Alliance for Water Stewardship Assessment Report

Prepared for Pakistan Tobacco Company (PTC),(Akora Khattak Factory)

(AWS 000427)

Prepared by: SGS

SGS Pakistan BOSS Ref.: 5014504

Version: 2

Date: Feburary 18, 2022

REPORT DETAILS

AWS REFERENCE	AWS 000427
REFERENCE NUMBER	SGS2022 _AWS0018
CLIENT REFERENCE	Pakistan Tobacco Company (PTC) – Akora Khattak
REPORT TITLE	**ALLIANCE FOR WATER STEWARDSHIP ASSESSMENT REPORT**
DATE SUBMITTED:	Feburary 18, 2022
CLIENT:	Zain Zafar (EHSM – AKF) Pakistan Tobacco Company (PTC) - Akora Khattak P.O GT Road, Factory Road, Akora Khattak, District Nowshera, Khyber Pakhtunkhwa, Pakistan T. + 92 (0)341 5722852 Cel. +92 301 100 9960 E-mail : zain_zafar@bat.com
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STATUS	Final
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1 EXECUTIVE SUMMARY

The scope of services covers the conformity assessment of water use in compliance with the AWS International Water Stewardship Standard (Version 2.0) for Pakistan Tobacco Company (PTC) (hereinafter referred to as "PTC Akora Khattak"). The assessment has been completed in compliance with the AWS Certification requirements, Version 2.0 dated March 2019. PTC - P.O GT Road, Factory Road, Akora Khattak, District Nowshera, Khyber Pakhtunkhwa, Pakistan. On 23th December to 24th December 2021, SGS-Pakistan Pvt. Ltd. (hereinafter referred to as "SGS") conducted the on-site conformity assessment for PTC Akora Khattak facilities and activities with regard to certification to the AWS Standard (Version 2.0).
There were 04 minor non-conformances raised during the course of the audit process.

PTC Akora Khattak responded to the findings raised with root cause analysis and action plans. Our review confirmed that all corrective action plans are acceptable.

Given the review of evidence provided and the on-site visit performed at PTC Akora Khattak, SGS recommends that PTC Akora Khattak be awarded the AWS Core Certified status with a surveillance audit interval of annual frequency.

2 SCOPE OF ASSESSMENT

The scope of services covers the conformity assessment of water use in compliance with the AWS International Water Stewardship Standard (Version 2.0) for PTC – Akora Khattak (hereinafter referred to as "PTC Akora Khattak") located at , P.O GT Road, Factory Road, Akora Khattak, District Nowshera, Khyber Pakhtunkhwa, Pakistan. The assessment has been completed in compliance with the AWS Certification requirements, Version 2.0 dated March 2019.

Pakistan Tobacco Company Limited is a Pakistani tobacco manufacturing company which is a subsidiary of British American Tobacco. It is headquartered in Islamabad, Pakistan and is the biggest cigarette maker in Pakistan. It has two factories which are located in Akora Khattak (which is near Nowshera), and Jhelum. The Company offers tobacco ingredients, cigarette and nicotine products. PTC Akora Khattak serves customers worldwide.

Table 2.1 includes details on SGS audit team.

Table 2.1 SGS Audit Team

Audit Team		Qualifications/Experience
Ali Hashim	Lead Auditor/ Local Auditor (SGS-Pak)	AWS certified auditor, M.Sc. Applied Chemistry with more than 15 years experience as Water expert in water chemistry, wet analysis, environmental monitoring, environmental impact assessment (EIA), treatment of wastewater, solid waste and hazardous waste anagement, carbon footprinting, Health & Safety Compliance. Project Manager & Skilled trainer in Environmnet, Health & Safety, in performing environmental and social risk assessment in line with the WB, ADB standards.
Paula Sofia Gomez Geras	Technical Review Manager	Depatrment of Sustainability and Climate Change

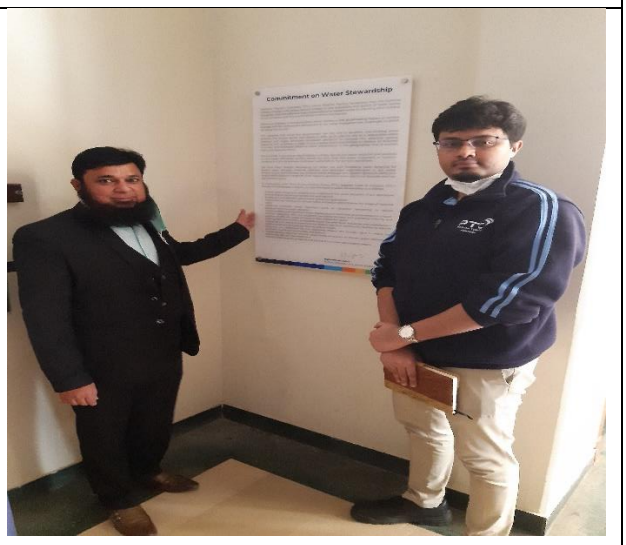
During the on site assessment, SGS auditor spent 3 hrs on stakeholder consultation meetings and 1.0 day on site visit of PTC Akora Khattak installations and reviewing activities and documents. Inteviews with personnel were also carried out.

PTC Akora Khattak provided most of the requested supporting documentation as evidence whilst on site. Outstanding documentation was forwarded on via email. SGS provided initial feedback on the gaps between PTC Akora Khattak current management and the level required by the

standard during the closing meeting of the on site assessment 23th December to 24th December 2021. PTC Akora Khattak responded that corrective actions will be taken to successfully close all findings raised.

Table 2.2 includes pictures taken while on site visit.

Table 2.2 Photos from PTC Akora Khattak on Site Assessment

<table>
<tr><td colspan="2"> 
</td></tr>
<tr><td colspan="2">PTC Akora Khattak Drain Layout</td></tr>
<tr><td> 
</td><td>  </td></tr>
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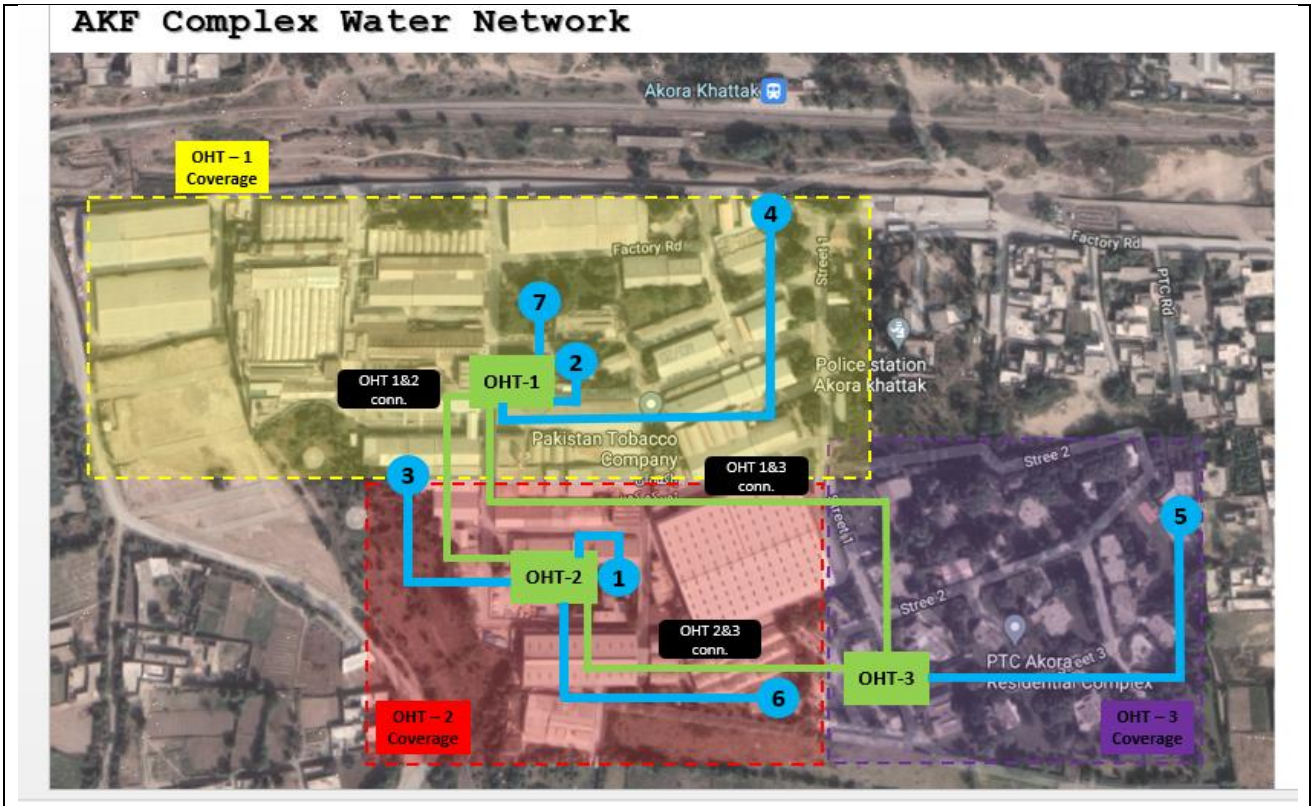
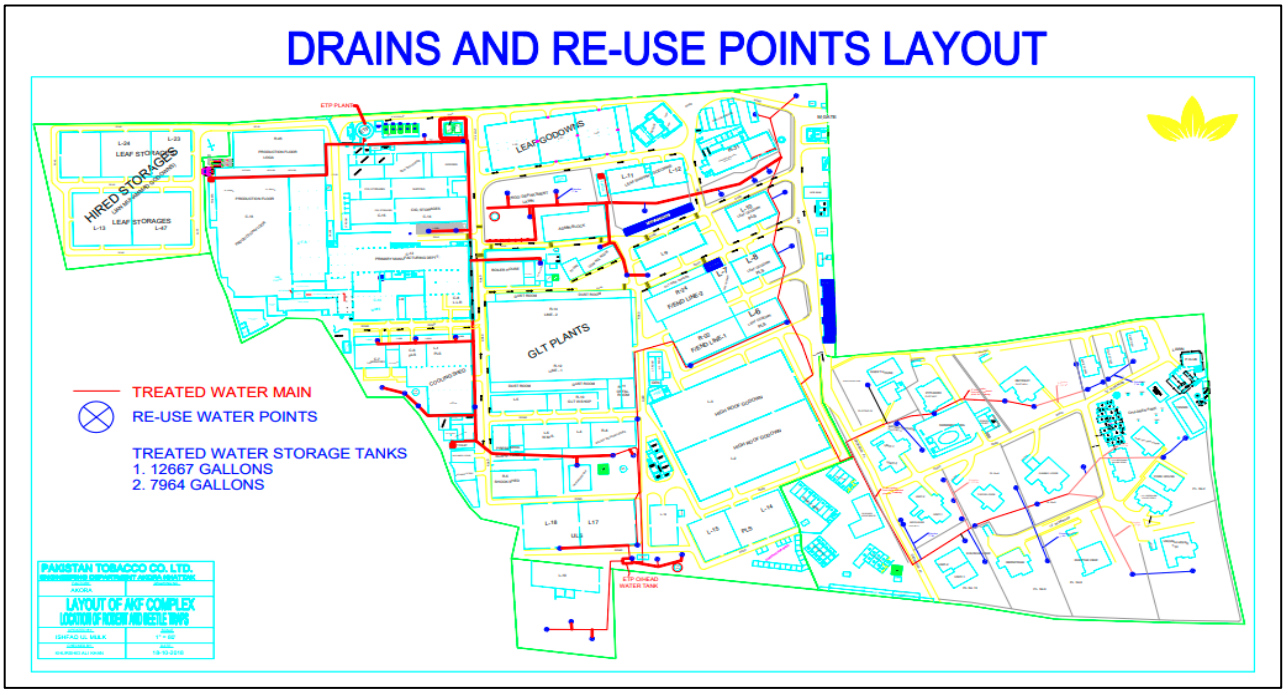


