

WATER STEWARDSHIP ASSURANCE SERVICES

### Alliance for Water Stewardship (AWS)

Audit Number: AO-000435

#### **SITE DETAILS**

Site: **BAT Uzbekistan - Samarkand Cigarette Factory** Address: 140100, Samarkand region, Farkhad settlement, 140100, Samarkand, UZBEKISTAN Contact Person: Ravshan Khasanboev AWS Reference Number: AWS-000482 Site Structure: Single Site

#### **CERTIFICATION DETAILS**

Certification status: Certified Core Date of certification decision: 2023-Mar-27 Validity of certificate: 2026-Mar-27

#### **AUDIT DETAILS**

Audited Service(s): AWS Standard v2.0 (2019) Audit Type(s): Initial Audit Audit Start Date: 2022-Nov-20 Lead Auditor: Tanya Christensen

Audit team participants: Inobat Allobergenova

Site Participants: Ravshan Khasanboev, Senior Manager EHS Sofya Kim, Other Rushaniya Yanova, Other Darya Sinegubova, Other Gurur Asi, Sustainability Manager



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#### **ADDITIONAL INFO**

Summary of Audit Findings: A total of 14 findings were raised during the certification audit: zero major non-conformity, 11 minor non-conformities, and 3 observations.

The Client is requested to perform a root cause analysis and define corrective actions for each of the non-conformities and to submit these to WSAS within 60 days of receipt of the audit report by 29 April 2023.

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

The audit team recommends certification of BAT Samarkand Cigarette Factory at Core level pending approval of the corrective actions plan and closure of the major non-conformity.

CLOSURE OF FINDINGS AND CORRECTIVE ACTION PLAN:

The Client has successfully submitted the corrective action plan addressing all findings. Proof of implementation has been requested for the Minors and this will be evaluated during the Surveillance Audit.

Scope of Assessment: The scope of services covers the Initial certification audit for assessing conformity of BAT Samarkand Cigarette Factory against the AWS International Water Stewardship Standard Version 2.

The site processes tobacco plants (leaf and stems) for the production of traditional cigarettes, and also exports some raw processed and blended material. A Tobacco Hitting Product line will start commercial production in 2023. The site is located on the outskirts of Samarkand in the South-eastern part of Uzbekistan. The site operates a closed-loop water management system, with no municipal supply or municipal wastewater treatment. There are 4 boreholes onsite, which supply all site and production demands. One is not operational and one is used for irrigation. The onsite Waste Water Treatment Plant (WWTP) is starting to age out and can process 100m3 a day. All treated wastewater is sent via a small canal to an onsite, lined evaporation pond. Some overflow during heavy rain goes to a nearby canal. The Samarkand Cigarette Factory is located within the Zarafshan River watershed.

The audit was conducted onsite on 21-23.11.2022

The onsite site visit included the assessment of the BAT SCF Production facilities and all relevant water-related infrastructure.

The following external stakeholders were interviewed during the audit: Shukrat Mamatkulov (SEEM CHief Engineer), Abdunazar Kahharov (Head of the Farkahad Mahalla), Natalia Mamazinskaya (Zaravshan National Park, Scientific Secretary).

#### **FINDINGS**

NUMBER OF FINI	DINGS PER LEVEL
Observation	3
Minor	11

## Alliance for Water Stewardship (AWS)

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FINDING DETAILS	
Finding No:	TNR-003436
Checklist Item No:	1.1.1
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2023-Nov-21
Checklist item:	<ul> <li>The physical scope of the site shall be mapped, considering the regulatory landscape and zone of stakeholder interests, including:</li> <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>
Findings:	<ul> <li>As the site's water supply is groundwater, more information is needed on the groundwater layers relevant for the wells - their type, spread, and recharge sources and zones.</li> <li>The site maintains that the evaporation pond on site is the end point of its wastewater, however there is discharge of the overflow from the pond to a canal. More information is needed on this discharge and clarity on the ultimate receiving body. The discharge location should also be mapped.</li> </ul>
Corrective action:	The type of the wells spread and recharge sources and zones will be mapped and documented by October 2023 The pond will be revised in line with new waste water treatment plant Capex. Permission will be obtained from the state on the maximum allowable discharges. Proper follow up system to understand the water discharge to canal will be established



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## Alliance for Water Stewardship (AWS)

Finding No:	TNR-002126
Checklist Item No:	1.3.3
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2023-Nov-21
Checklist item:	Site water balance, inflows, losses, storage, and outflows, including indication of annual variance in water usage rates, shall be quantified. Where there is a water-related challenge that would be a threat to good water balance for people or environment, an indication of annual high and low variances shall be quantified.
Findings:	<ul> <li>Traceable calculations supporting the re-worked Sankey diagram have not been provided.</li> <li>As the water flows in the catchment have very pronounced seasons, understanding of the seasonal variance of water withdrawal, losses, and discharge is needed and has not been demonstrated.</li> <li>The site should also aim to collect and provide information on what proportion of the site's effluent is evaporated at the site's pond, and what proportion is discharged to the canal, along with seasonal differences.</li> </ul>
Corrective action:	The Sankey diagram will be prepared in line with new WWTP modification and will be inserted to the AWS documentation the seasonal impact of water withdrawal table will be prepared and included to the AWS documentation In line with the new WWTP plant modification, the pond's evaporation and the water goes to pond will be clarified and mapped and followed up



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Finding No:	TNR-003437
Checklist Item No:	1.3.4
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2023-Nov-21
Checklist item:	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.
Findings:	<ul> <li>The site maintains that the evaporation pond is the end point of its wastewater, however there is discharge from the pond to the canal, indicating that the canal or the river to which it discharges, may be the receiving bodies. Information on their water quality has not been provided.</li> <li>The site provided separate water and wastewater quality analysis reports, for separate samples, without analysis of what those reports indicate about the groundwater quality or wastewater quality. E.g. wastewater results from Q4 indicate nitrogen and lead are above the limits. How does this compare with the results from other quarters in 2022 and with the results in the past? Plotting of results on a graph or table and interpretation of those results is missing.</li> </ul>
Corrective action:	The physical and chemical tests will be done for the discharged water into the pond. Monthly/yearly parameter trend analyzes will be carried out when exceedances are detected at regular quarterly monitoring and prepared to understand the impact of water quality on the pond and catchment.
Finding No:	TNR-002127
Checklist Item No:	1.3.6
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2023-Nov-21
Checklist item:	On-site Important Water-Related Areas shall be identified and mapped, including a description of their status including Indigenous cultural values.
Findings:	The site has not identified the onsite evaporation pond as an IWRA, despite it containing fish species and having a clear ecological value.
Corrective action:	The pond will be identified as an IWRA with its importance The impact on internal IWRA will be identified and AWS plans will be revised accordingly



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## Alliance for Water Stewardship (AWS)

Finding No:	TNR-003423
Checklist Item No:	1.5.3
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2023-Nov-23
Checklist item:	The catchment water-balance, and where applicable, scarcity, shall be quantified, including indication of annual, and where appropriate, seasonal, variance.
Findings:	The site needs to do additional work on understanding the catchment water balance: - Information and data in the document called 'AWS_Zeravshan_River_water_balance_and_risks' is not referenced to the sources. Although some quantitative data is provided, there is no clear water balance. - Spreadsheet with catchment water consumption calculations derives a positive water balance, in contrast to the considerable water stress indicated in other studies and sources. Calculation in this spreadsheet is not appropriate for establishing the water balance, including the following errors: it is assumed that all precipitation equals available water, without accounting for evapotranspiration or groundwater recharge; industrial use is not considered in the calculation of water consumption; a theoretical water use is calculated without an indication if actual water use information is available. - The site's permit requires monitoring groundwater levels at its wells but this monitoring information was not provided to support balance analysis, yet it is important to understand if the levels show any trends when Aqueduct tool indicates very high water stress levels. - Overall, information about groundwater layers/basins and their link with surface water was not provided to understand to what extent the river water balance reflects the balance of groundwater, or separate water balance for groundwater would be needed.
Corrective action:	Responses to the last two items above are required to downgrade the finding to a minor, and a corrective action plan for the first two items. Finding: Information and data in the document called 'AWS_Zeravshan_River_water_balance_and_risks' is not referenced to the sources. Corrective action:
	Zeravshan River water balance will be done by external consultant. After finalizing water catchment balance the Zeravshan river will be visible, measurable. The information of the water balance, new legislation and identified further risks - if there is - will be reflect to the document by revising the risks and opportunities document as well. Groundwater base analysis methodology will be identified by measuring the water well's levels. Water Well's permit and parameters will be added to the data-gathering requirements and the trend of the parameters will be analyses periodically.



