Alliance for Water Stewardship

Audit Report - ECOLAB
City of Industry, CA
The AWS International Water Stewardship Standard, Version 1.0, April 8th, 2014

Report Issued on December 18, 2017

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Introduction to the Alliance for Water Stewardship
The AWS Standard ("the Standard") is intended to drive water stewardship, which is defined as the use of water that is socially equitable, environmentally sustainable and economically beneficial, achieved through a stakeholder-inclusive process that involves site- and catchment-based actions. Good water stewards understand their own water use, catchment context and shared concerns in terms of water governance, water balance, water quality and Important Water-Related Areas, and then engage in meaningful individual and collective actions that benefit people and nature. The Standard outlines a series of actions, criteria and indicators for how one should manage water at the site level and how water management should be stewarded beyond the boundaries of a site. In this Standard, the "site" refers to the implementing entity that is responsible for fulfilling the criteria. The site includes the facility and the property over which the implementer that is using or managing water (i.e., withdrawing, consuming, diverting, managing, treating and/or discharging water or effluent into the environment) has control.

Assessment Information:	
Client Name	ECOLAB
AWS Reference Number - City of Industry	AWS-010-INT-SCS-00-01-0001-0013
Client AWS Representative/Group Manager (Role/Name/Contact info)	Lauren Kowalski, Global Supply Chain Sustainability Directo (630.305.1611/laura.kowalski@ecolab.com
Audit Team (Role/Name)	Lead Auditor: Nicole Munoz, SCS Global Services
	Technical Expert: Isabella Polenghi-Gross, Ph.D. AMEC Foster Wheeler
Audit dates (DD-DD Month YYYY)	28-Sep-17
Audit Location (City of Industry, CA)	18383 Railroad Street, City of Industry, CA 91748
Date(s) of previous audit (if applicable)	N/A
Findings from previous year	☐ YES, see tab 9
SCS Certificate number (if applicable)	
Expiry date of previous certificate (if applicable)	

Scope of Audit (check all applicable boxes)	
The AWS International Water Stewardship Standard Version V1.0 April 8th 2014	
Initial audit	☑ YES
Surveillance audit	☐ YES
Re-certification audit	☐ YES
RE-evaluation audit	☐ YES
Single-site audit	☐ YES
Multi-site audit	☑ YES, see tab 3
Group audit	☐ YES, see tab 3
If yes, please description of the group structure and relationships	
Description of Operations	

The **ECOLAB - City of Industry** plant is a manufacturing facility producing industrial cleaning and sanitizing chemical liquids for institutional, food, beverage and textile industries. The geographic scope of the site is limited to the property boundary of the facility. The facility is located in an urban industrial setting. Water for the facility comes from the municipal water districts, which is sourced from Northern California and Colorado River.

Description of the catchment in which the client operates:

The **City of Industry plant** is situated on about 7.8 acress. Facility is within the Rowland Water District (RWD), where all potable water supply is imported from the Metropolitan Water District of Southern California (MWDSC), which water is sourced from the Colorado & the State Water Project. Water is sourced from the Colorado River, Sacramento-San Joaquin Delta. Additional water sources include local ground water and recycled water.

Summary of shared water challenges:

Water scarcity, water infrastructure and risk of earthquakes and flooding damages have been identified as the primary water shared water challenge in the catchment. Water scarcity is attributed to the multi-year California drought. California drought emergency conditions were lifted by the Governor in April 2017, but the water scarcity remains the primary catchment concern.

Site List (multi-site and group operations)

Guidance
Please list all sites/group members below and indicate with an 'x' which were sampled. Multi-site operations: Each site if a multi-site operation shall be audited onsite during initial, surveillance and re-certification audits. If a client requests to add a new site to a multi-site certificate, SCS shall conduct an on-site audit of the site proposed for inclusion before adding that site to the certificate register. Group operations: To ensure that a representative sample (quantity and type) of group members are assessed, sample shall include the Group's central or head office of the group operation; random selection; and judgemental sampling.

Group sampling (justification)
Not Applicable, the certificate covers a single site.

Site Name	Street	Town	State & Zip Code	Contact Person	Email	Phone	Sampled

Audit Attendance - City of Industry, CA

Guidance:
Record in this section the people attending the different parts of the audit. Tick the parts of the audit attended by each person.

Audit Attendence	*Mark attendance with an 'x' as appropriate*				
Role/Title	**Opening meeting**	**Document review**	**Interview**	**Facility Inspection**	**Closing meeting**
Reliability Supervisor	x	x	x	x	x
Plant Manager	x	x			

Additional information on audit attendance
The plant manager was not available for the site audit but as able would be present during the audit. The onsite audit portion of the assessment largely focused on the facility production and processes in place. Document review was conducted primarily with Laura Kowalski remotely at later dates between October - December 2017.

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		CITY OF INDUSTRY	
Criterion #	Standard Provision or Requirement	**Major Minor Observation Conforming**	**Auditor Findings**
STEP 1: COMMIT			
Criterion 1.1	1.1 Establish a leadership commitment on water stewardship: Have the senior-most manager at the site, and if necessary a suitable individual within the corporate head office, sign and publicly disclose a commitment to: • Uphold the AWS water stewardship outcomes (good water governance, sustainable water balance, good water quality status and healthy status of Important Water- Related Areas); • Engage stakeholders in an open and transparent manner; • Strive to comply with legal and regulatory requirements • Respect water-related rights, including ensuring appropriate access to safe water, sanitation and hygiene for all workers in all premises under the		
	1.1.1 Signed and publicly disclosed statement that explicitly covers all requirements (see details in Criterion 1.1)	Minor	Ecolab provided an outdated statementd signed by previous plant manager dated February 9, 2015. Previous plant manager was promoted to new position in early part of 2016.
Criterion1.2	1.2 Develop a water stewardship policy: Develop an internally agreed-upon and communicated and publicly available water stewardship policy that references the concept of water stewardship (as informed by the AWS Standard, outcomes and criteria).		
	1.2.1 Publicly available policy that meets all requirements (see Guidance)	C	During the site audit, the link was not active, thereby not publically available as intended. The link was updated and active following the onsite audit.
STEP 2: GATHER & UNDERSTAND			
Criterion 2.1	2.1 Define the physical scope: Identify the site's operational boundaries, the sources the site draws its water from, the locations where the site returns its discharge to, and the catchment(s) that the site affect(s) and is reliant upon.		
	2.1.1 Documentation or map of the site's boundaries	C	A map of the site was reviewed. The map includes the property boundaries of the facility, storm water discharge points and the waste water discharge line are included. Water comes in through municipal connections and fire department. No other sources.