PTC Akora Khattak AWS Water Scheme



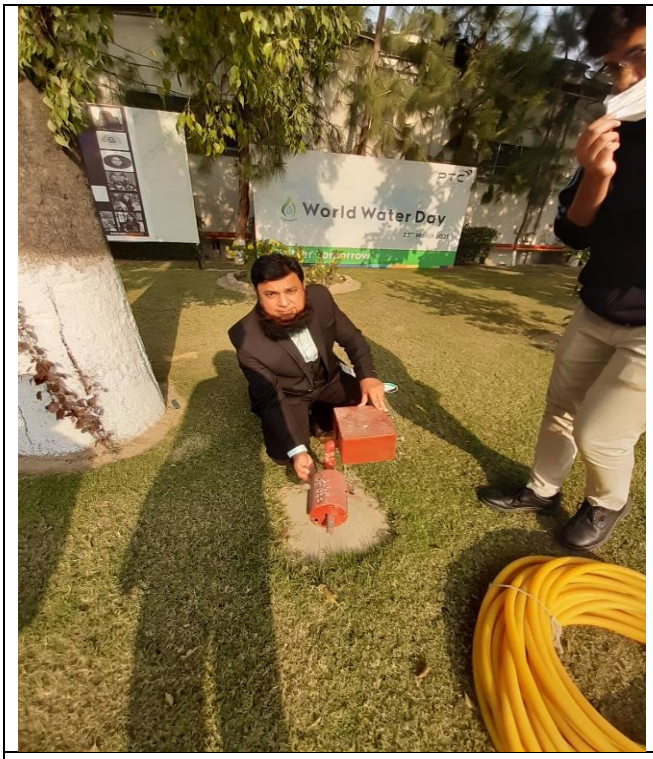
PTC Akora Khattak Re-Use Point Layout

WASH Assessment at PTC Akora Khattak Management Washroom

WASH Assessment at PTC Akora Khattak Management Washroom

WASH Assessment at PTC Akora Khattak

WASH Assessment at PTC Akora Khattak Checklist

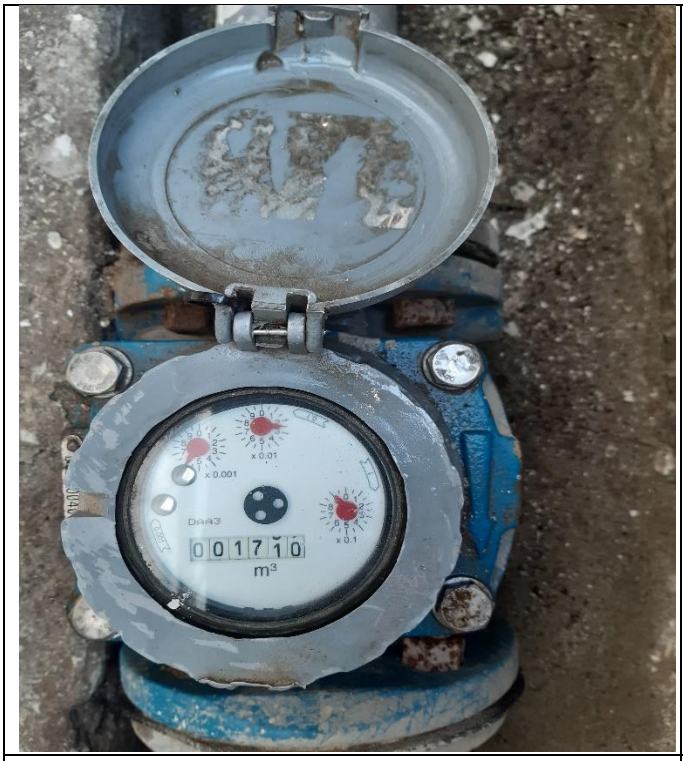


Treated Waste Water Point for Gardening

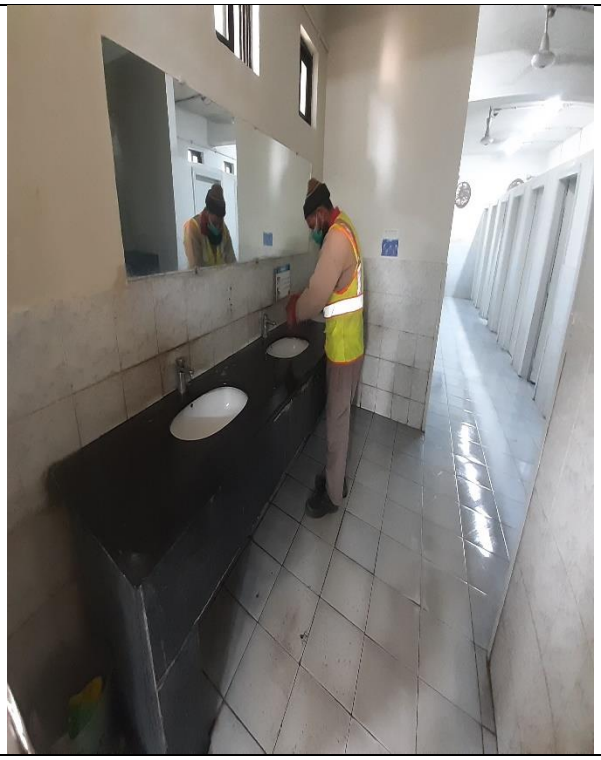
AWS outcomes share to stakeholder by PTC

PTC Akora Khattak Water Filtration Plant for Drinking Purpose

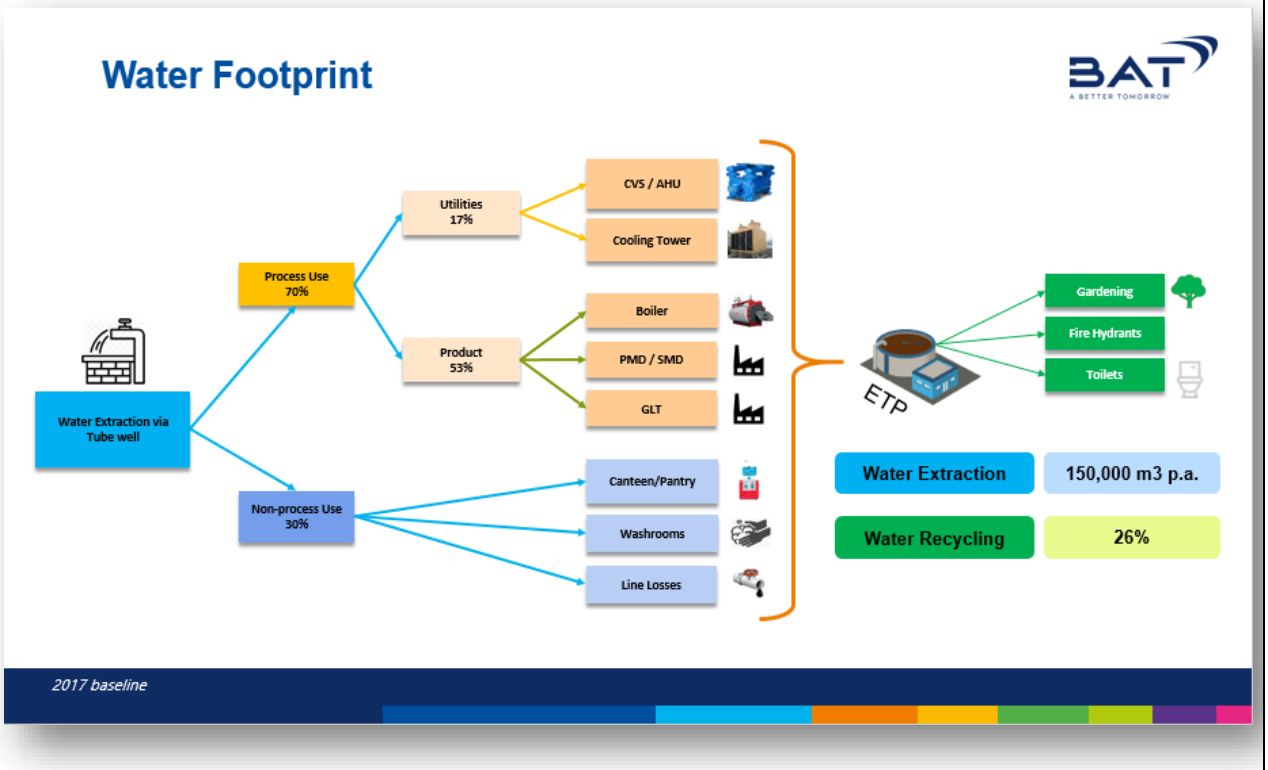
Inspection of Tube well # 2 Flow meter



Water Flow Meter



WASH Assessment at PTC Akora Khattak Labour Washroom



Water Footprint of PTC Akora Khattak

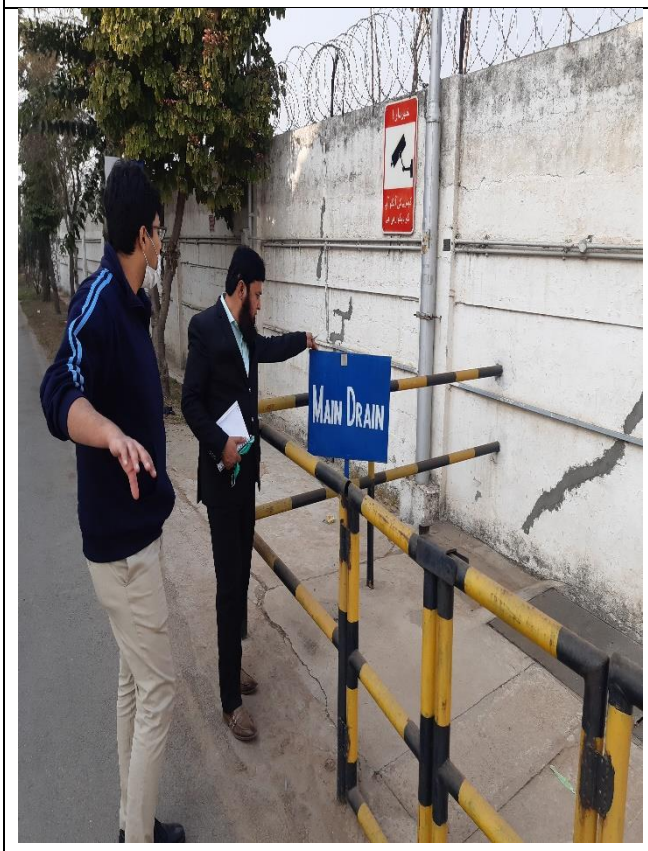
Stakeholder Consultation in Catchment Area (Buner)

