

TÜV Rheinland

Alliance for Water Stewardship Assessment Report

as per

AWS Standard Version 1.0

For

APCB Electronics (Kunshan) CO.,LTD

No.1818 Jin-Sha-Jiang North Road, Economic Technical

Development Zone, Kunshan, Jiangsu Province, China.

Prepared by: TUV Rheinland

Cert. Number: AWS-010-INT-CAB-00-08-00015-0084

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**Client and Certification Details:**

<b>Client Name:</b>	APCB Electronics(Kunshan) Co.,LTD
<b>Audit location:</b>	No.1818 Jin-Sha-Jiang North Road, Economic Technical Development Zone, Kunshan, Jiangsu Province
<b>Country:</b>	China
<b>Activities/Processes:</b>	PCB(Printed circuit board)
<b>Contact person:</b>	Mr. Liang You Xuan
<b>Contact email:</b>	Shane@apcb-ks.com
<b>Company website:</b>	<a href="http://www.apcb.com.cn/">http://www.apcb.com.cn/</a>
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<b>Auditor Team:</b>	Ian Jiang (Lead Auditor) Layla Chen (Local Auditor) Ivy Qiao (Local Auditor)
<b>Proposed date of next audit:</b>	5 <sup>th</sup> December 2019
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## Executive Summary

The scope of service covers the conformity assessment of water management and usage for APCB Electronics (Kunshan) Co.,LTD. The assessment was completed in compliance with the AWS Standard Version 1.0 dated on July 2015.

The 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 whole facility occupied area is 50,287 square meters; currently it has about 2800 employees. The annual production capacity is about 130,000 square meter PCB. The main production process is 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 would 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.

### Findings summary:

- Total nine findings were raised during the audit, including three minor non-conformity and six observations.

### Client's response:

Within the 30 days after the initial audit, client has returned duly the Corrective Action Plans for the non-conformities identified. The CAP is reviewed and accepted by the auditor team.

### Certification level:

After thorough evaluation of the non-conformance and observations, in compliance with the AWS Certification Requirement v1.0 TUV Rheinland auditor team would recommend to reward APCB Electronics(Kunshan) Co.,LTD AWS Core Certified status. Surveillance audit should be conducted on an annual basis.

## Scope of Assessment

Client factories main products	PCB(Printed Circuit Board)
Client factories production processes	Cutting-drilling-exposure-etching- multiband-pressing-electronic plate-pattern transfer-etching-solder mask-surface treatment-molding-testing-packing
Assessment preparations activities include:	Document review, stakeholder comments collecting
Assessment on-site activities includes:	Document review, management interview, employee interview, onsite tour
Assessment follow-up activities includes (in any):	Non-conformity follow up