	2.1.2 Names and location of water sources, including both water service provider (if applicable) and ultimate source water	C	Rowland Water District (RWD) is the water service provider that supplies this facility. 100% of the RWD's potable water supply is imported from the Metropolitan Water District of Southern California (MWDSC), which in turn sources from the Colorado & the State Water Project. Their ultimate sources of water (and average percentages) are: 1) Colorado River (~75%). Water is delivered from Lake Havasu by means of a 242-mile long aqueduct. The water originates as snowmelt from the mountainous regions in Utah, Wyoming, and Colorado. 2) Northern Ca State Project water (~25%). Water originates in the Sacramento – San Joaquin Delta and is delivered by means of a 441-mile long California Aqueduct. The RWD receives a blend of these waters from two treatment plants: Weymouth Filtration Plant in La Verne, supplied by both sources and the Three Valleys Municipal Water District Miramar Plant in Claremont, supplied by the State Water Project. Other sources include: 3) Local groundwater. 4) Recycled water.
	2.1.3 Names and location of effluent discharge points, including both water service provider (if applicable) and ultimate receiving water body	C	LA County is responsible for waste water treatment (San Jose Creek Water Reclamation Plant). After being treated, water is discharged from this plant to a number of reuse sites including GW recharge, irrigation of parks, schools and greenbelts. The remainder of water is discharged to the San Gabriel River, and eventually to the Pacific Ocean.
	2.1.4 Geographical description or map of the catchment(s)	C	A map of the Upper San Gabriel watershed, identified as the catchment for this site, was provided. It is a narrow watershed basin extending from the San Gabriel Mountains above the eastern Los Angeles Basin, across the San Gabriel Valley, to the Pacific Ocean. The San Gabriel River flows 60.6 miles through southern Los Angeles County; its main stem is about 43 miles long, while its farthest tributaries extend almost 18 miles altogether. A map of the surface drinking water sources (for cities served by the MWDSC) is also provided.
Criterion 2.2	2.2 Identify stakeholders, their water-related challenges and the site's sphere of influence: Identify stakeholders, document their water-related challenges and explain how the stakeholders are within the site's sphere of influence.		
	2.2.1 List of stakeholders, descriptions of prior engagements and summaries of their water-related challenges *(TCW in Guidance)*	OBS	Multiple records and documents submitted to verify conformance with the criterion, but a consolidated stakeholder mapping document was submitted on 10/27/17 to clearly identify specific stakeholders, contact information, level of engagement, type of stakeholder, and interest of stakeholder. The level of engagement was found to be primarily led by corporate, with increasing engagement at the facility level more recently. At the facility level, a new Plant Manager was brought onboard in 2016 and the Reliability Manager has been consistently engaged between the transition of Plant Managers. Ecolab has an active engagement with both the California Action Water Collaborative and Rowland Water District. **OBS:** Ensure that the facility level staff leads and maintains a continuous engagement of key stakeholders.

	2.2.2 Description of the site's sphere of influence	C	Ecolab identified its key players with the highest interest and highest influence as their Water/Sewer providers, which has been their focus on engagement activities. Rowland Water is generally impressed by their efforts at the site and corporate level. Generally, the water provider is not accustomed to other customers engaging them at the level which Ecolab has been and overall is not as technologically advanced to provide additional advancements in water stewardship opportunties at the site.
Criterion 2.3	2.3 Gather water-related data for the catchment: Gather credible and temporally relevant data on the site's catchment's x Water governance, including catchment plan(s), water-related public policies, major publicly led initiatives under way, relevant goals, and all water-related legal, regulatory requirements; x Water balance for all sources while considering future supply and demand trends; x Water quality for all sources while considering future physical, chemical and biological quality trends; x Important Water-Related Areas, including their identification and current status, while considering future trends; x Infrastructure's current status and exposure to extreme events while considering expected future needs. *(TCW in Guidance)*		
	2.3.1 List of relevant aspects of catchment plan(s), significant publicly led initiatives and/or relevant water-related public policy goals for the site *(TCW in Guidance)*	OBS	A list of regional objectives and Planning Targets that apply to the catchment was provided. These include objectives to optimize local water resources to reduce the reliance on imported water; to improve water quality; to enhance habitat; to enhance open space and recreation; to improve flood management; and to address climate change. A list of relevant water-related goals and opportunities for the site has been included in the water stewardship plan. **OBS:** Goals with SMART targests, specifically integrating Measurable to ensure ease of assessing if goals were met or not.
	2.3.2 List, and description of relevance, of all applicable water-related legal and regulatory requirements, including legally defined and customary water rights and water-use rights	OBS	The 2013 Upper San Gabriel River and Rio Hondo Sub regional Plan prepared by RMC contains references to relevant water-related laws and regulations for the catchment. OBS: The link provided for water rights is not working. According to Ecolab, the only water related legal compliance applicable to this site is their waste water permit, which was provided and reviewed. During the time of the drought there was a mandatory state level water reduction for each district, however, as confirmed in communication between Ecolab and Rowland water district such reduction did not apply to industry, only to domestic users.
	2.3.3 Catchment water balance by temporally relevant time unit and commentary on future supply and demand trends *(TCW in Guidance)*	OBS	References/links to source of water balance documents are provided. The 2013 Upper San Gabriel River and Rio Hondo Sub regional Plan prepared by RMC contains demand and supply projections for direct use in this sub region on a quinquennial basis. 2010 annual values are provided for the water balance of that year. OBS: An effort should be made to gather and summarize monthly data in tables or hydrographs. If such data is not available, the site should work with public sector agencies to develop it before the next renewal assessment in three (3) years. A general commentary upon current versus future changes in supply and demand is included.

