



**Alliance for Water Stewardship Assessment Report for single site certification**

**Prepared for Pulmuone Waters Co.,Ltd.**

Single site certification

SITE: Pulmuone Waters Co.,Ltd. Edong Factory

AWS REFERENCE: AWS-000326

**Prepared by: SGS**

**SGS Ref.: 5201781**

**Version: 1**

**Date: 08<sup>th</sup> March 2021**

This is a controlled document, which is subject to SGS document control procedures.  
It may not be reproduced in whole or in part without the express permission of SGS Spain.

## REPORT DETAILS

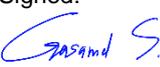
REFERENCE	AWS-000326
CLIENT REFERENCE	Mr. Sean Lee
REPORT TITLE	<b>ALLIANCE FOR WATER STEWARDSHIP ASSESSMENT REPORT</b>
DATE SUBMITTED:	08 <sup>th</sup> March 2021
CLIENT:	Pulmuone Waters Co.,Ltd. (Nestle Waters Korea) 142-24, Hwadong-ro 1870beon-gil, Idong-myeon, Pocheon-si, Gyeonggi-do, Korea
PREPARED BY:	Ms. Kasamol Phaibul  100 Nanglinchee Road Chongnonsee Yannawa Bangkok 10120 Tel: 02 6781 813 E-mail: <a href="mailto:Kasamol.phaibul@sgs.com">Kasamol.phaibul@sgs.com</a>
SIGNED:	Signed:  Kasamol Phaibul
TECHNICAL SIGNATORY	Signed:
STATUS	FINAL
NOTICE	<p><b>This document is issued by SGS under its General Conditions of Service accessible at <a href="http://www.sgs.com/terms_and_conditions.htm">http://www.sgs.com/terms_and_conditions.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.</b></p> <p><b>Any holder of this document is advised that information contained hereon reflects SGS's findings at the time of its intervention only and within the limits of Client's instructions, if any. SGS's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorised alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.</b></p>

Table of content

<b>REPORT DETAILS</b>	<b>2</b>
<b>1 EXECUTIVE SUMMARY</b>	<b>4</b>
<b>2 SCOPE OF ASSESSMENT</b>	<b>5</b>
<b>3 STAKEHOLDERS' ANNOUNCEMENT AND CONSULTATION</b>	<b>6</b>
<b>4 DESCRIPTION OF CATCHMENT</b>	<b>8</b>
<b>5 SUMMARY OF SHARED WATER CHALLENGES</b>	<b>12</b>
<b>6 INDICATORS CHECKLIST</b>	<b>16</b>
<b>7 AUDIT FINDINGS</b>	<b>32</b>
7.1 MAJOR NON CONFORMANCES	32
7.2 MINOR NON CONFORMANCES	33
7.3 OBSERVATIONS	34
<b>8 SUMMARY</b>	<b>35</b>
<b>9 OPPORTUNITIES FOR IMPROVEMENT</b>	<b>36</b>
<b>10 CONCLUSIONS AND RECOMMANDATIONS</b>	<b>37</b>
<b>11 REFERENCES</b>	<b>38</b>

## **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 Pulmuone Waters Co.,Ltd., Edong factory in 142-24, Hwadong-ro 1870beon-gil, Idong-myeon, Pocheon-si, Gyeonggi-do, Korea. The assessment has been completed in compliance with the AWS Certification requirements, Version 2 dated March 03<sup>rd</sup> 2019.

Pulmuone Waters Co.,Ltd., Edong factory is part of the Nestlé Waters Group. The factory produces Natural Mineral, bottled in 4 different sizes (330 ml, 500 ml, 1.5 L and 2.0 L).

On December 21<sup>st</sup> and 22<sup>nd</sup> 2020, SGS Thailand (hereinafter referred to as “SGS”) conducted the first AWS certification by off site audit. A total of four 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 Pulmuone Waters Co.,Ltd., Edong 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 Pulmuone Waters Co.,Ltd., Edong factory (hereinafter referred to as “the site”) located at 142-24, Hwadong-ro 1870beon-gil, Idong-myeon, Pocheon-si, Gyeonggi-do, Korea.

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

On December 21<sup>st</sup> – 22<sup>nd</sup> , 2020, SGS conducted the conformity assessment of site’s facilities and activities with regard to certification to the AWS Standard by remoting method. 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	AWS certified auditor with about 10 years of environmental experience with focus on GHGs emission and due diligence.
Sangmo Ku	Local Auditor	Korea auditor with about 6 years lead auditor in ISO 9001
Paula Gómez Geras	Technical Reviewer	AWS certified auditor, with more than 14 years experience in pollution control, environmental impact assessment, ISO14001 audit and training.

The site was represented at the audit by:

Mr. Sean Lee, QA team Manager;

Mr. Junggu Park, QA team water resource Supervisor;

The 2 days off-site audit covered documentary review, interview of the installations and activities in the bottling plant and personnel interviews. Two hours on slot had also been reserved for the stakeholders’ consultation meeting on December 21<sup>st</sup> 2020.

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 December 22<sup>nd</sup> 2020.

3 STAKEHOLDERS' ANNOUNCEMENT AND CONSULTATION

In compliance with the AWS Certification Requirements, public stakeholders' announcements were published on 3 outlets and at least 30 days before the site visit:

1. AWS website link <https://a4ws.org/certification/certification-consultations/>;
2. Client's website link <http://m.pulmuonewater.com/sub/csr.html#csr02>;
3. Local newspaper.



Photo 3.1 Information Disclosure posted on Client's webpage<sup>1</sup>



Photo 3.2 Information Disclosure on local news paper on 20<sup>th</sup>/11/2020

<sup>1</sup> Pgae <http://m.pulmuonewater.com/sub/csr.html#csr02> accessed on 22/12/2020



Photo 3.3 Information Disclosure on local news paper on 18/11/2020

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

**3.1 Local stakeholder consultation**

Stakeholders are classified into villages, schools, local administrations, small business, manufacturing local neighbour, local suppliers, local media, NGOs, local experts and farmers. According to COVID-19 situation, stakeholder consultation could not be set up. Therefore, the representative of 3 stakeholder groups were interviewed by phone called during 10.30 AM. To 12.00 PM. on 21/12/2020. The consultation was conducted in Korea language by SGS local auditor.

1<sup>st</sup> Stakeholder: Mr. Park, Sung Yeol; Kyunggi province Environmental Department officer, was interviewed was conducted during 10.30 AM. To 11.00 AM. Local auditor introduced him that the factory is audited AWS by SGS and has set up list of Important Water-Related Areas together with water challenges. The officer told the local auditor that the site has followed and complied with environment regulations. He appreciate that the factory will be certified by AWS. No concern or comments received.

2<sup>nd</sup> Stakeholder: Mr. Kim, Byung Hyun; 5<sup>st</sup> Village leader provided concern about the water shortage during seasons in 13 areas which no municipal water. The factory feedback that the representative from nearby villages used to invite to visit the factory and observe the operation. The factory presented groundwater balance and level of production wells compare with monitoring wells in the factory. No differentiated level between monitoring wells and production wells. Moreover, the factory has installed 3 monitoring wells outside the factory to monitor groundwater level and inform the community the groundwater situation. The community appropriate with the factory clarification and supporting.