On- site Stakeholder Consultation

Fresh Water Source of PTC Akora Khattak

Potential Pollution Sources Near R.O Plant

Potential Pollution Sources Near ETP Plant

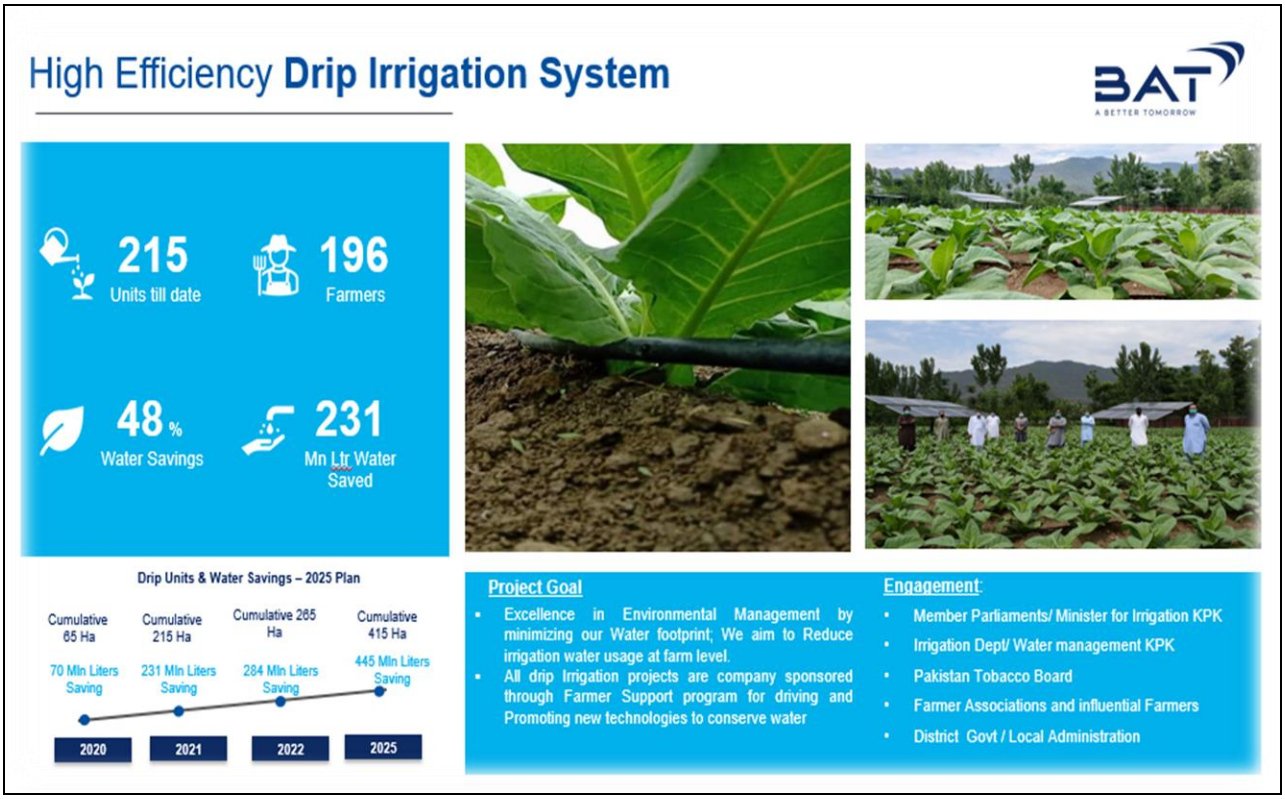


Factory Main Drain of PTC Akora Khattak

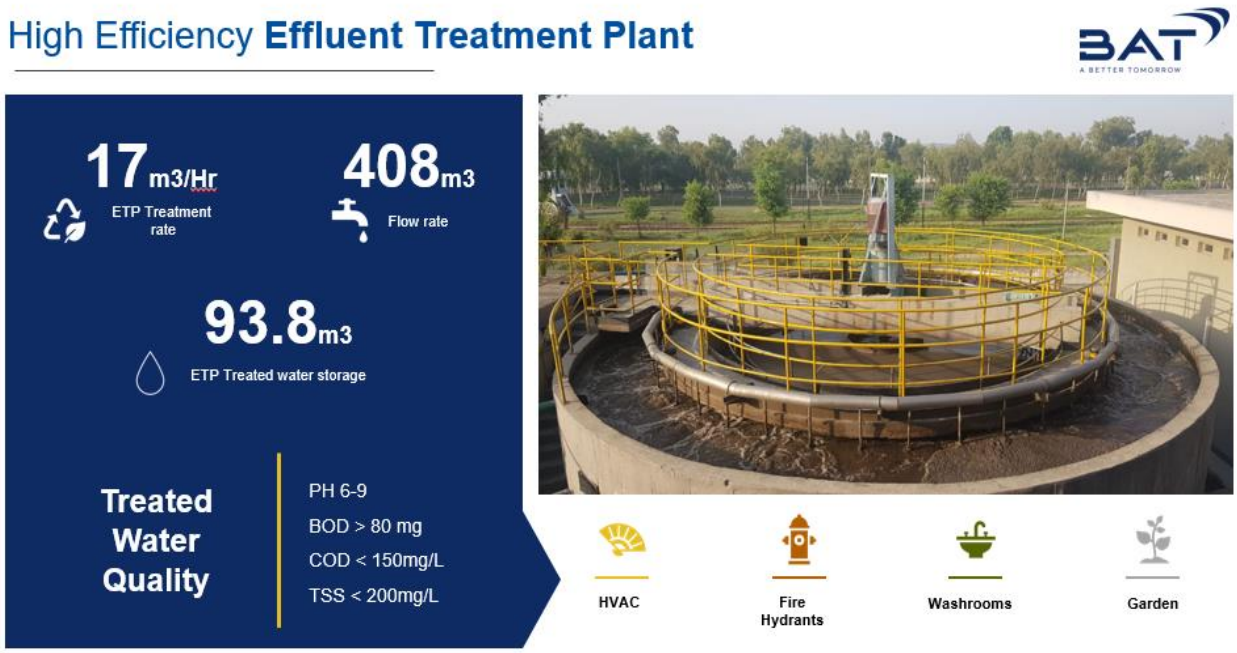
PTC Filtration Plant for Nearby Community