	2.3.4 Appropriate and credibly measured data to represent the physical, chemical and biological status of the site's water source(s) by temporally relevant time unit, and commentary on any nticipated future changes in water quality	OBS	2013 water quality data of the water sources (Weymouth and Miramar) are provided and compared to primary and secondary standards. Existing water quality programs in the catchment are listed. They may contain more specific data to represent the physical, chemical and biological status of the site's water sources or water bodies in the catchment. A map with surface drinking water sources (for cities served by the MWDSC) characterized by level of protection is also provided. OBS: Monthly representative water quality data (or the most relevant frequency they are available) for the timeframe relevant to the audit should be gathered and provided. Commentary on water quality sources indicates that no future changes are anticipated.
	2.3.5 Documentation identifying Important Water-Related Areas, including a description of their current status and commentary on future trends *(TCW in Guidance)*	C	Significant Ecological Areas and Environmentally Sensitive Habitat Areas are listed and described in the 2013 Upper San Gabriel River and Rio Hondo Sub regional Plan prepared by RMC. Documentation identifying IWRAs, including a description of their current status and commentary on future trends are listed as links. Additionally some of these IWRAs are described in more details.
	2.3.6 Existing, publicly available reports or plans that assess water-related infrastructure, preferably with content exploring current and projected sufficiency to meet the needs of water uses in the catchment, and exposure to extreme events *(TCW in Guidance)*	C	Water related infrastructures existing within the catchment are listed and described in documents and/or links provided, including for water supply, recycled water, storage, distribution, flood management, and water conservation. Some measures to be used in the event of emergency or disaster events are mentioned.
Criterion 2.4	2.4 Gather water-related data for the site: Gather credible and temporally relevant data on the site's: x Governance (including water stewardship and incident response plan); x Water balance (volumetric balance of water inputs and outputs); x Water quality (physical, chemical and biological quality of influent and effluent) and possible sources of water pollution; x Important Water-Related Areas (identification and status); x Water-related costs (including capital investment expenditures, water procurement, water treatment, outsourced water-related services, water-related R&D and water-related energy costs), revenues and shared value creation (including economic value distribution, environmental value and social value).		
	2.4.1 Copies of existing water stewardship and incident response plans *(TCW in Guidance)*	C	The current water stewardship plan and emergency response plans (dated August 2014 and June 2016) prepared for the site were reviewed.
	2.4.2 Site water balance (in Mm3 or m3) by temporally relevant time unit and water-use intensity metric (Mm3 or m3 per unit of production or service) *(TCW in Guidance)*	C	They have monthly data of water purchased and of water that goes into the product. They update these data once a year. Losses include 1) operational process, 26%; 2) RO (5%), or domestic & system (3% each). The efficiency is defined as the number of gallons of water used per metric tons of product produced. Their goal for 2017 is 7.2.

	2.4.3 Appropriate and credibly measured data to represent the physical, chemical and biological status of the site's direct and outsourced water effluent by temporally relevant time unit, and possible pollution sources (if noted) *(TCW in Guidance)*	C	Weck Laboratories, Inc. is a third party company who comes and collects sample from the RO (related to the discharge). Samples are analyzed for COD, BOD, TSS and other parameters (weekly) and for heavy metals (quarterly). A copy of the Industrial wastewater self monitoring report for the period of 07/01/2015 - 12/31/15 was provided and reviewed. Test results and permit limits were included. Samples are also taken at the discharge point: Weck Labs collects samples weekly from the discharge pipe sample port located next to the cooling towers. County also performs random sampling.
	2.4.4 Inventory of all material water-related chemicals used or stored on-site that are possible causes of water pollution	C	They have an Ecolab main frame Inventory of all the products on site and it also tells them where they are. Purchasing dept. and maintenance dept. keeps it up to date every day. A copy of the list of the Chemical Raw materials was provided and reviewed.
	2.4.5 Documentation identifying existing, or historic, on-site Important Water-Related Areas, including a description of their status	C	No Important Water-Related Areas are identified at the site.
	2.4.6 List of annual water-related costs, revenues and description/quantification of social, environmental or economic value generated by the site to the catchment	OBS	2015 actual incurred annual costs for water, waste water, and payroll are provided. Calculated annual revenue and gross profit were also provided. The social value has been described in terms of a contribution, support and widespread reach to other organizations in California, such as CWAC, that connect among themselves for restoration projects in the region. However the social value is not quantified. OBS: A true cost benefit analysis of the site to the catchment was not completed.
Criterion 2.5	2.5 Improve the site's understanding of its indirect water use: Identify and continually improve the site's understanding of: x Its primary inputs, the water use embedded in the production of those primary inputs and, where their origin can be identified, the status of the waters at the origin of the inputs; x Water used in outsourced water-related services within the catchment. *(TCW in Guidance)*		
	2.5.1 List of primary inputs with their associated embedded annual (or better) water use and (where known) their country/region/or catchment of origin with its level of water stress	C	Ecolab identified the top 5-10 raw materials used at the COI facility based on volume and cost and for each one of the correspondent vendor they performed a WWF analysis to calculate the water risk. Most of the top 6 raw materials they purchase are presumably produced in areas with low to average water risk scores. The largest risk lies with the sodium hypochlorite produced in California. Based on further research Ecolab reports that even if JCI, its vendor, does not publish a sustainability report, any sort of sustainability metrics, or have information on their sustainability program on their website, they do appear to be aware of relevant water scarcity issues. Ecolab also provided a summary of JCI responses to a questionnaire that show awareness of water stewardship goals and targets.
	2.5.2 List of outsourced services that consume water or affect water quality and both (A) estimated annual (or better) water withdrawals listed by outsourced services (Mm3 or m3) and (B) appropriate and credibly measured data to represent the physical, chemical and biological status of the outsourced annual (or better) water effluent	C	Ecolab identified the top outsourced water users and estimated the total amount of water consumed per month. They then performed a water risk analysis to come up with a score. Ecolab also requested and obtained information from some of the users on the status of the outsourced annual water effluents and other reports like Spill Prevention & Control Plan, Storm water Pollution Prevention Plan.