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Evidence of implementation:	Please, see attached files: 1. Plan of actions 2. Communication with consultancy company
Finding No:	TNR-002135
Checklist Item No:	1.5.4
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2023-Nov-21
Checklist item:	Water quality, including physical, chemical, and biological status, of the catchment shall be identified, and where possible, quantified. Where there is a water-related challenge that would be a threat to good water quality status for people or environment, an indication of annual, and where appropriate, seasonal, high and low variances shall be identified.
Findings:	<ul> <li>The site considers itself a closed loop water system. However, the situation needs to be analysed further because depending on the relationship between groundwater (that is the source of the site's supply) and the surface water in terms of flows between them, the site may be affecting the water quality indirectlly: the site takes groundwater and essentially evaporates most of it and does not return most of it to the catchment, potentially contributing to the reduction of water availability in the catchment and thus potentially indirectly contributing to higher concentrations of various compounds. The situation needs to be further analysed.</li> <li>The site samples groundwater but interpretation of the results from the protocols was not provided. It is recommended that UZBAT map their quarterly water quality test results form the boreholes, in order to see if salinity levels or the chemical composition is changing over time. This could be a valuable early warning system on water quality in the catchment.</li> </ul>
Corrective action:	The samples groundwater and interpretation of the results from the protocols will be prepared and provided to AWS in October surveillance audit. SMK and Urgut, will map the quarterly water quality test results form the boreholes and understand the salinity levels or the chemical composition is changing over time. SMK and Urgut will establish the y warning system on water quality in the catchment.
Finding No:	TNR-003433
Checklist Item No:	1.5.5
Status:	Open
Finding level:	Observation
Checklist item:	Important Water-Related Areas shall be identified, and where appropriate, mapped, and their status assessed including any threats to people or the natural environment, using scientific information and through stakeholder engagement.
Findings:	Other potential catchment IWRAs were discussed, such as a water dam and water reserve, and the site will undertake further work on catchment IWRAs as they progress with the standard.



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Finding No:	TNR-002136
Checklist Item No:	1.5.6
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2023-Nov-21
Checklist item:	Existing and planned water-related infrastructure shall be identified, including condition and potential exposure to extreme events.
Findings:	It is unclear, from the evidence submitted by the site, what the condition is of the Zeravashan Basin irrigation system or its different elements.
Corrective action:	The data gathering process and evidences to be submitted to the AWS will be revisited and clarified
Finding No:	TNR-003434
Checklist Item No:	1.7.1
Status:	Open
Finding level:	Observation
Checklist item:	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.
Findings:	The site should clarify the timeframe of risks, and should all potential costs.
Finding No:	TNR-003424
Checklist Item No:	3.7.1
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2023-Nov-21
Checklist item:	Evidence that indirect water use targets set in the water stewardship plan, as applicable, have been met shall be quantified.
Findings:	The site is still developing this target in their WSP and WSAS was unable to confirm the final outcome, this will be reviewed at the next surveillance audit.
Corrective action:	Indirect water usage is valid for Urgut site and SMK, Urgut leaf plant is working with farmers and in line with the Leaf Sustainability Program, water usage in the leaf is monitoring- It will be quantified for Urgut. SMK factory supplies leaf from Urgut, and indirect water usage to this specific process will be identified. The Core AWS standard do not seek for the raw materials water amount and understand the company to analyze indirect water usage. However SMK factory will sock an information any psichbarbard water usage us de standard direct
	from the same catchment where if applicable



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Finding No:	TNR-003425
Checklist Item No:	5.2.1
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2023-Nov-21
Checklist item:	The water stewardship plan, including how the water stewardship plan contributes to AWS Standard outcomes, shall be communicated to relevant stakeholders.
Findings:	There was no evidence that the water stewardship plan had been communicated to relevant stakeholders, although the site has widely disseminated the AWS process and standard.
Corrective action:	Water stewardship plan will be uploaded to the SMK's internet site. Plan will be shared with engaged stakeholder
Finding No:	TNR-002156
Checklist Item No:	5.4.1
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2023-Nov-21
Checklist item:	The site's shared water-related challenges and efforts made to address these challenges shall be disclosed.
Findings:	The site's water-related challenges have not been disclosed in line with the requirements of the indicator.
Corrective action:	The shared water challenged will be uploaded to the SMK's internet site.
Finding No:	TNR-003438
Checklist Item No:	5.5.1
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2023-Nov-21
Checklist item:	Any site water-related compliance violations and associated corrections shall be disclosed.
Findings:	The wastewater Q4 report indicates some of the parameters of the site's wastewater exceed limits (e.g. nitrogen and lead). Clarification is needed whether these are compliance violations.
Corrective action:	The measurement wil lbe repeated to understand whether there is methodological error or not. If there is still nitrogen, the sources of nitrogen- fertilizer, WWTP operational controls will be checked. The potential nitrogen sources will be consulted to WWTP project company The compliance of the violation will be clarified and documented

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Finding No:	TNR-003439
Checklist Item No:	5.5.2
Status:	Open
Finding level:	Observation
Checklist item:	Necessary corrective actions taken by the site to prevent future occurrences shall be disclosed if applicable.
Findings:	The wastewater Q4 report indicates some of the parameters of the site's wastewater exceed limits (e.g. nitrogen and lead). The site has provided an email indicating it is taking some corrective steps. Whether the corrective steps need to be disclosed, depends on whether the exceedances are compliance violations - see finding on 5.5.1.

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#### **Report Details**

Report	Value
Report prepared by	Tanya Christensen
Report approved by	Neringa Pumputyte
Report approved on (Date)	28 February 2023

Surveillance

Proposed date for next audit 2023-Nov-20

**Stakeholder Announcements** 

Date of publication	Location
11/10/2022	www.bat.uz translated to Uzbek
15/10/2022	WSAS Website
16/10/2022	AWS Website

#### **Catchment Information**



Hydrogeology map of Uzbekistan.jpg

**Catchment Information** 



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The site has prepared a 'catchment description' document, which is attached for reference, that goes into detail explaining the surface and groundwater resources in Uzbekistan and their current status. The main rivers of the Republic of Uzbekistan are: The Amu Darya, formed at the confluence of the Vakhsh and Pyandj Rivers; the Syr Darya, formed at the confluence of the Naryn and Karadarya Rivers; and the Chirchik near Tashkent. The Amu Darya basin includes the Surkhandarya, Sherabad, Kashkadarya, and Zarafshan rivers, but only the Kashkadarya and Sherabad are located entirely within Uzbekistan. In addition to the main rivers, there are more than 17.7 thousand natural watercourses in Uzbekistan.