The main gate



The water flow meter



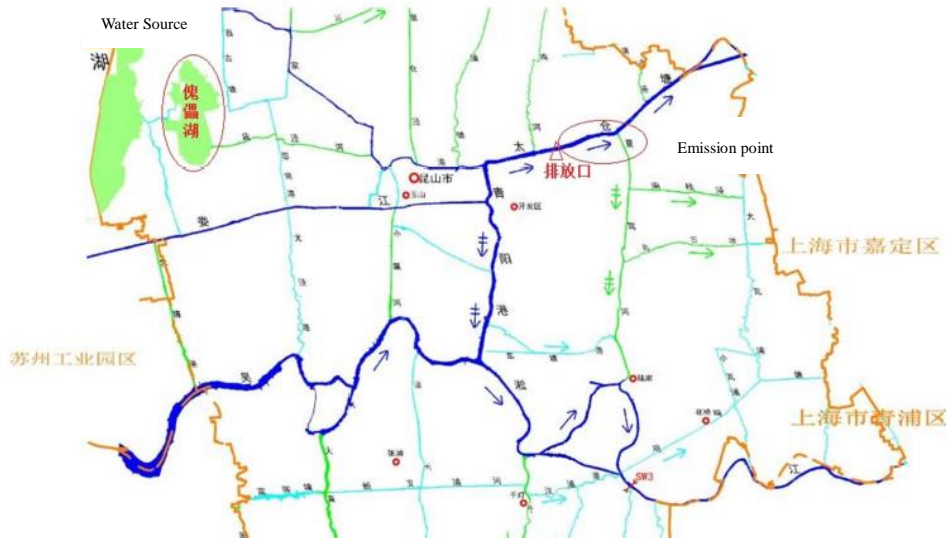
Neighbour river



Wastewater finally discharge point

### **Description of the Catchment**

APCB Electronics(Kunshan) Co.,LTD is located in the Kunshan City, southeast part of the Jiangsu Province. The site is in the area of the Wusong river catchment. The Wusong river is an important river in the Jiangsu Province, which origins from the Lake Taihu and flows to the Shanghai then into the sea. The site emits the wastewater into the Lou River, and then flow to Taicangtang River, and flow into Yangzte River. The site only uses the municipal water. The water is mainly from two sources; one is from Kuilei Lake, which is small branch of the Lake Taihu. Another one is Yangtze River; the extraction point is on the upstream of the emission point.



Remark: The circle in left side is Kulei Lake, one of the water source. The circle in right is emission point.

**Stakeholder list, engagement and analysis:**

Stakeholder name	Stakeholder type	Water-related challenge	Influence/to be influenced	Engagement
Supplier	Supplier	1.Increasing cost due to rising cost of the water resource 2. Stringent discharge standard led to the increasing cost on wastewater treatment.	High/High	Communicate with Water stewardship commitment and Supplier questionnaires
Employee	Employee	1.Ensure the compliance of the wastewater 2.Reduce the water lost in the production process 3.Establish good working environmental, to avoid the hazard to employee’s health	High/High	Training of water stewardship Routine communication during operation
Customer	Customer	1.Reduce the product cost 2.Demand for green product	High/Low	Communicate with Water stewardship commitment and
Kunshan Municipal Water Co., Ltd	Infrastructure	1.Water quality affect by the water resource quality	High/Low	No
Kunshan Environmental	Government	1.Monitor and manage the wastewater discharge situation	High/Low	Regular meeting



Bureau, Economic Development Zone management committee		2. Monitor the water quality of the catchment 3. Implement the regional water environmental plan.		
Neighbour resident	Local resident	Improve the water quality of the catchment, and improve the living environment	Low/High	Environmental hotline to supervise the factory
Neighbour company	Neighbour company	The deterioration of the water quality may result suspend of the production.	Low/High	Water stewardship training and communication meeting
WWF	NGO	Improve the water quality of the catchment	Low/Low	Informal discussion
Cooperated University	Scholar	Improve the water efficient of the site	Low/Low	Training and consultation

### Summary of shared Water Challenges

The plant has identified and prioritized the shared water challenges as below (1 is the highest, 3 is the lowest):

Water challenge	Relevance	Prioritization
Extreme event (natural disaster like earthquake, storm)	Suspend of the production	3
High wastewater discharge standard	Incompliance of the discharge permit may cause fine or production suspension	1
Temporary limit on discharge	Affect the production	1
Regional PCB industry inspection	The low efficient processing will be eliminated	1
High water cost and environmental tax	Affect the economic performance of the company	3
A few factory discharge illegally	More stringent inspection	2
Restriction of annual water use of the factory in Wusong River Catchment	Affect the production capacity	2

## Indicators Checklists

Per requirements set from the AWS certification requirements v1.0, below is a checklist of all the CORE AWS indicators. The documents reviewed/ processes reviewed are also indicated.