Criterion 2.6	2.6 Understand shared water-related challenges in the catchment: Based upon the status of the catchment and stakeholder input, identify and prioritize the shared water-related challenges that affect the site and that affect the social, environmental and/or economic status of the catchment(s). In considering the challenges, the drivers of future trends and how these issues are currently being addressed by public-sector agencies must all be noted.		
	2.6.1 Prioritized and justified list of shared water challenges that also considers drivers and notes related to public-sector agency efforts *(TCW in Guidance)*	OBS	Prioritization is a result based on impact multiplied by probability. The prioritized shared water challenges identifies water scarcity and vulnerability to infrastructure due to earquake/flood events. OBS: The information would be more impactful listing the specific stakeholders impacted by the shared water challenge and what the relevance is for the site or the stakeholder.
Criterion 2.7	2.7 Understand and prioritize the site's water risks and opportunities: Based upon the status of the site, existing risk management plans and/or the issues identified in 2.6, assess and prioritize the water risks and opportunities affecting the site. *(TCW in Guidance)*		
	2.7.1 Prioritized list of water risks facing the site, noting severity of impact and likelihood within a given time frame	C	Prioritization is a result based on impact multiplied by probability. The prioritized water risk at the site level were identified as water scarcity and vulnerability to infrastructure due to earquake/flood events.
	2.7.2 Prioritized list of water-related opportunities for the site	OBS	Priorities for opportunities were identified as reducing the cooling/heating of water and washout water. Detailed plan on water reduction target goals for inititatives such as restroom upgrades, RO system optimizations, wash-out systems, and product recovery water savings related to economical savings and production efficiencies gained. Expanding upon the list of opportunities to include more specific details on how it relates to the catchment. There are assumed connections with decreased water usage and reduced impact on the environment in the water sensitive region of California.
	2.7.3 Estimate of potential savings/value creation	OBS	Estimated potential savings created for priority opportunities. OBS: The table for "Estimated potential savings/value creation should include the units specified for Projected Water Saved. Additionally, indicate the timeline for completion of the identified opportunities.
STEP 3: PLAN			
Criterion 3.1	3.1 Develop a system that promotes and evaluates water-related legal compliance: Develop, or refer to, a system that promotes and periodically evaluates compliance with the legal and regulatory requirements identified in Criterion 2.3.		
	3.1.1 Documented description of system, including the processes to evaluate compliance and the names of those responsible and accountable for legal compliance *(TCW in Guidance)*	OBS	RACI compliance worksheet indicates the type of compliance required at the site and the responsible, accountable, consulting, informed or backup employee. Compliance documents maintained by the Safety, Health, and Environmental Manager. OBS: A document that summarizes the requirments and how Ecolab meets the regulation would ensure continued conformance to the requirements in the case of employee transitions.

Criterion 3.2	3.2 Create a site water stewardship strategy and plan: Develop an internally available water stewardship strategy and plan for the site that addresses its shared water challenges, risks and opportunities identified in Step 2 and that contains the following components (see Guidance for plan template): x a strategy that considers the shared water challenges within the catchment, water risks for the site (noting in particular where these are connected to existing public-sector agency catchment goals) and the site's general response (from Criteria 2.6 and 2.7) x a plan that contains: o A list of targets (based upon Criterion 2.7) to be achieved, including how these will be measured and monitored. Note: where identified as a shared water challenge, these targets must be continually improving for the four water stewardship outcomes until such time as best practice is achieved; o A list of annual actions that links to the list of targets; o A budget for the proposed actions with cost/benefit financial information (based, in part, upon financial data from 2.7); o An associated list indicating who will undertake the actions (i.e., who is responsible for carrying out the work) and who will ensure that the work is completed (i.e., who is accountable for achieving the target), including actions of other actors in the catchment; o A brief explanation that speaks to how the proposed actions will affect: (A) water-risk mitigation, (B) water stewardship outcomes and (C) shared water challenges.		
	3.2.1 Available water stewardship strategy	C	A water stewardship strategy was created as part of the AWS process. This document is a higher level document briefly indicating the shared water challenges, and water risks to the site and agency initiatives at the state and regional levels.
	3.2.2 Available plan that meets all component requirements and addresses site risks, opportunities and stakeholder shared water challenges *(TCW in Guidance)*	C	An updated stewardship plan was submitted on 11/21. The plan includes goals, targets, objectives and linked to shared water challenges. The plan was improved with a budget and muti-year targets. OBS: The Water Stewardship Plan could be improved with objectives that clearly indicate a path towards best practice and integrating SMART targets. Timing and budget need further refinement and review. Information is included but many initiatives have been completed but it is unclear how best practice will be achieved within the 4 water stewardship outcome areas.
Criterion 3.3	3.3 Demonstrate responsiveness and resilience to water-related risks into the site's incident response plan: Add to or modify the site's incident response plan to be both responsive and resilient to the water-related risks facing the site.		
	3.3.1 A description of the site's efforts to be responsive and resilient to water-related issues and/or risks in an appropriate plan *(TCW in Guidance)*	Minor	The site submitted an emergency response plan with a drought contingency plan but did not completely address the responsiveness of the and resilience aspect of the criteria.

Criterion 3.4	3.4 Notify the relevant (catchment) authority of the site's water stewardship plans: Contact the appropriate catchment authority/agency (if any) and inform them of the site's plans to contribute to the water stewardship objectives of their catchment plan as identified in Criterion 2.3. *(TCW in Guidance)*		
	3.4.1 Documented evidence of communicating the site's plan to the relevant catchment authority/agency	C	Ecolab communicated its plan to the Rowland Water District in December 2016. During the stakeholder interview with Rowland Water District, RWD described Ecolab as its most proactive commercial customer. Ecolab was the only business partner to attend workshops on the mandatory reduction on water usage. Ecolab discussed utilizing recycled water with RWD but the water quality was high in TDS that it could not be used for production purposes. RWD noted there are no regular meetings with Ecolab however engage as needed.
STEP 4: IMPLEMENT			
Criterion 4.1	4.1 Comply with water-related legal and regulatory requirements and respect water rights: Meet all applicable legal and regulatory requirements related to water balance, water management and Important Water-Related Areas as well as water-related rights. As noted in Criteria 1.1 and 3.2, where, through its water use, the site is contributing to an inability to meet the human right to safe drinking water and sanitation, the site must also continually work with relevant public sector agencies until this basic human right to water and sanitation is fulfilled.		
	4.1.1 Documentation demonstrating compliance *(TCW in Guidance)*	C	Records of permits and acceptable water discharge testing results provided as a record of compliance.
	4.1.2 (Catchments with stakeholders who have an unmet human right to safe drinking water and sanitation) Documentation of efforts to work with relevant public sector agencies to fulfil human right to safe drinking water and sanitation.	C	During the stakeholder interview, the RWD indicated DAC areas exist within Rowland, but access to safe drinking water is met. In the COI area, groundwater is not potable due to high TDS and shallow aquifers. RWD imports 90% of its water from the Metropolitan Water District. RWD prepurchasrs non-treated (tier 1 untreated) water and allows it to drain in the San Gabriel aquifer. This aquifer provides 1 year supply of dirinkable water as an additional resource.
Criterion 4.2	4.2 Maintain or improve site water balance: Meet the site's water balance targets. As noted in Criterion 3.2., where water scarcity is a shared water challenge, the site must also continually decrease its water withdrawals until best practices are met and work with relevant public sector agencies to address the imbalance and shared water challenge. Note: if a site wishes to increase its water use in a water scarce context, the site must cause no overall increase in water scarcity in the catchment and depletion of the site's water source(s) and encourage relevant public sector agencies to address the unlawful water use contributing to the imbalance in the catchment. *(TCW in Guidance)*		