The Samarkand Cigarette Factory and Urgut Leaf Factory are located within the Zarafshan River watershed. The Zeravshan River rises on the fringes of the Pamirs in Tajikistan, flowing towards west for some 300 kilometres (190 mi), passing Penjikent before entering Uzbekistan, where it turns west-to-north-west, flowing past Samarkand, before turning west after Navoiy and further to the south-west, passing Bukhara before it is lost in the desert beyond the city of Qorakol (Karakul), not quite reaching the Amu Darya, of which it was formerly a tributary.

The river is 800 km long, with 300 km running in Tajikistan. The annual average discharge is 161 m3/s and river flow observation has been carried out since 1913 at the gauging stations Dupuli and Saudji in Tajikistan. These were destroyed during regional conflict, and the flow is now recorded at the gauging station Ravatkhodja in Uzbekistan. River flow sharply increases in May-June and continues until July when there is flow peak. The river flow reduces from August till February-March.

The Zeravshan river basin supports large-scale irrigated farming, which is mostly based on a well-developed system of irrigation and drainage facilities. This includes all the tobacco farmers that supply the Urgut LEAF factory. The Samarkand province contains 375K hectares of irrigated land. The root cause of all existing problems is the irrational use of shared water resources by sectors of the economy in irrigated agriculture. Overuse of water for irrigation generates an increase in the amount of highly mineralized drainage water, which, returning to the water source, pollutes surface and groundwater.

The principal water delivery infrastructure of the Zeravshan river is located on the Uzbek territory, and consists of four hydro structures and two dams with water reservoirs.

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#### **Client Description and Site Details**

#### **Client/Site Background**

The factory was established in 1997 and constructed by BAT. During the period 2011-16 there was no access in Uzbekistan to foreign currency and the factory supplied local markets only, starting exports again in 2018. An Integrated Working System (IWS) was rolled out in 2017 and will consist of 4 phases, the site has completed phase 1. UZBAT operates two sites: the Samarkand Cigarette Factory (SCF) and the Urgut Leaf Factory, which is seasonal. The AWS system at both sites is implemented by the same team, under the same management system. Both sites sit within the same water catchment, and they are good candidate sites for a multi-site AWS application. UZBAT is engaged in a number of ESG projects: artesian wells restoration, forestation, water pump restoration (repairing irrigation pumps), stove fuel to gas and solar power. This report covers the Samarkand Cigarette Factory (SCF).

The site operates a closed-loop water management system, with no municipal supply or municipal wastewater treatment. There are 4 boreholes onsite: BH1 & 2 are used for all site and production demands. BH3 & 4 are not used for production, one is not operational, but available for backup and one is used for irrigation. The site operates a WWTP which is starting to age out (20 years) and it can process 100m3 a day, any discharged water is sent via a canal to an onsite lined evaporation pond. During a heavy rainfall, there is an overflow from the pond to the canal. CAPEX has been signed off to design and develop a new WWTP that can process 150m3 a day and will make the receiving pond redundant.

The SCF operates two shifts and is closed at the weekend. Humidification is kept at 63% in the cigarette rolling area, if the cigarette paper is too dry, then it will break during rolling process. Compressed air and vacuums are used for cleaning machinery, not water. In terms of cleaning, water is only used for cleaning the floors. The factory has one machine that uses steam, which is used to compress the filter rods. A humidification system is also used in the packing area, using mist to remove any dust. Some stem is used for heating, but cooling is not required as the roofs are insulated for the Uzbekistan summers.

The site produces cut tobacco for traditional cigarettes and receive 60-80 grades of tobacco from global suppliers, the only domestic supplier is the BAT Urgut LEAF plant. Steam is utilised in leaf processing, as the production line increases and decreases the moisture content of the leaf, and the stems are also treated with steam to expand and cut it, before all parts are brought together in the blending stations. Flavour can also be added and there are 30 types of flavouring for traditional cigarettes. All the leaf and stem preparations are undertaken in the PMD section, where the water use strategy is related to managing the moisture content of the base products, as the moisture content is increased and lowered in 4-5 stages. At the end of the PMD line, raw material is stored in graded boxes, about 70% are used onsite for cigarette manufacturing and 30% is exported as raw material.

There is a Tobacco Hitting Products (THP) area under construction, which starts test production in December 2022 and starts commercial production in 2023. These products were previously manufactured in St. Petersburg in Russia. Overall, 60% of production is the nano, slim range.

#### **Summary of Shared Water Challenges**

#### **Summary of Shared Water Challenges**

The key water challenges for the catchment are:

- water scarcity
- water quality
- deterioration of water stress area

The shared water challenges in the local area, as identified by stakeholders, are:

- Samarkand Kurbanad Channel overflow
- Farkhad Village Poor quality of drinking water and water supply interruptions
- Zaravshan National park- Water supply interruptions
- Farkhod shifer JSC Channel overflow



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0.1	General Requirements for Single Sites, Multi-Sites and Groups	
0.1.1	Eligibility Criteria	
0.1.1.1	The site(s) occupy one catchment OR an exception has been granted.	<b>⊘</b> Yes
Comment	The site occupies a single catchment.	
0.1.1.2	The scope of the proposed certification shall be under the control of a single management system.	<b>⊘</b> Yes
Comment	The scope of certification is under the control of a single management system.	
0.1.1.3	The scope of the proposed certification shall be homogeneous with respect to primary production system, water management, product or service range, and the main market structures.	<ul><li>✔</li><li>Yes</li></ul>
Comment	The site has a homogenous primary production system.	

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1	STEP 1: GATHER AND UNDERSTAND
1.1	Gather information to define the site's physical scope for water stewardship purposes, including: its operational boundaries; the water sources from which the site draws; the locations to which the site returns its discharges; and the catchment(s) that the site affect(s) and upon which it is reliant.
1.1.1	The physical scope of the site shall be mapped, considering the regulatory landscape and zone of stakeholder interests, including:       in progress         Site boundaries;       in progress         Water-related infrastructure, including piping network, owned or managed by the site or its parent organization;       Any water sources providing water to the site that are owned or managed by the site or its parent organization;         Water service provider (if applicable) and its ultimate water source;       Discharge points and waste water service provider (if applicable) and ultimate receiving water body or bodies;         Catchment(s) that the site affect(s) and is reliant upon for water.       Its regulatory in the site affect (s) and is reliant upon for water.
Comment	<ul> <li>The site has developed a Yandex map for the Samarkand site that maps all water-related infrastructure on the site as well as the physical scope. The 'AWS pipeline plan' outlines the water distribution system onsite, fresh and waste water.</li> <li>The site's water supply is from 4 boreholes (two of them operational) located on the site grounds. The site's effluent is treated by an onsite WWTP and is discharged to an evaporation pond on the site's grounds. These are all clearly mapped. The site maintains that the evaporation pond on site is the end point of its wastewater, however there is discharge of the overflow from the pond to a canal. More information is needed on this discharge and clarity on the ultimate receiving body. The discharge location should also be mapped.</li> <li>The catchment area was initially defined as bordered by the local municipal water supply company and the Zeravshan State Reserve. As a result of the on-site audit, the site expanded the map to include the surface water catchment for the Zerafshan River Basin. The Yandex map now encompasses the 'influence catchment' (as identified initially) and the full river basin catchment map.</li> <li>As the site's water supply is groundwater, more information is needed on the groundwater layers relevant for the wells - their type, spread, and recharge sources and zones</li> <li>The local Mahalat's (communities) are about 7,500 inhabitants, mainly farming community. Zeravshan river is less than 1km from factory and one canal that feeds into the river. Zeravshan originates in Tajikistan, no major Uzbekistan river originates in the country. They are therefore vulnerable to what happens in Tajikistan, particular if rivers are dammed for electricity generation.</li> </ul>
1.2	Understand relevant stakeholders, their water related challenges, and the site's ability to influence beyond its boundaries.