Clause	Expectations	Documents&Comments
COMMIT	1.1 Establish a leadership commitment on water stewardship:  1.1.1 Signed and publicly disclosed statement that explicitly covers all requirements	<input checked="" type="checkbox"/> Statement <input type="checkbox"/> Other : The commitment issued in 5 <sup>th</sup> June. 2018, signed by Mr.Zhuang/EVP, is on company website.
	1.2 Develop a water stewardship policy:  1.2.1 Publicly available policy that meets all requirements	<input checked="" type="checkbox"/> Water stewardship policy <input type="checkbox"/> Other : The policy was established and signed by Mr.Zhuang/EVP in 5 <sup>th</sup> June. 2018, which was posted on company website.
GATHER & UNDERSTAND	2.1 Define the physical scope:  2.1.1 Documentation or map of the site's boundaries  2.1.2 Names and location of water sources, including both water service provider (if applicable) and ultimate source water  2.1.3 Names and location of effluent discharge points, including both water service provider (if applicable) and ultimate receiving water body  2.1.4 Geographical description or map of the catchment(s)	<input checked="" type="checkbox"/> Documentation or map of the site's boundaries <input checked="" type="checkbox"/> Names and location of water sources <input checked="" type="checkbox"/> Names and location of effluent discharge points <input type="checkbox"/> Other : The documentation of the site boundaries, name and location of water sources, effluent discharge points are available and provided for review.
	2.2 Identify stakeholders, their water-related challenges and the site's sphere of Influence:  2.2.1 List of stakeholders, descriptions of prior engagements and summaries of their water-related challenges  2.2.2 Description of the site's sphere of influence	<input checked="" type="checkbox"/> List of stakeholders <input checked="" type="checkbox"/> Water-related challenges <input type="checkbox"/> Other : List of stakeholder was identified, and their influence and interest were evaluated as well. However, on the stakeholder list, the wastewater treatment plant( for domestic water) is missed. No specific content for neighbour resident and neighbour, also, no contact details of the stakeholders provided.
	2.3 Gather water-related data for the catchment:  2.3.1 List of relevant aspects of catchment plan(s), significant publicly led initiatives and/or relevant	<input checked="" type="checkbox"/> Water-related public policy goals <input checked="" type="checkbox"/> Applicable water-related legal and regulatory requirements

Clause	Expectations	Documents&Comments
	<p>water-related public policy goals for the site</p> <p>2.3.2 List, and description of relevance, of all applicable water-related legal and regulatory requirements, including legally defined and customary water rights and water-use rights</p> <p>2.3.3 Catchment water balance by temporally relevant time unit and commentary on future supply and demand trends</p> <p>2.3.4 Appropriate and credibly measured data to represent the physical, chemical and biological status of the site's water source(s) by temporally relevant time unit, and commentary on any anticipated future changes in water quality</p> <p>2.3.5 Documentation identifying Important Water-Related Areas, including a description of their current status and commentary on future trends</p> <p>2.3.6 Existing, publicly available reports or plans that assess water-related infrastructure, preferably with content exploring current and projected sufficiency to meet the needs of water uses in the catchment, and exposure to extreme events</p>	<p><input checked="" type="checkbox"/> Documentation identifying Important Water-Related Areas</p> <p><input type="checkbox"/>Other :</p> <p>The catchment plan and relevant goals have been collected.</p> <p>Applicable laws and regulations were collected.</p> <p>The catchment water balance was collected via the published resource and material.</p> <p>Important water-related areas were identified, including the wetland; the species special protect region and ecological park.</p>
	<p>2.4 Gather water-related data for the site:</p> <p>2.4.1 Copies of existing water stewardship and incident response plans</p> <p>2.4.2 Site water balance (in Mm<sup>3</sup> or m<sup>3</sup>) by temporally relevant time unit and water-use intensity metric (Mm<sup>3</sup> or m<sup>3</sup> per unit of production or service)</p> <p>2.4.3 Appropriate and credibly measured data to represent the physical, chemical and biological</p>	<p><input checked="" type="checkbox"/> Water stewardship and incident response plans</p> <p><input checked="" type="checkbox"/>Site water balance (in Mm<sup>3</sup> or m<sup>3</sup>)</p> <p><input checked="" type="checkbox"/>physical, chemical and biological status of the site's direct and outsourced water effluent</p> <p><input type="checkbox"/>Other :</p> <p>The water stewardship and incident response plans are in place.</p> <p>The site water balance was measured and calculated.</p>

