CERTIFICATION REPORT

Alliance for Water Stewardship (AWS)

Audit Number: AO-001452

WSAS WATER STEWARDSHIP ASSURANCE SERVICES

SITE DETAILS

Site: **APCB (Kunshan) Electronics Co. Ltd**

Address: No. 1818, Jin-Sha-Jiang North Road, Economic Technical Development Zone, Kunshan City, Jiangsu Province, P.R. CHINA

Contact Person: Li Guan Wu

AWS Reference Number: AWS-000122

Site Structure: Single Site

CERTIFICATION DETAILS

Certification status: Certified Gold

Date of certification decision: 2025-May-31

Validity of certificate: 2028-May-30

AUDIT DETAILS

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

Audit Type(s): Re-Certification Audit

Audit Start Date: 2025-Jan-13

Audit End Date: 2025-Jan-15

Lead Auditor: Lorry Long

Audit team participants:

Lingyun Yu

Site Participants:

Mr. Zhuang, General Manager
Mr. Liang, Deputy Manager
Mr. Li, Department Head
Mr. Lu, Director
Mr. Chen, Leader
Mr. Ming, Director
Mr. Zhou, Director
Mr. Yang, Director
Ms. Yang, Director
Mr. Wang, Director
Mr. Wang, Director
Mr. Hu, Leader

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ADDITIONAL INFO

Summary of Audit Findings: A total of 6 findings were raised during the certification audit, 2 major non-conformities, 2 minor non-conformities and 2 observations. The major non-conformities were of sufficient concern to warrant the categorisation of the non-conformity as major and related to good water governance.

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 02/13/2025.

The major non-conformities must be closed within 90 days of receipt of the report. In order to meet this timeline evidence is to be submitted to WSAS (within75 days) by 03/29/2025.

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

Scope of Assessment: The scope of services covers the recertification audit for assessing conformity of APCB Electronics (Kunshan) Co.Ltd. against the AWS International Water Stewardship Standard Version 2.

APCB Electronics (Kunshan) Co.Ltd. (hereinafter referred to as "APCB") is located at No.1818 Jin-Sha-Jiang North Road, Economic Technical Development Zone, Kunshan City, Jiangsu Province. APCB is a PCB manufacturer, producing PCB for broad industrial use, such as camera module board, TFT-LCD board, Rigid-flex board etc. The annual production capacity is about 468,800 square meter PCB. It was established in February 2001 and covers an area of 50,287 square meters, currently it has about 1800 employees. The main production process included:
cutting-drilling-exposure-etching-multiband-pressing-electronic plate-pattern transfer-etching-solder mask-surface treatment-molding-testing-packing.

The water sources used in APCB's site area included municipal water. The municipal water is supplied by Kunshan municipal Group Co., Ltd.

For discharged water, the factory adopts the principle of ‘Separation of rainwater and wastewater’, anc the different discharged water flows into different pipeline. The rainwater is discharged into the municipal rainwater pipeline and then finally flows to Yajiaobang Port. The industrial wastewater is treated by onsite wastewater treatment plant, after the onsite treatment, all the treated industrial wastewater finally flows to Taicang Pond. The domestic wastewater after pretreatment is discharged into municipal sewage pipeline and discharged to Guangda Water Affairs (Kunshan) Co., Ltd. for further treatment. Afterwards, it was discharged into Taicang Pond.

The audit was conducted onsite on 13th-15th January 2024.
The audit activities included the site visit covered production lines, wastewater treatment plant, chemical warehouse and IWRA, stakeholder interviews and documents review.

SCORE

72.00

FINDINGS

NUMBER OF FINDINGS PER LEVEL

Observation	2
Minor	3
Major	5

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WSAS WATER STEWARDSHIP ASSURANCE SERVICES

TUV Rheinland (Guangdong) Ltd.
No. 199 Kezhu RoadGuangzhou Science City/Guangzhou, UNITED

FINDING DETAILS

Finding No:	TNR-016682
Checklist Item No:	1.3.1
Status:	Open
Finding level:	Observation
Checklist item:	Existing water-related incident response plans shall be identified.
Findings:	During site visit, the drainage valve in the exhaust gas treatment facility on the roof was closed, and the condensate in the scrubbing tower was leaking.

Finding No:	TNR-016681
Checklist Item No:	1.3.1
Status:	Open
Finding level:	Observation
Checklist item:	Existing water-related incident response plans shall be identified.
Findings:	During site visit, the pipes were damaged in the cleaning area of electroplating workshop at 2F of the production building, and a small amount of cleaning fluid leaked.
Corrective action:	The site will develop an evaluation method, and assess the potential saving accordingly.

Finding No:	TNR-015958
Checklist Item No:	1.6.1
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2026-Jan-12
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 plan to engage stakeholders in in-depth communication regarding the shared water challenges.

Finding No:	TNR-017593
Checklist Item No:	1.6.3
Status:	Closed
Finding level:	Major
Due date:	2025-Apr-15
Checklist item:	Advanced Indicator Future water issues shall be identified, including anticipated impacts and trends
Findings:	The site did not identify the future water issues, including anticipated impacts and trends
Corrective action:	The site is planning to systematically review relevant materials to analyze the future population trend, water resources trend, and climate change, identify future water issues, and make corresponding predictions.

Finding No:	TNR-017594
Checklist Item No:	1.6.4
Status:	Closed
Finding level:	Major
Due date:	2025-Apr-15
Checklist item:	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.
Findings:	The site did not conduct social impact assessment.
Corrective action:	The site is planning to search and comprehend relevant materials to conduct a social impact assessment centered on water resources.

Finding No:	TNR-018253
Checklist Item No:	1.7.2
Status:	In Progress - CA plan approved
Finding level:	Minor
Checklist item:	Water-related opportunities shall be identified, including how the site may participate, assessment and prioritization of potential savings, and business opportunities.
Findings:	The identification of opportunity does not include figures of potential savings.

Finding No:	TNR-017603
Checklist Item No:	2.4.2
Status:	Closed
Finding level:	Major
Checklist item:	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.
Findings:	The site did not identify 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.
Corrective action:	Cause analysis: Did not understand the criteria, did not identify the plan. Corrective action: By searching literature on climate change prediction of Jiangsu, the site identified the extreme weather floods may become the water risks associated with climate change. APCB also searched and reviewed the Contingency Plan of Kunshan City, such as flood, typhoon, extraordinary rainstorm. In current, there were more than 360 rescue teams in Kunshan City and 147 water monitoring sections were set. In 2024, Kunshan Flood control and drought Relief Headquarters clarified the responsible persons for flood control in all districts, towns and important rivers and lakes, so as to facilitate unified command and supervision. APCB also had established Emergency preparedness for flood risk and communicated the plan to Kunshan Development Zone, the responsible person of Kunshan Development Zone accepted APCB's plan and stated that Kunshan Development Zone professional team would quickly arrive at the site to assist in the disposal if the site had any problems.

Finding No:	TNR-016022
Checklist Item No:	4.1.2
Status:	Closed
Finding level:	Major
Due date:	2025-Apr-15
Checklist item:	Value creation resulting from the water stewardship plan shall be evaluated.
Findings:	The site did not analyze its value creation resulting from the implementation of water stewardship plan.
Corrective action:	The site would account the investments in the water stewardship plan for 2024 and accounting for value creation resulting.

Finding No:	TNR-016023
Checklist Item No:	4.1.3
Status:	Closed
Finding level:	Major
Due date:	2025-Apr-15
Checklist item:	The shared value benefits in the catchment shall be identified and where applicable, quantified.
Findings:	The site did not identify the shared value benefits in the catchment.
Corrective action:	Understand the meaning of the shared value benefits in the catchment, identify the shared value benefits in the catchment, and do appropriate quantification.