Farmer Drip Irrigation Support Program

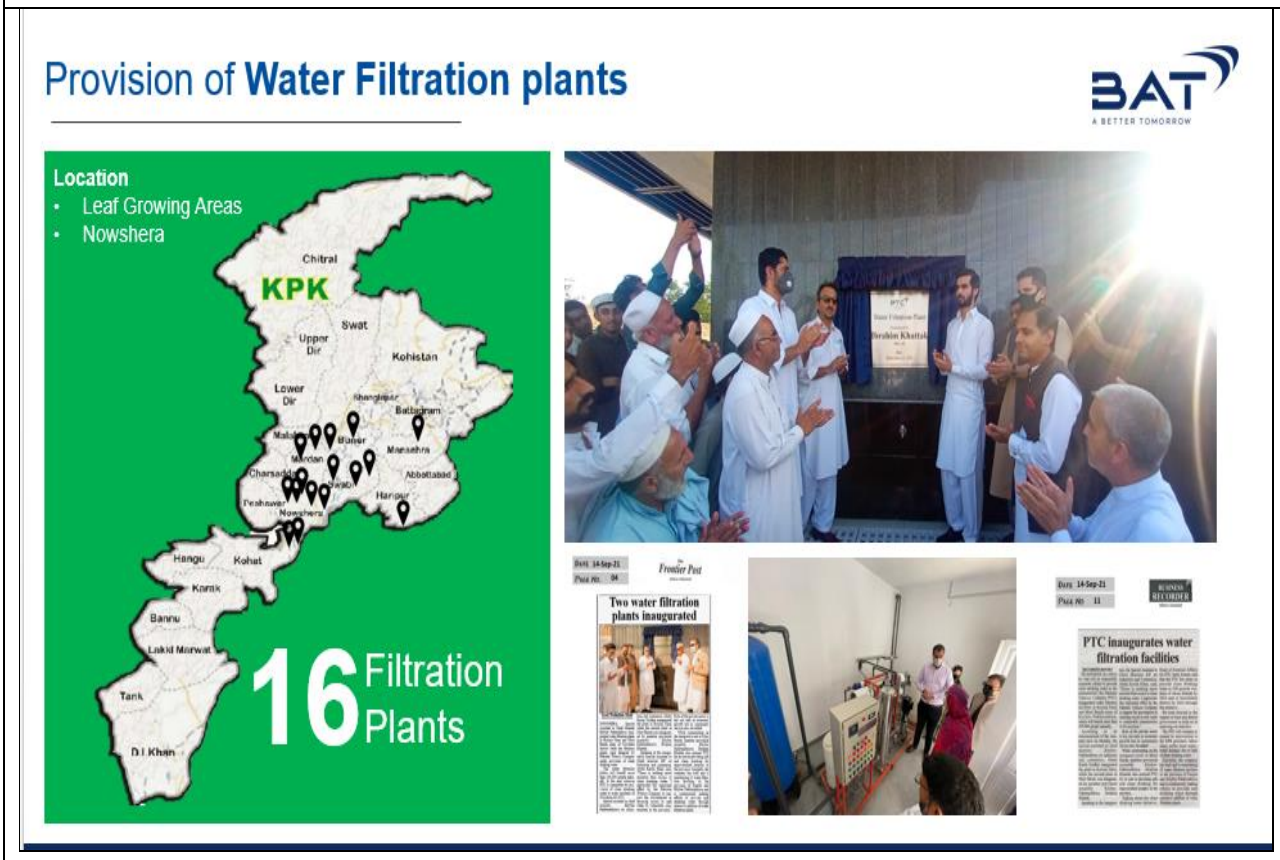
Farmer Drip Irrigation Support Program



PTC Akora Khattak High Efficiency Drip Irrigation System



PTC Akora Khattak High Efficiency Effluent Treatment Plant



Provision of Water Filtration Plants for Nearby Communities

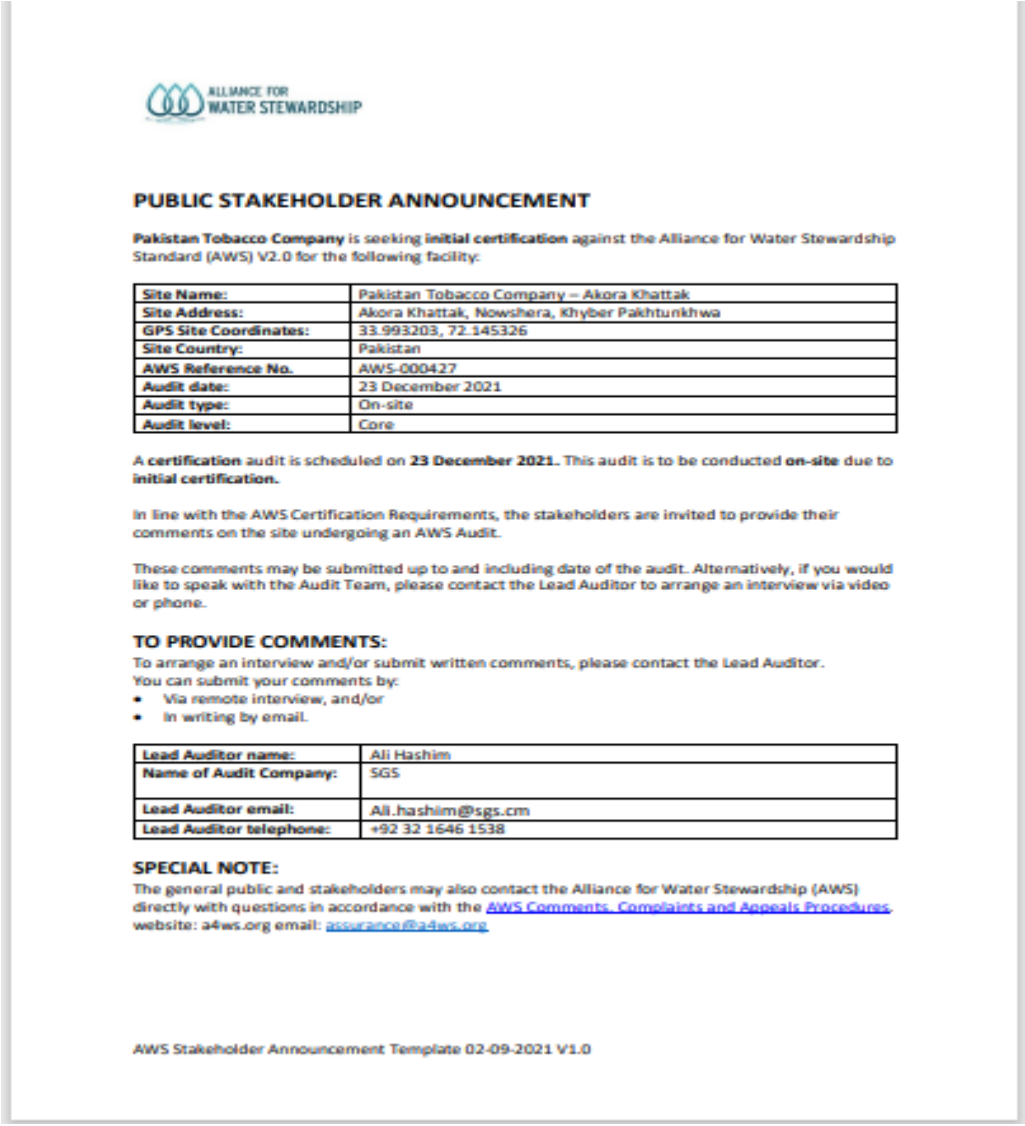
PTC Akora Khattak Water Softening Plant

Drip Irrigation Flow Meter at site Catchment

3 STAKEHOLDER ANNOUNCEMENT AND CONSULTATION

Following the AWS Certification Requirements, before the on-site conformity assessment, SGS prepared a stakeholder announcement on November 17, 2021, which stated PTC Akora Khattak intention to pursue AWS certification. Besides submitting to AWS for publication on the AWS website, the stakeholder announcement was posted to various departments (Department of Environment, Irrigation Department etc. to participate in stakeholders' meeting.

http/ AWS-000427-Pakistan-Tobacco-Company-2021-STAKEHOLDER-ANNOUNCEMENT.pdf (a4ws.org)



ALLIANCE FOR WATER STEWARDSHIP

PUBLIC STAKEHOLDER ANNOUNCEMENT

Pakistan Tobacco Company is seeking **initial certification** against the Alliance for Water Stewardship Standard (AWS) V2.0 for the following facility:

Site Name:	Pakistan Tobacco Company – Akora Khattak
Site Address:	Akora Khattak, Nowshera, Khyber Pakhtunkhwa
GPS Site Coordinates:	33.993203, 72.145326
Site Country:	Pakistan
AWS Reference No.	AWS-000427
Audit date:	23 December 2021
Audit type:	On-site
Audit level:	Core

A **certification** audit is scheduled on **23 December 2021**. This audit is to be conducted **on-site** due to **initial certification.**

In line with the AWS Certification Requirements, the stakeholders are invited to provide their comments on the site undergoing an AWS Audit.

These comments may be submitted up to and including date of the audit. Alternatively, if you would like to speak with the Audit Team, please contact the Lead Auditor to arrange an interview via video or phone.

TO PROVIDE COMMENTS:

To arrange an interview and/or submit written comments, please contact the Lead Auditor.
You can submit your comments by:

- Via remote interview, and/or
- In writing by email.

Lead Auditor name:	Ali Hashim
Name of Audit Company:	SGS
Lead Auditor email:	Ali.hashim@sgs.cm
Lead Auditor telephone:	+92 32 1646 1538

SPECIAL NOTE:

The general public and stakeholders may also contact the Alliance for Water Stewardship (AWS) directly with questions in accordance with the AWS Comments, Complaints and Appeals Procedures. website: a4ws.org email: assurance@a4ws.org

AWS Stakeholder Announcement Template 02-09-2021 V1.0

Image 3.1
Information Disclosure posted to various Departments

During the conformity assessment, SGS held a stakeholder consultation mseeting. Table 3.1 presents the personnel interviewed.

Table 3.1 Personnel Interviewed during Stakeholder Consultation Meeting

Organization		Personnel Interviewed
Chief Analyst, Environment Protection Agency Peshawar	Government authorities	M. Isrhad
District Director Irrigation Department, Buner		Murad Ali
Sub Engineer, Irrigation Department, Buner		Irshad Alam
Zenziber Restaurant, Akora Khattak	Vendor's	M. Sajid Khan
Mechanical & Electrical Contractor (MAK)		Sher Zaman
Orient Rental Modaraba		Engineering Services
Community Representative	Representative	M.Ayub
Community Representative	Representative	M. Quaid Jan
Owner Shahzad Marbels	Representative	Junaid Shahzad Khan

The stakeholders' meeting was held on the evening of 23rd & 24st December 2021 in BAT Akora Khattak factory during on site-audit conducted by SGS (Ref.; Photos attached). All participants gave a high appraisal to PTC Akora Khattak efforts for its water stewardship.

According to M. Isrhad, official from Environment Protection Agency, appreciated the efforts regarding improving the water quality, quantity & governance. BAT Akora Khattak should review occasional treatment or highlight if found abnormality in water quality.

Mr. Murad Ali from District Director Irrigation Department, Buner, appreciated that PTC Akora Khattak invest significant amount of money on water related initiatives in catchment. According to

Mr.Murad Ali, company has also invest in drip irrigation system. Company should maintained these projects and further projects related to water need to be done in agriculture in catchment.

Irshad Alam, Sub Engineer, Irrigation Department, Buner stated that water availability was a long issue in Buner. Irshad Alam appreciated the efforts of PTC Akora Khattak to collaborated with community farmer of Buner, to improve there lifestyle and livelihood.

M. Sajid Khan Zenziber Restaurant, Akora Khattak, stated that water availability in catchment is an issue and AWS certification which promotes good water governance and water sustainability in catchment. Mr.Sajid also appreciated the awareness trainings regarding AWS in factory.

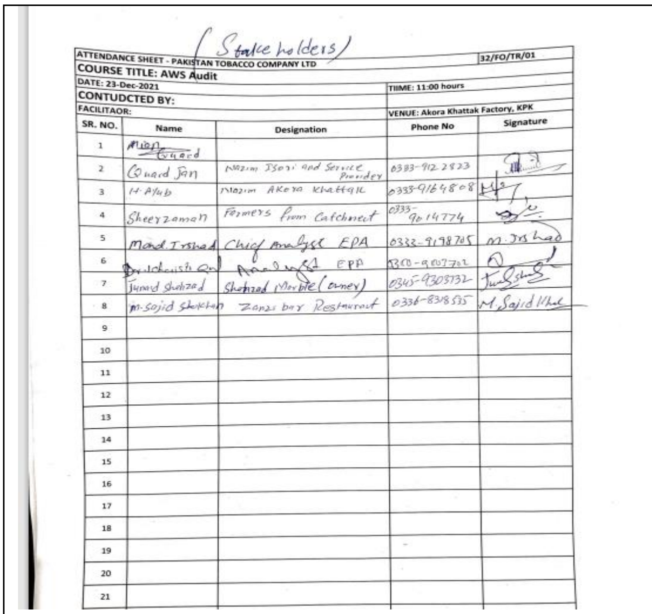
Sher Zaman, Mechanical & Electrical Contractor (MAK), AWS guides about water uses and its conservation. PTC Akora Khattak also created awareness session among farmers about water management in a sustainable manner.

Representative from Orient Rental Modaraba, suggested that PTC Akora Khattak focused on leakages of fresh water lines and also engage team to rectify these water leakages.

M.Ayub from community, appreciated the efforts of PTC Akora Khattak to save water and took initiatives to improve the water quality in catchment.

M. Quaid Jan from community representative, stated that AWS guides about water saving not for present time but also for next generation. Water quality and quantity in catchment was a challenge.

Junaid Shahzad Khan from Owner Shahzad Marbels, stated the AWS is universal system of water stewardship for water governance. Junaid Shahzad suggested that promotes the provision of safe drinking water and reduce or cut down the water usage in catchment.



(Stake holders)

ATTENDANCE SHEET - PAKISTAN TOBACCO COMPANY LTD — 32/FO/TR/01

COURSE TITLE: AWS Audit

DATE: 23-Dec-2021 — TIIME: 11:00 hours

CONTUDCTED BY:

FACILITAOR: — VENUE: Akora Khattak Factory, KPK

SR. NO.	Name	Designation	Phone No	Signature
1	Mian Guard			
2	Guard Jan	Nazim Isori and Service Provider	0333-912 2823	
3	H. Ayub	Nazim Akora Khattak	0333-9164808	
4	Sheerzaman	Farmers from Catchment	0333-9014774	
5	Mohd. Irshad	Chief Analyst EPA	0333-9198705	M. Irshad
6	[illegible]	Analyst EPA	0300-9007702	
7	Junaid Shahzad	Shahzad Marble (owner)	0345-9308732	
8	M. Sajid Shahkhan	Zanzibar Restaurant	0336-8318535	M. Sajid Khan
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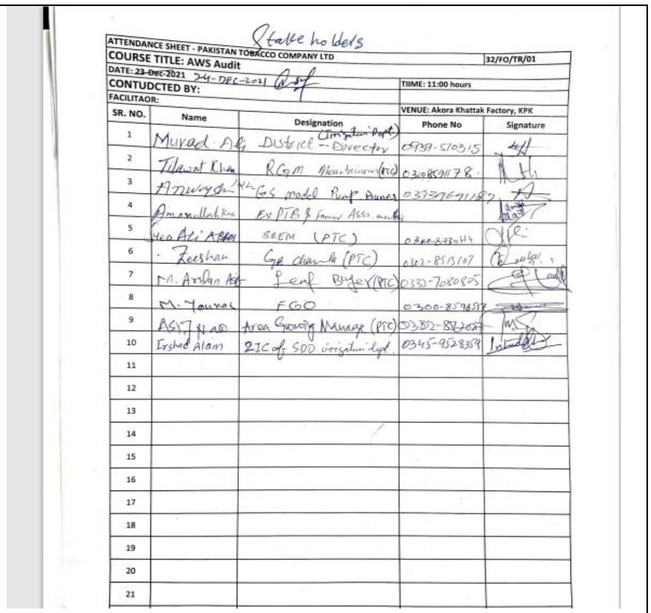

