

Alliance for Water Stewardship Assessment Report for single site certification Prepared for Perrier Vittel (Thailand) Ltd.

Single site certification

SITE: Perrier Vittel (Thailand) Ltd., Ayutthaya factory

AWS REFERENCE: AWS-000148

Prepared by: SGS SGS Ref.: 5002833

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REPORT DETAILS

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CLIENT:	Perrier Vittel (Thailand) Ltd. 41/1 Moo 5 Phosamton Bangpahan Ayutthaya 13220					
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January 20, 2022

[ALLIANCE FOR WATER STEWARDSHIP ASSESSMENT REPORT]

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1 EXECUTIVE SUMMARY

The scope of services covers the conformity assessment of water use in compliance with the AWS International Water Stewardship Standard Standard Version 2 for Perrier Vittel (Thailand) Ltd., Ayutthaya factory (hereinafter referred to as "the site") located at 41/1 Moo 5 Phosamton Bangpahan Ayutthaya in Thailand. The assessment has been completed in compliance with the AWS Certification requirements, Version 2 dated March 03rd 2019.

This is the re certification audit of the site as the 1st certification audit was issued in year September 18th 2017 and valid until September 18th 2021. No major or minor non conformance found during the surveillance audit.

Perrier Vittel (Thailand) Ltd., Ayutthaya factory is part of the Nestlé Waters Group. The factory produces purified water and natural mineral water, bottled in 4 different sizes (330 ml, 600 ml, 1.5 l and 6 l)

On November 10th 2021, SGS Thailand (hereinafter referred to as "SGS") conducted the conformity assessment for the site's facilities and activities with regard to certification to the AWS Standard on site by Kasamol Phaibul. A total of three findings were raised during the course of the audit process, and they were all categorized as observations.

Given the review of evidence produced and the site visit inspection, SGS recommends Perrier Vittel (Thailand) Ltd., Ayutthaya factory is awarded the AWS Core Certified status with surveillance audit interval of annual frequency.

2 SCOPE OF ASSESSMENT

The scope of services covers the conformity assessment of water use in compliance with the AWS Standard (Version 2.0) for the Perrier Vittel (Thailand) Ltd., Ayutthaya factory (hereinafter referred to as "the site") located at 41/1 Moo 5 Phosamton Bangpahan Ayutthaya in Thailand.

The assessment has been completed in compliance with the AWS Certification requirements, Version 2.0 dated March 03rd 2019.

On November 10th 2021, SGS conducted the conformity assessment of site's facilities and activities with regard to certification to the AWS Standard on site by Kasamol Phaibul. Table 2.1 includes details of SGS audit team. The audit plan is attached as a separate document.

Table 2.1 SGS Audit Team

Audit Team	Qualifications/Experience						
Kasamol Phaibul	Lead Auditor and Local Expert	AWS certified auditor with about 10 years of environmental experience with focus on GHGs emission and due diligence.					
Paula Gómez Geras	Technical Reviewer	AWS certified auditor, with more than 15 years experience in pollution control, environmental impact assessment, ISO14001 audit and training.					

The site was represented at the audit by Mr. Chaiyasak Phongsaphan, Water Resources manager-Asia

The 1 day audit covered documentary review, interview of the installations and activities in drinking water manufacturing plant and personnel interviews. One hour on slot had also been reserved for the stakeholders' consultation meeting on November 10th 2021.

The site provided most of the requested supporting documentation as evidence whilst before and during the audit. The outstanding information was provided in the aftermath of the site audit via access to the site sharepoint.

SGS provided initial feedback on the level required by the Standard during the closing meeting on November 10th 2021.

STAKEHOLDERS' ANNOUNCEMENT AND CONSULTATION 3

In compliance with the AWS Certification Requirements, public stakeholders' announcements were published at least 30 days before the audit on:

- 1. AWS website link https://a4ws.org/certification/certification-cons-ultations/;
- Community board
 Company's website link https://www.nestlepurelife.com/th/en-th/sustainability/AWS

Photo 3.1 Information Disclosure on community's board and company's website



During the consulation period, SGS did not receive comments from stakeholder.

3.1 Local stakeholder consultation

The AWS certification audit was carried out by on site. The site provided the stakeholder's mapping on advance of the audit to enable communication with a selected sample and replace the on-site stakeholders' consultation meeting. The stakeholders are classified into local authorities, business stakeholders, local communities and internal stakeholders (employee).

According to COVID-19 situation, the following stakeholders were interviewed by phone called during 14.00 to 15.00 on November 10th 2021. The interviwed was conducted in Thai language by lead auditor.