Finding No:	TNR-015959
Checklist Item No:	5.4.1
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2026-Jan-12
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 plan to disclose the shared water challenges and the efforts on the company's website.

Report Details

Report	Value
Report prepared by	Lorry Long
Report approved by	Leong Siew Mui
Report approved on (Date)	31/5/2025

Surveillance

Proposed date for next audit
2026-Jan-12

Stakeholder Announcements

Date of publication	Location
11/11/2024	https://www.tuv.com/content-media-files/greater-china/about-us/downloads/terms-and-conditions-and-certification-regulations/aws-000122-_apcb-electronics-(kunshan)-co.ltd_stakeholderannouncement_nov_v3.0-billingual.pdf
11/11/2024	http://www.apcb.com.cn/file/2024%E5%9B%BD%E9%99%85%E5%8F%AF%E6%8C%81%E7%BB%AD%E6%B0%B4%E7%AE%A1%E7%90%86%E6%A0%87%E5%87%86%E5%AE%A1%E6%A0%B8-%E5%88%A9%E7%9B%8A%E7%9B%B8%E5%85%B3%E6%96%B9%E6%84%8F%E8%A7%81%E5%BE%81%E6%B1%82%E5%85%AC%E5%91%8A.pdf

Comment: Through communication with the site management, due to Spring Festival is coming, the government staff are very busy, and they did not had time to join the interview onsite during the audit. And considering the information privacy, they did not accept the telephone interview. Therefore, no government joined the stakeholder interviews.

Catchment Information

Catchment Information

The Taihu Basin is located in the southern wing of the Yangtze River Delta, bordered by the Yangtze River to the north, the East China Sea to the east, the Qiantang River to the south, and demarcated by the Tianmu and Maoshan Mountains to the west. The basin covers an area of 36,895 square kilometers and is administratively divided among Jiangsu, Zhejiang, Shanghai, and Anhui, comprising three provinces and one municipality. Specifically, Jiangsu accounts for 19,399 square kilometers (52.6%), Zhejiang for 12,095 square kilometers (32.8%), Shanghai for 5,176 square kilometers (14.0%), and Anhui for 225 square kilometers (0.6%).

The topographical features of the Taihu Basin are characterized by higher elevations around the periphery and lower elevations in the center, with the western part higher than the eastern part, forming a saucer-like shape. The western part of the basin consists of mountainous regions, belonging to the Tianmu and Maoshan mountain ranges. The central area features a plain river network and a depression centered around Taihu Lake, along with numerous lakes. The northern, eastern, and southern edges, influenced by sediment deposition from the Yangtze River and Hangzhou Bay, have higher terrain, forming the rim of the saucer. The landforms are divided into mountainous and hilly areas and plains. The western mountainous and hilly region covers an area of 7,338 square kilometers, accounting for about 20% of the basin's total area. The general elevation of the mountainous areas ranges from 200 to 500 meters, while the hilly areas typically range from 12 to 32 meters. The vast central and eastern plain area, spanning 29,557 square kilometers, is divided into the central plain, the highland plain along the river and coast, and the Taihu Lake area. The central plain generally has an elevation below 5 meters, the highland plain along the river and coast has an elevation of 5.0 to 12.0 meters, and the average elevation of the Taihu Lake bed is about 1.0 meter.

The Taihu Basin falls within the subtropical monsoon climate zone, characterized by distinct seasons, abundant rainfall, and ample heat. During winter, the basin is affected by cold continental air masses, with prevailing northerly winds, resulting in a cold and dry climate. In summer, it is controlled by maritime air masses, with prevailing southeast winds, leading to a hot and humid climate. The annual average temperature ranges from 14.9 to 16.2 degrees Celsius, with a temperature distribution pattern of higher temperatures in the south and lower in the north. The annual sunshine duration ranges from 1,870 to 2,225 hours. The average annual precipitation over multiple years (1956–2000) is 1,177 millimeters, with about 60% concentrated in the flood season from May to September. The average annual evaporation over multiple years is 822 millimeters. The average annual natural runoff over multiple years is 16.01 billion cubic meters, equivalent to an annual runoff depth of 438 millimeters. The average annual runoff coefficient over multiple years is 0.37, with variations ranging roughly from 0.21 to 0.55. The average total water resources over multiple years in the basin amount to 17.6 billion cubic meters, of which the surface water resources are 16.01 billion cubic meters, the groundwater resources are 5.31 billion cubic meters, and the overlapping calculation of surface and groundwater is 3.72 billion cubic meters.

The Taihu Basin is the downstream tributary system of the Yangtze River system, featuring a dense network of rivers and a constellation of lakes, with a total water surface area of approximately 5,551 square kilometers, representing a water surface rate of 15%. The water flow is slow, with a velocity of only 0.3 to 0.5 meters per second during the flood season, and the water environment has a low carrying capacity. The lakes in the basin are centered around Taihu Lake, forming the western Taohu Lake group, the southern Jiaxing Lake group, the eastern Dianpu Lake group, and the northern Yangcheng Lake group. Taihu Lake is the largest lake in the basin and serves as an important water source and water resource regulation center. The total length of the rivers in the basin is about 120,000 kilometers, with a river network density of 3.3 kilometers per square kilometer. There are 228 rivers that flow into and out of Taihu Lake. The water system of the basin is centered around Taihu Lake and is divided into the upstream and downstream water systems. The upstream water system mainly consists of independent water systems in the western mountainous and hilly areas, including the Tiaoxi River system, the Nanhe River system, and the Taohu River system. The downstream mainly features the plain river network water system, including the eastern Huangpu River system, the northern Yangtze River water system, and the southeastern Yangtze River Estuary and Hangzhou Bay water system. The Jiangnan Canal (Beijing-Hangzhou Grand Canal) traverses the heart of the basin and the downstream water systems, playing a role in water volume regulation and transfer. The main rivers flowing into

the lake include the Tiaoxi River, Nanxi River, and Taohu River, while the rivers flowing out of the lake include the Taipu River, Guajing Port, and Xu River.
The Taihu Basin is situated in the core area of the Yangtze River Delta and is one of the most economically developed regions in China with a dense concentration of large and medium-sized cities, possessing significant geographical and strategic advantages. Within the basin are the metropolis of Shanghai and large and medium-sized cities such as Hangzhou, Suzhou, Wuxi, Changzhou, Zhenjiang, Jiaxing, and Huzhou, as well as numerous rapidly developing small cities and incorporated towns. A well-structured urban system with a complete hierarchy and increasingly rational group structure has been formed, with an urbanization rate reaching 74.7%.
The basin is characterized by a dense population and intensive industries. In 2018, the population of the Taihu Basin was 61.04 million, accounting for 4.4% of the national total population, with a population density of approximately 1,654 people per square kilometer. The total gross domestic product (GDP) of the entire basin was 876.63 billion yuan, representing about 9.7% of the national GDP. The per capita GDP reached 144,000 yuan, which is 2.2 times the national average level.

Refer to page 4 of the AWS summary report.

Catchment_overview.png

Catchment boundary.png

Client Description and Site Details

Site boundary.jpg

Client/Site Background

APCB Electronics (Kunshan) Co., LTD. is a PCB manufacturer, producing PCB for broad industrial use, such as camera module board, TFT-LCD board, Rigid-flex board etc. The annual production capacity is about 468,800 square meter PCB. It was established in February 2001 and covers an area of 50,287 square meters, currently it has about 1800 employees. The main production process included:
cutting-drilling-exposure-etching-multiband-pressing-electronic plate-pattern transfer-etching-solder mask-surface treatment-molding-testing-packing. The site only uses municipal water for production. It owns and operates a wastewater treatment plant. The wastewater will be discharged into the water body after treatment. Around the site are some factories and a small river. The nearest residence is about 400 meters away from the factory.