Stake holders

ATTENDANCE SHEET - PAKISTAN TOBACCO COMPANY LTD — 32/FO/TR/01

COURSE TITLE: AWS Audit

DATE: ~~23-Dec-2021~~ 24-DEC-2021 — TIIME: 11:00 hours

CONTUDCTED BY:

FACILITAOR: — VENUE: Akora Khattak Factory, KPK

SR. NO.	Name	Designation	Phone No	Signature
1	Murad Ali	District Director (Irrigation Dept)	0939-510315	
2	Tilawat Khan	RGM Maintenance (PTC)	0308591178	
3	Anwarzeb Khan	GS model Pump Owner	[illegible]	
4	Amanullah Khan	Ex PTB & Farmer Ass. member		
5	Yed Ali Abbas	SEEM (PTC)	[illegible]	
6	Zeeshan	Gp [illegible] (PTC)	0302-8513107	
7	M. Arslan Asif	Leaf Buyer (PTC)	0333-7080805	
8	M. Younas	FGO	0300-859[illegible]	
9	Asif Niaz	Area Growing Manager (PTC)	0302-8[illegible]	
10	Irshad Alam	2IC of SDO irrigation dept.	0345-9528359	
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Photolog 3.3 & 3.4: Stakeholder Consultation during Site visit

4 DESCRIPTION OF CATCHMENT

PTC Akora Khattak Factory is located in GT Road, Factory Road, Akora Khattak, District Nowshera, Khyber Pakhtunkhwa, province of Pakistan. Where, site is utilizing ground water. PTC Akora Khattak used ground water and then, treated wastewater after treatment by effluent treatment plant and then treated water is also recycled for factory operations.

Site is located near Kabul river and Kabul river empties into Indus river. Both rivers are within catchment area of the site. Distance of Kabul river is 2Km from site and Indus river is 13 KM from site.

The catchment area defined by Factory is given in below map.

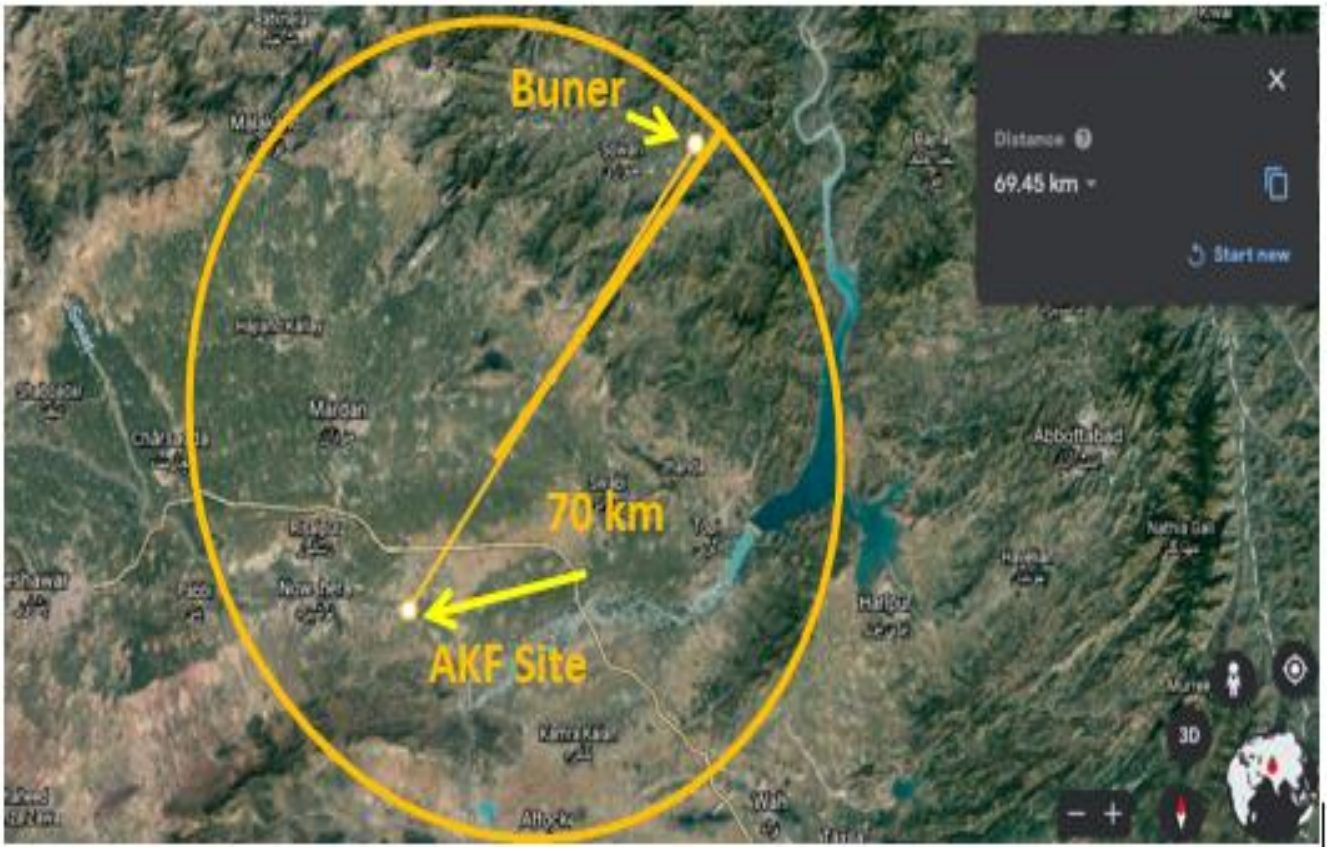

Figure 4.1 Total factory Catchment Area

The district Nowshera is situated in the center of Khyber Pakhtunkhwa, province of Pakistan. It covers an area of about 1700 Km2 between latitude 33º 42' to 34º 09' and longitude 71º 41' to 72º 15'. Groundwater generally occurs under watertable conditions with a few local exceptions. Depth to watertable generally varies from 13 to 50 meters below ground level in barani areas whereas it is within10 m in canal irrigated areas.

The movement of groundwater generally follows the topography which greatly varies particularly in central and southern parts. Groundwater elevation contours in district Nowshera are shown in Figure 4.2. From this contour map it is clear that groundwater is being discharged to River Kabul in Northern parts of the district and to River Indus in Southern part.

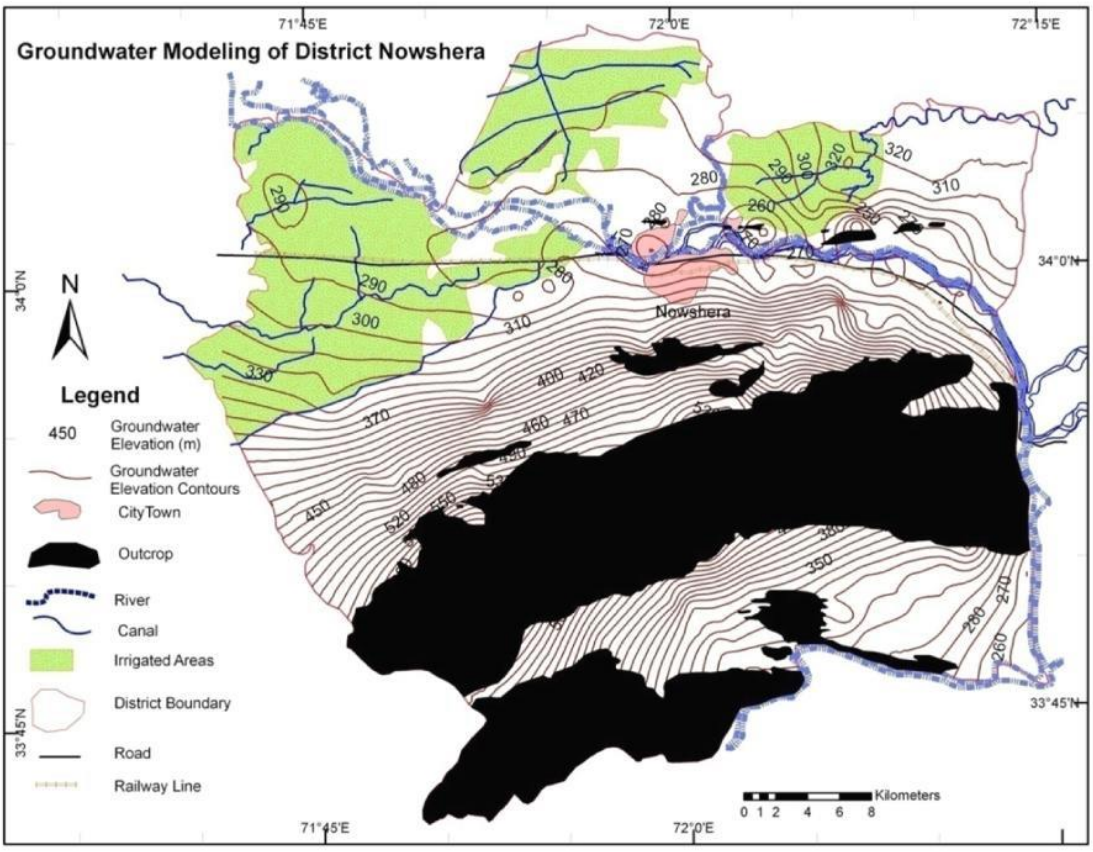

Figure 4.2 : Groundwater elevation contours (m)

The depth to groundwater along the Kabul and Indus rivers and in canal irrigated areas in western part is generally less than 10 m while it is more than 30 m for areas at higher elevations. The atertable in the district rises during rainy season (July and August) and declines during dry season (October to December) when the groundwater abstraction is higher .

The area receives maximum rainfall i.e. about 60% in the months of February, March, July and August. It is thought that winter rains contribute relatively more to groundwater recharge than monsoon rains which are in form of thunder storms and have more runoff.

The recharge rate was finalized to a value of 0.0005 meter per day in irrigated areas. Rainfall in the district is being measured at two station i.e. Resalpur and Cherrat. Twenty percent of this rainfall (as a starting value) was taken as being recharged to groundwater in areas without irrigation. This recharge rate was adjusted finally to the following values i.e. 0.0003125, 0.000375, 0.00039 and 0.00044 m/day, in different recharge zones during model calibration as shown in Figure 4.3.