Stakeholder group	Company name	Position	Name
Local authorities	Provincial Office of Natural Resources and Environment Ayutthya	Director	Mr. Phaibul Phutong
Employee	Perrier Vittel (Thailand) Ltd.,	Purchasing	Ms. Saowanee Pong-In
Local communities	N/A	Head Villager	Mr. Pattanakiat Preeprem

During stakeholder interview, head villager confirmed that the factory has supported the drinking water to the community in the special events and the factory has monitored and shared the result of water quality which sampled by the factory during the community meeting. The employee representative confirmed that she has received the information of factory's water saving target and projects. The factory has encourage employees to joint Youth Water Guardian Project to teach children in the community to clean and save community's canal. While, representative of local authorities confirmed that the authority has close relatationship with the factory. The factory has shared the information related to water catchment and knowledge of groundwater extraction. Also, the factory has complied with laws and regulations related to water.

Moreover, the site had conducted the individual stakeholder consultation in year 2020. The consultation result and list of questions were provided and showed in document name "Stakeholder interview score consultation 2020" and "Stakeholder Map_AY with Questionnaire-2020". From result of stakeholders consultation which conducted by the factory confirms that stakeholders were high satisfactction, low concerns and maintain expection performance.

4 DESCRIPTION OF CATCHMENT

Perrier Vittel (Thailand) Ltd., Ayutthaya factory extracted groundwater for raw material in manufacturing and other utilities. The raw water used for the process is abstracted from 4 boreholes (DW#2, DW#3, DW#4 and DW#5) located on the site. Table 1 provides details onathe site water useer licenses for the 4 boreholes.

Table 4.1: Water user licenses details

Borehole	License No.	Drilled	GPS Cod	oordinates		
Reference	License No.	icense No. Depth (m bgl)		Υ		
DW#2	3904-0032	150	666521 E	1595780 N		
DW#3	4704-0001	408	666531 E	1595757 N		
DW#4	735104-0006	380	666367 E	1595850 N		
DW#5	735304-0004	372	666200 E	1595750 N		

The factory is located in the middle part of Chao Phraya Basin or upper Chao Phraya River watershed.

April 1992 April 1992

Figure 1: Water Balance of the upper Chao Phraya River Watershed

The Chao Phraya Basin catchment area covers over 20,523.42 km2. The basin connects with:

- North: Ping basin and Nan basin;
- South: gulf on Thailand;
- West: Tha Chin basin and Sakae Krang basin;
- East: Pasak basin and Bang Pla Kong basin.

The Chao Phraya River is the main river of the Chao Phraya basin and the most important sub-basins are the Noi river, the Suphanburi river, the Tha Chin river and the Lopburi river. The river originates in the northern mountains of Thailand .

The Chao Phraya basin has traditionally been a crucial waterway for the transport of goods such as teak and rice and a source of essential ecosystem services for local populations. In 2003, the basin was home to 40% of Thailand's population and was central to the economic activity of 78% of the national workforce, which contributed to 66% of the national GDP .

The basin can be divided into 3 parts; upper, middle, and lower. Very little agricultural or industrial activity occurs in the upper part of the basin. Although according to a UN report , encroachment and land use change are negatively affecting the upper part of the basin. Most of the agricultural activity is concentrated in the middle basin. The lower basin consists mainly of agricultural and urban areas , but is also home to industrial estates and greater industrialisation as compared to the other parts of the basin .

Most of the the Chao Phraya basin's pollution stems from agriculture, industry and urbanisation. Water quality in the upper part of the basin is generally considered satisfactory, but is degrading downstream, at an unsustainable pace. Many production sites - in the lower part of the basin and in Bangkok - discharge untreated or only partially treated wastewater into the river. This is expected to get worse as industrialisation intensifies further upstream of the river. The main pollutants, in the Chao Phraya, include organic waste, nutrients, heavy metals, pesticides and other chemical substances.

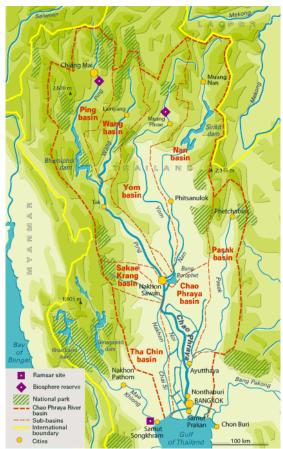


Figure 2: Map of the Chao Phraya River Basin¹

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http://www.chiangraitimes.com/china-to-help-draft-up-plan-for-chao-phraya-basin.html

5 SUMMARY OF SHARED WATER CHALLENGES

Community Relations Process (CRP) system is used to analyzed the information gained from stakeholders concern and priorities based on the evaluation matrix of likelihood and severity. The likelihood is evaluated from the possibility of the situation can occure. While severity is the evaluation of magnitude of impact to the operation. Then the priority is caused by the likelihood multiply with impact and shown in term of low, medium and high. The water challenges have been presented in Table 5.1 below.