	4.2.1 Measurement-based evidence showing that targets have been met	C	One of the site's Team H20 Reduction Team targets was to reduce potable water use by 20% to comply with the Rowland water District Water Reduction of 20%. The Water Stewardship Plan dated 11/21/17 set to achieve a 7% reduction in water intensity (normalized to production) by December 2016. A route for water consumption reduction was laid out and provided. Critical water uses were identified. Data provided by Ecolab as part of the KPI tracking process show that there has been a reduction in water use greater than 7% since 2014. The Water Stewardship Plan dated 11/21/17 noted the goal was completed by December 2016. Analyses, reports, and KPIs provided show that volume of incoming water increased while volume of effluent decreased in the period between 2013 and 2015, showing an improvement in the water balance.
	4.2.2 (Water scarce catchments only) Evidence of continual decrease or best practice	OBS	ECOLAB is in a water scarce catchment. Ecolab demonstrates best practices in reducing water and identifying opportunities to improve the production process. The site as a history of reducing waste water and potable water since 2014. The site does plan to increase their water use in the future. OBS: The site's ability to continuously demonstrate meeting their goal of 7% or 20% potable water reduction will be reviewed during surveillance. The site will need to ensure there is no net increase in water scarcity in the catchment by showing continued improvement in on-site water use efficiency, reduction of water losses, increase in on-site waster water recycling.
	4.2.3 (Sites wishing to increase withdrawals in water scarce catchments only) Evidence of no net increase in water scarcity	OBS	See 4.2.2 response above.
Criterion 4.3	4.3 Maintain or improve site water quality: Meet the site's water quality targets. As noted in Criterion 3.2., where water quality stress is a shared water challenge, the site must also continually improve its effluent for the parameters of concern until best practices are met and work with relevant public sector agencies to address the imbalance and shared water challenge. Note: if a site wishes to increase its water use in a water stressed context, the site must cause no overall increase in the degradation of water quality in the catchment and degradation of the site's water source(s) and encourage relevant public sector agencies to address the unlawful water use contributing to the degradation in the catchment.		
	4.3.1 Measurement-based evidence showing that targets have been met	C	The site's target is to maintain the current water quality levels to meet the discharge permit. The 2017 SWPPP Annual Report for storm water was reviewed which besides compliance with storm water requirements, also certified that none of the pollutants identified in the impaired watershed is present in the facility's industrial storm water discharge. A copy of the Industrial wastewater self monitoring report for the period of 07/01/2015 - 12/31/15 was provided and reviewed. Test results were within specified permit limits included.
	4.3.2 (Water quality-stressed catchments only) Evidence of continual improvement or best practice	C	Site does not have a shared water challenge within this context.
	4.3.3 (Sites wishing to increase effluent levels of water quality parameters of concern in water quality-stressed catchments only) Evidence of no net degradation in water quality in the catchment	C	Site did not increase or degrade effluent levels of water quality parameters. According to the Rowland website, Rowland Water District provides its customers with drinking water that is in compliance with all health and safety standards established by the United States Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH).

Criterion 4.4	4.4 Maintain or improve the status of the site's Important Water-Related Areas: Meet the site's targets for Important Water-Related Areas at the site. As noted in Criterion 3.2., where Important Water-Related Area degradation is a shared water challenge, the site must also continually improve its Important Water-Related efforts until best practices are met, and the site must not knowingly cause any further degradation of such areas on site. *(TCW in Guidance)*		
	4.4.1 Documented evidence showing that targets have been met	C	No IWRAs at the site. Catchment IWRAs have been identified together with their status, and future trends. IWRAs have been discussed with stakeholders via Ecolab California Water Action Collaborative (CWAC) connections. There are a number of relevant projects in California that work to protect and restore IWRAs and they have discussed their status and opportunities to get involved in CWAC monthly meetings.
	4.4.2 (Degraded Important Water-Related Area catchments only) Evidence of continual improvement or best practice	C	IWRAs are not identified as a shared water challenge in the catchment.
Criterion 4.5	4.5 Participate positively in catchment governance: Continually coordinate and cooperate with any relevant catchment management authorities' efforts. As noted in Criterion 3.2, where water governance is a shared water challenge, the site must also continually improve its efforts until best practices are met *(TCW in Guidance)*		
	4.5.1 Documented evidence of the site's ongoing efforts to contribute to good catchment governance	C	Stakeholder interviews with the RWD and CWAC included discussion on how Ecolab, from the corporate level, is working to ensure good water stewardship within the expansive Souther California water catchment.
	4.5.2 (Weak water governance catchments only) Evidence of continual improvement or best practice	C	Water governance is not a shared water challenge within this context.
Criterion 4.6	4.6 Maintain or improve indirect water use within the catchment: Contact the site's primary product suppliers and water-related service providers located in the catchment and request that they take actions to help contribute to the desired water stewardship outcomes.		
	4.6.1 List of suppliers and service providers, along with the actions they have taken as a result of the site's engagement relating to indirect water use	C	Ecolab identified the top 5-10 raw materials used at the COI facility based on volume and cost and for each one of the correspondent vendor they performed a WWF analysis to calculate the water risk. Most of the top 6 raw materials they purchase are presumably produced in areas with low to average water risk scores. The largest risk lies with the sodium hypochlorite produced in California. Based on further research Ecolab reports that even if its sodium hypchlorite vendor, whom does not publish a sustainability report, any sort of sustainability metrics, or have information on their sustainability program on their website, they do appear to be aware of relevant water scarcity issues. Ecolab also provided a summary of this vendor's responses to a questionnaire that show awareness of water stewardship goals and targets.
Criterion 4.7	4.7 Provide access to safe drinking water, adequate sanitation and hygiene awareness (WASH) for workers on-site: Ensure appropriate access to safe water, effective sanitation and protective hygiene for all workers in all premises under the site's control.		