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1.2.1	Stakeholders and their water-related challenges shall be identified. The process used for stakeholder identification shall be identified. This process shall:       Yes         - Inclusively cover all relevant stakeholder groups including vulnerable, women, minority, and Indigenous people;       Yes         - Consider the physical scope identified, including stakeholders, representative of the site's ultimate water source and ultimate receiving water body or bodies;       Provide evidence of stakeholder consultation on water-related interests and challenges;         - Note that the ability and/or willingness of stakeholders to participate may vary across the relevant stakeholder groups;       Identify the degree of stakeholder engagement based on their level of interest and influence.
Comment	The site has prepared a 'AWS Stakeholder SWOT' spreadsheet, which captured all relevant stakeholders and their water-related challenges. All departments had an input into the list to ensure all relevant stakeholders were identified, including the corporate relations department based in Samarkand. The site has conducted a number of meetings with stakeholders on water-related issues and the AWS process. Sample invitation letters, meeting agenda and pictures from the meetings were reviewed during the audit and examples have been uploaded as evidence. The site held stakeholder meetings at the Samarkand Cigarette Factory (SCF) on the 19-20.08.22 and 20.09.22, with the local community,
	water service provider and local businesses being in attendance. Please reference the 'AWS Mahallya stakeholder engagement' presentation for further details. The site conducted a meeting at the Kubanabad channel (canal) next to the factory on the 06.09.22, as it is in disrepair and therefore a water stewardship challenge. Evidence of that meeting is also attached.
	The site has identified water challenges within the Farkhad Mahalla (local community), such as poor water quality. 90% of residents wont use the water and use bottled water for drinking, as the public water infrastructure is decades old and the water towers in the community have been destroyed. The spreadsheet identifies the degree of stakeholder engagement based on their level of interest and influence.
1.2.2	Current and potential degree of influence between site and stakeholder shall be identified, within the catchment and considering the site's ultimate water source and ultimate receiving water body for wastewater.
Comment	The site has mapped all their stakeholders on a 'water risk assessment HEATMAP' which reviews and classifies the potential degree of influence between the site and their stakeholders.
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.
Comment	The site has a number of emergency response plans in place:
	<ul> <li>Business Continuity Plan - Recovery of Manufacturing Processes. This plan signposts to a specific 'water supply interruption' and 'sprinkler reduction' plans are available.</li> <li>The Emergency Plan: Risk 2 covers spillage into the wastewater system, for example, chemical and fuel spillages and impact on water.</li> <li>Hazardous materials management instructions, to minimise risk. Seconda containments are in place for all hazardous material. Training takes place, with an exam, for individuals to be signed off to work with any hazardous material.</li> </ul>
1.3.2	Site water balance, including inflows, losses, storage, and outflows shall be identified and mapped Yes



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## Alliance for Water Stewardship (AWS)

Comment	The site supplied a water balance schematic for the factory site, which did not match the description of the water distribution system that was observed during the site tour. It was reviewed in detail during the audit and the site subsequently reworked their water balance and submitted a new version for a post-audit review. The re-worked 'water balance SCF 2021' correctly identifies and maps the inflows losses, storage and outflows.
1.3.3	Site water balance, inflows, losses, storage, and outflows, including indication of annual variance in water usage rates, shall be quantified. Where there is a water-related challenge that would be a threat to good water balance for people or environment, an indication of annual high and low variances shall be quantified.
Comment	The water balance dataset used by the site covers the period from January to December 2021. The site reworked their water balance and Sankey diagram to account for losses, and clarified water flows, ensuring the final calculation balances. The inflows, losses, storage and outflows have been quantified by the site and the Sankey diagram supports the water balance calculations, looking at percentages and percentage loss, but it is not linked up with any volume data. Traceable calculations supporting the diagram have not been provided. The site is investing in additional water meters, in order to more accurately measure their water use and onsite water balance. As the water flows in the catchment have very pronounced seasons, understanding of the seasonal variance of water withdrawal, losses, and discharge is also needed. The site should also aim to collect and provide information on what proportion of the site's effluent is evaporated at the site's pond, and what proportion is discharged to the canal, along with seasonal differences.
	Finding No: TNR-002126
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.
Comment	The site has an SOP in place (No. 141) including controls for water usage and wastewater discharge. Section 4.3 in the SOP states that testing labs are used for establishing water quality. The onsite pond receives all the treated waste water, before it is discharged into the Kubanabad canal. The 'water quality checkpoint' presentation, shows the three testing points on the site: fresh, wastewater and ETP.
	The site has supplied a number of test reports as evidence of their water quality testing programme: - Wastewater report Q1-4 2022 - Wells and water pipes chemical report (boreholes) 2022 - Email containing results from the Q4 waste water analysis
	The site maintains that the evaporation pond is the end point of its wastewater, however there is discharge from the pond to the canal, indicating that the canal or the river to which it discharges, may be the receiving bodies. Information on their water quality has not been provided.
	The site provided separate water and wastewater quality analysis reports, for separate samples, without analysis of what those reports indicate about the groundwater quality or wastewater quality. <i>Finding No: TNR-003437</i>
1.3.5	Potential sources of pollution shall be identified and if applicable, mapped, including chemicals used or stored on site.
Comment	The Yandex map lists any potential sources of pollution, please reference the map in 1.1.1.
	The site supplied a 'water pollution points' document which provides additional information on the pollution points across the site and the operational controls in place to manage them.
1.3.6	On-site Important Water-Related Areas shall be identified and mapped, including aImportantdescription of their status including Indigenous cultural values.in progress



WATER STEWARDSHIP ASSURANCE SERVICES

## Alliance for Water Stewardship (AWS)

#### Audit Number: AO-000435

Comment	The site has identified the onsite garden, as the trees are protected, and the site has to conduct an annual tree count, including species. They are not allowed to cut down the dead trees as they count. Uzbekistan has a Presidential Decree regarding tree protection, with a national moratorium on tree cutting. The State committee on environmental protection and ecology oversees the implementation of the moratorium.
	The site shared an example of the 'inventory list for the garden' from October 2022. The site will do a Technical Task to add tags to all the trees so they can be scanned more easily on an annual basis. WSAS noted that the site has not listed the evaporation pond, which contains fish species etc and has ecological value to the site, being surrounded by the garden.
	Finding No: TNR-002127
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 respectively to the site shall be respectively. Yes
Comment	The site has prepared a 'water costs' spreadsheet, which has collated data from 2020 - 2022 on any operational water-related costs associated with activities at the Samarkand factory. It includes the management of the boreholes and CAPEX for the new WWTP. IWRA visits are also included in the spreadsheet.
	The site is looking at engaging with stakeholders on shared water challenges in the AWS Strategic Plan. For this indicator the site has included all operational water-related costs, whereas costs related to the implementation of the WSP are included in the AWS Strategic Plan.
1.3.8	Levels of access and adequacy of WASH at the site shall be identified. Ves
Comment	The audit crew verified that the WASH facilities were to a good standard at the site. There are sensors installed on the taps and pressure reduction features in the showers. The site has prepared a 'WASH access photos' presentation, which provides a visual breakdown of all WAS Services onsite. The 'certificate of acceptance of the building' lists the WASH facilities that were specified when the building was constructed, in line with the national requirements.
	The site has undertaken 'AWS Training for contractors' delivering it to cleaning and canteen services, garden services and employees, this covered WASH issues for the site. Legislation No 410 covers WASH issues and working conditions and the site is compliant with this legislation.
	Additional evidence was supplied: - Bottled water certificate, - Cleaning services contract, - Water dispenser report, - Bottled water radiation test report, - Cleaning services instruction.
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.Image: Comparison of the start of the sta
Comment	The site has developed a 'AWS WMS Suppliers 2022' spreadsheet listing all their suppliers of raw materials. The table records the suppliers, country of origin, process, and whether they share the same water catchment. Only the tobacco from the BAT Urgut plant is within the same water catchment and has been identified as such. The WSP contains an action (1.4.1) to establish the indirect water use of the BAT Urgut Leaf site, which is also being audited against the AWS Standard. The outcome of that action is contained in the 'water consumption leaf supplier UFP' spreadsheet.