Shared water challenges	Associated public sector agency, initiative	Relevance for the stakeholders	Stakeholder groups	Relevant for the site	Initiatives
					Water analysis monitoring
Salinization of the water (surface and GW)	Department of Groundwater Resources Local government	Farming business: need for change	Other Influencers/Local Communities	Impact to factory operation	Well development
,	Ů	, and the second		·	Water analysis monitoring
	Department of Groundwater	Access to water of people in community	Other Influencers/Local	Impact to factory	Static water level monitoring
Depletion of the GW	Resources Local government	Access to the same watershed from neighbour factory	Communities	operation	Static water level monitoring, engage and communicate to stakeholders.
	Access to water of peop				Water analysis monitoring
Use of pesticide for farming	Department of Pollution	community, Environmental	Other Influencers/Local Communities	Impact to factory operation	Well development
-		impact		·	Water analysis monitoring
Pollution from waste water from household	Government control, treatment plants mandatory	Environmental impact to people	Other Influencers/Local	Impact to factory	Water analysis monitoringand raise awareness to protect natural resources
and industries.	for industries and block building	in the community	Communities	operation	Water analysis monitoringand raise awareness
Flood	Local government, Provincial Impact to daily living of people		Other Influencers/Local Communities	Impact to factory operation	Prepare protection to reserve factory and water resources
	Government	in community	Communities	operation	Donate support to communities
Water Regeneration	Community people, Global Conservation Leading	Generation of water regeneration to fulfill Nestlé requirement to support in return	Other Influencers/Local	Impact to factory	Water regeneration action to fulfill KPI
water Negerieration	Organization	back the water which has been used by factory	Communities	operation	Projects with community

6 INDICATORS CHECKLIST

As per the requirement set out in the AWS certification requirements Section 2.11.3.1 below is a checklist of all the CORE AWS indicators with the relevant reviewed evidence provided by the site. and the indicator with which it is associated.

Table 6.1 Evidence reviewed by SGS against each CORE AWS indicator

Clause	Details	Yes	No	Comments/Evidence
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.			 Site boundary "Ayutthaya factory boundary with DW position" Site's water sources, site's receiving water bodies and site's catchment "Maps" Water source come from groundwater at confined aquifers and are on average 50 m. thick name "Nonthaburi" and "Thon Buri". The aquitard layers of clay separate the aquifers from one another. The depth of Nonthaburi and Thon Buri aquifers are 200 and 450 m. from ground surface level Discharge water is released to public canal, name "Klong Dan". Ref name "Ayutthaya factory boundary with DW position" The factory locates in the southern part of Chaopraya basin. The recharge location is around Ang Thong provice until Chainat and Uthaithani province. Ref "Chaopraya Basin water quality"

Clause	Details	Yes	No	Comments/Evidence
				OVER 1 1932 E MANO OVER 1
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;			Stakeholder identification are: Local authorities, business stakeholders, local community, and internal stakeholders. Stakeholder consultation meeting was done by factory's supplier. Water resource management is included in point of concern by stakeholders. The outcome of the consultation is identified in water challenges. Stakeholders are evaluated in degree of engagement based on their level of interest and influence. Latest stakeholder consultation was conducted in year 2021. Ref: CRP version 2.0, which is internal document of Nestle Water related to stakeholder consultation was provided.

Clause	Details	Yes	No	Comments/Evidence
	- Identify the degree of stakeholder engagement based on their level of interest and influence.			
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.	\boxtimes		The degree of influence was ranking from low (1) to high (4) level. The ranking is separated into the influence of stakeholder to site and site to stakeholder. Ref: "Stakeholder Map_AY"
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	\boxtimes		The site has prepared incident response plan for drought and flooding situation.
	identified.			Flooding ref: Business continuity plan Nestle Water Thailand for Flood Crisis, issue date 01/08/2018
				Drought ref: BCP drought presentation, update 28/01/2016
				131OBS Observation
				BCP is on process of revision. The official version will be reviewed on 1st surveillance audit.
1.3.2	Site water balance, including inflows, losses, storage, and outflows shall be identified and mapped.	\boxtimes		Water Map daily shows water mapping of quantity of water withdrawal for processing and cleaning, with water input from deep wells.
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.			System name "Akaze" has been used to monitor water balance in real-time. Production water and internal usage water come from groundwater. Flow rate, totalizer, cumulative volume, dynamic water level and static water level have been monitored every time water is withdrawn.
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.			The factory has monitored wastewater quality after treatment before discharge to public and at effluent point in canal. The monitoring in accordance with the legal requirements. The result is in line with the requirement standard. Water quality is sampled and analysis by third party in monthly. Moreover, the quality of water source has been monitored and analysis in monthly. The result is complied with national standard.
				Ref: folder 2.4.3 Water quality - effluent