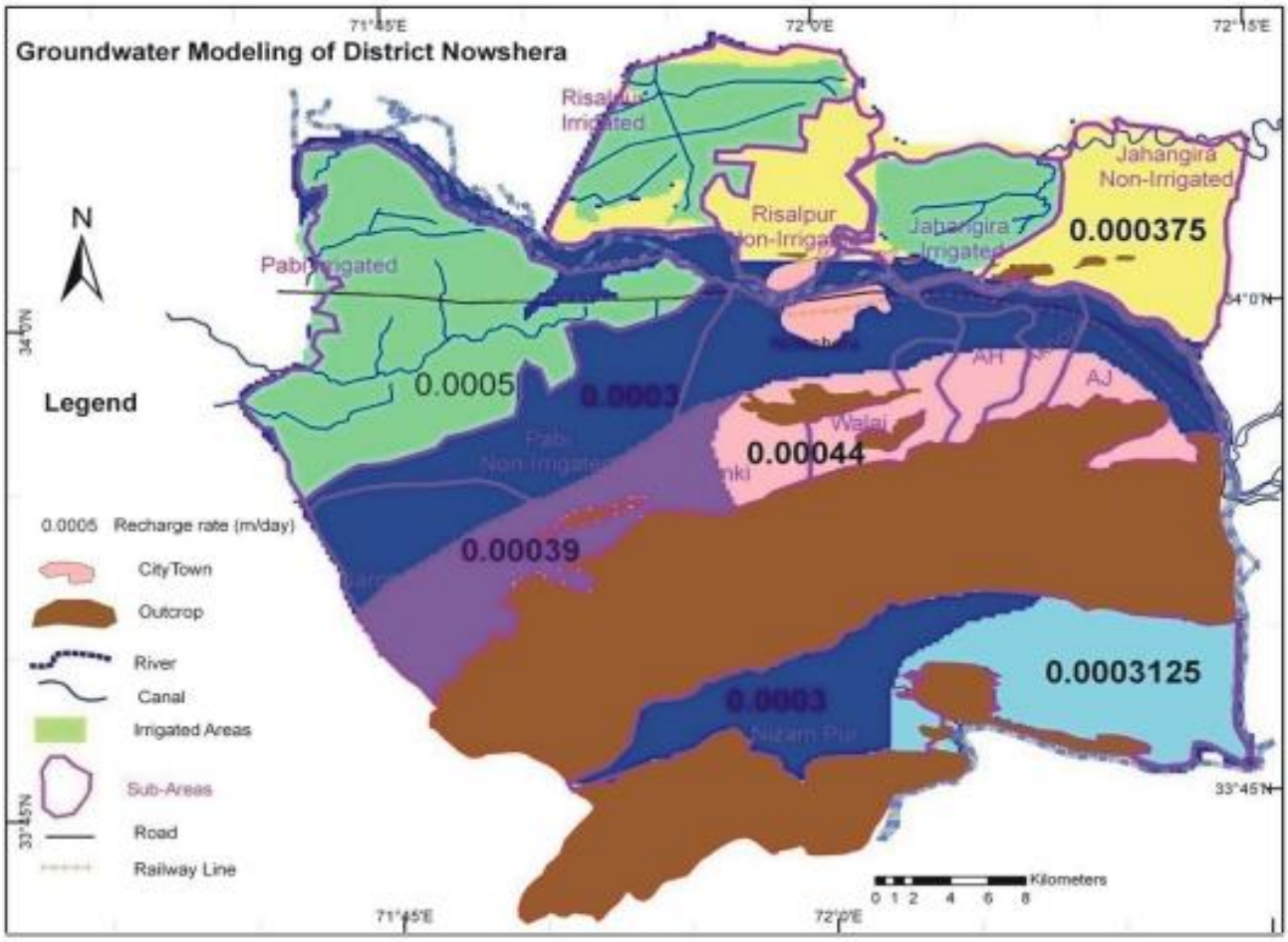

Figure 4.3 Ground Water Modeling of District Nowshera

Figure 4.4 PTC Akora Khattak Waste Water Discharge Layout

5 SUMMARY OF SHARED WATER CHALLENGES

PTC Akora Khattak has identified general shared challenges in the catchment and these are listed in Table 5.1.

Table 5.1.Detailed Shared Water Challenges for PTC Akora Khattak

No.	Water Challenges/Priorities	Specific Activity	Method of Influaence	Type of Engagement	Interest of Stakeholder	Influence/ Power of Stakeholder on Site	Influence/Power of site on Stakeholder
1	Safe and adequate Drinking Water, Adequate Sanitation and Hygiene	Awareness Days celebrations, Awareness sessions	Partner, involve and inform	Day-to-day interaction	High	Low	High
2	Safe and Ample Drinking Water, Adequate Sanitation and Hygiene	Awareness Days celebrations, Awareness sessions	Involve and inform	Day-to-day interaction	High	Low	High
3	Safe and Adequate Supply of Water for drinking and domestic usage, Adequate Sanitation and Hygiene	Water Quality Initiatives, Awreness and Education.	Inform and Reciprocate	Informal Consultations	Low	Low	Low
4	Safe and Adequate Supply of Water for drinking and domestic usage, Adequate Sanitation and Hygiene	Water Quality Initiatives, Awreness and Education.	Inform and Reciprocate	Informal Consultations	Low	Low	Low

5	- Inequitale and inadequate water delivery system - land erosion increasing the risk of flash floods - River and water body pollution - Water Quality - Water Scarcity	Water engagement with water conservation department - comms Letters of communication to AC/DC office Provision of Water Filtration Plants	Inform and Consult	Formal and informal correspondence - case to case basis	High	High	Low
6	Compliance to EPA regulations, NEQS standards	Water Quality Monitoring	Consult	Formal Reporting / Spotchecks	High	High	Low
7	Water Scarcity, Water Quality and Wastewater	Meet and discuss the Water related challenges in the catchment Share the Water Stewardship Actions in the catchment	Inform and reciprocate	Awareness session and sharing of best practices	Low	Low	Low
8	Water Quantity, Water Quality	Drip Irrigation System	Inform and Involve	Consultations, Trainings and Water Projects	High	High	High

9	Water availability	Provision of generator system for the provision of water for irrigation purposes	Partner	MOU on Water for Life Project	High	High	High
10	Water Scarcity and Water Quality	PK Water measurement trials 2021	Inform and Involve	Consultations, Trainings and Water Measurement Projects	High	High	High
11	Provision of Tree samplings every year for the aforestation purposes	MOU on Aforestation	Partner	MOU on Aforestation in Pakistan	High	Low	High
12	Provision of better drinking water facility under WASH	Provision of Drinking Water filtration Plants to improve the drinking water quality standard	Involve	Periodic Engagment	Low	Low	Low
13	Scarcity and Quality of Water Waste Water Management	Understand their water usage and motivate them to take initiatve to make their processes more water efficient	Inform and invlove	Communication by Email and Meetings	Low	High	High

14	Scarcity and Quality of Water Waste Water Management	Understand their water usage and motivate them to take initiatve to make their processes more water efficient	Inform and invlove	Communication by Email and Meetings	Low	High	High
15	Scarcity and Quality of Water	Awareness sessions	Inform	Meetings, Visits and Trainings	Low	Low	Low

6 INDICATORS CHECKLIST

6.1 CORE AWS INDICATORS

As per the requirement set out in the Section 2.11.3.1 of the AWS Certification Requirements, the following table 6.1 presents all the CORE AWS indicators with the relevant reviewed evidence provided by PTC Akora Khattak.

Table 6.1 Evidence Reviewed by SGS Against Each CORE AWS Indicator

Clause	Details	Comments/Evidence
1	**GATHER AND UNDERSTAND**	
1.1	**Gather information to define the site's physical scope for water stewardship purposes, including: its operational boundaries; the water sources from which the site draws; the locations to which the site returns its discharges; and the catchment(s) that the site affect(s) and upon which it is reliant.**	
1.1.1	The physical scope of the site shall be mapped, considering the regulatory landscape and zone of stakeholder interests, including: - Site boundaries; - Water-related infrastructure, including piping network, owned or managed by the site or its parent organization; - Any water sources providing water to the site that are owned or managed by the site or its parent organization; - Water service provider (if applicable) and its ultimate water source; - Discharge points and waste water service provider (if applicable) and ultimate receiving water body or bodies; - Catchment(s) that the site affect(s) and is reliant upon for water.	Physical scope of the site is available and mapped, including site boundaries and catchment details. Pakistan Tobacco company is located in Akora Khattak city, a town in Jahangira tehsil of Nowshera District in Khyber-Pakhtunkhwa province of Pakistan. Site coordinates have been mentioned (33°59'37" N 72°08'44" E). PTC-Akora Khattak Factory spans over a total area of 47.24 acres, including a residential area of 13.93 acres. (Ref: 1.1 Physical Scope) Water related infrastructure including, ground water & discharge point, with piping network has been shared. (Ref: 1.1 Physical Scope). The site primarily relies on groundwater extracted from 6 tube wells for most of its water demand. 7th Tube well is not using. For drinking water purposes, the groundwater is treated via water filtration plants and multi-parameter water quality testing regime is

Clause	Details	Comments/Evidence
		followed as per NEQS standards. Site has only one discharge point. (from Wastewater Treatment Plant & surface water channel/storm water) has been identified and mapped inside the site's boundary. (Ref: 1.1 Physical Scope) The site discharges wastewater into the local community drain (called "Khor" in the local language) after it undergoes treatment by effluent Treatment Plant. The ultimate receiving water body is the Kabul River. Bottled drinking water is also utilized on site (around 250 litters/month) and is provided by the outsourced canteen vendor, Zanzibar. (Ref: 1.1 Physical Scope). Total Physical Scope along including catchment is at 70 KM radius around the Site. The major cities falling within the catchment are Nowshera, Mardan, Swabi and Attock and Buner along with the neighboring irrigated areas, including some tobacco cultivation areas.
1.2	**Understand relevant stakeholders, their water-related challenges, and the site's ability to influence beyond its boundaries.**	
1.2.1	Stakeholders and their water-related challenges shall be identified. The process used for stakeholder identification shall be identified. This process shall: - Inclusively cover all relevant stakeholder groups including vulnerable, women, minority, and Indigenous people; - Consider the physical scope identified, including stakeholders, representative of the site's ultimate water source and ultimate receiving water body or bodies; - Provide evidence of stakeholder consultation on water-related interests and challenges; - Note that the ability and/or willingness of stakeholders to participate may vary across the relevant stakeholder	Stakeholders with their water related Challenges have been identified (Ref: 1.2 Key AWS Stakeholders (with Challenges) Final). Stakeholder's Identification; utilizing procedure developed by site for the purpose of Identification and analysis of stakeholders. The stakeholders are classified in Internal External - General Public External – Government External - Service Providers External - Private Sector External - NGO External Community.

Clause	Details	Comments/Evidence
	groups; - Identify the degree of stakeholder engagement based on their level of interest and influence.	(Ref: 1.2 Key AWS Stakeholders (with Challenges) Final & 1.2.1 & 1.2.2 Stakeholder Identification).
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.	Current & Potential degree of influence has been identified. (Ref: 1.2 Key AWS Stakeholders with Challenges Final)
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.	Water-related incident response plans. (Ref: 1.3.1 Emergency Response Plan).
1.3.2	Site water balance, including inflows, losses, storage, and outflows shall be identified and mapped.	Site water balance including inflows and outflows of water balance are available and mapped. Inlet: Seven (07) main tube wells out of which one tube well is not working and provided water (Zanzibar, 250 litters/month) has been utilized on the site. (Ref: 1.1 Physical Scope) Outlet: only one discharge point (WWTP outlet) is marked on the map. (Ref: 1.1 Treated Water Layout) Site water balance, including inflows, losses, storage, and outflows are identified and mapped. (Ref: 1.3.2 & 1.3.3 Site Water Balance & AKF Water Balance Sheet). Observation 01: It would be recommendable to keep the record of storm/rainwater balance of site (Ref: 1.3.2 & 1.3.3 Site Water Balance & AKF Water Balance Sheet).
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	Annual variance in water usage rates is quantified. (Ref 1.3.2 & 1.3.3 Site Water Balance).