WSAS 2 Quality StreetNorth Berwick, EH39 4HW, UNITED KINGDOM



WATER STEWARDSHIP ASSURANCE SERVICES

## Alliance for Water Stewardship (AWS)

		_
1.4.2	The embedded water use of outsourced services shall be identified, and where those services originate within the site's catchment, quantified.       Yes	2 es
Comment	The site has recorded all of their outsourced services in the 'AWS WMS Suppliers 2022' spreadsheet, and they only use water from the site to undertake their activities, none of them share the same water catchment.	r
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.	<b>D</b> es
Comment	The site has identified a number of water governance initiatives:	
	<ul> <li>Concept and strategy for development of water management in Uzbekistan 2020-2030, based on the Decree of the President No UP-6024. Covering the 3 main rivers in Uzbekistan, none of which originate in UZB. The water-related infrastructure in the country and introducing 'smart meters' for water use, moving from analogue to digital metering, in order to encourage water efficiency. Water is currently cheap, even though UZB is becoming increasingly water stressed.</li> <li>Zarafshan water district improvement project in UZB</li> <li>Zarafshan river report (UNDP) strategy for potable water supply and improvement of wastewater treatment within the river basin</li> <li>BAT Water Usage Roadmap- self-assessment tool, mainly for engineering departments. The site's self-assessment also supplied.</li> </ul>	i
1.5.2	Applicable water-related legal and regulatory requirements shall be identified, including       Image: Comparison of the state of the	<b>D</b> es
Comment	The legal department at Samarkand is responsible for monitoring all legal and regulatory requirements and will update the relevant departments accordingly. WSAS had view of their September-October mailout from the Legal Dept. The site produces quarterly reporting to the Samarkand Environmental Committee, which includes the water quality test reports form boreholes and the WWTP test results. One of the quarterly reports was supplied for review.	;
	The site's 'special water use' permit, for extracting water from the onsite boreholes was supplied, from the Ministry of Geology, Zarafshan Department of Hydrogeology. The site is permitted to extract 304.8 m3 per day and 111,271m3 pr annum. There are three conditions set by the permit: water meter instalment, keep the well area clean and monitoring of groundwater levels. The permit is for 2020-202 and the site pays quarterly compensation for extraction. The site is not required to report back on extraction rates, but the Department can undertake spot checks to review records.	ו 15
	A number of links to relevant environmental Decrees are uploaded as evidence, such as 'Water use and water consumption in the Republic of Uzbekistan'. The site has summarised the environmental legislation that applies to the site, such s the Law of the Republic of Uzbekistan "On Water and Water Use" No. 837-XII of 06.05.1993. Overall the site has an effective system in place to identify water-related legal and regulatory requirements.	b
1.5.3	The catchment water-balance, and where applicable, scarcity, shall be quantified, includingindication of annual, and where appropriate, seasonal, variance.in progree	<b>/</b> SS



WATER STEWARDSHIP ASSURANCE SERVICES

# Alliance for Water Stewardship (AWS)

Comment	The site has undertaken significant work post-audit to develop the catchment water balance for the Zaravshan river basin. WSAS notes that the catchment water balance applies to both the BAT Samarkand and Urgut sites.
	The site has provided several documents, including: - Screenshots from Aqueduct tool that indicate extremely high water stress in the area. - Published paper 'Water Quantity and Quality in the Zerafshan River Basin: Only an Upstream Riparian Problem?'
	<ul> <li>Document called 'AWS_Zeravshan_River_water_balance_and_risks' that compiles information from Wikipedia and from unknown sources. The compilation is not referenced and although some quantitative data is provided, there is no clear water balance.</li> <li>Spreadsheet with catchment water consumption calculations that derives a positive water balance, in contrast to the considerable water stress indicated in other studies and sources. Calculation in this spreadsheet is not appropriate for establishing the water balance, including the following errors: it is assumed that all precipitation equals available water, without accounting for evapotranspiration or groundwater recharge; industrial use is not considered in the calculation of water consumption; a theoretical water use is calculated without an indication if actual water use information is available.</li> </ul>
	The site's permit requires monitoring groundwater levels at its wells. This monitoring information was not provided to support balance analysis yet it is important to understand if the levels show any trends. Overall, information about groundwater layers/basins and their link with surface water was not provided to understand to what extent the river water balance reflects the balance of groundwater, or separate water balance for groundwater would be needed.
	Overall, the site has clearly worked on understanding the catchment water balance but needs to do considerable additional work.
	Finding No: TNR-003423
1.5.4	Water quality, including physical, chemical, and biological status, of the catchment shall be identified, and where possible, quantified. Where there is a water-related challenge that would be a threat to good water quality status for people or environment, an indication of annual, and where appropriate, seasonal, high and low variances shall be identified.
Comment	The site supplied an academic article titled 'Water quality, potential conflicts and solutions - an upstream-downstream analysis of the transnational Zarafshan River' (2013). There is seasonal data available for the Zarafshan River within the report, and although it is old, it is still a benchmark for the site in this initial certification cycle.
	The site considers itself a closed loop water system. It does not discharge water into the Zarafshan River and are therefore does not analyse the river's water quality. However, depending on the relationship between groundwater (that is the source of the site's supply) and the surface water in terms of flows between them, the site may be affecting the water quality indirectly: the site takes groundwater and essentially evaporates most of it and does not return most of it to the catchment, contributing to the reduction of water availability in the catchment and thus potentially indirectly contributing to higher concentrations of various compounds. The situation needs to be further analysed.
	The site samples groundwater but interpretation of the results from the protocols was not provided.
	The site is working on improving their relationship with the municipal supply company in order to obtain more up-to-date data on the water quality of the river.
	Finding No: TNK-002135
1.5.5	Important Water-Related Areas shall be identified, and where appropriate, mapped, and their status assessed including any threats to people or the natural environment, using scientific Obs. information and through stakeholder engagement.