Clause	Details	Yes	No	Comments/Evidence
1.3.5	Potential sources of pollution shall be identified and if applicable, mapped, including chemicals used or stored on site.			Ref: Environmental aspect from chemical stock The factory has identified the environmental health and safety impact of every list of storage chemical. Oxonia leakage Acid and Alkaline for Cleaning the injector Lubricating oil Chemical leakage from chemical storage tank Chemical storage room has been shown on map during the audit and provided aspect identification from manufacturing process. All the chemical is monitored by following ISO14001 guideline.
1.3.6	On-site Important Water-Related Areas shall be identified and mapped, including a description of their status including Indigenous cultural values.			Referring from site representative interview and site visit in certification audit, no onsite water-related areas. However, Water related areas which located about 10 km. from the factory are considered at; • Wat Mahat That • Wat Phra Sri Sanphet • Wat Lokayasutharam • Ayutthaya Historical Park • Wat Chai Watthanaram • Thung Makham Yong
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.			According to water-related cost and revenue are confidential, so the financial showed SAP system and how to extract cost and revenue. The allocation cost for Nestle pure life cost extraction is 52173102 and 52173101 for Minere water's (natural mineral water). Water-related costs and revenue: Costs related to the water data collection process

Clause	Details	Yes	No	Comments/Evidence
				 Costs qualitative analysis of drinking water and wastewater, in order to comply with legal requirements and other requirements Costs related to the water donation Costs related to the maintenance of the entire existing infrastructure for water used on site Costs related to the treatment of waste water Revenue generated from net sales of water-related goods
1.3.8	Levels of access and adequacy of WASH at the site shall be identified.			The factory has applied WASH to provide clean drinking water, toilets to all employees.
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.			Primary input is groundwater for manufacturing. Groundwater quality is sampled and analysis in monthly and extract quantity is monitored in real-time. List of indirect water used was provided. They are used in chiller, washing and engineering utility. Water come from groundwater. Consumption quantity, water quality were provided. Moreover, the factory has set water consumption target and create water saving projects.
1.4.2	The embedded water use of outsourced services shall be identified, and where those services originate within the site's catchment, quantified.	\boxtimes		The site has provided top 5 suppliers name list with volume of water consumption and wastewater discharge from year 2019 to 2021. Most of the suppliers does not locate within the site's catchment. Only laundry service locate within site's catchment. Water usage quantity has been assumption.
				As per interview, 1 of top 5 suppliers is going to coordinate with the factory to conduct water saving/ improve water quality project.
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			Catchment is Chaopraya basin which flow from northern part to central part of Thailand. The catchment authority has followed national strategic planning for water conservation. Ref of catchment plan is "20 years Strategic planning of groundwater

Clause	Details	Yes	No	Comments/Evidence
	relevant goals to help inform site of possible opportunities for water stewardship collective action.			resources (year 2017 – 2036)" developed by Department of Groundwater Resources.
1.5.2	Applicable water-related legal and regulatory requirements shall be identified, including legally-defined and/or stakeholder-verified customary water rights.	\boxtimes		Water use licenses are issued by Ministry of Natural Resources and Environment of Ayutthaya province: "Water use license" Ref: folder 2.3.2 Water use licenses
1.5.3	The catchment water-balance, and where applicable, scarcity, shall be quantified, including indication of annual, and where appropriate, seasonal, variance.			From AQUEDUCT Water Risk Atlas review, the site is located in Low-medium (5-25%) for water depletion. Also the Site provide the dynamic water level compare with groundwater daily withdrawals. Moreover, the factory keep update the catchment water level which monitor by the government compare with the factory consumption. It can confirm that no water scarcity in the area. Ref: WR REF1 Historical Data AOA_template-TH-AY-Q1
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.			Surface water quality of Chaopraya Basin monitoring close to the factory in Ayutthaya province is Fair level. The data is available on Pollution Control Department website at link; http://iwis.pcd.go.th/index.php Water quality is under Thailand's national standard.
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.			Ref: "Water related area periodization" As IWRA located about 10 km. from the factory and not on site, but the factory has identified their status and present condition. they are considered at; • Maha That temple (Historical area) • Phra Sri Sanphet temple (Historical area) • Lokayasutharam temple (Historical area) • Ayutthaya Historical Park • Chai Watthanaram temple (Historical area) • Yai Chaimongkol temple (Historical area) • Ayothaya floating market • Wild-life sanctuary
				From the evidence provided, all areas are in good condition with and low likelihood in effect from factory operated. No action required.