3<sup>rd</sup> Stakeholder: Mr. Baek, Jong gi, factory manager at Pocheon Green, water drinking manufacturing. The manager explained that Pocheon Green factory produce some types of drinking water for Pulmuone Waters Co.,Ltd.,. Pocheon Green is setting water saving project under Edong factory support. Factory manager appreciate that the factory will be certified by AWS. No concern or comments received.

**4 DESCRIPTION OF CATCHMENT**

Pulmuone Waters Co.,Ltd., Edong factory is located in Gyeonggi-do Province. The major basin is North and South Korea, and Imjin-gang is minor basin. Referring from Aqueduct Water Risk Atlas, water stress of the factory is medium-high.

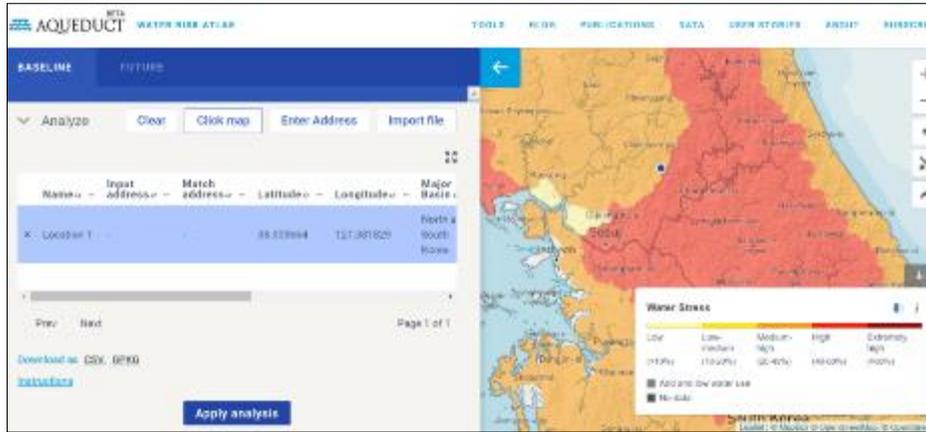


Figure 1: Water Stress result, [Aqueduct Water Risk Atlas \(wri.org\)](http://wri.org)



Figure 2: Imjin-gang basin, [Imjin-gang : Interactive map \(riversnetwork.org\)](http://riversnetwork.org)

The Imjin basin encompasses a large area in the north part of Gyonggi-do, on average, 680.50 m. above mean sea level, varying from 155 to 1,570 m. at certain points. The area and length of the Imjin catchment are 8,139 km<sup>2</sup> and 273.50 km respectively. The Imjin river is one of the most water resources in the northern part of Gyonggi province, passing through North and South Korea, crossing the Demilitarized Zone (DMZ). The Northern part of the Imjin river basin is predominantly mountainous, so the river gradient is relatively steep, and many streams pass through the valleys. The uppermost part, which heads from Hamgyeongnam-do Masikryoung Duryu mountains, varies in elevation from 1,500–1,800 m above sea level. Imjin river drains 21 major watersheds about 254.6 km. in the trans boundary area between South and North Korea. Hantan river is a tributary of the Imjin river flowing through

Gangwon and Gyeonggi Provinces. It is a, which eventually joins the Han River downstream of Seoul before emptying into Gyeonggi Bay in Yellow Sea, is the well-known Korean transboundary basin.

Annual precipitation of the Imjin river basin is 1,100 mm, with the highest hourly rainfall recorded at 120 mm. About 74% of the total annual discharge occurs between June and September, roughly parallel to the monsoonal climate, with its wet summers and dry winters.

Stream flow increases the most in March and continuously decreases till late May, which is the minimum flow period resulting from the high demand of irrigation and low rainfall. Stream water quantities of main tributaries as well as Hantan River, one of major tributary, also rapidly decreased after April similar to the whole basin area, and the worst case was happened in Sami creek. Much more demands for irrigation at each tributary area than influx from upper reaches caused obvious dry state in both Hantan River and upper reaches of Imjin river after May.

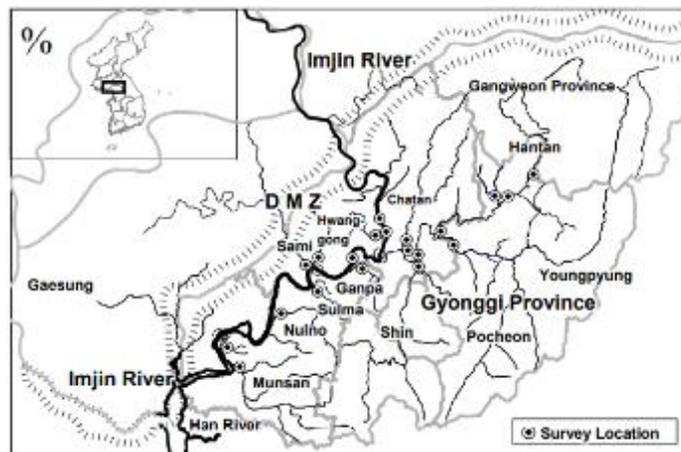


Figure 3: Imjin Watershed



Figure 4: Factory location

Major pollutant sources in the basin are the waste from livestock and industries. There are total 1,619 industries in the basin, about 426 belong to the fabric and textile factories followed by 206 restaurants. Major livestock are cattle, dairy cattle, pig, and poultry, whose waste discharge is about 6,371 ton/day. Significant pollutant sources degrade water quality of the areas locate in the upper reaches at Shin and Pocheon stream.

Pulmuone Waters Co.,Ltd., Edong factory is part of Nestlé Water Group. The factory produces Natural Mineral, bottled in 4 different sizes (330 ml, 500 ml, 1.5 L and 2.0 L). The raw water used for the production process is abstracted from 6 boreholes. While water utility for engineering propose come from municipal water is provided by Korea governance from Seoul. From site water balance, the ratio between groundwater extraction and municipal water is 96% and 4% respectively.

The factory extracts water from a fractured granitic aquifer that has a limited capacity and used by other stakeholders. The wells fields are located within the site boundary and occupies about 28% of the total extraction.