WATER STEWARDSHIP ASSURANCE SERVICES

## Alliance for Water Stewardship (AWS)

Comment	The site has identified the Zerafshan State Reserve (National Park) as their main catchment IWRA. The ZNP is divided into sections and its status has been assessed as 'somewhat degraded and in need of restoration'. The site has prepared presentation describing the National Park, although in Russian, it can be translated within the document to English for review. The presentation explains the water characteristics of the river within the National Park. Zarafshan has a mixed snow-glacial supply, mainly glacial, so there is a great variability in the flow of water throughout the year. The greatest flow of water in the river is observed in June - July, the lowest in January - March. The riverbed is unstable, the river changes it from year to year, dividing into many channels, which during the year can wash and wash away individual islets. The main soil-forming factor on the territory of the NPP is the occurrence of groundwater. Soil-forming rocks are pebble-sand sediments of the Zarafshan River. The evolutionary scheme of soil formation is as follows: fresh sediments, meadow floodplain-alluvial soils, meadow-alluvial, meadow-takyr, light serozems. In the south-eastern part of the reserve, the soils are formed on pebbles with a deep occurrence of groundwater.
	Evidence was reviewed during the audit, to demonstrate the environmental degradation of the area, deforestation and unauthorised sand/gravel extraction from the riverbanks for concrete production. WSAS discussed other potential catchment IWRAs, such as a water dam and water reserve, and the site will undertake further work on catchment IWRAs as they progress with the standard.
1.5.6	Existing and planned water-related infrastructure shall be identified, including condition andImage: condition andpotential exposure to extreme events.in progress
Comment	The site clearly has an understanding of existing and planned water-related infrastructure in their immediate catchment, but they have not summarised it in line with the requirements of the indicator. The site supplied a presentation post-audit., which shows the 'Scheme of the Zeravshan Basin Management of Irrigation Systems'. It is unclear whether the presentation contains information on the condition of the irrigation system, so this was raised as a finding.
	The catchment information document identifies additional water-related infrastructure, explaining the activities of the Zarafshan Basin Irrigation System Administration.
	Finding No: TNR-002136
1.5.7	The adequacy of available WASH services within the catchment shall be identified.Image: Comparison of the catchment shall be identified.Yes
Comment	The site has compiled a presentation on 'the adequacy of available WASH services within the catchment' outlining information of catchment WASH services. Access to safe drinking water is a very low risk, based on UNICEF data and the Aqueduct tool. Access to sanitation is also a very low risk.
1.6	Understand current and future shared water challenges in the catchment, by linking the water challenges identified by stakeholders with the site's water challenges.
1.6.1	Shared water challenges shall be identified and prioritized from the information gathered. Yes



WATER STEWARDSHIP ASSURANCE SERVICES

# Alliance for Water Stewardship (AWS)

Comment	The site have utilised the WWF Water Risk Filter and identified the following water challenges for the site: - water scarcity - water quality - deterioration of water stress area They received good feedback from stakeholders regarding shared water challenges and stakeholders are approaching UZBAT to address water challenges that they are facing. On the basis of that, the site has produced a new 'Shared Water Challenges' spreadsheet, which focusses on challenges identified with their stakeholders. These are: - Samarkand Kurbanad - Channel overflow - Farkhad Village - Poor quality of drinking water and water supply interruptions - Zrawayban National and Water Supply interruptions
	- Farkhod shifer JSC - Channel overflow
1.6.2	Initiatives to address shared water challenges shall be identified.
Comment	The site has conducted a number of stakeholder meetings that have assisted in identifying potential initiatives. Farkhad water challenges have been identified and two options are being explored, 90% of residents are refusing to use municipal water and instead they buy bottled water. UZBAT are now exploring the technical root causes for the water challenge, before they can focus on a particular solution. The Zaravshan National Park initiatives include: installing information boards and automatic cameras for wildlife.
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.QObs.
Comment	The site has conducted a SWOT analysis of water resource management and a Risk & Opportunity Analysis, which can be located in the 'AWS Stakeholders SWOT and R&Os' spreadsheet, this should be read with the 'SCF Risk Process analysis' tab
1.7.2	Water-related opportunities shall be identified, including how the site may participate, assessment and prioritization of potential savings, and business opportunities.Image: Coloradia sector Yes
Comment	Please see 1.7.1
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.



WATER STEWARDSHIP ASSURANCE SERVICES

## Alliance for Water Stewardship (AWS)

Comment	The BAT Group's annual ESG Report 'A Better Tomorrow' was supplied, which contains the BAT corporate water withdrawal target of -35% vs. the 2017 baseline, by 2035. This is a key driver for the corporation to seek AWS certification for their global sites and UZBAT (Samarkand & Urgut) have set up a multi-disciplinary project team, to develop AWS standard system processes and engage with catchment stakeholders.
	The site has developed an 'AWS Training for employees' presentation, for all internal staff. The presentation is attached and it's tri-lingual: Uzbek, Russian and English.
	The site has summarised best practice activities in the 'Best Practices List SCF' against the 5 AWS outcomes. Under good water governance, the site has listed the Zaravshan National Park projects and the Farkhad community project. The impact of these projects was further explored through stakeholder interviews and it was clear that their water catchment partners, understood the AWS standard and the water challenges they were addressing with the UZBAT team.
1.8.2	Relevant sector and/or catchment best practice for water balance (either through waterImage: Colorado of the sector and the sector
Comment	The site has identified a number best practices to reduce water consumption from operations and have undertaken a number of initial water efficiency projects. These include: cleaning equipment with high-pressure equipment, installing infrared control valves on taps, new metering system to enable the site to better monitor water use and install shower aerators. The site has also installed a solar thermal system to supply the showers with hot water during summer and otherwise preheat the boillers.
	The stakeholder interview process also revealed that other industrial stakeholders considered the site as catchment best practice by having an on-site industrial WWTP, water purification process and borehole management.
1.8.3	Relevant sector and/or catchment best practice for water quality shall be identified, including value of the sector and the se
Comment	The site has identified the following actions as being best practice: supplying filtered water across the site, due to lack of municipal water supply and operating an onsite WWTP and receiving pond. The site is in the process of appointing contractors to install a new WWTP, with an increased capacity to treat wastewater.
1.8.4	Relevant catchment best practice for site maintenance of Important Water-Related Areas shall ves be identified.
Comment	The site has identified best practice for both the onsite and catchment IWRAs and is also implementing them. The site conducts an annual tree inventory of all trees onsite, as these are protected by law, as reforestation is considered critical to increasing the probability of rainfalls and water recharging across Uzbekistan.
	The site is undertaking a number of projects with the Zaravshan National Park,, whether practical nature conservation projects or awareness raising activities. The reinstatement of boreholes and water supply infrastructure at the local Farkhad settlement is being investigated and developed between the community stakeholder and UZBAT.
1.8.5	Relevant sector and/or catchment best practice for site provision of equitable and adequate WASH services shall be identified. Yes
Comment	Please reference the best practice spreadsheet for confirmation that the following best practice actions have been identified and implemented by the site: supplying filtered water across the site, installing solar thermal systems to support the hot water requirements from the showers. The Farkhad project will also support WASH criteria by supplying good quality water to the settlement.

## Alliance for Water Stewardship (AWS)



2	STEP 2: COMMIT & PLAN - Commit to be a responsible water steward and develop a Water Stewardship Plan
2.1	Commit to water stewardship by having the senior-most manager in charge of water at the site, or if necessary, a suitable individual within the organization head office, sign and publicly disclose a commitment to water stewardship, the implementation of the AWS Standard and achieving its five outcomes, and the allocation of required resources.
2.1.1	<ul> <li>A signed and publicly disclosed site statement OR organizational document shall be identified. The statement or document shall include the following commitments: - That the site will implement and disclose progress on water stewardship program(s) to achieve improvements in AWS water stewardship outcomes</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>
Comment	The site has a Water Stewardship Commitment in Russian, Uzbek and English. It is posted on the site's website and signed by Pavel Vereshak (Head of Samarkand Branch/Factory Director) on the 07.01.22.
2.2	Develop and document a process to achieve and maintain legal and regulatory compliance.
2.2.1	The system to maintain compliance obligations for water and wastewater management shall       Image: Complexity of the system of t
Comment	The responsibility for monitoring compliance obligations sits within Legal and Corporate Relations team, whilst the responsibility for submitting any reporting to the Environmental Committee is done by the Sustainability team.
	operational delivery is the responsibility of the leadership team (LDR). The AWS standard system and water stewardship is covered in the manual and a translated version of the manual is attached for reference. Sofya is responsible for maintaining compliance obligations for water related issues and examples of submission records are attached.
2.3	Create a water stewardship strategy and plan including addressing risks (to and from the site), shared catchment water challenges, and opportunities.
2.3.1	A water stewardship strategy shall be identified that defines the overarching mission, vision, and goals of the organization towards good water stewardship in line with this AWS Standard. Yes
Comment	The site has developed an 'AWS Strategic Plan' which defines the mission, vision and goals within it. It clearly contains a water stewardship strategy but also goes beyond that and should be read alongside the WSP.
2.3.2	<ul> <li>A water stewardship plan shall be identified, including for each target:</li> <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>