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. Laws and regulations are becoming stricter regarding the water quality of wastewater discharged by enterprises.
2. The total phosphorus levels in Taihu Lake remain mildly polluted, and the government is increasingly demanding phosphorus emission reductions from enterprises.
3. Water scarcity continues to be a significant issue.
4. Frequent extreme weather events, such as heavy rains and floods, are impacting local production and daily life.
5. Rising municipal water prices are leading to increased water usage costs.
6. Natural disasters will impact local infrastructure and urban construction.
The site has prioritized the shared water challenges based on the severity and urgency of the issues, with the sequence numbers from 1 to 6 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.* — Yes
Comment	Water-related discharge locations had been visited during the audit. Due to the water source locations being controlled by water supply 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, products 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 a site and catchment background report. In this report, it contains the following content: • Map of site boundaries with the source of water supply and discharge points of wastewater and rainwater. • Map of water-related infrastructures at the site such as pipeline, and wastewater treatment plant. • Map of the water plant (Kunshan City Water Supply Group Co., Ltd.) and its ultimate water sources (main water source: Kuilei Lake and Yangtze River), municipal WWTP (Everbright Water (Kunshan) Co., Ltd.) and its ultimate receiving water body (Taicangtang River) Domestic wastewater is directly incorporated into the municipal wastewater network and treated by the municipal WWTP (Everbright Water (Kunshan) Co., Ltd.); industrial wastewater is treated by the ETP within the site and then discharged into the nearby river (Taicangtang 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, academic institutions, 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.

Refer to page 18 of the AWS summary report.

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.*

Obs.

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 Kunshan Ecological Environment Bureau, 120110000-2021-409-L
2. Major Accident Emergency Response Procedure, T-6-2-610-A000, involving response processes for water outages and natural disasters (such as earthquakes, floods, etc.)
3. Emergency response process for chemical spills, E-3-3-820-A010
4. Emergency Plan for Wastewater Treatment Station, E-3-3-810-A030
5. Environmental Abnormal Discharge Emergency Response Specification, E-3-3-810-A190
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 production line and analyze water consumption and trends on a weekly basis.
• The site tracks the readings of each water meter every day 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.
• In August 2024, the site commissioned a third-party organization to conduct water balance testing, complied with the "General Principles of Water Balance Test in Enterprises (GB/T12452-2008)", a China national standard, which identifies water inflow, losses, storage and drainage, including production water, domestic water, reuse water, reuse water, etc.

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 production line and analyze water consumption and trends on a weekly basis.
• The site tracks the readings of each water meter every day 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.
• In August 2024, the site commissioned a third-party organization to conduct water balance testing, complied with the “General Principles of Water Balance Test in Enterprises (GB/T12452-2008)”, a China national standard, which identifies water inflow, losses, storage and drainage, including production water, domestic water, reuse water, reuse water, etc.

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 wastewater:
• 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, and Ni in real-time
• Internal laboratory conducts daily testing of industrial wastewater discharge outlet and wastewater treatment processes
- Domestic wastewater:
• Domestic wastewater is tested by an external qualified laboratory twice a year
- Rainwater:
• The site has installed an online monitoring device at the rainwater outlet to monitor PH in real-time
• The site entrusts a third-party laboratory to test the water quality of rainwater outlets twice a year.
- Drinking water
• The site entrusts a third-party laboratory once a year to test the water quality of the municipal water supply for domestic use.
• The site provides employees with free drinking water, equipped with 27 water dispensers, and entrusts a third-party laboratory once a year to test the quality of drinking water, monitoring the main parameters of the sanitary standards for domestic drinking water (GB5749-2022), such as total coliforms, color, turbidity, odor and taste, visible matter to the naked eye, and total hardness.
- Environmental water quality
• There are a total of 4 groundwater and 9 soil monitoring points in the site area, which are monitored once a year
• The site annually commissions an external laboratory to test the water quality of the surrounding river - Taicangtang River (the receiving water body for the site's industrial wastewater), with monitoring parameters including: pH, COD, ammonia nitrogen, total phosphorus (TP), total nitrogen (TN), total suspended solids (TSS), copper (Cu), tin, nickel (Ni), manganese (Mn), petroleum products, total cyanide, and formaldehyde. The sampling points are located at the wastewater discharge outlet and 500 meters upstream and 1.3 kilometers downstream.

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 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/rainwater quality testing, peripheral water testing. Operation and maintenance of wastewater online testing facilities 5. Environmental training, frugal project investment, stakeholders' collaboration 6. AWS related expenses The site identified water-related cost data from 2021 to 2024 and analyzed the trends. The site has not generated direct water-related revenues; however, the site has identified the social, cultural, and environmental values derived from its operations and the implementation of sustainable water management practices.	
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 (December 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 provides employees with free drinking water, equipped with 27 water dispensers, and entrusts a third-party laboratory once a year to test the quality of drinking water, monitoring the main parameters of the sanitary standards for domestic drinking water (GB5749-2022), such as total coliforms, color, turbidity, odor and taste, visible matter to the naked eye, and total hardness. • 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.*	Yes

Comment	The site screened and identified suppliers/service providers that account for more than 5% of product weight or more than 5% of procurement costs (11 suppliers/service providers were involved), and then sent questionnaires to investigate their indirect water consumption (A total of 11 suppliers/service providers 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 supplier's water usage, wastewater quality, environmental violation records, IPE water risk screening results, etc.	
1.4.2	*The embedded water use of outsourced services shall be identified, and where those services originate within the site's catchment, quantified.*	Yes
Comment	The site also collects the water consumption of its outsourced services such as 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 screened and identified suppliers/service providers that account for more than 5% of product weight or more than 5% of procurement costs (11 suppliers/service providers were involved), and then sent questionnaires to investigate their indirect water consumption (A total of 11 suppliers/service providers 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 supplier's water usage, wastewater quality, environmental violation records, IPE water risk screening results, etc. 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 11 main suppliers/service providers is approximately 900,000 tons. The embedded water use of materials is about 10,000 tons by calculation (based on data provided by the 11 main suppliers/service providers)	
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 Taihu Lake catchment as well as the water balance data within the administrative boundaries (Suzhou City and Kunshan City), which are included within the Taihu Basin boundary where the site is located. 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 Kunshan City, Suzhou City and Taihu Lake catchment from 2018 to 2023, and the annual differences and trends are available.
According to the Suzhou Water Resources Bulletin (2023), the total water resources in Suzhou in 2023 were 4.9149 billion cubic meters, a increase of 2.2923 billion cubic meters from the historical average. Among them, the surface water resources are 1.7226 billion cubic meters, and the groundwater resources are 984.8 million cubic meters.
In 2023, the total water consumption in the city was 10.015 billion cubic meters, including 1.106 billion cubic meters for agricultural water consumption, 7.352 billion cubic meters for industrial water consumption, 1.163 billion cubic meters for domestic water consumption, and 0.362 billion cubic meters for ecological environment water consumption. From 2015 to 2023, the water consumption in Suzhou remained stable.
According to the "Comprehensive Plan for Water Resources in Suzhou City (2021-2035)", the surface water resource consumption rate in Suzhou City was 28.70% in 2020, and the average surface water resource consumption rate in the past five years was 33.28%. The surface water development and utilization rate in Suzhou City was 29.44% in 2020, and the average surface water resource development and utilization rate in the past five years was 38.26%. In 2020, the groundwater intake in Suzhou City was about 0.03 million cubic meters, and the average groundwater resource development and utilization rate in the past five years was 0.62%. (Data source: Suzhou City Comprehensive Plan for Water Resources (2021-2035))

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.