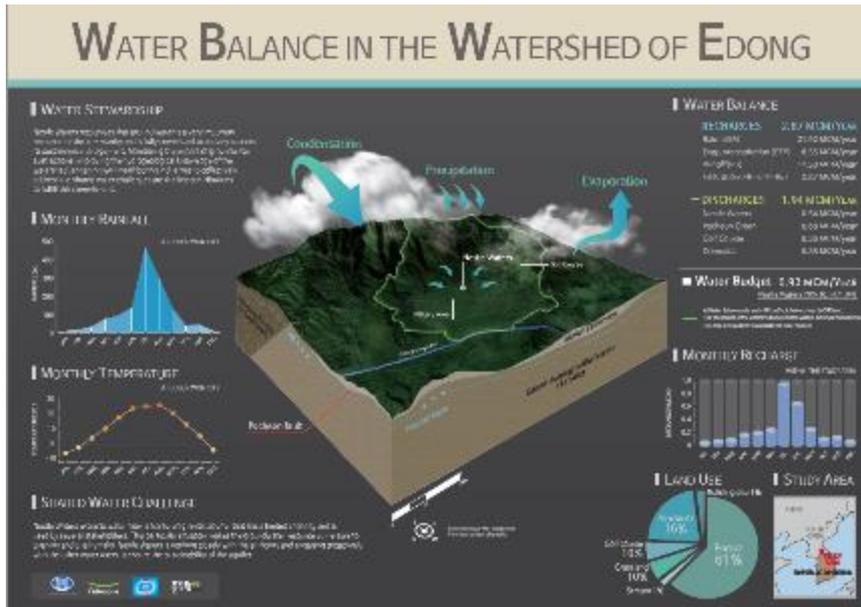


Figure 5. Waer balance in the watershed of Edong

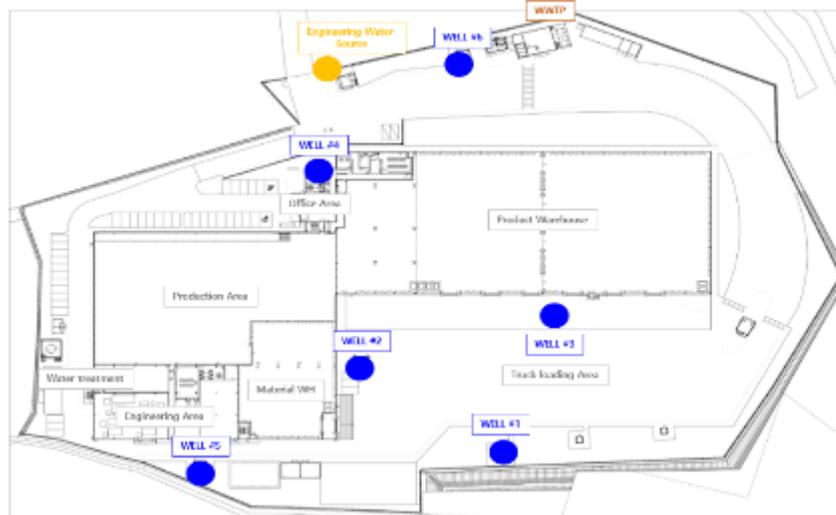


Figure 6. Site and Wells map

For municipal water which has been supplied from Seoul. Seoul is located at 37.34 N latitude and 126.59 E longitude, is divided by the river system of the Han River and 4 streams (Cheonggye, Jungnang, Tan, and Anyang), and surrounded by mountains on all 4 sides. To the north is Bugak Mountain, to the east is Nak Mountain, to the

south is Nam Mountain, and to the west is Inwang Mountain. On the outer edge are Bukhan Mountain (north), Deogyang Mountain (west), Gwanak Mountain (south), and Yongma Mountain (east), together forming a double basin.

The Han River is formed by the Namhan and Bukhan rivers that converge 35 km upstream to the northeast of Seoul. The river cuts through the center of Seoul from east to west, joining the Imjin River before flowing into the West Sea to the north of Incheon. The total length of the Han is 494.44 km, which has a drainage area of 25,953.6 km<sup>2</sup>. The effective basin width is 47.19 km, with a shape factor of 1.95. It is a combination of dendritic and fan shapes. The river winds and meanders and is quite wide compared to its length, making it difficult to utilize and manage. This phenomenon is concentrated on the gently sloped Namhan River and the main stream. The channel slope is the 1/250 point upstream of convergence, and at the 1/5,000 point of the main stream. Within Seoul, 36 small and medium streams flow into the Han, with total length of the streams in aggregate being 247.99 km. Stream planning has been divided into zones: Jungnang (Cheonggye Stream, Jungnang Stream), Tan Stream (Tan Stream, Yangjae Stream), Nanji (Bulgwang Stream, Hongje Stream), and Seonam (Anyang Stream).

The raw water uses comes from intake points located in Seoul (Gangbuk, Jayang, Pungnap, Amsa) and the City of Namyangju (Gangbuk). The total capacity is 7,120,000 m<sup>3</sup>/day. Seoul has 6 purification centers (Arisu Purification Centers) with a daily processing capacity of 4,350,000 m<sup>3</sup>, and average production around 3,166,000 m<sup>3</sup>/day.

Tap water produced at the purification centers is supplied through a network of pipes to residents, the final users, and the length of those pipes total 13,792 km. The key facilities for tap water supply are pumping stations and distribution stations, the latter of which number 104, with a total distribution capacity of 2,418,000 m<sup>3</sup>. Even if the water production and supply facilities were to encounter an emergency, everyone would be supplied with water at a normal rate for 17 hours. Facilitating the supply are 196 pumping stations.

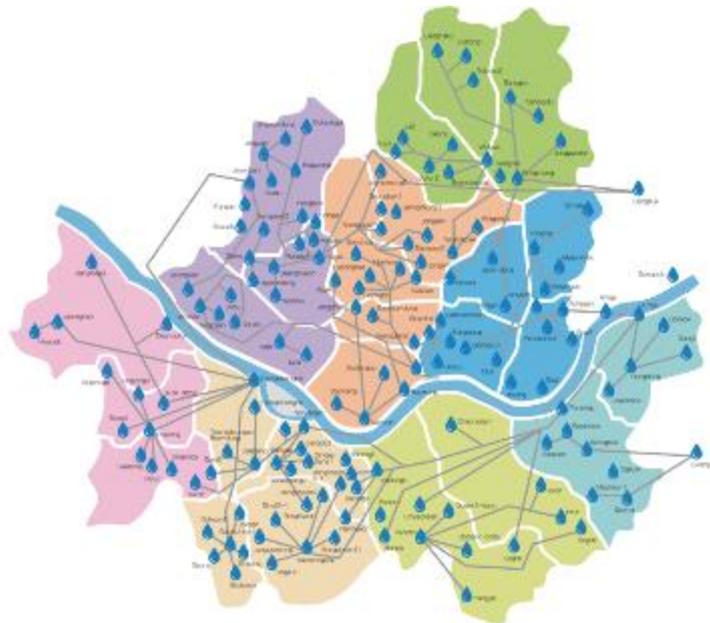


Figure 6. Tap water and piping network

**5 SUMMARY OF SHARED WATER CHALLENGES**

The QA team Manager has developed a list of main shared water challenges in the catchment. The Community Relations Process (CRP) system is used to analyse and review the information gained from interviewed internal and external stakeholders. Based on its outcome, the plant has developed the list of shared water challenges and related priority through an evaluation risk matrix that considered likelihood and severity. Likelihood indicates the possibility of an event to occur while severity indicates the magnitude of its impact on the plant’s operations.

The water challenges are presented in Table 5.1 below. Information has been extracted from reference REF022 “Shared water challenges”.