Clause	Expectations	Documents&Comments
	<p>status of the site’s direct and outsourced water effluent by temporally relevant time unit, and possible pollution sources (if noted)</p> <p>2.4.4 Inventory of all material water-related chemicals used or stored on-site that are possible causes of water pollution</p> <p>2.4.5 Documentation identifying existing, or historic, onsite Important Water-Related Areas, including a description of their status</p> <p>2.4.6 List of annual water-related costs, revenues and description/quantification of social, environmental or economic value generated by the site to the catchment</p>	<p>The data of the physical, chemical and biological status of the site’s direct and outsourced water effluent has been collected.</p>
	<p>2.5 Improve the site’s understanding of its indirect water use:</p> <p>2.5.1 List of primary inputs with their associated embedded annual (or better) water use and (where known) their country/region/or catchment of origin with its level of water stress</p> <p>2.5.2 List of outsourced services that consume water or affect water quality and both (A) estimated annual (or better) water withdrawals listed by outsourced services (Mm3 or m3) and (B) appropriate and credibly measured data to represent the physical, chemical and biological status of the outsourced annual (or better) water effluent</p>	<p><input checked="" type="checkbox"/> List of primary inputs</p> <p><input type="checkbox"/> List of outsourced services</p> <p><input type="checkbox"/> Other :</p> <p>The primary inputs were listed, including the copper board, chemicals and inks etc..</p> <p>No outsource services in the site.</p>
	<p>2.6 Understand shared water-related challenges in the catchment:</p> <p>2.6.1 Prioritized and justified list of shared water challenges that also considers drivers and notes</p>	<p><input checked="" type="checkbox"/> List of shared water challenges</p> <p><input type="checkbox"/> Other :</p> <p>The water challenges were listed, mainly the government restriction and the improvement of the local water environment.</p>

Clause	Expectations	Documents&Comments
	<p>related to public-sector agency efforts</p> <p>2.7 Understand and prioritize the site's water risks and opportunities:</p> <p>2.7.1 Prioritized list of water risks facing the site, noting severity of impact and likelihood within a given time frame</p> <p>2.7.2 Prioritized list of water-related opportunities for the site</p> <p>2.7.3 Estimate of potential savings/value creation</p>	<p><input checked="" type="checkbox"/> List of water risks facing the site</p> <p><input checked="" type="checkbox"/> List of water-related opportunities</p> <p><input type="checkbox"/> Other :</p> <p>The water risks and opportunities were identified and evaluated.</p>
PLAN	<p>3.1 Develop a system that promotes and evaluates water-related legal compliance:</p> <p>3.1.1 Documented description of system, including the processes to evaluate compliance and the names of those responsible and accountable for legal compliance</p>	<p><input checked="" type="checkbox"/> Documented description of system</p> <p><input type="checkbox"/> Other :</p> <p>The site establish the written statement of the legal compliance system and assign the responsible person.</p>
	<p>3.2 Create a site water stewardship strategy and plan:</p> <p>3.2.1 Available water stewardship strategy</p> <p>3.2.2 Available plan that meets all component requirements and addresses site risks, opportunities and stakeholder shared water challenges</p>	<p><input checked="" type="checkbox"/> Water stewardship strategy</p> <p><input checked="" type="checkbox"/> Plan</p> <p><input type="checkbox"/> Other :</p> <p>The site has developed the Water stewardship strategy addressing the identified shared water challenges.</p> <p>The site developed the plan addressing the reduction of the water use and improving the water quality.</p> <p>However, the plan did not include the measure and monitor, and the analysis of the cost/benefit was insufficient.</p>
	<p>3.3 Demonstrate responsiveness and resilience to water-related risks into the site's incident response plan:</p> <p>3.3.1 A description of the site's efforts to be responsive and resilient to water-related issues</p>	<p><input checked="" type="checkbox"/> Description of the site's efforts</p> <p><input type="checkbox"/> Other :</p> <p>The site developed the plan address the reduction of the water use and improve the water quality, and the plan meant the rule of</p>