The site has collected water quality data for the main water bodies in the Taihu Basin from 2018 to 2023, and annual trends in water quality changes can be identified.
In 2023, Taihu Lake was mildly polluted, with total phosphorus being the primary pollutant. The northern and western coastal areas were mildly polluted, while the central lake area and the eastern coastal area had good water quality. The entire lake was in a state of mild eutrophication; the eastern coastal area was in a mesotrophic state, and the central lake area, northern coastal area, and western coastal area were in a state of mild eutrophication. The water quality of the rivers around the lake was excellent. Among the 133 national assessment sections monitored, 42.1% were Class II, 57.1% were Class III, and 0.8% were Class IV. According to the data from past reports, the water quality in the basin has shown an improving trend over the years.

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.*

Yes

Comment	The Catchment Background Survey Report lists the Important Water-Related Areas of the catchment. The Important Water-Related Areas are collected from government-published documents, including 'Ecological protection red line of Jiangsu Province', and' Ecological environment zoning of three lines and one list'. The status of the IWRAs are collected from the management authorities.	
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, flood control, and drainage, wastewater treatment, emergency response at provincial, catchment, and city levels, and water-related objectives. Based on the available information, the water-related infrastructure in the catchment is relatively good.	
1.5.7	*The adequacy of available WASH services within the catchment shall be identified.*	Yes
Comment	The site obtained the WASH status in Suzhou from the Suzhou Statistical Yearbook for 2023, including dimensions such as water supply coverage, wastewater treatment rate, drinking water quality, urban public health facilities, cleaning, and environmental sanitation management levels. Overall, the WASH services are good in Suzhou City.	
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 an external laboratory to test the water quality of the surrounding river - Taicangtang River (the receiving water body for the site's industrial wastewater), with monitoring parameters including: pH, COD, ammonia nitrogen, total phosphorus (TP), total nitrogen (TN), total suspended solids (TSS), copper (Cu), tin, nickel (Ni), manganese (Mn), petroleum products, total cyanide, and formaldehyde. The sampling points are located at the wastewater discharge outlet and 500 meters upstream and 1.3 kilometers downstream. According to the testing report in 2024.12.07, the result showed that the parameter such as pH, chemical oxygen demand, ammonia nitrogen and total phosphorus all meet the Class III water quality standards in the "Environmental Quality Standards for Surface Water" (GB 3838-2002), and are in line with the water quality grades planned by the government. The test result of 2024 was even better than the water quality testing result in August 2023, indicating that the water quality is stable and improving.	
Score	7	
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 the adequacy of WASH provision within the catchments of origin of primary inputs including the coverage of safe drinking water supply, the coverage of wastewater treatment, and the rate of security disposal of municipal solid waste.	
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. Laws and regulations are becoming stricter regarding the water quality of wastewater discharged by enterprises.
2. The total phosphorus levels in Taihu Lake remain mildly polluted, and the government is increasingly demanding phosphorus emission reductions from enterprises.
3. Water scarcity continues to be a significant issue.
4. Frequent extreme weather events, such as heavy rains and floods, are impacting local production and daily life.
5. Rising municipal water prices are leading to increased water usage costs.
6. Natural disasters will impact local infrastructure and urban construction.
The site has prioritized the shared water challenges based on the severity and urgency of the issues, with the sequence numbers from 1 to 6 indicating decreasing levels of priority.

Finding No: TNR-015958

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. Such as
1. Separated different kinds of wastewater and treated them individually.
2. The etching solution with high ammonia nitrogen and the nitric acid waste liquid are collected separately and outsourced for treatment.
3. Regular water quality tests should be conducted on the wastewater discharge outlet of Taicangtang and its upstream and downstream areas, and the water quality compliance at the Zhen Dong Ferry section of Taicangtang and the Zhaotun section of Wusong River should be closely monitored.

1.6.3 *Advanced Indicator*
Future water issues shall be identified, including anticipated impacts and trends No

Comment

The site did not identify the future water issues, including anticipated impacts and trends

Finding No: TNR-017593

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. No

Comment

The site did not conduct social impact assessment.

Finding No: TNR-017594

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 conducted a comprehensive assessment of the potential water-related internal and external risks faced during its operations, based on the paper "Water Risk Assessment System for Enterprises in the Taihu Lake Basin," published in the Chinese Journal of Environmental Science, as well as the operational conditions of the site itself. The assessment was carried out from three dimensions: physical risks, regulatory risks, and reputational risks.
Based on the water-related risk list provided by the site, the site analyzed the priority of each risk by considering both the severity of the impact and the likelihood of occurrence. In addition, the site provided an overall discussion of the potential business losses these risks might cause and the enterprise's response strategies.

1.7.2 *Water-related opportunities shall be identified, including how the site may participate, assessment and prioritization of potential savings, and business opportunities.* — No

Comment: The site has identified a total of 6 water-related opportunities across three dimensions: water balance, water quality, and stakeholder engagement considering how the site may participate. The site prioritized the opportunities via six aspects.

Finding No: TNR-018253

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:
• The government continuously encourages enterprises within its jurisdiction to introduce advanced water-saving technologies by creating water-efficient park construction projects. It has established a unified set of enterprise assessment indicators, including management systems, personnel allocation, technological innovation, and water intensity. Leading enterprises in this regard are also rewarded.
• The government has established a water quality monitoring system for water body sections within the catchment to continuously monitor the water quality. Additionally, a strict government assessment system has been put in place.
• The government encourages enterprises within the catchment to introduce advanced water management systems and offers rewards to those that obtain AWS certification.
• The park government is implementing the AWS certification program to encourage enterprises within its jurisdiction to focus on sustainable water management.
• Collaborate with peer organizations and stakeholders to promote sustainable water management
• Engaging with peer organizations and stakeholders to promote water stewardship
• Communicating on the site's 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:
• 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.
• Chemical cleaning and/or mechanical grinding and brushing, using countercurrent cleaning or water reuse, equipped with copper powder recovery or pollutant recovery treatment devices.

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 practice for water quality, such as:
• The government has introduced policies that specify if enterprises within its jurisdiction meet all the surface water Class IV standards for chemical oxygen demand (COD), ammonia nitrogen (NH3-N), and total phosphorus (TP) in a given quarter—standards that are stricter than the requirements of their discharge permits—they will be rewarded at a rate of 0.1 yuan per cubic meter. This incentive aims to encourage enterprises to improve their wastewater treatment effectiveness, thereby enhancing the environmental quality of water bodies such as the Wusong River.
• Using the latest technology to recover waste acid from the production process and reduce the load on the wastewater treatment station
• Formulate internal control standards stricter than discharge permit for industrial wastewater

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: • 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 Mr.Zhuang, the general manager of APCB. The commitment includes all the necessary element and has been displayed on its official website.	
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 Mr.Zhuang, the general manager of APCB.	
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	APCB disclosed the information of its water management organizational structure and members of the compliance responsible team on its official website. By using a third-party service platform called EAGLE EYE, APCB can identify applicable water related legal and regulatory requirements in a timely manner. APCB has prepared its own sustainable water stewardship operation procedure, E-3-1-400-0001, which defines the water management responsibilities of each department.	
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

APCB has developed a water stewardship strategy and announced it on its official website. The strategy expounds APCB's long-term plan for water stewardship in terms of standardized management, corporate social responsibility and implementation of best practices, including:
1. Comply with all national laws, regulations, and other requirements;
2. Communicate with management personnel at all levels and employee representatives to strengthen their understanding of sustainable water management;
3. The company's development plan adheres to the concept of sustainable development, and any plan and decision take into account the impact on the water environment;
4. Actively implement government water management policies and regional water environmental plans, and take responsibility for water management within the catchment area;
5. Use water as efficiently as possible and reduce water loss;
6. Use advanced technology to improve the reuse rate of water;
7. Make every effort to prevent pollution and promote waste reduction, reuse, recycling, and proper disposal;
8. Take necessary measures to provide employees and other stakeholders with safe drinking water, environmental sanitation, and personal hygiene (WASH);
9. Make every effort to communicate regularly with stakeholders and promote their participation in sustainable water management activities.