No.	Risk/Challenge	Prioritization			Ranking	Associated public sector agency, initiative	Relevance for the stakeholders	Relevance for the site	Objective	Target	KPI	Actions / Initiatives / Mitigation	Cost/benefit (kKRW)	Expected results	Status	Responsible	Start date	Deadline
		Likelihood	Impact	Priority														
1	Installation of poultry farm in the catchment area.	Low	Medium	Low	5	City hall & village	Tangible / intangible impacts by smell from the farm and a bad village impression risk.	Potential ground water pollution and reputational risk by bad smell.	Maintain a good ground water quality	Reject or postpone the installation. If installation of poultry farm need further actions to keep/monitor ground water quality if it is potential contamination sources.	N/A	Build up good relationship with villagers for aligned activities against the each risk. - Social Regular meeting with village representatives to check each tendency. - Social Monitoring of installation progress and City hall's stance. - Social	NA	Farm installing postpone	Done: Stopped installation / Monitoring	Administration(OS manager)	10-Jun-18	31-Dec-19

No.	Risk/Challenge	Prioritization			Ranking	Associated public sector agency, initiative	Relevance for the stakeholders	Relevance for the site	Objective	Target	KPI	Actions / Initiatives / Mitigation	Cost/benefit (kKRW)	Expected results	Status	Responsible	Start date	Deadline
		Likelihood	Impact	Priority														
2	Installation of golf club in the catchment area.	Medium	Medium	Medium	3	City hall	Potential ground water pollution to villagers, Pocheon Green	Potential ground water pollution and reduce water license	Maintain a good ground water quality / Minimize water quality impact to catchment area	Minimize impact to groundwater quality as contamination sources near factory.	N/A	1. Issue official letter to Province office and City hall include Ministry of Environment. - Social 2. Sharing it on Village representatives meeting - Social 3. Install piezometers near factory - Environmental 4. 3D poster for watershed - Environmental 5. Engage with golf club owner. - Social / Economy 6. Enhance ground / surface Water quality monitoring near golf club. - Environmental 7. Encourage the golf course to join a sustainability program - Economy	2,000	No impact to groundwater quality	1. Done 2. Done 3. Done 4. Done 5. Done, but it's very limited. 6. Done, continue to try to do	QA manager OS manager Factory manager	1-Jan-19	Continue
3	Limited water capacity of the aquifer	Low	High	Medium	1	Ministry of Environment	Kyunggi province officer Increasing of required water volume for other purposes from neighborhoods near factory. (PG, farmers, golf site, military area)	Water restriction, DWL move down. Serious water limitation for further sales volume increasing.	Keep water capacity of the aquifer without any impact to groundwater quantity	Keep an authorized license volume. Existing approved ground water sharing from PG.	Keep 1,469ton per day and develop more license	1. Submit more better geological evidences to authorities on existing license revise through a correct agency. - Environmental 2. Aggressively follow up for committed action plan at issued new license by authority. -	100,000	Increase technical rationale and credibility to authority for avoiding of licensed volume deduction on regular license revicing.	Progressing	Sean lee Jung gu park	15-Oct-18	6-Jun-22

No.	Risk/Challenge	Prioritization			Ranking	Associated public sector agency, initiative	Relevance for the stakeholders	Relevance for the site	Objective	Target	KPI	Actions / Initiatives / Mitigation	Cost/benefit (kKRW)	Expected results	Status	Responsible	Start date	Deadline
		Likelihood	Impact	Priority														
											Economy 3. Monitor the status of new well developments on upstream of factory. - Environmental		Maximize line capacity through new production line installation					
4	Technical complication for new watershed size between Ministry and ED factory.	Medium	Medium	Medium	2	Ministry of Environment	Not applicable but Local experts who assigned by the ministry for deliberationship of water license and the ministry officers has a strong negative opinion for increasing of the license volume in existing catchment area.	Must be demonstrated to keep a new watershed size through more precise evidences objectively until next environment impact study to extend existing water license.	Keep existing catchment area	Persuade the ministry and local experts through more credible technical data and information to allow new water resource in the area	Additional water from existing wells	Selection more credible agency who has more reasonable technical rationales to solve it. - Economy	NA	Check the feasibility to increase WR license volume and actually try it based on perfect rationals.	Progressing	Sean lee Jung gu park	15-Oct-18	Continue
												Gathering more reasonable geological information in watershed with agency. - Environmental	NA					
												Good relationship with local experts through business interactions. - Social	NA					
												Introduce 3D Diagram to explain our watershed situation to all. (Committed action with Zone) - Environmental	25000 (Completion)					
Installing of piezometer to demonstrate	100000 (Completion)	WS Shim	1-Feb-19	30-Jun-19														

No.	Risk/Challenge	Prioritization			Ranking	Associated public sector agency, initiative	Relevance for the stakeholders	Relevance for the site	Objective	Target	KPI	Actions / Initiatives / Mitigation	Cost/benefit (kKRW)	Expected results	Status	Responsible	Start date	Deadline
		Likelihood	Impact	Priority														
											there are no impact by our business deployment. (Committed action with Zone) - Environmental							
5	Pollution from waste water from the industries (Pocheon Green)	Low	Low	Low	6	Ministry of Environment	Government control, treatment plants mandatory for industries and block building.	Potential ground water pollution and complaints from villagers	Maintain a good ground water quality	No any issue from the industries (PG)	No issue	Water analysis monitoring - Protect brand/factory reputation and image and strengthen community relationship: Economy	10,000	Keep good water quality	Quarterly & Yearly monitoring of groundwater quality (analysis)	Sean lee Jung gu park	-	Continue
6	Piezometer water level monitoring results is bad	Low	Medium	Low	4	Ministry of Environment and village in the catchment area	Stakeholders will not be able to use it due to deterioration of water quality.	Low productivity and sales due to poor raw water conditions	Continuous monitoring, analysis and sharing for constant quality	Ensuring stable status and maintaining continuous business		Conduct regular monitoring and data accumulation every month (see Sharing of village councils, Environmental Impact Assessment) - Environmental	NA	Check the feasibility to increase WR license volume and actually try it based on perfect rationals.	-	Sean lee Jung gu park	30-Jun-19	Continue

**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 5.1 Evidence reviewed by SGS against each CORE AWS indicator**

Clause	Details	Yes	No	Comments/Evidence
1	Gather and Understand (core)			
1.1	site's physical scope for water stewardship purposes			
1.1.1	<p>The physical scope of the site shall be mapped, considering the regulatory landscape and zone of stakeholder interests, including:</p> <ul style="list-style-type: none"> <li>- Site boundaries;</li> <li>- Water-related infrastructure, including piping network, owned or managed by the site or its parent organization;</li> <li>- Any water sources providing water to the site that are owned or managed by the site or its parent organization;</li> <li>- Water service provider (if applicable) and its ultimate water source;</li> <li>- Discharge points and waste water service provider (if applicable) and ultimate receiving water body or bodies;</li> <li>- Catchment(s) that the site affect(s) and is reliant upon for water.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>- Site boundary from googlemap was provided. Discharge pint and deep wells were indicated on map.</li> <li>- Water source come from                             <ol style="list-style-type: none"> <li>1. Groundwater at confined aquifers for production</li> <li>2. Municipal water for engineering (i.e. cooling tower and sanitary propose)</li> </ol> </li> <li>- Discharge water is over flow system. Effluent flow from outlet to Hantan River – Imjin River</li> <li>- Catchment is groundwater, which name Hantan River</li> <li>- Municipal water provider: Korea government</li> </ul>
1.2	Understand relevant stakeholders, their waterrelated challenges, and the site's ability to influence beyond its boundaries.			
1.2.1	<p>Stakeholders and their water-related challenges shall be identified. The process used for stakeholder identification shall be identified.</p> <p>This process shall:</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Document name "CRP version 2.0", which is internal document of Nestle Water related to stakeholder consultation was provided.</p> <ul style="list-style-type: none"> <li>- Stakeholders are classified into villages, others, schools, local administrations, small business, manufacturing local neighbour, local suppliers, local media, NGOs, local experts and farmers.</li> </ul>