Clause	Expectations	Documents&Comments
	and/or risks in an appropriate plan	being a SMART plan.
	3.4 Notify the relevant (catchment) authority of the site's water stewardship plans:  3.4.1 Documented evidence of communicating the site's plan to the relevant catchment authority/agency	<input checked="" type="checkbox"/> Documented evidence of communicating <input type="checkbox"/> Other : The site communicate the plan with the local authority.
<b>IMPLEMENT</b>	4.1 Comply with water-related legal and regulatory requirements:  4.1.1 Documentation demonstrating compliance  4.1.2 (Catchments with stakeholders who have an unmet human right to safe drinking water and sanitation) Documentation of efforts to work with relevant public sector agencies to fulfil human right to safe drinking water and sanitation.	<input checked="" type="checkbox"/> Water-related legal and regulatory requirements <input checked="" type="checkbox"/> Documents of efforts to work with relevant public sector agencies <input type="checkbox"/> Other :  The applicable laws and regulations were collected. Based on research, no violation happened since 2017.  However, during on-site tour, it was noticed that no anti-leakage equipment for the chemical which used for nickel-contained wastewater pre-treatment facility. The canopy of the waste oil storage area was damaged, resulting the leakage of the rain.
	4.2 Maintain or improve site water balance:  4.2.1 Measurement-based evidence showing that targets have been met  4.2.2 (Water scarce catchments only) Evidence of continual decrease or best practice  4.2.3 (Sites wishing to increase withdrawals in water scarce catchments only) Evidence of no net increase in water scarcity	<input checked="" type="checkbox"/> Measurement-based evidence <input checked="" type="checkbox"/> Evidence of continual decrease or best practice <input checked="" type="checkbox"/> Evidence of no net increase in water scarcity <input type="checkbox"/> Other :  The site has implemented some water saving projects to improve the water balance, including condensation water recycle, cooling water saving and multiple use of the water etc.  Based on the document check, the water consumption per ton product was reduced compared with the same period in 2017.

Clause	Expectations	Documents&Comments
	<p>4.3 Maintain or improve site water quality:</p> <p>4.3.1 Measurement-based evidence showing that targets have been met</p> <p>4.3.2 (Water quality-stressed catchments only) Evidence of continual improvement or best practice</p> <p>4.3.3 (Sites wishing to increase effluent levels of water quality parameters of concern in water quality-stressed catchments only) Evidence of no net degradation in water quality in the catchment</p>	<p><input checked="" type="checkbox"/> Measurement-based evidence</p> <p><input checked="" type="checkbox"/> Evidence of continual decrease or best practice</p> <p><input checked="" type="checkbox"/> Evidence of no net degradation in water quality in the catchment</p> <p><input type="checkbox"/> Other :</p> <p>The site has implemented below measure to monitor the water quality: online testing system, manual testing, and third party testing. Based on the document, the effluent quality is in compliance with the legal requirements.</p> <p>Based on the search on the local water bureau, the water quality of the catchment is maintained in compliance with standard in 2017 and 2018.</p>
	<p>4.4 Maintain or improve the status of the site's Important Water-Related Areas:</p> <p>4.4.1 Documented evidence showing that targets have been met</p> <p>4.4.2 (Degraded Important Water-Related Area catchments only) Evidence of continual improvement or best practice</p>	<p><input checked="" type="checkbox"/> Documented evidence</p> <p><input checked="" type="checkbox"/> Evidence of continual decrease or best practice</p> <p><input type="checkbox"/> Other :</p> <p>The site continuously pays attention to the IWRA including water supplier and municipal wastewater treatment plant. So far, the operation of them is normal.</p>
	<p>4.5 Participate positively in catchment governance:</p> <p>4.5.1 Documented evidence of the site's ongoing efforts to contribute to good catchment governance</p> <p>4.5.2 (Weak water governance catchments only) Evidence of continual improvement or best practice</p>	<p><input checked="" type="checkbox"/> Documented evidence</p> <p><input checked="" type="checkbox"/> Evidence of continual decrease or best practice</p> <p><input type="checkbox"/> Other 其他:</p> <p>The site joined the meeting hold by local authority, and held the communication meeting with the surrounding factories, and provided training to their suppliers.</p>