Clause	Details	Yes	No	Comments/Evidence
1.5.6	Existing and planned water-related infrastructure shall be identified, including condition and potential exposure to extreme events.	\boxtimes		The site doesn't have any extreme risk. They have wells to extract groundwater and operated under government control.
1.5.7	The adequacy of available WASH services within the catchment shall be identified.	\boxtimes		The factory keeps monitor water quality, which use for drinking and washing in communities nearby the factory.
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.			7 challenges are identified and prioritized from low to high level. Likelihood, impact and priority are factors for consideration. The impact is considered relevance to site and group of stakeholders.
				Ref: Shared water challenges - Ayutthaya
1.6.2	Initiatives to address shared water challenges shall be identified.	\boxtimes		Water level monitoring, water quality analysis and monitoring and water regeneration project by coordinate with community are the initiative of shared water challenges.
				Ref: Shared water challenges- Ayutthaya
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	\boxtimes		Ref: Shared water challenges – Ayutthaya
	prioritized, including likelihood and severity of impact within a given timeframe, potential costs and business impact.			Risks are analysed in term of economic, environment and social. Risks are identified and prioritized in likelihood, impact and priority by ranking from low to high. The criteria of ranking are also described.
				Water risks are;
				Depletion of groundwater Water regeneration
				 Water regeneration Action, cost of impact and business impact have been identified.
170	Water related expertunities shall be identified including	\square		
1.7.2	Water-related opportunities shall be identified, including how the site may participate, assessment and			Ref: Shared water challenges – Ayutthaya

Clause	Details	Yes	No	Comments/Evidence
	prioritization of potential savings, and business opportunities.			Water-related opportunities are identified in term of economy, environment and social benefit; Protect brand/factory reputation Improve aquifer performance Strengthen community relationship Sustain water resource Impact cost/ potential saving cost, implementation plan and updated status are also identified.
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.			In year 2020, the factory has evaluated of hydrogeological regime and surrounding areas, Ayutthaya province in the Central Plain of the lower Chao Phraya Basin. Moreover, the factory has been working with WWF-Thailand on environmental project called "Youth Water Guardian with Nestle" to improve water quality through water gate. Activities in year 2021 were canal clean up and community engagement.
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.			The factory has set water ratio to monitor amount of consume water in production and factory's facility. Then the projects will be set to reduce water consumption to meet or below water ratio. The factory has installed Akaze system to monitor water level, water extraction amount and water consumption in real-time. Ref: REF Water saving target and water consumption
1.8.3	Relevant sector and/or catchment best practice for water quality shall be identified, including rationale for data source.			Before borehole installation, Nestle requirement mentions that the factory must do study water resource validation for new resource. The incoming water must be monitored heavy metal, pesticides and etc. parameters. Then the result must be sent to management team and receive confirmation letter to install borehole. While waste water must be treated and monitor quality before releasing. The factory must comply the wastewater quality with Thailand's regulation and Nestle
				wastewater requirement. Ref:
				REF024 Legal registration and evaluation

Clause	Details	Yes	No	Comments/Evidence
				REF10 Products Specification of Nestle Pure Life (Retail), document No. 8482.QA.S.S.001, revision 1.0
				REF011 Catchment water quality monitoring
1.8.4	Relevant catchment best practice for site maintenance of Important Water-Related Areas shall be identified.			From the evidence provided, all areas are in good condition with low likelihood in effect from factory operated. No action required. However, the Nestle Environment Requirement mention that the factory must monitor static water level in annually by shut down operation and leave borehole as long as they can (about 72 hours) and compare the result with previous result.
1.8.5	Relevant sector and/or catchment best practice for site provision of equitable and adequate WASH services shall be identified.	\boxtimes		The best practice for site provision of equitable and adequate WASH services is supplies safe drinking water for all workers with gender separation and shower room.
2	COMMIT AND 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			 Policy is publicly available on website: https://www.nestle.com/csv/impact/water/policy-stewardship Nestle Water Commitments has been signed and disclosed in Key Global Message by Maurizio Patamello, CEO of Nestle Waters July 2017 Water Stewardship Roadmap, by Marco Settembri, Head of Nestle Waters, April 2016 Environmental Policy, signed by Mr. Taweesak Rujirapisit, factory manager-Ayutthaya factory
	- That the site will allocate resources to implement the Standard.			

Clause	Details	Yes	No	Comments/Evidence
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.			Ref: Legal registration and evaluation The system has a description for responsibilities and it is identified the persons and positions. From the list of legal compliance is provided, the evaluation sheet confirm that all legal is complied.
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.			 From The Nestle Water in Society Guidelines, water stewardship strategy has been identified; Ensure full compliance with all applicable water regulations and legislation and relevant Nestlé policies and standards. Optimise the water use ratio at factory level by implementing water saving initiatives. Engage in open and transparent dialogue with communities about local water management. Implement the most relevant collaboration at watershed level that is credible and will bring real benefit to the local water resource and/or the preservation of local natural capital (biodiversity). Mobilise employees, local communities and other key stakeholders by organising water education events, particularly at our factories and headquarters. Engage in a wider, year-long Project WET water conservation programme with educational or environmental stakeholders and partners.
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			 Ref: "Water saving projects 2021 6 water saving projects have been implemented. (Extend sanitize, reduce water consumption for general used and extend hot sanitize for filter line) Each project has described the proposed action plan. The department which responsible for each project have been identified. Production department is responsible almost every project.