Clause	Details	Yes	No	Comments/Evidence																																																								
	<ul style="list-style-type: none"> <li>- Inclusively cover all relevant stakeholder groups including vulnerable, women, minority, and Indigenous people;</li> <li>- Consider the physical scope identified, including stakeholders, representative of the site's ultimate water source and ultimate receiving water body or bodies;</li> <li>- Provide evidence of stakeholder consultation on water-related interests and challenges;</li> <li>- Note that the ability and/or willingness of stakeholders to participate may vary across the relevant stakeholder groups;</li> <li>- Identify the degree of stakeholder engagement based on their level of interest and influence.</li> </ul>			<ul style="list-style-type: none"> <li>- Stakeholders are evaluated in degree of engagement based on their level of interest and influence.</li> <li>- The stakeholder consultation was done by factory's supplier. The outcome of the consultation is identified in water challenges.</li> </ul> <p>Water resource management is included in point of concern by stakeholders.</p> <table border="1"> <thead> <tr> <th>SH Sub-Category</th> <th>Name / Organization</th> <th>Concerns / Expectations vis-à-vis the site</th> <th>Influence of SH on site (Y)</th> <th>Influence of site on SH (O)</th> <th>Attitude</th> <th>AWS SH?</th> <th>Power of SH at</th> </tr> </thead> <tbody> <tr> <td colspan="8">*Stakeholder Category : LOCAL AUTHORITIES (5)</td> </tr> <tr> <td>Local representative organisations</td> <td>Edong office</td> <td>Villagers complaints</td> <td>2.0</td> <td>2.0</td> <td>Neutral</td> <td>No</td> <td>N/A</td> </tr> <tr> <td>Local administrations</td> <td>Environment office</td> <td>Water shortage / Villagers complaints</td> <td>3.0</td> <td>2.5</td> <td>Neutral</td> <td>No</td> <td>N/A</td> </tr> <tr> <td>Local administrations</td> <td>Kyeonggi-do Province (licence approval)</td> <td>Water shortage / Villagers complaints</td> <td>3.0</td> <td>2.5</td> <td>Neutral</td> <td>Yes</td> <td>3.5</td> </tr> <tr> <td>Local representative organisations</td> <td>Pocheon City officer</td> <td>Villagers complaints</td> <td>2.0</td> <td>1.0</td> <td>Neutral</td> <td>No</td> <td>N/A</td> </tr> <tr> <td>Other authorities (regulatory...)</td> <td>Pocheon Fire office</td> <td>Fire accident / Ammonia gas leakage</td> <td>2.0</td> <td>2.0</td> <td>Neutral</td> <td>No</td> <td>N/A</td> </tr> </tbody> </table>	SH Sub-Category	Name / Organization	Concerns / Expectations vis-à-vis the site	Influence of SH on site (Y)	Influence of site on SH (O)	Attitude	AWS SH?	Power of SH at	*Stakeholder Category : LOCAL AUTHORITIES (5)								Local representative organisations	Edong office	Villagers complaints	2.0	2.0	Neutral	No	N/A	Local administrations	Environment office	Water shortage / Villagers complaints	3.0	2.5	Neutral	No	N/A	Local administrations	Kyeonggi-do Province (licence approval)	Water shortage / Villagers complaints	3.0	2.5	Neutral	Yes	3.5	Local representative organisations	Pocheon City officer	Villagers complaints	2.0	1.0	Neutral	No	N/A	Other authorities (regulatory...)	Pocheon Fire office	Fire accident / Ammonia gas leakage	2.0	2.0	Neutral	No	N/A
SH Sub-Category	Name / Organization	Concerns / Expectations vis-à-vis the site	Influence of SH on site (Y)	Influence of site on SH (O)	Attitude	AWS SH?	Power of SH at																																																					
*Stakeholder Category : LOCAL AUTHORITIES (5)																																																												
Local representative organisations	Edong office	Villagers complaints	2.0	2.0	Neutral	No	N/A																																																					
Local administrations	Environment office	Water shortage / Villagers complaints	3.0	2.5	Neutral	No	N/A																																																					
Local administrations	Kyeonggi-do Province (licence approval)	Water shortage / Villagers complaints	3.0	2.5	Neutral	Yes	3.5																																																					
Local representative organisations	Pocheon City officer	Villagers complaints	2.0	1.0	Neutral	No	N/A																																																					
Other authorities (regulatory...)	Pocheon Fire office	Fire accident / Ammonia gas leakage	2.0	2.0	Neutral	No	N/A																																																					
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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.																																																								
1.3	Gather water-related data for the site, including: water balance; water quality, Important Water-Related Areas, water governance, WASH; water-related costs, revenues, and shared value creation.																																																											
1.3.1	Existing water-related incident response plans shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The site has prepared incident response plan for flooding situation. Name" Business Contingency Plan – Disaster Recovery Plan Crisis Response (BCP-DRP)" Effective date 20 <sup>th</sup> /07/2015, updated 10 <sup>th</sup> /12/2019																																																								
1.3.2	Site water balance, including inflows, losses, storage, and outflows shall be identified and mapped.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Water withdrawal from Jan 2019 to Dec. 2020 provided. Water Map daily shows water mapping of quantity of water extraction, filling in the bottle and municipal water quantity for engineering and sanitary purpose.																																																								
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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Water usage for sanitary and engineering come from municipal water. Production water come from groundwater. Flow rate, totalizer, cumulative volume, dynamic water level and static water level have been monitored every time water is withdrawn. Total water withdrawal in 2019 and 2020 were 405,750,130 and 399,537,580 liters respectively. The water ratio of year 2019																																																								

Clause	Details	Yes	No	Comments/Evidence
	people or environment, an indication of annual high and low variances shall be quantified.			was 1.077 and 2020 was 1.072, which lower than Nestle's water target at 1.081.
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The factory has performs the qualitative monitoring in accordance with the legal requirements in force: <ul style="list-style-type: none"> <li>• Drinking water quality in manufacturing</li> <li>• Wastewater quality after treatment before discharge to public.</li> </ul> All the water quality have submitted to government agency. The result is in line with the requirement standard.
1.3.5	Potential sources of pollution shall be identified and if applicable, mapped, including chemicals used or stored on site.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The factory has identified the environmental health and safety impact of every list of storage chemical. <ul style="list-style-type: none"> <li>• Oxonia, Acid and Alkaline for CIP tank</li> <li>• Acid and Alkaline for Cleaning the injector</li> <li>• Lubricating oil for Semi-finished product transport</li> <li>• Chemical leakage from chemical storage tank</li> </ul> The factory also provided audit report of ISO14001:2015 which completed on March 2019. All the chemical is monitored.
1.3.6	On-site Important Water-Related Areas shall be identified and mapped, including a description of their status including Indigenous cultural values.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Referring from site representative interview and local auditor confirmation, no on-site water-related areas.
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Water-related costs and revenues are provided. The factory has monitor cost; The company has set out to monitor the following water-related costs and revenue: <ul style="list-style-type: none"> <li>• Costs related to the water data collection process</li> <li>• Costs qualitative analysis of drinking water and wastewater, in order to comply with legal requirements and other requirements</li> <li>• Costs related to the water donation</li> <li>• Costs related to the maintenance of the entire existing infrastructure for water used on site</li> <li>• Costs related to the treatment of waste water</li> <li>• Revenue generated from net sales of water-related goods</li> </ul> Moreover, the factory has evaluate the share value created from water.