Clause	Expectations	Documents&Comments
	<p>4.6 Maintain or improve indirect water use within the catchment:</p> <p>4.6.1 List of suppliers and service providers, along with the actions they have taken as a result of the site's engagement relating to indirect water use</p>	<p><input checked="" type="checkbox"/> List of suppliers and service providers</p> <p><input checked="" type="checkbox"/> List of actions</p> <p><input type="checkbox"/> Other :</p> <p>A list of suppliers, mainly raw materials and packing materials was provided for review.</p> <p>The site has conducted the water use investigation on the supplier, like questionnaires filling, to get an overview of the suppliers.</p>
	<p>4.7 Provide access to safe drinking water, adequate sanitation and hygiene awareness (WASH) for workers on-site:</p> <p>4.7.1 List of actions taken to provide workers access to safe water, effective sanitation and protective hygiene (WASH) on-site</p>	<p><input checked="" type="checkbox"/> List of actions</p> <p><input type="checkbox"/> Other :</p> <p>The site monitor the water quality via check the disclosed information of the water suppliers, also, the site has conducted potable water testing to ensure the safety of the water.</p>
	<p>4.8 Notify the owners of shared water-related infrastructure of any concerns:</p> <p>4.8.1 List of individuals contacted and key messages relayed</p>	<p><input checked="" type="checkbox"/> List of messages</p> <p><input type="checkbox"/> Other :</p> <p>The site has reported the water management plan and concerns to the zone management authority</p>
EVALUATE	<p>5.1 Evaluate the site's water stewardship performance, risks and benefits in the catchment context:</p> <p>5.1.1 Post-implementation data and narrative discussion of performance and context (including water risk)</p> <p>5.1.2 Total amount of water-related costs, cost savings and value creation for the site based upon the actions outlined in 3.2 (drawn from data gathered in 2.4.6)</p> <p>5.1.3 Updated data for indicator 2.4.7 on catchment shared value creation based upon the actions outlined in 3.2</p>	<p><input checked="" type="checkbox"/> Total amount of water-related costs, cost savings</p> <p><input type="checkbox"/> Other :</p> <p>The site introduced the AWS at the beginning of 2018, compared the performance between Jan. to Sep. of year 2017, the water consumption per product reduced about 3.7%.</p>