Clause	Details	Yes	No	Comments/Evidence
	Positions of persons responsible for actions and achieving targets Where available, note the link between each target and			 Each project contains the specific project name, start and end date with action plan. The outcome of each project consider volume of water saving, energy saving and financial saving.
	the achievement of best practice to help address shared water challenges and the AWS outcomes.			
2.4.1	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.			 The site has prepared incident response plan for drought and flooding situation. The factory apply guideline toward a sustainable water resources. In guideline mentions about the critical situation that in situations where groundwater levels are already below locally agreed water levels, a reduction in pumping volume or rate may be required. In the case of obvious decline of the local water levels, the performances have been identified.
				 The factory has join with local government agencies to share and exchange information related to water sustainability.
				Ref: REF017 Guideline towards a sustainable water resources management at Nestle, Gy-11.001/7/2015
				Flooding ref: Water Situation Monitoring presentation
				Drought ref: BCP drought presentation
3	IMPLEMENT			
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.			The factory invited government and local community to observe manufacturing processes and disclose water balance of the upper Chao Phraya river watershed.
				Moreover, the factory set up Youth Water Guardian Project by corporate with WWF. The purpose of the project is providing knowledge to students to protect and observe catchment. The result of the project confirm that farmers in the area can increase water usage. The volumetric study was conducted by Rajabhat University Ayutthaya.
3.1.2	Measures identified to respect the water rights of others including Indigenous peoples, that are not part of 3.2			All drinking waters station in the factory is PET bottle (in office) which the water is clean and safe for consumption.
	shall be implemented.			For village 4 and 5, which are site's stakeholders, the factory has set monitoring plan to sample drinking water from storage tanks of each village to control water quality.

Clause	Details	Yes	No	Comments/Evidence
				Also during special event, site will support drinking water for people who attended the events.
				REF: Community well sample
				Ref: THAILAND-WASH Self -Assessment Tool_AY_08 Jul 2016
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.	\boxtimes		The regulation related to groundwater extraction and consumption, and quality of wastewater before releasing have been monitored and evaluated by the responsible team. The results of internal verification is compliance with regal and regulation.
3.2.2	Where water rights are part of legal and regulatory	\boxtimes		N/A Thailand's regulation does not mention about water right.
	requirements, measures identified to respect the water rights of others including Indigenous peoples, shall be implemented.			Ref: REF024 Legal registration and evaluation
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.			Evidence that the site has been improving water balance through reducing water consumption for general use, extend sanitize line and hot sanitize for filter line. Every projects have own saving target.
				From the evidence reviewed, the completed projects have achieved project saving target.
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			From AQUEDUCT Water Risk Atlas review, the site is located in Low-medium (5-25%) for water depletion. Also the Site provide the dynamic water level compare with groundwater daily withdrawals. It can confirm that no water scarcity in the area.
	shall be implemented.			However, the factory keeps to monitor rainfall together with groundwater level after pump out. Moreover, the site has been improving water balance through reductions in water use, recycle wastewater.
3.3.3	Legally-binding documentation, if applicable, for the reallocation of water to social, cultural or environmental needs shall be identified.			The factory has provided drinking water to community in special events. Moreover, site's representative explained that site had shared treated wastewater to nearby community for agriculture propose during the hot season.
				Ref: Water donation
3.4	Implement plan to achieve site water quality targets.			

Clause	Details	Yes	No	Comments/Evidence
3.4.1	Status of progress towards meeting water quality targets set in the water stewardship plan shall be identified.	\boxtimes		Ref: folder 2.4.3 Water quality - effluent Effluent water quality is under Thailand's national standard.
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.			Quality of discharge water does not shared water challenge. However, Nestle water has own criteria of discharge wastewater quality. Some standard value is stronger than Thailand's national's standard. From the water quality testing report review, both discharge water and water source are complied with Thailand's national standard and Nestle water standard.
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.			From the evidence provided, all areas are in good condition and low likelihood in effect from factory operated. No action required. However, an effect and linkage of factory's operation with the list of important water-related is monitored. If any impact is found, it will be listed in shared water challenges immediately.
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.			The factory provides drinking water to all workers, toilets for men and women separately.
3.6.2	Evidence that the site is not impinging on the human right to safe water and sanitation of communities	\boxtimes		The factory provides drinking water to all workers, toilets for men, women and shower room.