WATER STEWARDSHIP ASSURANCE SERVICES

## Alliance for Water Stewardship (AWS)

Comment	The site has developed a robust WSP for a site that is going through its initial certification audit. The objectives in the WSP are linked to specific indicators and they have a clear list of actions linked to each objective. The WSP captures how progress will be measured and monitored and any budget allocated to the actions.
	Individuals have been identified as responsible for any specific actions and the objectives are linked to AWS outcomes. Discussed breaking the WSP down to an annual plan as that will make it easier to complete Step 4 & Step 5. SMART targets are critical, split long-term targets into annual bites.
2.4	Demonstrate the site's responsiveness and resilience to respond to water risks
2.4.1	A plan to mitigate or adapt to identified water risks developed in co-ordination with relevant public-sector and infrastructure agencies shall be identified. Yes
Comment	The 'Recovery of Manufacturing Processes Plan' UZBAT/SCF 2022 has also bee uploaded against indicator 1.3.1. and water risks have been studied in the contingency plan. The site is a closed water loop site, so there is no dependency on external public-sector infrastructure, but relevant adaptation strategies have been identified. The site has consulted with relevant public sector and infrastructure agencies to identify shared water challenges and these are resulting in projects, such as the Kubanabad canal improvement project.

Alliance for Water Stewardship (AWS)

WATER STEWARDSHIP ASSURANCE SERVICES

3	STEP 3: IMPLEMENT - Implement the site's stewardship plan and improve impacts	
3.1	Implement plan to participate positively in catchment governance.	
3.1.1	Evidence that the site has supported good catchment governance shall be identified.	✓
Comment	The audit team was shown the 'BAT Sustainability Agenda' presentation, which explains the ESG agen and how UZBAT delivers activities against it, explaining internal reporting processes.	ıda
	The site has proactively supported good catchment governance by engaging their catchment stakeholders in identifying shared water challenges and explaining the AWS process. As explained against 1.2.1., the site held stakeholder meetings at the Samarkand Cigarette Factory (SCF) on the 19-20.08.22 and 20.09.22, with the local community, water service provider and local businesses being in attendance. The site conducted a meeting at the Kubanabad channel (canal) next to the factory on the 06.09.22, as it is in disrepair and therefore a water stewardship challenge. And they are working with the local Mahalla (community association) as the Farkhad settlement, next to the factory, is located within it.	g
	The SCF site has partnered up with the Mahalla to address the water challenges in the Farkhad settlement. The Zarafshan Natural Park (ZNP) and BAT are both located in the middle stretch of the Zarafshan river. UZBAT are undertaking a number of environmental improvement projects with and at the national park and are a committed project partner.	t
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.	✓
Comment	The site is proactively developing water improvement projects with the Farkhad settlement, that is located next to the factory. The water quality at the settlement is poor and UZBAT are developing projects to reinstate the two inactive boreholes as well as rehabilitating the infrastructure, including a new pump. This would make the settlement able to be water self-sufficient and have access to good quality water.	I
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.	✓
Comment	Please reference indicator 2.2.1, the evidence is uploaded again for this indicator.	
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.	✓
Comment	The site is actively promoting the water rights of the local Mahalla settlement Farkhad, exploring and developing a number of projects to bring two local boreholes back into service and establishing infrastructure, such as a water tower and pump.	
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.	✓



## Alliance for Water Stewardship (AWS)

Comment	There are a number of water balance targets in the WSP, please reference the section for indicator 3.3 (Row 18-22) in the plan, progress towards them is clearly identified. Please also reference the 'water saving plan' as the first three activities contribute towards improving the site's water balance, and progress towards those targets is clearly identified.	
	The 'Leadership Pillar Score Card' has a water indicator, which is m3/1m cigequivalent. target is 2.8 currently at 2.63	39 -
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.	<ul><li>✓</li><li>Yes</li></ul>
Comment	The '5 year water savings plan' outlines the projects that the site is implementing and have planned t address water scarcity. Column H records the volume of water saved per month from the action.	
3.3.3	Legally-binding documentation, if applicable, for the re-allocation of water to social, cultural or environmental needs shall be identified.	<ul><li>✓</li><li>Yes</li></ul>
Comment	The site does not directly re-allocate water to social, cultural or environmental needs, but they are pursuing projects in the local community to improve access to water.	
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.	<ul><li>✓</li><li>Yes</li></ul>
Comment	The site has set a number of water quality targets in the WSP (please reference row 23-27) under t overall target of 'Implement a plan to achieve the water quality targets set out in the water management plan'. Progress towards meeting the targets are clearly identified in the plan.	he
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.	<ul><li>✓</li><li>Yes</li></ul>
Comment	The site is in the process of developing a new onsite WWTP which will ensure that the progresses on improving water quality for the site's effluent. It is currently at the design stage and WSAS had view of email communications between Gurur Asi with the designer during the audit.	
	The site also maintains robust oversight of the status of their effluent through third-party testing, evidence of this is uploaded against indicator 1.3.4.	
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.	<ul><li>✓</li><li>Yes</li></ul>



#### WATER STEWARDSHIP ASSURANCE SERVICES

# Alliance for Water Stewardship (AWS)

Comment	The site has a target for the onsite IWRA regarding the trees and by next year there will be a tag and scan system in place, to improve record keeping and legal compliance with submitting the annual tre head count. The WSP contains the following onsite and catchment targets against indicator 3.5:	e
	1)IWRA on-site:	
	<ol> <li>Conduct an annual inventory of trees -Purchase RFID</li> <li>Plan a budget and implement a survey of the evaporator pond to determine biodiversity and</li> </ol>	
	improve it Planned 2) IWRA in catchment: To initiate a zeravshan National Park (IWRA) engagement project with the	
	government in the framework of stakeholder engagement: 1. Meetings and events are organized in order to convey the position on the situation - done 2. Prepare a potential project plan for implementation (Projects are proposed to prevent the risks	of
	deepening the river, extinction of biodiversity) - planned 3. Monitoring of project implementation	
3.6	Implement plan to provide access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers at all premises under the site's control.	
3.6.1	Evidence of the site's provision of adequate access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers onsite shall be identified and where applicable, quantified.	✓ Yes
Comment	The site has put together a presentation on the WASH facilities on site, including cleaning checklist protocols. Pictures supplied for all WASH functions onsite. The site has quantified WASH measures across the site in a spreadsheet, including screenshots of the relevant regulatory requirements.	
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.	<b>V</b> es
Comment	The site is actively promoting the water rights of the local Mahalla settlement Farkhad, exploring and developing a number of projects to bring two local boreholes back into service and establishing infrastructure, such as a water tower and pump.	
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.	<b>≠</b> ress
Comment	The site has set an indirect water use target (1.4) for the Urgut plant in their WSP (Row 9), but the target is in process with a due date for 01.02.23.	
	Finding No: TNR-003424	
3.7.2	Evidence of engagement with suppliers and service providers, as well as, when applicable, actions they have taken in the catchment as a result of the site's engagement related to indirect water use, shall be identified.	✓ Yes
Comment	The site has conducted AWS training with the service providers: cleaners, gardeners and canteen staff. The results of that training were: understanding water problems, WASH, AWA. Contractors start to suggest initiatives for the rational use of water.	
3.8	Implement plan to engage with and notify the owners of any shared water-related infrastructure of any concerns the site may have.	
3.8.1	Evidence of engagement, and the key messages relayed with confirmation of receipt, shall be identified.	✓ Yes