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

APCB has developed a Water Stewardship Plan (Year 2024), 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:
• Promote sustainable water management through training
• Improve the indirect water use performance of the site by carrying out water management training for suppliers and promoting them to remove IPE violation records
• Through continuous process improvement, the total water consumption per unit product in 2024 is 2 m3.
•The quality of the discharged wastewater meets 100% of the internal control requirements of the site, and the wastewater internal control index of Rida is lower than the wastewater discharge permit requirements.
• Use WBCSD to evaluate the WASH of the site and the final result received 90%.
• Monitor the water quality of the river which the industrial wastewater of the site discharged to and trust external agencies to test the water quality quarterly.
• Carry out at least 2 river patrol activity each year.

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.

Yes

Comment

On December 4, 2024, APCB signed Jointly promote AWS Mutual Assistance Agreement with one company within the same catchment and communicated on the AWS action and performance with each other.
On December 3, 2024, APCB as an organizer, organized one 'river patrol' activity in Taicang Pond with one neighbor company, one service provider, one supplier, sanitation workers, residents, totally 11 persons attended the activity.
On January 8, 20205, APCB as an organizer, organized one 'river patrol' activity and river monitoring in Kuilei Lake with one neighbor company, one service provider, totally 10 persons attended the activity.

Score	4	
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	On November 27, 20204, APCB organized a sharing seminar on sustainable water stewardship to share its experience in carrying out AWS with one brother company in another catchment. In 2024, APCB signed Jointly promote AWS Mutual Assistance Agreement with one borther company in another catchment.	
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.*	Yes
Comment	APCB communicated its water management plan for 2024 through stakeholder seminars and visits, including wastewater treatment service provider, freshwater service provider, local government and enterprises and achieved consensus on water quality, water saving and etc.	
Score	7	
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	APCB has established Emergency environmental emergency plan, it states the emergency environmental emergency process and business continuity strategy, the content covers chemical leakage, wastewater, solid waste, emergency shutdown, water shutdown, power outage, gas shutdown, storm weather emergency environment, etc. The emergency plan had been registered in Suzhou City Kunshan Ecological and Environmental Bureau. APCB has identified its water risks, and corresponding strategies to mitigate water risks are developed. The site developed these via study of the government's water-related plan or consultation with the government.	
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.*	No
Comment	By searching literature on climate change prediction of Jiangsu, the site identified the extreme weather floods may become the water risks associated with climate change. APCB also searched and reviewed the Contingency Plan of Kunshan City, such as flood, typhoon, extraordinary rainstorm. In current, there were more than 360 rescue teams in Kunshan City and 147 water monitoring sections were set. In 2024, Kunshan Flood control and drought Relief Headquarters clarified the responsible persons for flood control in all districts, towns and important rivers and lakes, so as to facilitate unified command and supervision. APCB also had established Emergency preparedness for flood risk and communicated the plan to Kunshan Development Zone, the responsible person of Kunshan Development Zone accepted APCB's plan and stated that Kunshan Development Zone professional team would quickly arrive at the site to assist in the disposal if the site had any problems.	
Score	6	

Finding No: TNR-017603

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	1. APCB actively cooperates with the government supervision department to conduct supervisory inspections and visits, conduct correction when non-compliance raised. 2. APCB invited a third agency to monitor the water quality twice a year of the receiving water body (Taicang Pond) of its rainwater and send the reports to local government and neighbor companies. 3. APCB actively attend the meetings organized by the government to learn latest regulations and requirements. 4. The wastewater treatment facility in the site is sampled as limited space on-site teaching site by Kunshan Development District.	
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	1. APCB has developed its own sustainable water stewardship operation procedure, E-3-1-400-0001, to standardize its water management activities. 2. APCB has established an Environment and Water Stewardship Committee to coordinate its environmental and water management related affairs. An organization chart of the environment and water stewardship management team established, including the manager representative of the water stewardship and the responsible department. 3. APCB implement AWS management on the site and has obtained the AWS certification since 2018 and upgraded to gold certification in 2021.	
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.*	N/A
Comment	The site does not perform this indicator.	
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	APCB has established a procedure to ensure the operation of APCB meet the provisions of relevant laws, regulations and other requirements. The vice manager of environmental and safety department is responsible for updating the laws and regulations. With the help of a third-party platform, APCB timely obtains updated information on laws and regulations, and conducts compliance evaluation on laws and regulations every year and keeps records. According to IPE and monitoring reports, the facility operated in accordance with laws and regulations.	

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

APCB has established a procedure to ensure the operation of APCB meet the provisions of relevant laws, regulations and other requirements.
APCB timely obtains updated information on laws and regulations quarterly and conducts compliance evaluation on laws and regulations every year and keeps records.
The site has developed a water quality monitoring plan, including rainwater, discharged industrial wastewater, discharge domestic wastewater, rainwater, surface water, groundwater, soil to ensure that the drainage water quality and pollutant concentrations in groundwater and soil meet the requirements of laws and regulations. A brief summary of monitoring point information and monitoring frequency is as follows:
• Discharged industrial wastewater
1. APCB has established water quality pollution management regulations, which include monitoring requirements for discharged industrial water quality, including parameters and frequency.
2. APCB has invited a third party to monitor the parameters (pH, COD, NH3-N, TP, TN, SS, Cu, Tin, Ni, Mn, Petroleum, Total cyanides, Formaldehyde) every month and installed online monitoring facilities at the industrial wastewater discharge outlet to monitor the parameters (pH, COD, NH3-N, Ni) of the discharged wastewater in real time.
3. Internal laboratory conducts daily testing of industrial wastewater discharge outlet and wastewater treatment processes
•Discharge domestic wastewater
APCB has invited a third party to monitor the parameters (pH, COD, SS, NH3-N, TP, Petroleum, Ni, Cu, Tin, Total cyanides, Formaldehyde) of discharged domestic wastewater every three month.
• Rainwater discharge
APCB has invited a third party to monitor the parameters (pH, COD, SS, NH3-N, TP, TN, TSS, Cu, Tin, Ni, Mn, Total cyanides, Formaldehyde) of rainwater and installed an online monitoring device at the rainwater outlet to monitor the parameter (pH) of rainwater in real-time.
•Environmental water quality
4 groundwater monitoring points and 9 soil monitoring points have been set up in the site area, which are monitored once a year.
APCB has invited a third party to monitor the parameters (PH, COD, NH3-N, TP, TN, SS, Cu, Tin, Ni, Mn, Total cyanides, Formaldehyde) of Taicang Pond (the receiving water of the site's industrial wastewater) once a year. The sampling points are located at the wastewater discharge point, 500 meters upstream and 1300 meters downstream of discharge point.

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

The site has developed a Water Stewardship Plan (Year 2024) improvement action list, which specifies targets, required actions, measurement, status, effectiveness evaluation, accountable and deadline, etc.
1. APCB has set targets for fresh water use amount was less than 820,000 m3 and the site tracks its fresh water use amount on a monthly basis.
2. APCB has set an annual target of recycling rate of reclaimed water was more than 70% and tracks the progress of its recycling rate of reclaimed water on a quarterly basis.
3. APCB had set an annual target of water use per unit products (convert into double-sided board) was 0.7 m3/m2 and tracks the water use per unit products (convert into double-sided board) on a monthly basis
According to the data statistics and analysis records provided by the site,
1. Annual total water use amount: 778,680 m3 in 2024.
2. Recycling rate of reclaimed water: 72% in 2024.
3. Water use per unit products (convert into double-sided board): 0.59 m3/m2 in 2024.