Clause	Details	Yes	No	Comments/Evidence
1.3.8	Levels of access and adequacy of WASH at the site shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The factory has applied WASH to provide clean drinking water, 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Municipal water is used for indirect water used for clear industrial water, residential using water, chiller/boiler and fire tank supplement.  Water consumption in year 2019 to 2020 are provided.
1.4.2	The embedded water use of outsourced services shall be identified, and where those services originate within the site's catchment, quantified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	From the list of supplier provided, Pocheon Green is the supplier locate within the site's catchment. The factory take the Pocheon Green into risk analysis and record quantity of water consumption. As per information provided, the factory is going to coordinate with Pocheon Green to save water consumption.
1.5	Gather water-related data for the catchment, including: water governance, water balance, water quality, Important Water-Related Areas, infrastructure, and WASH			
1.5.1	Water governance initiatives shall be identified, including catchment plan(s), water-related public policies, major publicly-led initiatives under way, and relevant goals to help inform site of possible opportunities for water stewardship collective action.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The factory has identifies and updates information about: <ul style="list-style-type: none"> <li>• Water resources quantity limitation from the extraction license by monitoring groundwater extraction;</li> <li>• Policies of the regulatory and regulatory authorities, with an impact on the permanent updating of and compliance with the legal requirements related to water management;</li> </ul>
1.5.2	Applicable water-related legal and regulatory requirements shall be identified, including legally-defined and/or stakeholder-verified customary water rights.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The factory aims to identify all legal and regulatory requirements with specific environment which including for water management. The site provide list of legal compliance which has been monitored and updated the lasted regulation. The result showed that the factory complies with the applicable water related legal and regulatory.
1.5.3	The catchment water-balance, and where applicable, scarcity, shall be quantified, including indication of annual, and where appropriate, seasonal, variance.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The site provides the dynamic water level compare with groundwater daily withdrawals. From the report of 3 groundwater monitoring wells outside the factory compare with the factory consumption, it can confirm that no water scarcity in the area.



Clause	Details	Yes	No	Comments/Evidence
1.6.1	Shared water challenges shall be identified and prioritized from the information gathered.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6 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.  <b>No. 161 OBS. The projects which have been done or rejected should not be as challenges.</b>
1.6.2	Initiatives to address shared water challenges shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The initiatives to address the shared water challenges are; <ul style="list-style-type: none"> <li>• Keep water capacity of the aquifer without any impact to groundwater quantity and develop more license</li> <li>• Persuade the ministry and local experts through more credible technical data and information to allow new water resource in the area</li> <li>• Maintain a good ground water quality / Minimize water quality impact to catchment area</li> </ul>
1.7	Understand the site's water risks and opportunities: Assess and prioritize the water risks and opportunities affecting the site based upon the status of the site, existing risk management plans and/or the issues and future risk trends identified in 1.6.			
1.7.1	Water risks faced by the site shall be identified, and prioritized, including likelihood and severity of impact within a given timeframe, potential costs and business impact.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The water risk faced by the site are; <ul style="list-style-type: none"> <li>• Limited water capacity of the aquifer</li> <li>• Technical complication for new watershed size between Ministry and the factory</li> <li>• The installation of golf club in the catchment area</li> <li>• Piezometer water level monitoring results is bad</li> </ul> Water risks are identified and prioritized in likelihood, impact and priority by ranking from low to high. The criteria of ranking are also described. Action, cost of impact and business impact have been identified.
1.7.2	Water-related opportunities shall be identified, including how the site may participate, assessment and prioritization of potential savings, and business opportunities.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	From the risk face, water-related opportunities are created; <ul style="list-style-type: none"> <li>• Increase technical rationale and credibility to authority for avoiding of licensed volume deduction on regular license revising</li> <li>• Maximize line capacity through new production line installation</li> <li>• Check the feasibility to increase WR license volume on perfect rationales</li> </ul>

Clause	Details	Yes	No	Comments/Evidence
				<ul style="list-style-type: none"> <li>No impact to groundwater quality</li> </ul>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The factory set up events World water day by invite local students to learn how to sustain water, Ocean clean up by encourage factory's staffs to collect the garbage around the beach. Moreover, the factory went to share knowledge to teachers in local school. All information has been disclosed on company's website at link; <a href="http://m.pulmuonewater.com/sub/csr.html#csr02">http://m.pulmuonewater.com/sub/csr.html#csr02</a>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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 below water ratio.
1.8.3	Relevant sector and/or catchment best practice for water quality shall be identified, including rationale for data source.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>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.</p> <p>While waste water must be treated and monitor quality before releasing. The factory must comply the wastewater quality with Korea's regulation and Nestle wastewater requirement.</p>
1.8.4	Relevant catchment best practice for site maintenance of Important Water-Related Areas shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	From the evidence provided, all areas are in good condition and low likelihood in effect from factory operated. No action required. However, the factory has installed 3 piezometer water level monitoring outside the factory to monitor groundwater level of the catchment.
1.8.5	Relevant sector and/or catchment best practice for site provision of equitable and adequate WASH services shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The best practice for site provision of equitable and adequate WASH services is supplies safe drinking water for all workers.
2	Commit and Plan (core)			Comments/Evidence
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,			

Clause	Details	Yes	No	Comments/Evidence
	the implementation of the AWS Standard and achieving its five outcomes, and the allocation of required resources.			
2.1.1	<p>A signed and publicly disclosed site statement OR organizational document shall be identified. The statement or document shall include the following commitments:</p> <ul style="list-style-type: none"> <li>- That the site will implement and disclose progress on water stewardship program(s) to achieve improvements in AWS water stewardship outcomes</li> <li>- That the site implementation will be aligned to and in support of existing catchment sustainability plans</li> <li>- That the site's stakeholders will be engaged in an open and transparent way</li> <li>- That the site will allocate resources to implement the Standard.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>- Policy is publicly available on website: <a href="https://www.nestle.com/csv/impact/water/policy-stewardship">https://www.nestle.com/csv/impact/water/policy-stewardship</a></li> <li>- Nestle Water Commitments has been signed and disclosed in Key Global Message by Maurizio Patamello, CEO of Nestle Waters July 2017</li> <li>- Water Stewardship Roadmap, by Marco Settembri, Head of Nestle Waters, April 2016</li> <li>- Nestle Edong Factory's commitment to AWS standard signed by Sangki Woo (factory Manager Edong factory) and Jimmy Cho (Business Executive officers), September 2020</li> </ul>
2.2	Develop and document a process to achieve and maintain legal and regulatory compliance.			
2.2.1	<p>The system to maintain compliance obligations for water and wastewater management shall be identified, including:</p> <ul style="list-style-type: none"> <li>- Identification of responsible persons/positions within facility organizational structure</li> <li>- Process for submissions to regulatory agencies.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>From The Nestle Water in Society Guidelines, water stewardship strategy has been identified;</p> <ul style="list-style-type: none"> <li>• Ensure full compliance with all applicable water regulations and legislation and relevant Nestlé policies and standards.</li> <li>• Optimise the water use ratio at factory level by implementing water saving initiatives.</li> <li>• Engage in open and transparent dialogue with communities about local water management. Implement the most relevant collaboration at watershed level</li> </ul>