	4.7.1 List of actions taken to provide workers access to safe water, effective sanitation and protective hygiene (WASH) on-site *(TCW in Guidance)*	C	Ecolab COI completed a water safety audit on 7/12/17 performed by Nalco Water service team. A program has been implemented to continue to test all water systems for legionella. Invoice and description of services provided by contracted cleaning service as of 2016 are available.
Criterion 4.8	4.8 Notify the owners of shared water-related infrastructure of any concerns: Contact the owners of shared water-related infrastructure and actively highlight any concerns the site may have in light of its risks and shared water challenges.		
	4.8.1 List of individuals contacted and key messages relayed *(TCW in Guidance)*	C	Ecolab contacted the California Department of Water Resources and Rowland Water District and records of the communication and key messages conveyed are provided.
STEP 5: EVALUATE			
Criterion 5.1	5.1 Evaluate the site's water stewardship performance, risks and benefits in the catchment context: Periodically review the site's performance in light of its actions and targets from its water stewardship plan to evaluate: x General performance in terms of the water stewardship outcomes (considering context and water risks), positive contributions to the catchment, and water-related costs and benefits to the site. *(TCW in Guidance)*		
	5.1.1 Post-implementation data and narrative discussion of performance and context (including water risk)	OBS	While opportunities to evaluate post-implementation performance is still limited, Ecolab completed targets over the time since they started the initiative of seeking AWS certification in 2014. COI's Team H20 completed a review of water reduction efforts but not clearly related to the larger site's water stewardship plans. OBS: Structure the review on an annual basis so it is clear that it was conducted and was comprehensive to assess if the implementation had strong/weak performance, specifically discussiing if the water stewardship efforts are effective, mitigating water risk, decreasing shared water challenge or creating value.
	5.1.2 Total amount of water-related costs, cost savings and value creation for the site based upon the actions outlined in 3.2 (drawn from data gathered in 2.4.6)	C	As the AWS standard is still in its initial implementation phase, this will be reviewed during future assessments.
	5.1.3 Updated data for indicator 2.4.7 on catchment shared value creation based upon the actions outlined in 3.2	C	As the AWS standard is still in its initial implementation phase, this will be reviewed during future assessments.
Criterion 5.2	5.2 Evaluate water-related emergency incidents and extreme events: Evaluate impacts of water-related emergency incidents (including extreme events), if any occurred, and determine effectiveness of corrective and preventive measures. Factor lessons learned into updated plan.		

	5.2.1 Documented evidence (e.g., annual review and proposed measures)	C	The following documents prepared for the CoI facility were reviewed: Emergency Response Plan last revised in August 2014; and Emergency Response and Contingency Plan last revised in June 2016. The 2017 SWPPP Annual Report for storm water was reviewed which besides compliance with storm water requirements, also certified that none of the pollutants identified in the impaired watershed is present in the facility's industrial storm water discharge. All containers of hazardous material and hazardous waste are stored in a way that provides appropriate secondary containment. The appropriate safety equipment (ex. fire extinguisher, eye wash, etc.) is available in the immediate vicinity, in good condition and properly maintained/inspected. They have random inspections by the County. The CUPA report, dated 09/15/17 lists three minor notices of violations, two of which (Failure to separate incompatible wastes from the same container & Failure to properly label hazardous waste accumulation containers) were corrected on site and one (Failure to submit recyclable materials report every two years) needed to be complied by 10/15/17 (compliant confirmed as per email communication with Seth Lewis on 11/14/17. They also have monthly check-in meetings to discuss the priorities of the site, identify any issues with the equipment, and other metrics, and management issues. An electronic copy of the meeting records was provided by Seth Lewis in an email date 11/14/17. Ecolab has also provided written review of an emergency incident (broken underground water line occurred on Jan 11 2017), describing the response measures taken with an associated total cost.
Criterion 5.3	5.3 Consult stakeholders on water-related performance: Request input from the site's stakeholders on the site's water stewardship performance and factor the feedback/lessons learned into the updated plan.		
	5.3.1 Commentary by the identified stakeholders *(TCW in Guidance)*	OBS	Stakeholders comments are saved in the form of emails and stakeholder mapping notes. OBS: Ensure notes are maintained on stakeholder engagement and identify the dates in which engagment occurred. Ensure that comments are related to the sites water -related performance. Only RWD was able to sufficiently comment on Ecolab's performance. CWAC and General Mills were able to comment on Ecolab's efforts but not actual implemented performance given their role and relaltionship with Ecolab.
Criterion 5.4	5.4 Update water stewardship and incident response plans: Incorporate the information obtained into the next iteration of the site's water stewardship plan. Note: updating does not apply for initial round of Standard implementation.		
	5.4.1 Modifications to water stewardship and incident response plans incorporating relevant information *(TCW in Guidance)*	C	The water stewardship plan document was used as a working document throughout this process and has been updated multiple times to provide more clarifying information. The site's incident response plan has been reviewed and deemed sufficient.During future assessments this will continue to be checked.
STEP 6: COMMUNICATE & DISCLOSE			
Criterion 6.1	6.1 Disclose water-related internal governance: Publicly disclose the general governance structure of the site's management, including the names of those accountable for legal compliance with water-related laws and regulations.		
	6.1.1 Disclosed and publicly available summary of governance at the site, including those accountable for compliance with water-related laws and regulations *(TCW in Guidance)*	C	An organizational chart listing key personnel is available upon request, but site governance is listed in the COI case study available on the Ecolab website.