Clause	Details	Comments/Evidence
	people or environment, an indication of annual high and low variances shall be quantified.	mNC 01: Water related challenge that would be threat to good water balance for people or environment an indication of annual high and low variances is not quantified. (water related challenge is of high impact should be quantified and seasonal variations should be measured)
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.	Water quality of the site's water sources, and effluent has been monitored. Water quality was checked as per legal requirement and latest monitoring reports are available. (Ref: 1.3.4 Confidential) mNC 02: Water quality-related challenge was not identified (For example, tube wells) water parameters are within compliance, but may be gradually increasing over time, it will be indicating future non-compliance and risk. Such type of study or future challenges was not found.
1.3.5	Potential sources of pollution shall be identified and if applicable, mapped, including chemicals used or stored on site.	Sources of Pollution have been identified and their preventive measures are documented. (Ref: 1.3.5 Pollution Sources) Observation 02: Potential sources of pollution are identified that would be advisable to map . (Ref: 1.3.5 Pollution Sources). Observation 03: Chemical dosing container for drinking water treatment plant is a potential source which are not identified it would be interesting to include it. (Ref: 1.3.5 Pollution Sources).
1.3.6	On-site Important Water-Related Areas shall be identified and mapped, including a description of their status including Indigenous cultural values.	All-important water related areas have been identified map including their description, values and current condition status. (Ref 1.3.6 Site IWRA)
1.3.7	Annual water-related costs, revenues, and a description or quantification of the social, cultural, environmental, or economic water-related value generated by the site shall be identified and used to inform the evaluation of the plan	Annual water related cost is available (Ref. 1.3.7 Water Budget File & Ref: 2.3.2 LA VSMs & LDMs)

Clause	Details	Comments/Evidence
	in 4.1.2.	mNC 03: Cost for stakeholder consultation efforts is not identified. • Cost spent for electricity bills of tube wells is not identified. • Total amount spent on energy for the movement of water • Total amount spent on energy for the heating and cooling of water
1.3.8	Levels of access and adequacy of WASH at the site shall be identified.	Levels of access and adequacy of WASH at site have been identified and verified on site. (Ref: 1.3.8 & 1.8.5 WASH Services)
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 uses of primary inputs, including quantity, quality and level of water risk within the site's catchment, shall be identified.	The water used for irrigation is identified as 30,213,460 m3/year. The embedded water for laundry is identified as 82944 L/year (Ref: 1.4.1 Embedded Water for (Primary Inputs & 1.4.2 Primary Water for Outsourced). Observation 04: It would be interesting to include the level of water risk within the site's catchment in the document (Ref: 1.4.1 Embedded Water for Primary Inputs & 1.4.2 Primary Water for Outsourced).
1.4.2	The embedded water use of outsourced services shall be identified, and where those services originate within the site's catchment, quantified.	Bottled drinking water is 2,610 Litre/year. (Ref: 1.4.1 Embedded Water for Primary Inputs).
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.	Water governance initiatives identified, and policies have been documented. (Ref: 1.5.1 Water Governance Initiatives). Observation 05: Discussion and communication with relevant stakeholders can also be documented relevant to the governance

Clause	Details	Comments/Evidence
		and policies Observation 06: Document should be developed only relevant to the physical scope of the site. (Irrelevant documents with respect to physical scope are found).
1.5.2	Applicable water-related legal and regulatory requirements shall be identified, including legally-defined and/or stakeholder-verified customary water rights.	Applicable water-related legal and regulatory requirements are identified. (Ref: 1.5.2 Water Related Legal Requirement)
1.5.3	The catchment water-balance, and where applicable, scarcity, shall be quantified, including indication of annual, and where appropriate, seasonal, variance.	Water balance of catchment has been identified and quantified. (Ref: 1.5.3 Catchment Water Balance (with River Flows, Rainfall Data) Record of seasonal variance for catchment has been identified, (the flow in the Kabul and Indus river varies, and a monthly variation. (Ref: 1.5.3 Catchment Water Balance (with River Flows, Rainfall Data) & 1.5.3 Catchment Water Balance). Observation 07: It would be interestin to quantify the seasonal variance for irrigation, river . (Ref: 1.5.3 Catchment Water Balance with River Flows, Rainfall Data & 1.5.3 Catchment Water Balance).
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.	Quality Reports of catchment water are available. (Ref: 1.5.4 Catchment Water Quality) mNC 04: Water related challenge and threat to good water quality status has not been quantified. Annual, and seasonal, high and low variances are not identified
1.5.5	Important Water-Related Areas shall be identified, and where appropriate, mapped, and their status assessed including any threats to people or the natural environment, using scientific information and through stakeholder engagement.	Important Water related area (IWRA) in the catchment area have been identified and mapped. Observation 08: It would be advisable to deescribe properly the threats to people or

Clause	Details	Comments/Evidence
		to the natural environment through stakeholder's engagement . (Ref: 1.5.5 IWRA)
1.5.6	Existing and planned water-related infrastructure shall be identified, including condition and potential exposure to extreme events.	Existing water related infrastructures have been identified. (Ref: 1.5.6 & 1.5.7 Water Infrastructure).
1.5.7	The adequacy of available WASH services within the catchment shall be identified.	Adequacy of WASH within the catchment have not been identified. (Ref:1.5.6 & 1.5.7 Water Infrastructure)
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.	Shared water challenges are identified and prioritize. (Ref: 1.6.1 & 1.6.2 Shared Water Challenges)
1.6.2	Initiatives to address shared water challenges shall be identified.	Initiatives to address shared water challenges are identified. (1.6.1 & 1.6.2 Shared Water Challenges)
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.	Water risks faced by the site are identified, and prioritized. (Ref: 1.7.1 Water Risks)
1.7.2	Water-related opportunities shall be identified, including how the site may participate, assessment and prioritization of potential savings, and business opportunities.	Water related opportunities have been identified and explained in detail. Several initiatives have been taken and some are under consideration to improve water efficiency at site and catchment area. (Ref: 1.7.2 & 1.8.2 & 1.7.2 & 1.8.2 Water Related Opportunities)
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.	Relevant catchment best practice for water governance is identified in detail. Initiatives taken for Water Conservation; Deployment of Drip irrigation resulted around 48% less water than Conventional irrigation system and introduce the best practice of water

Clause	Details	Comments/Evidence
		conservation to local farmer in catchment area. (Ref: 1.8.1 Best Practices for water stewardship & 1.8.1 & 1.8.4 Catchment Best Practices)
1.8.2	Relevant sector and/or catchment best practice for water balance (either through water efficiency or less total water use) shall be identified.	Relevant sector best practice for water balance, water efficiency & less total water use has been identified. Water KPI's Tracking and Reporting Mechanism (Ref: 1.7.2 & 1.8.2 & 1.7.2 & 1.8.2 Water Related Opportunities) Water KPI's Tracking and Reporting Mechanism with Daily Tracking Dashboard are working well. • Following DDS Board is used to track daily water extraction and consumption. • Water data is collected every shift which is then add into the system at the day. • The Dashboard gives data of total extracted water and consumed water. • Water consumed at individual locations and processes is also tracked in the same tracker against the set monthly and daily targets. • Actions are taken if water targets are not being met (Ref. # 1.8.1 Best Practices for water stewardship and Verified during site visit)
1.8.3	Relevant sector and/or catchment best practice for water quality shall be identified, including rationale for data source.	Best practice for water quality and monitoring plan is available. (Ref1.8.3 & 1.8.3 Best Practices for Water Quality)
1.8.4	Relevant catchment best practice for site maintenance of Important Water-Related Areas shall be identified.	Relevant catchment best practice for site maintenance of Important Water-Related Areas has been identified.

Clause	Details	Comments/Evidence
		(Ref: 1.8.1 Best Practices for water stewardship & 1.8.1 & 1.8.4 Catchment Best Practices).
1.8.5	Relevant sector and/or catchment best practice for site provision of equitable and adequate WASH services shall be identified.	Provision of equitable and adequacy of WASH at site have been identified. (The evidence was verified during site visit) (Ref: 11.3.8 & 1.8.5 WASH Services)
2	**COMMIT AND PLAN**	
2.1	**Commit to water stewardship by having the senior-most manager in charge of water at the site, or if necessary, a suitable individual within the organization head office, sign and publicly disclose a commitment to water stewardship, the implementation of the AWS Standard and achieving its five outcomes, and the allocation of required resources.**	
2.1.1	A signed and publicly disclosed site statement OR organizational document shall be identified. The statement or document shall include the following commitments: - That the site will implement and disclose progress on water stewardship program(s) to achieve improvements in AWS water stewardship outcomes - That the site implementation will be aligned to and in support of existing catchment sustainability plans - That the site's stakeholders will be engaged in an open and transparent way - That the site will allocate resources to implement the Standard.	A sign and publicly disclosed site statement/AWS commitment is available and displayed at site. (Verified during site visit). (Ref:2.1.1 Commitment on Water Stewardship Final)
2.2	**Develop and document a process to achieve and maintain legal and regulatory compliance.**	
2.2.1	The system to maintain compliance obligations for water and wastewater management shall be identified, including: - Identification of responsible persons/positions within facility organizational structure - Process for submissions to regulatory agencies.	The system to maintain compliance obligation has been identified responsible persons are identified for legal and regulatory compliance. (Ref: 2.2.1 Legal and Regulatory Requirement)
2.3	**Create a water stewardship strategy and plan including addressing risks (to and from the site), shared catchment water challenges, and opportunities.**	

Clause	Details	Comments/Evidence
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.	Plans and objectives have been identified. (Ref: BAT_ESG_Report_2020 & 2.1.1 & 2.3.1 AWS Policy) Observation 09: Strategy would be clear and concise explaining water targets and roadmap to achieve those targets and future adaptation. (Ref: BAT_ESG_Report_2020 & 2.1.1 & 2.3.1 AWS Policy)
2.3.2	A water stewardship plan shall be identified, including for each target: - How it will be measured and monitored - Actions to achieve and maintain (or exceed) it - Planned timeframes to achieve it - Financial budgets allocated for actions - Positions of persons responsible for actions and achieving targets - Where available, note the link between each target and the achievement of best practice to help address shared water challenges and the AWS outcomes.	Water stewardship plan is available which categorizes priorities, initiatives, scope, budget, responsible person, timeframe and measures. Year to date values of each target and plan have also been quantified. (Ref 2.3.2 AKF Water Stewardship Plan Observation 10: It would be interesting to link between each target and the achievement of best practice to help address shared water challenges and the AWS outcomes . (Ref 2.3.2 AKF Water Stewardship Plan).
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.	Plan to mitigate identified water risks in co-ordination with relevant public-sector and infrastructure agencies are identified. (Ref: 2.4.1 Plan for External Risks & 2.4.1 Mitigation to Identified Risks).
3	**IMPLEMENT**	
3.1	**Implement plan to participate positively in catchment governance.**	
3.1.1	Evidence that the site has supported good catchment governance shall be identified.	Evidence that the site has supported good catchment governance has been identified Water Filtration plants, Water for Life project, Drip Irrigation Systems, afforestation drives in the catchment area.