Clause	Details	Yes	No	Comments/Evidence
	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.			Ref: WASH
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.			The quantity of indirect water use is monitored. Water consumption saving projects have been listed with target setting. From the factory's water ratio can confirm that the projects have been implemented and achieved. **MATER LOSAGE PILER EXCLURING** **MATER LOSAGE PILER EXCL

Clause	Details	Yes	No	Comments/Evidence
				WeterMap Viels Correspond Dec. Story and Story Dec. Story and St
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.			Ref: AWS Sharing to contractor and supplier According to laundry service locate in the same catchment with the factory, the factory presented AWS knowledge, water consumption assessment and water saving knowledge. However, factory's representative informed that the factory has coordinated with 1 of supplier to improve catchment quality. 372OBS Observation: The detail of project by coordination with the supplier will be reviewed on 1st surveillance audit.
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.	\boxtimes		No concern arise around shared water challenges that affected or link to water-related infrastructure. However, list of water infrastructure is monitored. If any water infrastructure nearby found impact, it will be listed in shared water challenges immediately.
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.			

Clause	Details	Yes	No	Comments/Evidence
3.9.1	Actions towards achieving best practice, related to water governance, as applicable, shall be implemented.	\boxtimes		Youth Water Guardian Project corporate with WWF has been continued in year 5. The objective of the projects is encourage students and local people to improve water quality through water gate and sustain water resource.
				Moreover, the factory invited local government to observe manufacturing processes and share water sustainable knowledge. The factory also accept the enquiry from The Federation of Thai Industries to site survey and observe soil characteristic for return water to underground Project in year 2020.
3.9.2	Actions towards achieving best practice, related to targets in terms of water balance shall be implemented.	\boxtimes		The water ratio has been set and reviewed in annually. Water saving consumption projects had been listed and implemented to reduce water consumption. The achievement of projects implementation and water ratio, which meet with target setting are the evidence to confirm the action of best practice.
3.9.3	Actions towards achieving best practice, related to	\boxtimes		Water quality of incoming water is under Nestle water quality standard.
	targets in terms of water quality shall be implemented.			While treated wastewater is complied with Thailand's regulation and Nestle wastewater requirement.
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.	\boxtimes		From the evidence provided, all areas are in good condition with low likelihood. No action required. However, the site has kept monitored static water level since year 2017, water level is maintained. The result will be used for water resource study in the future.
3.9.5	Actions towards achieving best practice related to targets in terms of WASH shall be implemented.	\boxtimes		Adequate WASH services is supplies safe drinking water for all workers with gender separation and shower room.
4	EVALUATE			
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.			As the Nestle Indochina sustainability roadmap 4 priority areas and 2025 commitments, water manufacturing site will regenerate 100% of water use and water category will be carbon-neutral (2025). The factory has implemented water regeneration by coordinate with WWF to improve water catchment quality. The result of the project confirm that farmers in the area can increase water usage. The volumetric study was conducted by Rajabhat University Ayutthaya. The increasing of volumetric is water regeneration at 100% of water use.
4.1.2	Value creation resulting from the water stewardship plan shall be evaluated.	\boxtimes		From 3 completed water consumption saving projects have been implemented, the factory can save more than 3,000 m³/year.

Clause	Details	Yes	No	Comments/Evidence
				For water regeneration project, local community (farmers) can increase the amount of water usage from the catchment.
4.1.3	The shared value benefits in the catchment shall be identified and where applicable, quantified.			Reduce water consumption from water national resources and increase water catchment quality.
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.			Ref: BCP-Ayutthaya, Document: Business Continuity Plan Nestle Waters Thailand Issue date: 01/08/2018 No emergency/incident related to water during 2021. However, water level has been monitored and recorded in control room. Then the conclusion will be summarized in annually. The incident response plan for flooding situation is reviewed and updated when any changes caused. BCP for Drought Crisis- Nestle Waters Thailand Issue date 28/01/2016 The factory will monitored water level from government agency in monthly and if the drought is going to happen, crisis planning will be revised.
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.			Water saving achievement has been communicated internally and during Nestle water Indochina's Town Hall event. Moreover, factory's representative explained that the normally consultation will be conducted in World Water day. Due to the COVID-19 situation, the event has been postponed but will be conducted in year 2022. 431 OBS Observation: Site's water stewardship performance should to be consulted with other groups of stakeholder engagement to receive feedback from different group of people.
4.4	Evaluate and update the site's water stewardship plan, incorporating the information obtained from			

Clause	Details	Yes	No	Comments/Evidence
	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.	\boxtimes		Trends related to achievement of water ratio, risk status and effectiveness of the action plan, trends in emergency situations, involvement of staffs in joint with saving projects, cost-benefit and other benefits from water saving must be reported to and be evaluated by Nestle Water in global level. Then site's water stewardship plan will be modified to meet with site's target.
5	COMMUNICATE & DISCLOSE			
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.			Information has been disclosed on Nestle Pure life website at link; https://www.nestlepurelife.com/th/th-th/node/456
	water-related laws and regulations shall be disclosed.			For summary of site's water stewardship result has been published on board.
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.	\boxtimes		According to COVID-19 water stewardship plan and the outcomes contribution to AWS Standard were communicated internally in annually employee meeting and in Nestle water Indochina's Town Hall event. The factory explained that for an external parties, it has been included in presentation to present for visitors and up on requested.
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.	\boxtimes		The site has posted on Nestle Purelife website and community's board at Moo 4, Moo 5 and factory's board (in front of the factory) about the achievement ration of water consumption ratio and target. The evidences of disclosing on board was provided.
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.			