	6.2 Disclose annual site water stewardship performance: Disclose the relevant information about the site's annual water stewardship performance, including results against the site's targets. *(TCW in Guidance)*		
	6.2.1 Disclosed summary of site's water stewardship results	OBS	The summary of the sites water stewardship results are discussed in the case study. The document is a brief summary of the water stewardship plan. It is publically available for review on the Ecolab website. Data is from 2013-2017. OBS: Site could include more detail on the challenges and opportunities that have occurred and resulted in significant impacts.
	6.3 Disclose efforts to address shared water challenges: Publicly disclose the site's shared water challenges and report on the site's efforts to help address these challenges, including all efforts to engage stakeholders and coordinate and support public-sector agencies. *(TCW in Guidance)*		
	6.3.1 Disclosed and publicly available description of shared challenges and summary of actions taken to engage stakeholders (including public-sector agencies)	OBS	The case study stated listed several water challenges from water scarcity, failing infrastructure,loss of wetlands, natural disasters. The list of engagement is very brief and general. Further elaboration was requested on the level of engagement for each stakeholder and how it addressed the shared water challenges.
	6.4 Drive 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. Note: any site-based violation that can pose an immediate material threat to human or ecosystem health from use of or exposure to site-related water must be reported immediately to relevant public agencies.		
	6.4.1 Available list of water-related compliance violations with corresponding corrective actions	C	EPA Report is based on hazardous materials/waste storage (RCRA); Toxic releases (TSCA); and Clean Air Act. Water compliance report included water related permits. A list of the water-related compliance violations with corresponding corrective actions is provided through a link to the EPA online enforcement and Compliance History.
	6.5 Increase awareness of water issues within the site: Strive to raise the understanding of the importance of water issues at the site through active communications.		
	6.5.1 Record of awareness efforts (dates and communication) and, if possible, level of awareness *(TCW in Guidance)*	OBS	Plant engineer and plant manager attended AWS training in San Francisco, CA in October 2014. The plant created "Team H2O" in an effort to increase water stewardship at the site level. This is an effort toward a sustainable water balanced plant. Outreach activities included beach cleanup which directly affects the quality of the waterways in the watershed. Efforts were steps toward achieving good water quality status and healthy water status. Ecolab is a member and financial contributor to CWAC (California Water Action Collaborative). OBS: To expand upon plant knowledge of the broader efforts of the site, and in an effort towards good water governance, circulate the case study to plant staff and consider presenting in staff meetings.

Guidance
Disclaimer: auditing is based on a sampling process of the available information and therefore nonconformities may exist which have not been identified. Observations are defined as an area of concern regarding a process, document, or activity where there is opportunity for improvement. Major non-conformity is raised if the issue represents a systematic problem of substantial consequence; the issue is a known and recurring problem that the client has failed to resolve; the issue fundamentally undermines the intent of the AWS Standard; or the nature of the problem may jeopardize the credibility of AWS. **Applicants** must close* major NCR within Ninety (90) days of the NCR issue date. Failure to meet this deadline will require another conformity assessment. **Certificate Holders** must close* major NCR within Thirty (30) days of the NCR issue date. If the Major NCR is not addressed within 30 days SCS shall suspend or withdraw the certificate and reinstatement shall not occur before another conformity assessment has been successfully completed. Minor non-conformity: Where the audit team has evaluated an audit finding and determines that the seriousness of the issue does not meet the any of the criteria for Major non-compliance the audit team shall grade the finding as a minor non-conformity. **Applicants** must submit an acceptable corrective action plan^ to address all minor non-conformities to be recommended for certification. **Certificate Holders** must close minor NCR within Ninety (90) days of the NCR issue date. SCS may agree to an alternative time frame with the client as long as this can be justified and is documented in the NCR report. If corrective actions are inadequate to resolve a minor non-conformity by the time of the next scheduled audit, SCS shall upgrade the audit finding to a major non- conformity. If an unusually large number of minor non-conformities are detected during the course of a single audit, the audit team may at their discretion raise a major non-conformity to reflect a systematic failure of the client's management system to deliver conformity with the AWS Standard. ** closed = actioned by the client, corrections & corrective actions verified and closed by the auditor.* *^The corrective action plan shall include an analysis of the root cause of the minor non-conformity; the specific corrective action(s) to address the minor non-conformity; and an appropriate time frame to implement corrective action(s).*

MAJOR #	Criteria / Indicator #	Major – Detail on Non Conformance	Due Date (90 calendar Days)	Root Cause Analysis and Corrective Action Taken

MINOR #	Section #	Minor – Detail on Non Conformance	Due Date	Root Cause Analysis and Corrective Action Taken
ECO-2017-MINOR-001	1.1.1	Ecolab provided an outdated statementd signed by previous plant manager dated February 9, 2015. Previous plant manager was promoted to new position in early part of 2016.	December 30, 2017	Closed 12/11/17. Root Cause: ECOLAB had been working on collecting documents and creating procedures and plans for approximately two years in preparation of the AWS certification audit and the update of the statement was overlooked durinig the transitiong bewtween plant managers. Corrective Action: An updated commitment letter provided and signed by Steve Olson, COI Plant Manager.
ECO-2017-MINOR-002	3.3.1	The site submitted an emergency response plan with a drought contingency plan but did not completely address the responsiveness of the and resilience aspect of the criteria.	December 30, 2017	Closed 11/28/17. Root Cause: The inclusion of resilience and responsiveness in the context of the AWS standard was a new concept and it was not clear how to integrate this aspect of the criteria into current response plans that were considered compliant. Corrective Action: ECOLAB updated their Global Operations Disaster Recovery Plan. It was specifically updated to address the responsiveness and resilience aspects of water related issues and/or risks, which includes utilizing third-party sites for continued production. The existing drought contingency plan was integrated into the emergency response plan.

