meet the national standards. The testing content of drinking water includes 18 kinds of testing items such as odor, tissue status, taste, pH, conductivity, turbidity, chloride, chroma, nitrite, total hardness, nitrate, total bacterial colony, total coliform, mold and yeast, Salmonella, Shigella, Staphylococcus aureus and Escherichia coli, and the test results are in line with national standards.	
Score	4	
3.9.11	*Advanced Indicator* *A list of efforts to spread best practices shall be identified.*	N/A
Comment	The site does not perform this indicator.	

3.9.12	*Advanced Indicator* *A list of collective action efforts, including the organizations involved, positions of responsible persons of other entities involved, and a description of the role played by the site shall be identified.*	N/A
Comment	The site does not perform this indicator.	
3.9.13	*Advanced Indicator* *Evidence of the quantified improvement that has resulted from the collective action relative to a site-selected baseline date shall be identified and evidence from an appropriate range of stakeholders linked to the collective action (including both those implementing the action and those affected by the action) that the site is materially and positively contributing to the achievement of the collective action shall be identified.*	N/A
Comment	The site does not perform this indicator.	

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	Water Stewardship Plan of the site specifies the requirements of evaluating site performance and and its contribution to achieving water stewardship results based on the objectives of the water stewardship plan. The 2024 water stewardship plan has 19 objectives. The water management plan states that each objective can be associated with several main outcomes of the standard. Each objective has defined good practices, actions, targets, cost/benefit, desired outcomes, responsible party,status and implementation effect evaluation.	
4.1.2	*Value creation resulting from the water stewardship plan shall be evaluated.*	Yes
Comment	By carrying out water stewardship plan, The site has achieved the following values: 1. The site saved 54000 tons of water and 190000 yuan in costs in 2023; By 2024, 88333 tons of water will be saved, resulting in a cost savings of 206000 yuan. 2. The site reduced COD emissions by 2298.261kg, ammonia nitrogen emissions by 806.5kg, total phosphorus emissions by 29.742kg, and total nitrogen emissions by 3826.909kg.	
4.1.3	*The shared value benefits in the catchment shall be identified and where applicable, quantified.*	No
Comment	The shared value benefits in the catchment not be identified. ***Finding No: TNR-015882***	
4.1.4	*Advanced Indicator* *A governance or executive-level review, including discussion of shared water challenges, water risks, and opportunities, and any water-related cost savings or benefits realized, and any relevant incidents shall be identified.*	Yes
Comment	The site's project team summarized the actions and objectives of the sustainable water management plan and its performance and reported them to the company's leadership, and organized a summary meeting with the relevant personnel. At the meeting, the leaders evaluated the program and the company's leader, General Manager Ma, summarized and evaluated the internal audit of the AWS program: 1. Advantages: the ability of the internal auditor team has been improved, the adequacy and effectiveness of the AWS management system operation is strong, and the ability of the Qujing plant's water sustainability strategy has been comprehensively improved. 2. Shortcomings: the internal auditor review depth is not enough, in-depth study is needed. Through this internal audit, it was found that the infrastructure of Qujing's water plant is still good, but the related parties carry out fewer activities on water.	
Score	3	
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

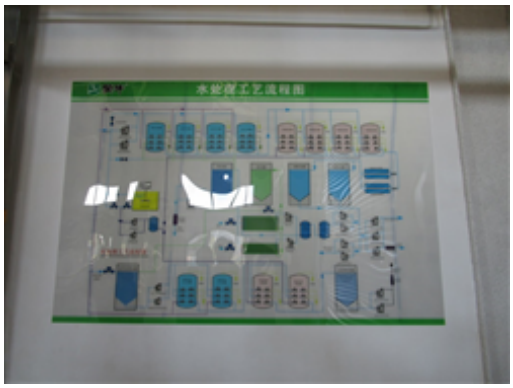
Comment	The site confirmed that there had been no emergency incident this year. In the "Inner Mongolia Mengniu Dairy (Group) Co., LTD. Room temperature Division Qujing Factory document" this document summarizes the year's safety incidents.	
4.3	*Evaluate stakeholders' consultation feedback regarding 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.*	No
Comment	The site has disclosed its water management performance for 2024 on its website, however the site has not yet communicated its water management performance to different types of stakeholders for feedback, such as government, community, surrounding businesses, water infrastructure, suppliers, employees, etc. ***Finding No: TNR-015881***	
4.3.2	*Advanced Indicator* *The site's efforts to address shared water challenges shall be evaluated by stakeholders. This shall include stakeholder reviewing of the site's efforts across all five outcome areas, and their suggestions for continual improvement.*	N/A
Comment	The site does not perform this indicator.	
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.*	Yes
Comment	Monthly project team members review and follow up the progress of the plan, confirm the progress of the plan with relevant departments and update the sustainable water management plan table.	

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 site's internal governance in relation to water and communication on sustainable water management issues on its company website: https://www.mengniu.com.cn/contact/detail/22123.html	
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 has communicated its water stewardship plan with stakeholders based on their willingness to participate, through the following forms: 1. On-site visits to stakeholders, such as visits to local environmental protection bureaus, water authorities, meteorological bureaus, and neighboring farms; 2. Organizing stakeholder meetings/training sessions, such as supplier meetings and employee training; 3. Disclosing the annual water stewardship plan on the company's official website. https://www.mengniu.com.cn/contact/detail/22123.html	
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 the water stewardship performance of 2024, including quantified performance against targets on its official Website. https://www.mengniu.com.cn/contact/detail/22123.html	
5.3.2	*Advanced Indicator* *The site's efforts to implement the AWS Standard shall be disclosed in the organization's annual report.*	N/A
Comment	The facility does not perform this indicator.	
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.*	N/A
Comment	The facility does not perform this indicator.	
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.*	No

Comment	The site has not yet disclosed the shared water challenges and the efforts made to address these challenges. ***Finding No: TNR-015887***	
5.4.2	*Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be identified.*	No
Comment	The site has not fully established a communication mechanism with stakeholders, including identifying shared water challenges together with stakeholders and communicating its efforts to address these challenges to a broader range of stakeholder groups, such as communities, neighboring businesses, water supply infrastructure, suppliers, and employees, in order to obtain a wider range of feedback. ***Finding No: TNR-015888***	
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	A procedure to manage non-conformance and related corrective action is developed, there is no water-related compliance violation identified in past few years.	
5.5.2	*Necessary corrective actions taken by the site to prevent future occurrences shall be disclosed if applicable.*	Yes
Comment	A procedure to manage non-conformance and related corrective action is developed, there is no water-related compliance violation identified in past few years.	
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	A procedure to manage non-conformance and related corrective action is developed, there is no water-related compliance violation identified in past few years.	

Photographic Evidence from Audit

Yes



Water treatment flow chart.JPG

Chemical storage area-2.JPG

water treatment system.JPG

Hazardous waste storage area.JPG

waste water treatment station.JPG

dining area.JPG

Wastewater treatment flow chart.JPG

Chemical storage area-3.JPG

Toilet-3.JPG

Non-hazardous waste storage area.JPG

Toilet-1.JPG

Cutlery recycling area.JPG

Stormwater discharge point.JPG

Chemical storage area-1.JPG

Toilet-2.JPG

Previous Findings	
All non-conformities raised in the previous audit have been satisfactorily closed.	N/A