Clause	Expectations	Documents&Comments
	5.2 Evaluate water-related emergency incidents and extreme events:  5.2.1 Documented evidence (e.g., annual review and proposed measures)	<input checked="" type="checkbox"/> Documented evidence <input type="checkbox"/> Other : The emergency respond plan was established and registered by local bureau. The sites conducted the drill annually. The secondary containers were equipped to prevent accidently leakage. Holding tanks were constructed to cope with the malfunction of the wastewater treatment plant if any.
	5.3 Consult stakeholders on water-related performance:  5.3.1 Commentary by the identified stakeholders	<input checked="" type="checkbox"/> Commentary by the identified stakeholders <input type="checkbox"/> Other : The site obtained the commentary from the supplier and the employee, the result was satisfied.
	5.4 Update water stewardship and incident response plans:  5.4.1 Modifications to water stewardship and incident response plans incorporating relevant information	<input checked="" type="checkbox"/> Relevant information <input type="checkbox"/> Other : The site adopted the AWS at the beginning of 2018, so this is not applicable, and it will be followed in the surveillance audit.
COMMUNICATE & DISCLOSE	6.1 Disclose water-related internal governance:  6.1.1 Disclosed and publicly available summary of governance at the site, including those accountable for compliance with water-related laws and regulations	<input checked="" type="checkbox"/> Summary of governance <input type="checkbox"/> Other : The site has disclosed the water-related governance and organization chart on the website.
	6.2 Disclose annual site water stewardship performance:  6.2.1 Disclosed summary of site's water stewardship results	<input checked="" type="checkbox"/> Summary of results <input type="checkbox"/> Other : The site just introduced the AWS system in the beginning of the 2018, the annual review has not been reviewed. So no performance was disclosed.
	6.3 Disclose efforts to address shared water challenges:  6.3.1 Disclosed and publicly available description of shared challenges and summary of actions	<input type="checkbox"/> Publicly available description <input type="checkbox"/> Other : The site disclosed the effort to address shared water challenges on the stakeholder and

Clause	Expectations	Documents&Comments
	taken to engage stakeholders (including public-sector agencies)	supplier meeting.
	6.4 Drive transparency in water-related compliance: 6.4.1 Available list of water-related compliance violations with corresponding corrective actions	<input checked="" type="checkbox"/> List of water-related compliance violations with corresponding corrective actions <input type="checkbox"/> Other : The site has the violation record in IPE platform, and public the corrective action on it.
	6.5 Increase awareness of water issues within the site: 6.5.1 Record of awareness efforts (dates and communication) and, if possible, level of awareness	<input checked="" type="checkbox"/> Record of awareness efforts (dates and communication) <input type="checkbox"/> Other : The site has implemented actions to raise the internal awareness of water issues, such as training, communication, bulletin.

**Assessment Non-conformities:**

During audit. Three minor non-conformities and six observations were identified.

**Minor non-conformities:**

NO.	AWS Expectations	Description of non-conformity	Client's response and Documentation provided
1	2.2.1 List of stakeholders, descriptions of prior engagements and summaries of their water-related challenges	On the stakeholder list, the wastewater treatment plant(for domestic water) is missed. No specific content for neighbor resident and neighbor, no contact detail of the stakeholder.	Root cause analysis: It's the first time that the site adopted The AWS system. We didn't fully understand this section of the standard. Corrective action: Conduct a comprehensive stakeholder investigation. Add the missing stakeholder in the list, also the contact details of the stakeholder.
2	3.2 Create a site water stewardship strategy and plan	The water stewardship strategy and plan did not include the measure and monitor, the analysis of the cost/benefit was insufficient.	Root cause analysis: It's the first time that the site adopted The AWS system. We didn't fully understand this section of the standard. Some action plans are still being development, so the cost/benefit is not completely evaluated. Corrective action: 1. Add the content of evaluation and monitoring, also assign the responsible person. 2. Conduct in-depth analysis of the each initiative and add the detailed information of the costs and benefits in the plan.
3	4.1 Comply with water-related legal and regulatory requirements	No anti-leak equipment for the chemical which used for nickel-contained wastewater pre-treatment facility. The canopy of the waste oil storage area was damaged, result the leakage of the rain.	Root cause analysis: 1. The chemical containers at nickel wastewater pre-treatment area were mainly used for temporary storage, so the anti-leak equipment was ignored. 2. For waste oil storage area, there is a large gap between the wall and the shed. So the rain may come in from the side of the shed. Corrective action:

			<p>1. Anti-leak equipment will be installed around the nickel wastewater pre-treatment area.</p> <p>2. Separate roof will be installed on waste oil storage warehouse to prevent the rain.</p>
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Observations:

NO.	AWS Expectations	Description	Client's response and Documentation provided(If any)
1	2.4.2	In the water balance, the data from meter or estimation should be different	
2	4.3	The testing result of NH3-N(one wastewater parameter) from manual testing(1.3mg/L) and online monitoring facility (not over 0.8mg/L)are having an obvious gap. Though both the result are in compliance, it is recommended that the site should investigate and find the reason.	
3	4.5	When participate the meeting hold by government/industrial associations, it is recommended to maintain the participation record.	
4	6.2	The site has not yet disclosed the annual water stewardship performance. Note: The site introduced the system in the middle of the year 2018, so the annual review has been conducted.	
5	6.3	The site disclosed the effort to shared water challenge via stakeholder/supplier meeting. It is recommended that the site may use more openly method like disclosed via website, sustainability report etc..	
6	6.4	The site published the corrective action on the IPE platform, but it is still recommended such case on the company website.	

## **Summary and Conclusion of the Assessment**

In assessment of the water stewardship performance of the The APCB Electronics(Kunshan) Co.,LTD, it is apparent that the sites put considerable effort to adopt the AWS standard into the management system.

Three minor-conformities were raised during the assessment. the APCB has been requested to make some improvement plan to address the Non-conformity to fully compliant to the standard.

Six observations were issued during this audit, auditors have pointed out the areas that to be considered for improvement in the following implementation, however, no action is demanded during the audit cycle.

All evidences provided to TUV Rheinland to address the non-conformity was reviewed and evaluated to ensure the compliance to the AWS standard. All actions were accepted as sufficient to close the non-conformity.

In conclusion, the The APCB Electronics(Kunshan) Co.,LTD met the AWS standard-Core Level.

## **Opportunity and Improvement**

Because of the cultural characteristic, normally it is difficult to communicate with the external stakeholder about the water issue. However, in Kunshan City, the government aim to promote the concept and system of water stewardship. Giving the opportunity that the site could establish a formal communication channel with the neighbour factory and resident.

The site is recommended to make a comprehensive plan, following the AWS guidance, with detail cost/analysis, implementation plan, routine examination and review, to truly evaluate the performance of the AWS system.

## Appendix:

During the audit, totally seven stakeholders were interviewed. Following is the summary.

Name	Stakeholder type	Summary of Feedback
Kunshan Qiandeng Three wastes purification Co., Ltd.-Mr. Liu Kang	Supplier - WWT service	The facility communicated the AWS standard to him through training, and he knew the AWS through this training. He discussed with the site about the treatment scheme of wastewater together and improved the water utilization.
Kunshan Qiandeng Three wastes purification Co., Ltd.-Mr. Tian Huantuan	Supplier - WWT service	The facility communicated the AWS standard to him through training, and he knew AWS through this training. He discussed with the site about the treatment scheme of wastewater together and improved the water utilization.
3rd party staff / contractors for water reuse project (Zhongtuo Tianda Co., Ltd)- Mr. Chen Chang	Supplier - water reuse service	The facility communicated the AWS standard to him through training, and he knew AWS through this training. He discussed with the site about the scheme of water reuse together.
Mr. Xie	Local resident	The facility communicated the AWS standard to him through training, and he knew AWS through this training. The most concerned issue of him was the quality of drinking water. He strongly agreed with the efforts made by the factory on water.
Mr. Cao	Local resident	The facility communicated the AWS standard to him through training, and he knew AWS through this training. He hoped the factory would do something more.
Dynamic Electronics Co., Ltd.-Mr. Zhang Zhixiang	Neighbour Plant	The facility communicated the AWS standard to him through training. He knew the AWS through meeting from local EPA. There were discussions between two facility on how to improve water use. His site also wanted to apply for the AWS Certificate.
Guangdong Toneset Science& Technology Co., Ltd- Mr. Liu Wang	Supplier – Raw material	The facility communicated the AWS standard to him through training, and he knew AWS through this training. He was aware of the factory's efforts on water use, such as install water sub-metering, water reuse treatment processes and etc.