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 has developed a Water Stewardship Plan (Year 2024) improvement action list, which specifies targets, required actions, measurement, status, effectiveness evaluation, accountable and deadline, etc. 1. APCB has set targets for fresh water use amount was less than 820,000 m3 and the site tracks its fresh water use amount on a monthly basis. 2. APCB has set an annual target of recycling rate of reclaimed water was more than 70% and tracks the progress of its recycling rate of reclaimed water on a quarterly basis. 3. APCB had set an annual target of water use per unit products (convert into double-sided board) was 0.7 m3/m2 and tracks the water use per unit products (convert into double-sided board) on a monthly basis. 4. APCB also set a long-term targe of water use per unit products (convert into double-sided board) was 0.5 m3/m2 which meet Level 1 cleaner production standards for the wastewater discharged amount per unit product. APCB has developed a proposal for improving water balance in 2024, with a total of 4 improvement measures approved, involving topics such as optimizing production processes to save water consumption and improve wastewater utilization, such as: 1. Regularly replace membrane components for reclaimed water to ensure the reclaim water system is stable; 2.Install electromagnetic valve in production line to reduce the water use; 3. Collect and filter rainwater, and use it for cooling tower makeup, mechanical seal cooling, production processes, etc.	
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	A series of water stewardship plans are implemented to achieve the site's water quality targets. According to the water quality monitoring plan, the site entrusts a third-party laboratory to test its various water quality. According to the test report and analysis record provided by the site, the water quality is 100% in line with its internal control standard. 1. APCB has developed a water quality monitoring plan and commissioned third-party laboratories to test the water quality of various sources, including drinking water, discharged water, groundwater, soil, and upstream and downstream water quality of river which the rainwater discharged to. 2. APCB has installed a series of online water quality detection systems to monitor inflow and outflow in real-time, such as monitoring CI (conductivity) at the tap water inlet, to ensure that the incoming water meets the water quality requirements of the APCB pure water preparation system; Monitor (pH, COD, NH3-N, Ni at the total industrial wastewater discharge outlet; Monitor pH at the rainwater outlet. 3. APCB has formulated the operation standards of industrial wastewater treatment facilities to standardize the wastewater treatment process and has kept the daily operation and maintenance records for tracking the operation status of wastewater treatment facilities. 4. APCB has developed a management procedure for pollutant concentration in wastewater discharge and established internal control indicators that are stricter than the discharge permit. The specific details are as follows: Internal control index of discharged wastewater: COD 25mg/L; Cu 0.15 mg/L; Cyanide 0.1 mg/L; TN 7.5 mg/L; PH 6.0-9.0; TP 0.25 mg/L; Formaldehyde 0.5 mg/L; SS 7.5 mg/L; NH3-N 2.5 mg/L; Ni: 0.1 mg/L; Tin 2.5 mg/L (Permit requirements: Emission standard of pollutants for electroplating GB 21900-2008 and Integrated Wastewater Discharge Standard GB8978-1996: COD 50mg/L; Cu 0.3 mg/L; Cyanide 0.2 mg/L; TN 15 mg/L; PH 6.0-9.0; TP 0.5 mg/L; Formaldehyde 1 mg/L; SS 30 mg/L; NH3-N 8 mg/L; Ni: 0.1 mg/L; Tin 5 mg/L). 5. APCB has implement the 'One Enterprise, One Policy' Standardized Rectification Plan for Phosphorus-Related Enterprises in the Taihu Catchment and the risk level was C. APCB monitors the total wastewater discharged and has developed a series of implementation plans. Including: optimizing the ETP treatment process and add the wastewater reuse rate. The site tracks the progress of its Water Stewardship targets regularly.	
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

A series of water stewardship plans are implemented to achieve the site's water quality targets. According to the water quality monitoring plan, the site entrusts a third-party laboratory to test its various water quality. According to the test report and analysis record provided by the site, the water quality is 100% in line with its internal control standard.
1. APCB has developed a water quality monitoring plan and commissioned third-party laboratories to test the water quality of various sources, including drinking water, discharged water, groundwater, soil, and upstream and downstream water quality of river which the rainwater discharged to.
2. APCB has installed a series of online water quality detection systems to monitor inflow and outflow in real-time, such as monitoring CI (conductivity) at the tap water inlet, to ensure that the incoming water meets the water quality requirements of the APCB pure water preparation system; Monitor (pH, COD, NH3-N, Ni at the total industrial wastewater discharge outlet; Monitor pH at the rainwater outlet.
3. APCB has formulated the operation standards of industrial wastewater treatment facilities to standardize the wastewater treatment process and has kept the daily operation and maintenance records for tracking the operation status of wastewater treatment facilities.

4. APCB has developed a management procedure for pollutant concentration in wastewater discharge and established internal control indicators that are stricter than the discharge permit. The specific details are as follows: Internal control index of discharged wastewater: COD 25mg/L; Cu 0.15 mg/L; Cyanide 0.1 mg/L; TN 7.5 mg/L; PH 6.0-9.0; TP 0.25 mg/L; Formaldehyde 0.5 mg/L; SS 7.5 mg/L; NH3-N 2.5 mg/L; Ni: 0.1 mg/L; Tin 2.5 mg/L (Permit requirements: Emission standard of pollutants for electroplating GB 21900-2008 and Integrated Wastewater Discharge Standard GB8978-1996: COD 50mg/L; Cu 0.3 mg/L; Cyanide 0.2 mg/L; TN 15 mg/L; PH 6.0-9.0; TP 0.5 mg/L; Formaldehyde 1 mg/L; SS 30 mg/L; NH3-N 8 mg/L; Ni: 0.1 mg/L; Tin 5 mg/L).
5. APCB has implement the 'One Enterprise, One Policy' Standardized Rectification Plan for Phosphorus-Related Enterprises in the Taihu Catchment and the risk level was C.
The site tracks the progress of its Water Stewardship targets regularly.
A series of water stewardship plans are implemented to achieve the site's water quality targets. According to the water quality monitoring plan, the site entrusts a third-party laboratory to test its various water quality. According to the test report and analysis record provided by the site, the water quality is 100% in line with its internal control standard.
APCB has developed a management procedure for pollutant concentration in wastewater discharge and established internal control indicators that are stricter than the discharge permit. The specific details are as follows: Internal control index of discharged wastewater: COD 12mg/L; Cu 0.05 mg/L; TN 2.56 mg/L; PH 7.6; TP 0.05 mg/L; Formaldehyde 0.05 mg/L; SS 7 mg/L; NH3-N 1.24 mg/L; Ni: 0.014 mg/L; Tin and Cyanide were not detected, and achieving 100% of the internal control targets by 2024.
APCB has strengthened the operation and maintenance of wastewater system to ensure that the quality of wastewater reaches the set standard stably and optimize the waste recycle system to improve the reuse rate of wastewater.

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

There are no Important Water-Related Areas in the site. Although there are no IWRAs within the APCB site, there is a great deal of concern about the status of IWRAs in the catchment and some effort has been made. For example: APCB has developed a yearly river patrol program and organizes staff to patrol the river and conduct water protection publicity.
1. APCB has invited a third party to monitor the parameters (PH, COD, NH3-N, TP, TN, SS, Cu, Tin, Ni, Mn, Total cyanides, Formaldehyde) of Taicang Pond (the receiving water of the site's industrial wastewater) once a year. The sampling points are located at the wastewater discharge point, 500 meters upstream and 1300 meters downstream of discharge point.
2. APCB also invited a third party to monitor groundwater and soil in the site yearly.