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Comment	The site has a closed-loop water system, but they have engaged with stakeholders of neighbouring water related infrastructure, such as the Kurbanabad channel (canal) and the water supply company in the area Suv'Taminot. The site challenged the water supply company on the cleaning of the Kurbanabad channel, which led to the municipal water supply company dredging the channel. The site threatened to take them to court, had a meeting with them and the minutes of the meeting now function as an agreement. The water supply issues at the Farkhad Mahalla led to the site engaging with Suv'Taminot, as they were at the meeting, actively engaging with them on this issue.	
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 of the second s	
Comment	The site has collated best practice information for step 1.8 and the 'Best Practice List' spreadsheet also records whether actions have been implemented against the AWS Outcome. Please reference indicator 1.8.1 for an outline of implementation activities.	
3.9.2	Actions towards achieving best practice, related to targets in terms of water balance shall be fimplemented.	
Comment	The site has identified a number best practices to reduce water consumption from operations and have undertaken a number of initial water efficiency projects. These include: cleaning equipment with high-pressure equipment, installing infrared control valves on taps, new metering system to enable the site to better monitor water use and install shower aerators. The site has also installed a solar thermal system to supply the showers with hot water during summer and otherwise preheat the boilers.	
	The stakeholder interview process also revealed that other industrial stakeholders considered the site a catchment best practice by having an on-site industrial WWTP, water purification process and borehole management.	
3.9.3	Actions towards achieving best practice, related to targets in terms of water quality shall be of implemented.	
Comment	The site has identified the following actions as being best practice: supplying filtered water across the site, due to lack of municipal water supply and operating an onsite WWTP and receiving pond. The site is in the process of appointing contractors to install a new WWTP, with an increased capacity to treat wastewater.	
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.	
Comment	The site has identified best practice for both the onsite and catchment IWRAs and is also implementing them. The site conducts an annual tree inventory of all trees onsite, as these are protected by law, as reforestation is considered critical to increasing the probability of rainfalls and water recharging across Uzbekistan.	
	The site is undertaking a number of projects with the Zaravshan National Park, whether practical nature conservation projects or awareness raising activities. The reinstatement of boreholes and water supply infrastructure at the local Farkhad settlement is being investigated and developed between the community stakeholder and UZBAT.	
3.9.5	Actions towards achieving best practice related to targets in terms of WASH shall be implemented.	

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Comment Please reference the best practice spreadsheet for confirmation that the following best practice actions have been identified and implemented by the site: supplying filtered water across the site, installing solar thermal systems to support the hot water requirements from the showers. The Farkhad project will also support WASH criteria by supplying good quality water to the settlement.

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**STEWARDSHIP** 



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Comment	The site has had initial stakeholder meetings, to identify shared water challenges and inform them of their WSP. Stakeholders have been extensively consulted to benchmark the site's initial water stewardship performance.	
	The site sent out a questionnaire to all UZBAT staff (internal stakeholders) on the AWS process, including asking for potential IWRAs in the catchment and how the site currently performs on water related issues. The questionnaire had nine questions in total and 32 staff members responded.	
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.	
Comment	The WSP is continuously reviewed in weekly AWS team meetings and when something changes then the plan has been amended accordingly. Please refence the attached action plan emails and Action Plan. This is reflected in the WSP itself as it is comprehensively linked to individual indicators in the AWS standard, that have been amended as an issue progresses through planning.	

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5	STEP 5: COMMUNICATE & DISCLOSE - Communicate about water stewardship and disclose the site's stewardship efforts
5.1	Disclose water-related internal governance of the site's management, including the positions of those accountable for legal compliance with water-related local laws and regulations.
5.1.1	The site's water-related internal governance, including positions of those accountable for compliance with water-related laws and regulations shall be disclosed.Image: Complexity of the second seco
Comment	The 'Integrated Management System Manual SCF' outlines the site's governance structure and includes AWS elements. The manual contains the OPS LDR (Operations Leadership) Team that all have an input on the AWS process. The site has disclosed AWS elements to stakeholders at numerous events.
	The 'AWS Mini Training' booklet (tri-lingual) is widely distributed externally and internally and would be the ideal location for adding some information on the site's water-related internal governance. A copy was made available through a powerpoint presentation. And the site has now added a page on the 'EHS Pilar Team Charter' that consists of an organisational chart, identifying the team members that deliver the AWS system. Sofya Kim is responsible for compliance with water-related laws and regulations.
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 AWSImage: mail of the stewardship plan contributes to AWSStandard outcomes, shall be communicated to relevant stakeholders.in progress
Comment	All stakeholders were issued with the 'AWS mini training' booklet - it covers: the AWS outputs, how the AWS works, what the site is doing, next steps, water efficiency activities everyone can take and why it's important for everyone. This is a great dissemination tool, simplifying the AWS process for easy digestion. In addition, stakeholders were also supplied with the 'AWS Strategic Plan', although it is unclear how this was disseminated. The internal TVs run slides on the AWS process and this was witnessed by the audit team during the audit.
	The site has actively communicated their AWS process, but there was no evidence that the water stewardship plan had been communicated to relevant stakeholders. Finding No: TNR-003425
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 of against targets, shall be disclosed annually at a minimum.
Comment	The 'AWS mini training' booklet' is the summary of the site's very initial water stewardship performance. There is also a statement on the UZBAT website that the site is engaging with the AWS process (www.bat.uz) and report will be made available on the website as well.
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 for the progress in progress in progress is a start of the site of the second start of the s
Comment	The 'AWS mini training' booklet is the main disclosure tool used by the site and it does not currently address the shared water-related challenges in an adequate manner. The presentation to the Mahalla and other stakeholders explains the collective process they went through, identifying shared water challenges.

## Alliance for Water Stewardship (AWS)

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Finding No: TNR-002156

**WSAS** 

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5.4.2	Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be identified.	<b>√</b> Yes
Comment	The site has evidenced numerous examples of their stakeholder engagements, which were confi through the stakeholder interviews. The site has undertaken projects with the Zaravshan Nation (ZNP) and engaged the water supply company in repairing the Kubanabad canal.	rmed al Park
5.5	Communicate transparency in water-related compliance: make any site water-related compliance violations available upon request as well as any corrective actions the site has taken to prevent future occurrences.	
5.5.1	Any site water-related compliance violations and associated corrections shall be disclosed.	7
	in	orogress
Comment	There have been no water-related incidents which was confirmed by email, by Sherzod Rashlov (Security Manager). However, the wastewater Q4 report indicates some of the parameters of the site's wastewater exceed limits (e.g. nitrogen and lead). The site has provided an email indicating it is taking some corrective steps but clarification is needed whether these exceedances are compliance violations. <i>Finding No: TNR-003438</i>	
5.5.2	Necessary corrective actions taken by the site to prevent future occurrences shall be disclosed if applicable.	<b>Q</b> Obs.
Comment	There have been no water-related incidents which was confirmed by email, by Sherzod Rashlov (Security Manager). However, the wastewater Q4 report indicates some of the parameters of the site's wastewater exceed limits (e.g. nitrogen and lead). The site has provided an email indicating it is taking some corrective steps. Whether the corrective steps need to be disclosed, depends on whether the exceedances are compliance violations.	
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.	<b>√</b> Yes
Comment	Please reference 5.5.1	



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Photographic Evidence from Audit



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**WSAS** 



SCF storm drain.jpg



SCF inside WWTP.jpg



WATER STEWARDSHIP ASSURANCE SERVICES

## Alliance for Water Stewardship (AWS)

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SCF Borehole.jpg



SCF Humidification System.jpg



SCF Receiving Pond.jpg



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## Alliance for Water Stewardship (AWS)

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SCF Tobacco Tumbler.jpg