Clause	Details	Yes	No	Comments/Evidence
				<p>that is credible and will bring real benefit to the local water resource and/or the preservation of local natural capital (biodiversity).</p> <ul style="list-style-type: none"> <li>• Mobilise employees, local communities and other key stakeholders by organising water education events, particularly at our factories and headquarters.</li> <li>• Engage in a wider, year-long Project WET water conservation programme with educational or environmental stakeholders and partners.</li> </ul>
2.3.2	<p>A water stewardship plan shall be identified, including for each target:</p> <ul style="list-style-type: none"> <li>- How it will be measured and monitored</li> <li>- Actions to achieve and maintain (or exceed) it</li> <li>- Planned timeframes to achieve it</li> <li>- Financial budgets allocated for actions</li> <li>- Positions of persons responsible for actions and achieving targets</li> <li>- Where available, note the link between each target and the achievement of best practice to help address shared water challenges and the AWS outcomes.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>- Initiatives projects to replenish watershed have been setup.</li> <li>- The action processes have been explained.</li> <li>- Responsible of each project has been identified.</li> <li>- Timeframe (starting- deadline), cost and benefit, expected results and present status have been identified.</li> </ul> <p><b>No. OBS 232, it should be address the benefit related to AWS outcomes.</b></p>
2.4	Demonstrate the site’s responsiveness and resilience to respond to water risks			
2.4.1	A plan to mitigate or adapt to identified water risks developed in co-ordination with relevant public-sector and infrastructure agencies shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>- The site has prepared incident response plan for drought and flooding situation.</li> <li>- 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.</li> <li>- The factory has installed piezometer to monitor groundwater level outside the factory.</li> <li>- The factory has join with nearby factories and local government agencies to share and exchange information related to water sustainability.</li> </ul>
3	Implement (core)			Comments/Evidence

Clause	Details	Yes	No	Comments/Evidence
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The factory has been introduced and educated to its interested parties regarding concept and principals of AWS and Catchment governance. Also the government and local communities' representatives were invited to visit the factory to observed manufacturing process.  Moreover, the factory share knowledge related to water sustainable to students and teachers around the factory.
3.1.2	Measures identified to respect the water rights of others including Indigenous peoples, that are not part of 3.2 shall be implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The factory supports the community to have the good quality of water consumption by support drinking water for community.
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The regulation related to groundwater extraction and consumption, and quality of wastewater before releasing have been monitored and evaluated by the responsible team.
3.2.2	Where water rights are part of legal and regulatory requirements, measures identified to respect the water rights of others including Indigenous peoples, shall be implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A the regulation does not mention about water right.
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Evidence that the site has been improving water balance through reductions in water use, recycle wastewater, and use rain water for washing.
3.3.2	Where water scarcity is a shared water challenge, annual targets to improve the site's water use efficiency, or if practical and applicable, reduce volumetric total use shall be implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Water scarcity does not a shared water challenge. However, the factory has the targets to improve the efficient water use are the following: <ul style="list-style-type: none"> <li>• Reuse water</li> <li>• Monitor water consumption to reduce water in non-productive</li> </ul> Moreover, the Nestle Water has set water ratio for the factory to achieve in term of own consumption and manufacturing process.
3.3.3	Legally-binding documentation, if applicable, for the re-allocation of water to social, cultural or environmental needs shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The factory has provided drinking water to community in special events.

Clause	Details	Yes	No	Comments/Evidence
3.4	Implement plan to achieve site water quality targets.			
3.4.1	Status of progress towards meeting water quality targets set in the water stewardship plan shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Effluent water quality is in line with national standard. Moreover, Nestle water has own criteria of discharge wastewater quality. Some standard value is stronger than national's 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The factory has monitor, in accordance with legal requirements, the quality parameters for: <ul style="list-style-type: none"> <li>• Drinking water quality in manufacturing</li> <li>• Wastewater quality in treatment plant before discharge</li> <li>• Groundwater and surface water quality at golf club</li> </ul> Only groundwater and surface water quality monitoring at golf club is shared water challenge.
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	From the evidence provided, all areas are in good condition and low likelihood in effect from factory operated. No action required. However, the factory installed 3 monitoring wells outside the factory to monitor groundwater level around the factory.
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The factory provides drinking water, canteen and cabinet of occupational medicine, for health surveillance in case of need for all staffs.
3.6.2	Evidence that the site is not impinging on the human right to safe water and sanitation of communities through their operations, and that traditional access rights for Indigenous and local communities are being respected, and that remedial actions are in place where this is not the case, and that these are effective.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The factory provides drinking water to all workers, toilets for men, women separately.

Clause	Details	Yes	No	Comments/Evidence
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Indirect water use target does not be set in water stewardship plan. However, the factory has project to reuse of drain water after deep well CIP for loading area cleaning purpose. It can reduce indirect water consumption about 400 m <sup>3</sup> /year.
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The factory has monitored water consumption in year 2019 and 2020 of Pocheon Green who is site's supplier and locate in the same catchment area. Then they has created water saving project with under supervised by the site.
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No concern arise around shared water challenges that affected or link to water-related infrastructure. However, the quality of discharge water is monitored by coordination with owner of water-related infrastructure.
3.9	Implement actions to achieve best practice towards AWS outcomes: continually improve towards achieving sectoral best practice having a local/catchment, regional, or national relevance.			
3.9.1	Actions towards achieving best practice, related to water governance, as applicable, shall be implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The factory created events World water day by invite local students to learn how to sustain water, Ocean clean up by encourage factory's staffs to collect the garbage around the beach. Moreover, the factory went to share knowledge to teachers in local school. All information has been disclosed on company's website at link; <a href="http://m.pulmuonewater.com/sub/csr.html#csr02">http://m.pulmuonewater.com/sub/csr.html#csr02</a>
3.9.2	Actions towards achieving best practice, related to targets in terms of water balance shall be implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The water consumption rate has been decreased when compare with water ratio.
3.9.3	Actions towards achieving best practice, related to targets in terms of water quality shall be implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Water quality of incoming water is under Nestle water quality standard. While treated wastewater is complied with regulation limitation and Nestle wastewater requirement. The organization established 5 targets as – Good water governance, Sustainable water balance, Good water quality status, Important water-related area, Safe water/sanitation/hygiene for all.

Clause	Details	Yes	No	Comments/Evidence
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	From the evidence provided, all areas are in good condition with low likelihood. No action required. However, the factory installed 3 monitoring wells outside the factory to monitor groundwater level around the factory.
3.9.5	Actions towards achieving best practice related to targets in terms of WASH shall be implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The best practice for site provision of equitable and adequate WASH services is supplies safe drinking water for all workers.
4	Evaluate (Core)			
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A, This is the 1st year assessment. This pending indicator will be covered again in next year surveillance for continuous improvement.
4.1.2	Value creation resulting from the water stewardship plan shall be evaluated.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A, This is the 1st year assessment. This pending indicator will be covered again in next year surveillance for continuous improvement.
4.1.3	The shared value benefits in the catchment shall be identified and where applicable, quantified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A, This is the 1st year assessment. This pending indicator will be covered again in next year surveillance for continuous improvement.
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	From the Business Continuity Plan of the factory, the Business Continuity Team (BCT) must follow the activation decision process in case of emergency incident.