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	1. The WASH installations fully comply with the national "Hygienic Standards for the Design of Industrial Enterprises" (GBZ 1-2010). 2. The site conducts WBCSD self-assessment to evaluate the level of onsite WASH and the final result was 94%. 3. The site carried out a questionnaire survey on employee satisfaction regarding drinking water, sanitation, and facilities, and according to the survey results, the satisfaction was about 90%, and according to the result, the site conducted decoration of dormitory. 4. APCB conducts testing of drinking water every year to ensure safe drinking water. 5. Sanitation and hygiene installations were checked and cleaned daily, water purifiers were checked daily and maintained when needed.	
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.*	N/A
Comment	The site does not perform this indicator.	
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	Indirect water use targets have been set in the water stewardship plan. 1. APCB conducted onsite assessment and data collection on water use of 8 existing suppliers (which account for more than 1.5% of its costing) and 3 new hazardous waste treatment companies and promote them to reduce the water use to reduce the indirect water use. 2. APCB has screened suppliers /service providers' IPE violation records and promoted them to provide feedback to the IPE platform (a well-known environmental information disclosure platform in China) and remove the violation records, in 2024, APCB promoted one supplier to remove the violation records.	
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	Indirect water use targets have been set in the water stewardship plan. 1. APCB conducted a questionnaire survey on its 8 existing suppliers (which account for more than 1.5% of its costing) and analyzed their indirect water use based on the survey questionnaire. All suppliers provided feedback on their water management improvement projects and achievements carried out in 2024. 2. APCB has screened suppliers /service providers' IPE violation records, and promoted them to provide feedback to the IPE platform (a well-known environmental information disclosure platform in China) and remove the violation records. 3. The site conducts on-site audits of new service providers every year, covering topics related to environmental management. In 2024, the site conducted on-site audit on 4 new hazardous waste treatment service providers. For the findings found during the audit, the site will promote the suppliers to follow up and rectify them. The site also required other hazardous waste treatment service providers provided the licenses for review.	
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.*	N/A
Comment	The site does not perform this indicator.	
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 actively cooperates with the government supervision department to conduct supervisory inspections and visits. The site keeps close contact with local water-related infrastructure owners through many ways such as WeChat, e-mail or phone call.	
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

1. The site has developed its own sustainable water stewardship management manual, E-3-1-400-0001, to standardize its water management activities.
2. APCB has established an Environment and Water Stewardship Committee to coordinate its environmental and water management related affairs. An organization chart of the environment and water stewardship management team is included in the AWS management manual of APCB. Including the manager representative of the environment and water stewardship, the responsible department and person.
3. APCB implement AWS management on the site and has obtained the AWS certification since 2018 and upgraded to gold certification in 2021.

3.9.2 *Actions towards achieving best practice, related to targets in terms of water balance shall be implemented.*

Yes

Comment

1. APCB has set an annual target of recycling rate of reclaimed water was more than 70% and tracks the progress of its recycling rate of reclaimed water on a quarterly basis.
2. APCB had set an annual target of water use per unit products (convert into double-sided board) was 0.7 m3/m2 and tracks the water use per unit products (convert into double-sided board) on a monthly basis

APCB has developed a proposal for improving water balance in 2024, with a total of 4 improvement measures approved, involving topics such as optimizing production processes to save water consumption and improve wastewater utilization, such as:
1. Regularly replace membrane components for reclaimed water to ensure the reclaim water system is stable;
2. Install electromagnetic valve in production line to reduce the water use;
3. Collect and filter rainwater, and use it for cooling tower makeup, mechanical seal cooling, production processes, etc.

3.9.3 *Actions towards achieving best practice, related to targets in terms of water quality shall be implemented.*

Yes

Comment

1. APCB has developed a management procedure for pollutant concentration in wastewater discharge and established internal control indicators that are stricter than the discharge permit. The specific details are as follows: Internal control index of discharged wastewater: COD 25mg/L; Cu 0.15 mg/L; Cyanide 0.1 mg/L; TN 7.5 mg/L; PH 6.0-9.0; TP 0.25 mg/L; Formaldehyde 0.5 mg/L; SS 7.5 mg/L; NH3-N 2.5 mg/L; Ni: 0.05 mg/L; Tin 2.5 mg/L (Permit requirements: Emission standard of pollutants for electroplating GB 21900-2008 and Integrated Wastewater Discharge Standard GB8978-1996: COD 50mg/L; Cu 0.3 mg/L; Cyanide 0.2 mg/L; TN 15 mg/L; PH 6.0-9.0; TP 0.5 mg/L; Formaldehyde 1 mg/L; SS 30 mg/L; NH3-N 8 mg/L; Ni: 0.1 mg/L; Tin 5 mg/L). The site entrusts a third-party laboratory to test its various water quality. According to the test report and analysis record provided by the site, the water quality is 100% in line with its internal control standard.
APCB monitors the total wastewater discharged and has developed a series of implementation plans. Including: optimizing the ETP treatment process and add the wastewater reuse rate.
APCB enjoy the preferential policy of a 50% reduction in environmental protection tax in Kunshan City for that the Cu, COD, Ni, NH3-N, TP was lower than 50% of the permit requirements.