OBS#	Section #	Observation– Detail on Opportunity for Improvement	Due Date	Corrective Action Taken / Response
ECO-2017-OBS-001	2.2.1	Multiple records and documents submitted to verify conformance with the criterion, but a consolidated stakeholder mapping document was submitted on 10/27/17 to clearly identify specific stakeholders, contact information, level of engagement, type of stakeholder, and interest of stakeholder. The level of engagement was found to be primarily led by corporate, with increasing engagement at the facility level more recently. At the facility level, a new Plant Manager was brought onboard in 2016 and the Reliability Manager has been consistently engaged between the transition of Plant Managers. Ecolab has an active engagement with both the California Action Water Collaborative and Rowland Water District. OBS: Ensure that the facility level staff leads and maintains a continuous engagement of key stakeholders.	N/A	ECOLAB understood the need for more facility level engagment with stakeholders and will look to resolve this immediately.
ECO-2017-OBS-002	2.3.1	A list of regional objectives and Planning Targets that apply to the catchment was provided. These include objectives to optimize local water resources to reduce the reliance on imported water; to improve water quality; to enhance habitat; to enhance open space and recreation; to improve flood management; and to address climate change. A list of relevant water-related goals and opportunities for the site has been included in the water stewardship plan. OBS: Goals with SMART targests, specifically integrating Measurable to ensure ease of assessing if goals were met or not.	N/A	ECOLAB understood the need for more measurable goals. Indentifying measureable goals is being evaluated.
ECO-2017-OBS-003	2.7.2	Priorities for opportunities were identified as reducing the cooling/heating of water and washout water. Detailed plan on water reduction target goals for inititatives such as restroom upgrades, RO system optimizations, wash-out systems, and product recovery water savings related to economical savings and production efficiencies gained. Expanding upon the list of opportunities to include more specific details on how it relates to the catchment. There are assumed connections with decreased water usage and reduced impact on the environment in the water sensitive region of California.	N/A	ECOLAB understood the observation and will take it under consideration.

ECO-2017-OBS-004	2.7.3	Estimated potential savings created for priority opportunities. OBS: The table for "Estimated potential savings/value creation should include the units specified for Projected Water Saved. Additionally, indicate the timeline for completion of the identified opportunities.	N/A	ECOLAB understood the observation and will take it under consideration.
ECO-2017-OBS-005	4.2.2	ECOLAB is in a water scarce catchment. Ecolab demonstrates best practices in reducing water and identifying opportunities to improve the production process. The site as a history of reducing waste water and potable water since 2014. The site does plan to increase their water use in the future. OBS: The site's ability to continuously demonstrate meeting their goal of 7% or 20% potable water reduction will be reviewed during surveillance. The site will need to ensure there is no net increase in water scarcity in the catchment by showing continued improvement in on-site water use efficiency, reduction of water losses, increase in on-site waster water recycling.	N/A	ECOLAB understood that this will be reviewed for surveillance and is aware of the issue of increasing water use while not having a net increase in water scarcity.
	4.2.3	See 4.2.2 detail above.		
ECO-2017-OBS-006	5.1.1	While opportunities to evaluate post-implementation performance is still limited, Ecolab completed targets over the time since they started the initiative of seeking AWS certification in 2014. COI's Team H20 completed a review of water reduction efforts but not clearly related to the larger site's water stewardship plans. OBS: Structure the review on an annual basis so it is clear that it was conducted and was comprehensive to assess if the implementation had strong/weak performance, specifically discussiing if the water stewardship efforts are effective, mitigating water risk, decreasing shared water challenge or creating value.	N/A	ECOLAB noted the need to review at least annually and clearly be able to evaluate performance.

ECO-2017-OBS-007	5.3.1	Stakeholders comments are saved in the form of emails and stakeholder mapping notes. OBS: Ensure notes are maintained on stakeholder engagement and identify the dates in which engagment occurred. Ensure that comments are related to the sites water -related performance. Only RWD was able to sufficiently comment on Ecolab's performance. CWAC and General Mills were able to comment on Ecolab's efforts but not actual implemented performance given their role and relaltionship with Ecolab.	N/A	ECOLAB noted the observation and will be considered to maintain the stakeholder mapping.
ECO-2017-OBS-008	6.2.1	The summary of the sites water stewardship results are discussed in the case study. The document is a brief summary of the water stewardship plan. It is publically available for review on the Ecolab website. Data is from 2013-2017. OBS: Site could include more detail on the challenges and opportunities that have occurred and resulted in significant impacts.	N/A	ECOLAB noted the observation and will take into consideration for updates to the Case Study.
	6.3.1	The case study stated listed several water challenges from water scarcity, failing infrastructure,loss of wetlands, natural disasters. The list of engagement is very brief and general. Further elaboration was requested on the level of engagement for each stakeholder and how it addressed the shared water challenges.		
ECO-2017-OBS-009	6.5.1	Plant engineer and plant manager attended AWS training in San Francisco, CA in October 2014. The plant created “Team H2O” in an effort to increase water stewardship at the site level. This is an effort toward a sustainable water balanced plant. Outreach activities included beach cleanup which directly affects the quality of the waterways in the watershed. Efforts were steps toward achieving good water quality status and healthy water status. Ecolab is a member and financial contributor to CWAC (California Water Action Collaborative). OBS: To expand upon plant knowledge of the broader efforts of the site, and in an effort towards good water governance, circulate the case study to plant staff and consider presenting in staff meetings.	N/A	ECOLAB noted the observation and will consider reviewing the Case Study with plant staff during staff meetings to expand plant knowledge of the overall plant stewardship efforts.

Certification Decision

Guidance
The recommendation section to be filled out by the auditor with optional comments. The Certification Decision section is to be completed by the SCS's decision-making entity after initial, re-certification and re-evaluation audits. Details of the decision making entity and any observations or further details can be included in the comments field.

Auditor's recommendation for initial, continued or re-certification based on compliance with requirements:	**X**	Initial Certification **Recommended**
		Initial/Continued Certification **Not Recommended**
Level of certification recommended (if applicable):	X	AWS Core
		AWS Gold
		AWS Platinum
Comments (e.g. justification for change in certification level, recommendations for sampling):		

To be completed by the SCS Decision-Making Entity	**SCS Certification Decision:**	**X**	**Approved**
			Denied
	Certification decision by:	**Neil Mendenhall**	
	Technical Review by:	Neil Mendenhall	
	Date of decision:	31 December 2017	
	Surveillance schedule:	**Next audit is scheduled for** *(include range)* **: October 2018-December 2018**	