Clause	Details	Yes	No	Comments/Evidence
				<pre> graph TD     A[Event Information] --&gt; B[Head of Department or Technical Director]     B --&gt; C{Evaluate event decide whether a major or minor}     C -- MAJOR --&gt; D[Informs EDONG Crisis (BC) Team]     C -- MINOR --&gt; E[Implements Corrective Actions]     D --&gt; F[EDONG Crisis (BC) Team analyses the need for launching the internal of external BCP]     F -- internal --&gt; G[BC Team launches the internal BCP]     F -- External --&gt; H[NW KR BCP Team communicates the need and plans the launch of External BCP in collaboration with NW Zone AOA]     H --&gt; I[Nestlé Waters Korea, EDONG BC team NW Zone AOA implement External BCP]                     </pre>
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A, This is the 1st year assessment. This pending indicator will be covered again in next year surveillance for continuous improvement
4.4	Evaluate and update the site's water stewardship plan, incorporating the information obtained from the evaluation process in the context of continual improvement.			
4.4.1	The site's water stewardship plan shall be modified and adapted to incorporate any relevant information and lessons learned from the evaluations in this step and these changes shall be identified.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A, this is the 1st year assessment. This pending indicator will be covered again in next year surveillance for continuous improvement.
5	Communicate and Disclose (core)			
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.			

Clause	Details	Yes	No	Comments/Evidence
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The site responsible team has been disclosed on company's website at link <a href="http://m.pulmuonewater.com/down/Web1_AWS-committee_team.pdf">http://m.pulmuonewater.com/down/Web1_AWS-committee_team.pdf</a>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The water stewardship plan has been disclosed on company's website at link; <a href="http://m.pulmuonewater.com/down/Web2_AWS-Water_Stewardship_Plan.pdf">http://m.pulmuonewater.com/down/Web2_AWS-Water_Stewardship_Plan.pdf</a> <b>No. 521 OBS. The outcome from water stewardship plan will be covered again in next year surveillance for continuous improvement.</b>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A, This is the 1st year assessment. This pending indicator will be covered again in next year surveillance for continuous improvement. <b>No. 531 OBS. The summary for site's water stewardship performance will be covered again in next year surveillance for continuous improvement. It should be communicate to stakeholders.</b>
5.4	Disclose efforts to collectively address shared water challenges, including: associated efforts to address the challenges; engagement with stakeholders; and co-ordination with public-sector agencies.			
5.4.1	The site's shared water-related challenges and efforts made to address these challenges shall be disclosed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Site's shared water-related challenges has been disclosed on company's website at link; <a href="http://m.pulmuonewater.com/down/Web2_AWS-Water_Stewardship_Plan.pdf">http://m.pulmuonewater.com/down/Web2_AWS-Water_Stewardship_Plan.pdf</a>
5.4.2	Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The factory created events World water day by invite local students to learn how to sustain water, Ocean clean up by encourage factory's staffs to collect the garbage around the beach. Moreover, the factory went to share knowledge to teachers in local school. All information has been disclosed on company's website at link; <a href="http://m.pulmuonewater.com/sub/csr.html#csr02">http://m.pulmuonewater.com/sub/csr.html#csr02</a>
5.5	Communicate transparency in water-related compliance: make any site water-related compliance violations			

Clause	Details	Yes	No	Comments/Evidence
	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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	From the interview and document review, no water-related compliance violation has been occurred in year 2019 and 2020.
5.5.2	Necessary corrective actions taken by the site to prevent future occurrences shall be disclosed if applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	As no water-related compliance violation has been occurred, so no corrective actions have been necessary to prevent future occurrences. However, the factory showed the management procedure in case of compliance violation occurred.
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No site water-related violation that may pose significant risk and threat to human or ecosystem health has been occurred in year 2019 and 2020. However, the factory showed the Standard procedure of Communication System of Nestle Water, 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. The site was then provided with time to respond to the findings and supply additional information for SGS to the review and to either accept and close the finding or request further information or action. Once all findings were closed by the Lead Auditor all documentation and audit trail were then reviewed by the Certifier.

### **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.	Type	Ref.	Details	Response by Pulmuone Waters Co.,Ltd., Edong 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.	Type	Ref.	Details	Response by Pulmuone Waters Co.,Ltd., Edong factory	Relevant References

**7.3 OBSERVATIONS**

Five 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.	Type	Ref.	Details	Response by Pulmuone Waters Co.,Ltd., Edong factory	Relevant References
1.6.1	Observation	161OBS	The projects which have been done or rejected should not be as challenges.		
2.3.2	Observation	232OBS	stewardship plan should be address the benefit related to AWS outcomes.		
5.2.1	Observation	521OBS	The outcome from water stewardship plan will be covered again in next year surveillance for continuous improvement.		
5.3.1	Observation	531OBS	The summary for site's water stewardship performance will be covered again in next year surveillance for continuous improvement. It should be communicate to stakeholders.		

**8 SUMMARY**

In reviewing the body of evidence presented by Pulmuone Waters Co.,Ltd., Edong 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.

## **9 OPPORTUNITIES FOR IMPROVEMENT**

The certification audit for Pulmuone Waters Co.,Ltd., Edong 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, 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 Pulmuone Waters Co.,Ltd., Edong factory is awarded AWS Core Certified status with a surveillance audit interval of annual frequency.

**11 REFERENCES**

- REF01 Factory's environmental policy and Leadership commitment on water stewardship signed by Sangki Woo (factory Manager Edong factory) and Jimmy Cho (Business Executive officers), September 2020
- REF02 Nestle Commitment on water stewardship, policy mandatory July 2014
- REF03 Nestle Waters commitments, Key Global Message Internal Document, date July 2017, by Maurizio Patarnello CEO of Nestle Waters
- REF04 Edong factory boundary picture
- REF05 Water balance in the watershed of Eding picture
- REF06 Stakeholder mapping around the factory
- REF07 The Nestle Waters in Society Guidelines
- REF08 Groundwater use license
- REF09 Catchment water balance monitoring
- REF10 Location of drinking water provide within factory
- REF011 Important water-related area and catchment water quality monitoring
- REF012 Water situation monitoring and incident response plan
- REF013 Incident monitoring and response plan
- REF014 Site water consumption balance year 2019-2020
- REF015 Wastewater quality analysis
- REF016 Record of water consumption of Pocheon Green year 2019 and 2020
- REF017 Initiative potencial project with Pocheon Green
- REF018 Chemical stock Monitoring
- REF019 Chemical database
- REF020 Environmental impact assessment from chemical usage
- REF021 Top 5 suppliers who consume water with amount of water consumption
- REF022 Shared water challenges
- REF023 Water related area prioritization
- REF024 Legal registration and evaluation
- REF025 List of water improvement project
- REF026 Water saving target
- REF027 Self assessment tool for evaluating access to water, sanitation and hygiene (WASH) at workplace
- REF028 WASH action list
- REF029 Business continuity plan Nestle Water Edong factory, Effective date 20th/07/2015, updated 10th/12/2019.
- REF030 Piezometer water level monitoring installation location photos
- REF031 Record of municipal water consumption
- REF032 Strategy for maximize water resource volume in Edong factory
- REF033 Water donation
- REF034 Clean ocean activity photos
- REF035 World Water day activity photos
- REF036 ISO 14001:2015 audit report by SGS Korea