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	1. APCB has invited a third party to monitor the parameters (PH, COD, NH3-N, TP, TN, SS, Cu, Tin, Ni, Mn, Total cyanides, Formaldehyde) of Taicang Pond (the receiving water of the site's industrial wastewater) once a year. The sampling points are located at the wastewater discharge point, 500 meters upstream and 1300 meters downstream of discharge point. 2. APCB also invited a third party to monitor groundwater and soil in the site yearly. 3. On December 3, 2024, APCB as an organizer, organized one 'river patrol' activity in Taicang Pond with one neighbor company, one service provider, one supplier, sanitation workers, residents, totally 11 persons attended the activity. 4. On January 8, 20205, APCB as an organizer, organized one 'river patrol' activity and river monitoring in Kuilei Lake with one neighbor company, one service provider, totally 10 persons attended the activity.	
3.9.5	*Actions towards achieving best practice related to targets in terms of WASH shall be implemented.*	Yes
Comment	1. The WASH installations fully comply with the national "Hygienic Standards for the Design of Industrial Enterprises" (GBZ 1-2010). 2. APCB conducts WBCSD self-assessment to evaluate the level of onsite WASH and the final result was 94%. 3. APCB carried out a questionnaire survey on employee satisfaction regarding drinking water, sanitation, and facilities, and according to the survey results, the satisfaction was above 90%. 4. APCB conducts testing of drinking water every year to ensure safe drinking water. 5. APCB has checked and cleaned sanitation and hygiene installations daily and checked water purifiers daily and maintained when needed.	
3.9.6	*Advanced Indicator* *Achievement of identified best practice related to targets in terms of good water governance shall be quantified.*	Yes
Comment	In 2016, APCB was awarded the honor of "Water-saving Enterprise" by Jiangsu Provincial Department of Housing and Urban-Rural Development. APCB implement AWS management on the site and has obtained the AWS certification since 2018 and upgraded to gold certification in 2021.	
Score	4	
3.9.7	*Advanced Indicator* *Achievement of identified best practice related to targets in terms of sustainable water balance shall be quantified.*	N/A
Comment	The site does not perform this indicator.	
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 has quantified the performance of the targets set in the Water stewardship plan which includes Best Practice such as APCB has developed a management procedure for pollutant concentration in wastewater discharge and established internal control indicators that are stricter than the discharge permit. The specific details are as follows: Internal control index of discharged wastewater: COD 25mg/L; Cu 0.15 mg/L; Cyanide 0.1 mg/L; TN 7.5 mg/L; PH 6.0-9.0; TP 0.25 mg/L; Formaldehyde 0.5 mg/L; SS 7.5 mg/L; NH3-N 2.5 mg/L; Ni: 0.05 mg/L; Tin 2.5 mg/L (Permit requirements: Emission standard of pollutants for electroplating GB 21900-2008 and Integrated Wastewater Discharge Standard GB8978-1996: COD 50mg/L; Cu 0.3 mg/L; Cyanide 0.2 mg/L; TN 15 mg/L; PH 6.0-9.0; TP 0.5 mg/L; Formaldehyde 1 mg/L; SS 30 mg/L; NH3-N 8 mg/L; Ni: 0.1 mg/L; Tin 5 mg/L). The site entrusts a third-party laboratory to test its various water quality. According to the test report and analysis record provided by the site, the water quality is 100% in line with its internal control standard.	
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	According to the water quality monitoring plan, the site entrusts a third-party laboratory to test its various water quality. According to the test report and analysis record provided by the site, the water quality is 100% in line with its internal control standard. 1. The WASH installations fully comply with the national "Hygienic Standards for the Design of Industrial Enterprises" (GBZ 1-2010). 2. APCB conducts WBCSD self-assessment to evaluate the level of onsite WASH and the final result was 94%. 3. APCB carried out a questionnaire survey on employee satisfaction regarding drinking water, sanitation, and facilities, and according to the survey results, the satisfaction was above 90%. 4. APCB conducts testing of drinking water every year to ensure safe drinking water. 5. APCB has checked and cleaned sanitation and hygiene installations daily and checked water purifiers daily and maintained when needed. In addition, APCB has also set up a variety of channels to collect employees' opinions and suggestions on their WASH and follow up these feedback in a timely manner, such as: • The site conducts an employee satisfaction survey through questionnaires every year, summarizes and analyzes the survey results, and develops an action plan based on employee feedback. • The site conducts satisfaction survey for the employee restaurant regularly, and the employees can feedback their opinions on the restaurant hygiene, food safety and other aspects at any time.	
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.*	Yes
Comment	1. On December 3, 2024, APCB as an organizer, organized one 'river patrol' activity in Taicang Pond with one neighbor company, one service provider, one supplier, sanitation workers, residents, totally 11 persons attended the activity. 2. On January 8, 20205, APCB as an organizer, organized one 'river patrol' activity and river monitoring in Kuilei Lake with one neighbor company, one service provider, totally 10 persons attended the activity.	
Score	8	
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	The site evaluates the overall performance in 2024 according to the water stewardship plan. The site review water stewardship plan and check each performance of targets in the plan.	
4.1.2	*Value creation resulting from the water stewardship plan shall be evaluated.*	No
Comment	The site review water stewardship plan and check each performance of targets in the plan, but did not analyze its value creation resulting from the implementation of water stewardship plan. ***Finding No: TNR-016022***	
4.1.3	*The shared value benefits in the catchment shall be identified and where applicable, quantified.*	No
Comment	The site evaluates the overall performance in 2024 according to the water stewardship plan. The site review water stewardship plan and check each performance of targets in the plan. However, the site did not identify the shared value benefits in the catchment. ***Finding No: TNR-016023***	
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.*	N/A
Comment	The site does not perform this indicator.	
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 presents its emergency response procedure and plan identifying proposed preventive and corrective actions, as well as measures to mitigate future incidents. No water-related emergencies and extreme events occurred at the site in recent years.	
4.3	*Evaluate stakeholders' consultation feedback regarding the site's water stewardship performance, including the effectiveness of the site's engagement process.*	
4.3.1	*Consultation efforts with stakeholders on the site's water stewardship performance shall be identified.*	Yes
Comment	APCB communicated its water stewardship performance of 2024 through stakeholder seminars and visits. APCB invited the surrounding residents, enterprises, suppliers and service providers to share and evaluate the performance of the sustainable water management.	

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.*	Yes
Comment	APCB communicated its water stewardship performance of 2024 through stakeholder seminars and visits. APCB invited the surrounding residents, enterprises, suppliers and service providers to share and evaluate the performance of the sustainable water management. The stakeholders also provided feedback for the site's water stewardship performance.	
Score	6	
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	APCB has developed an 'AWS Management Manual', which specifies that its water stewardship plan shall be modified and adapted to incorporate any relevant information and lessons learned from the evaluations annual process, and once a year the AWS Leader meets with management to set goals for the upcoming year and evaluate the previous year's performance.	

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 official Website. http://www.apcb.com.cn/file/2024%E5%B9%B4AWS%E7%BD%91%E4%B8%8A%E5%85%AC%E7%A4%BA%E8%B5%84%E6%96%99.pdf	
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 communicated its water management plan for 2024 through stakeholder seminars and visits. The site has already developed the plan for 2025 and intends to communicate it with stakeholders in the first half of 2025. The water stewardship plan also developed at it official website: http://www.apcb.com.cn/file/24%E5%B9%B4%E5%8F%AF%E6%8C%81%E7%BB%AD%E6%B0%B4%E7%AE%A1%E7%90%86%E8%AE%A1%E5%88%92.pdf http://www.apcb.com.cn/file/25%E5%B9%B4%E5%8F%AF%E6%8C%81%E7%BB%AD%E6%B0%B4%E7%AE%A1%E7%90%86%E8%AE%A1%E5%88%92.pdf	
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 2023, including quantified performance against targets on its official Website. http://www.apcb.com.cn/file/24%E5%B9%B4%E5%8F%AF%E6%8C%81%E7%BB%AD%E6%B0%B4%E7%AE%A1%E7%90%86%E8%AE%A1%E5%88%92.pdf	
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 site has not conducted 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 site has not conducted 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-015959***	
5.4.2	*Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be identified.*	Yes
Comment	The site advocates stakeholder participation through multiple channels, which mainly include: 1. Conducting stakeholder surveys annually to collect water-related topics of concern to stakeholders and disclosing the site's water management plans and performance. 2. Visiting key stakeholders, such as government agencies and customers. 3. Carrying out external publicity campaigns. 4. Collaborating with neighboring enterprises to share water management experiences, engage in collective actions, and establish mutual assistance mechanisms. 5. Organizing stakeholder seminars annually to communicate the site's water management plans and performance, and to solicit feedback and suggestions from stakeholders.	
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, any site water-related violation that may pose significant risk and threat to human or ecosystem health is required to be immediately communicated to the relevant public.	

Photographic Evidence from Audit

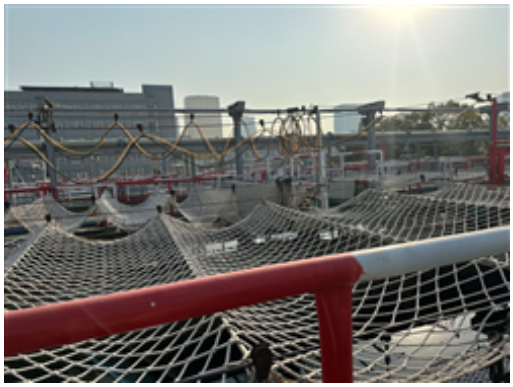
Yes

Domestic Wastewater Discharge Point.JPG

Industrial water discharge point.JPG

Factory name.JPG

Wastewater Final Discharge Point.JPG



Wastewater Treatment Plant.JPG

Drinking water facility.JPG

Production workshop.JPG

Taicang Pond.JPG

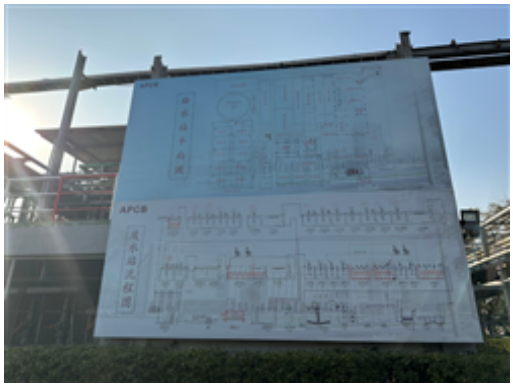
Online wastewater monitoring system.JPG

Rainwater Discharge point.JPG

Pure Water Station.JPG

Chemical Warehouse.JPG

Eye washing station.JPG



Wastewater treatment process diagram on site.JPG

Non-hazardous waste stored area.JPG

Hazardous waste warehouse.JPG

Pure water treatment process diagram on site.JPG

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