Clause	Details	Yes	No	Comments/Evidence
5.4.1	The site's shared water-related challenges and efforts made to address these challenges shall be disclosed.			Information has been disclosed on Nestle Pure life website at link; https://www.nestlepurelife.com/th/th-th/node/456
5.4.2	Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be identified.			Nestle water corporates with WWF for Youth Water Guardian Project. The project involves students and communities to implement projects for water quality improvement. Ref: WWF project- Youth Water Guardian with Nestle
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.			No compliance violations occurs in 2021. If any feedback receives, it is the responsibility of Safety Health and Environment (SHE), Human Resources and team leader to solve problem and communicate to community by following a standard procedure for communication.
				Ref: REF038 Standard procedure of Communication System, document No. 8482.SHE.SA.P.024
5.5.2	Necessary corrective actions taken by the site to prevent future occurrences shall be disclosed if applicable.	\boxtimes		According to no compliance violations occurs in in 2021, so no corrective action provided. However, the factory shows the Standard procedure of Communication System of Nestle Water, if any compliance violations receive, the corrective action will be taken and disclosed within and outside the factory.
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.			No compliance violations occurs in in 2021. However, the factory provided the Standard procedure of Communication System of Nestle Water. If any violation that may pose risk and threat to human or ecosystem health shall be communicated by E-mail, letter, memorandum and fax.

7 AUDIT FINDINGS

A findings log was issued to the site which detailed the findings raised during the audit. As there were a large number of documents supplied to SGS as evidence and each one had to be reviewed, the findings log acted as a live document and was updated periodically until all indicators and documents had been reviewed for compliance.

7.1 MAJOR NON CONFORMANCES

During the course of the audit major non-conformances were not raised.

Table 7.1.1. Major Non-Conformances raised during the AWS audit process

No.	Туре	Ref.	Details	Response by Perrier Vittel (Thailand) Ltd., Ayutthaya factory	Relevant References

7.2 MINOR NON CONFORMANCES

Minor non-conformances were not raised during the audit process.

Table 7.2.1. Minor Non-Conformances raised during the AWS audit process

No.	Туре	Ref.	Details	Response by Perrier Vittel (Thailand) Ltd., Ayutthaya factory	Relevant References

7.3 OBSERVATIONS

Three observations were raised during the audit which are only to be considered as improvement opportunities. No action is necessary during this audit period but these issues would most likely come under scrutiny during a surveillance audit scenario.

Table 7.3.1. Observations and New Information Requests raised during the AWS audit process

No.	Туре	Ref.	Details
1.3.1	Observation	131OBS	BCP is on process of revision. The official version will be reviewed on 1st surveillance audit.
3.7.2	Observation	372OBS	The detail of project by coordination with the supplier will be reviewed on 1st surveillance audit.
4.3.1	Observation	431OBS	Site's water stewardship performance should to be consulted with other groups of stakeholder engagement to receive feedback from different group of people.

8 SUMMARY

In reviewing the body of evidence presented by Perrier Vittel (Thailand) Ltd., Ayutthaya factory, it is apparent that a considerable quantity of effort and work has been put into the preparation in closing the gaps for the audit for Alliance for Water Stewardship Certification.

The instances of observations were raised during the audit which are affectively recommendations for future improvement. No action is necessary during this audit period but these issues would most likely come under scrutiny during a surveillance audit scenario.

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9 OPPORTUNITIES FOR IMPROVEMENT

The certification audit for Perrier Vittel (Thailand) Ltd., Ayutthaya factory against the AWS Standard is for the initial assessment of conformity and as such allows for some areas for improvement going forward.

As this was a first year assessment of the 2nd certification, focus of the review has been on the documented plan and its implementation to date.

Future audits will review deeply the evaluation of performance against the Standard indicators and how this is monitored and presented as compliance. SGS recommends that the factory develops robust ways of monitoring performance against the indicators, collecting, storing and publishing accessibility related to AWS on the website at least in annually.

10 CONCLUSIONS AND RECOMMANDATIONS

Given the review of evidence produced and site visit inspections SGS recommends that Perrier Vittel (Thailand) Ltd., Ayutthaya factory is awarded AWS Core Certified status with a surveillance audit interval of annual frequency.