Clause	Details	Comments/Evidence
		(Ref: 3.1.1 Good Practices Support) Evidence of best practices were verified during site visit by AWS audit team.
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.	Measures have been documented and have been verified during site visit and consultation with stakeholders by AWS team. (Ref: 3.1.2 & 3.2.2 Measures to Water Rights)
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.	Process to confirm legal and regulatory compliances is present and implemented as per procedure and the same was verified during audit on site. (Ref: 3.2.1 Verify Legal Process)
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.	Water rights are in compliance withal legal and regulatory requirements by the site. Site has implemented such actions and activities which makes water efficiency beyond compliance. (PTC) Pakistan is ranked 1st among all BAT sites all over the world in term of water recycling with an exceptional recycling rate of above 43%. They further have plans to enhance water recycling and to improve water quality. They have implemented the policy of zero discharge. Evidences were observed during site visit of the site. (Ref: 3.3.1 & 3.3.2 Legal Water Rights).
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.	Water rights are in compliance withal legal and regulatory requirements by the site. Site has implemented such actions and activities which makes water efficiency beyond compliance. (PTC) Pakistan is ranked 1st among all BAT sites all over the world in term of water recycling with an exceptional recycling rate of above 43%. They further have plans to enhance water recycling and to improve water quality. They have implemented the policy of zero discharge. Evidences were observed during site visit of the site. Site has implemented Water Efficiency Projects 2025 and most of

Clause	Details	Comments/Evidence
		project under this initiative have been completed and other are under progress. (Ref: Key Water Reuse Initiatives & 3.3.1 & 3.3.2 Legal Water Rights).
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.	Annual targets to improve the site's water use efficiency, or if practical and applicable, reduce volumetric total use shall be implemented (Ref: 3.3.1 & 3.3.2 Legal Water Rights & Key Water Reuse Initiatives & AKF Complex ESG Glide path)
3.3.3	Legally-binding documentation, if applicable, for the re-allocation of water to social, cultural or environmental needs shall be identified.	No Reallocation of water from the site.
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.	Status of progress towards meeting water quality targets set in the water stewardship plan are identified. (Ref: 3.4.1 & 3.4.2 Quality Targets and Progress & 3.4.1 & 3.4.2 Water Quality Progress)
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.	Continual improvement to achieve best practice for the site's effluent are identified. (Ref: 3.4.1 & 3.4.2 Quality Targets and Progress & 3.4.1 & 3.4.2 Water Quality Progress)
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.	Practices to maintain and enhance the site important water related areas are implemented. (3.5.1 IWRA Plan Implementation)

Clause	Details	Comments/Evidence
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.	Provision of adequate access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers is identified. Trainings are given to the workers and employees to maintain and report on the near misses or any damage to the WASH related services. (Ref: 3.6.1 WASH Provision & 3.6.1 WASH Provision at site).
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.	Site is not impinging the human rights. (Ref: Audit interviews and stakeholder consultation during AWS audit)
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.	Evidence of improvement in indirect water use is identified and verified during site visit. (3.7.1 & 3.7.2 Indirect Water Targets) Observation 11: It would be recommendable to identify and quantify properly Indirect water use targets. (Evidence of improvement in indirect water use is identified and verified during site visit. 3.7.1 & 3.7.2 Indirect Water Targets).
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.	Evidence of engagement with suppliers and service providers, and actions they have taken in the catchment as a result of the site's engagement related to indirect water use, are identified. Evidence of engagement with farmers which are included in identified catchment area. At these farms, Water conservation measures have been applied, Drip irrigation and Sprinkler with drip irrigation giving the best results in terms of water savings.

Clause	Details	Comments/Evidence
		(Ref: 3.7.1 & 3.7.2 Indirect Water Targets & 1.4.1 Embedded Water for Primary Inputs)
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.	Evidence of engagement, and the key messages relayed with confirmation of receipt, shall be identified (Ref: 3.8.1 Evidence of Engagement & 1.4.1 Embedded Water for Primary Inputs). Observation 12: It would be advisable to do the consultation and engagement more often. (Ref: 3.8.1 Evidence of Engagement & 1.4.1 Embedded Water for Primary Inputs).
3.9	**Implement actions to achieve best practice towards AWS outcomes: continually improve towards achieving sectoral best practice having a local/catchment, regional, or national relevance.**	
3.9.1	Actions towards achieving best practice, related to water governance, as applicable, shall be implemented.	Action for achieving best practice for water governance is implemented. (Ref: 3.9.1 Actions for Water Governance)
3.9.2	Actions towards achieving best practice, related to targets in terms of water balance shall be implemented.	Actions towards achieving best practice, related to targets in terms of water balance shall be implemented and identified. (Ref.3.9.2 Actions for Water Balance & AWS Audit site visit)
3.9.3	Actions towards achieving best practice, related to targets in terms of water quality shall be implemented.	Best practice for water quality and Water quality monitoring plan is available, and reports submitted to government department EPA-KPK for compliance. Continuous improvement is being done by regular monitoring and risk eradication and also through implementing water quality improvement initiatives by site. (Ref: 3.9.3 Actions for Water Quality)
3.9.4	Actions towards achieving best practice, related to targets	Actions towards achieving best practice, related to targets in terms

Clause	Details	Comments/Evidence
	in terms of the site's maintenance of Important Water-Related Areas shall be implemented.	of the site's maintenance of Important Water-Related Areas are identified and implemented. (Ref: 3.9.4 Actions for IWRA Improvement).
3.9.5	Actions towards achieving best practice related to targets in terms of WASH shall be implemented.	Best practice related to targets in terms of WASH is implemented through WASH Defects Reporting and Training on Good Personal Hygiene. (Ref: 1 3.9.5 Actions for WASH Services)
4	**EVALUATE**	
4.1	**Evaluate the site's performance in light of its actions and targets from its water stewardship plan and demonstrate its contribution to achieving water stewardship outcomes.**	
4.1.1	Performance against targets in the site's water stewardship plan and the contribution to achieving water stewardship outcomes shall be evaluated.	Performance against targets in the site's water stewardship plan has been identified and evaluated based on the progress. Moreover, deployment of Drip irrigation resulted around 48% less water than Conventional irrigation system. Increase Water Recycling is above 40.8% and site is going to achieve zero discharge target. (Ref: 1.3.8 & 1.8.5 WASH Services & 4.1.1 Performance against Targets)
4.1.2	Value creation resulting from the water stewardship plan shall be evaluated.	Value creation resulting from the water stewardship plan is evaluated as invested amount of 43,982,626.40 and 360000 are amount saved so far after, implementation of following projects in response to the AWS plan for site are as; Water Softening Plant, Above Ground Water Pipelines, Condensate Recovery RO, Reject Water Utilization, Treated Water for Solar Panel Cleaning, Mist Water Taps Installation, and Water Filter Plant Up gradation. The actions taken in response to AWS in catchment area are; Provision of Water Filtration plants, High Efficiency Drip Irrigation System, Al Bases High Efficiency Drip Irrigation System – Pilot, WASH Campaign – Nowshera District, Engagement with Catchment

Clause	Details	Comments/Evidence
		Farmers. (Ref: 4.1.2 & 4.1.3 Value Creation from AWS).
4.1.3	The shared value benefits in the catchment shall be identified and where applicable, quantified.	The shared value benefits in the catchment shall be identified and where applicable, quantified. The actions taken in response to AWS in catchment area are; Provision of Water Filtration plants, High Efficiency Drip Irrigation System, Al Bases High Efficiency Drip Irrigation System – Pilot, WASH Campaign – Nowshera District, Engagement with Catchment Farmers. (Ref: 4.1.2 & 4.1.3 Value Creation from AWS). Observation 13: The value creation could be categorized as economic, social and reputational values. (Ref: 4.1.2 & 4.1.3 Value Creation from AWS).
4.2	**Evaluate the impacts of water-related emergency incidents (including extreme events), if any occurred, and determine the effectiveness of corrective and preventative measures.**	
4.2.1	A written annual review and (where appropriate) root-cause analysis of the year's emergency incident(s) shall be prepared and the site's response to the incident(s) shall be evaluated and proposed preventative and corrective actions and mitigations against future incidents shall be identified.	The site has internal Enercon system where all the incidents, near misses and actions taken are recorded. Internal meetings are conducted where the current status of reported risks and hazards are discussed and actions to mitigate those risks and prevention and improvement are discussed and implemented by the committee. A written annual review and root-cause analysis of the year's emergency incident(s) and the site's response to the incident(s) are evaluated and proposed preventative and corrective actions and mitigations against future incidents are identified. (Ref: 4.2.1 & 4.4.1 Emergency Response Actions).
4.3	**Evaluate stakeholders' consultation feedback regarding the site's water stewardship performance, including the effectiveness of the site's engagement process.**	
4.3.1	Consultation efforts with stakeholders on the site's water	Consultation efforts with stakeholders on the site's water

Clause	Details	Comments/Evidence
	stewardship performance shall be identified.	stewardship performance are identified with government officials, locals, farmers, and other companies to discuss AWS plans and targets and the efforts to achieve those targets. (Ref: 4.3.1 Consultation Efforts & 4.3.1 Consultation Efforts.ppt.).
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.	The site stewardship plan is available. (Ref. 2.3.2 AKF Water Stewardship Plan) Observation 14: The site's water stewardship plan modification or adapted to incorporate any relevant information and lessons learned from the evaluations in this step or these changes are not described properly.
5	**COMMUNICATE & DISCLOSE**	
5.1	**Disclose water-related internal governance of the site's management, including the positions of those accountable for legal compliance with water-related local laws and regulations.**	
5.1.1	The site's water-related internal governance, including positions of those accountable for compliance with water-related laws and regulations shall be disclosed.	The site's water-related internal governance, including positions of those accountable for compliance with water-related laws and regulations are disclosed on site's website. (Pakistan Tobacco Company - Media (ptc.com.pk) (Ref: 5.1.1 & 5.2.1 & 5.3.1 Governance Structure).
5.2	**Communicate the water stewardship plan with relevant stakeholders.**	
5.2.1	The water stewardship plan, including how the water stewardship plan contributes to AWS Standard outcomes, shall be communicated to relevant stakeholders.	AWS journey and its contribution in AWS Standard outcome are disclosed to the relevant stakeholders and also disclosed through print media. Meeting on AWS Journey and PTC's Efforts to achieve AWS Outcomes was held with Mr. Omer Vaqar (AC Nowshera) Waqas Chaudhry (AC Jahangira)

Clause	Details	Comments/Evidence
		(Ref: 5.1.1 & 5.2.1 & 5.3.1 Governance Structure).
5.3	**Disclose annual site water stewardship summary, including the relevant information about the site's annual water stewardship performance and results against the site's targets.**	
5.3.1	A summary of the site's water stewardship performance, including quantified performance against targets, shall be disclosed annually at a minimum.	Summary of the site's water stewardship performance, including quantified performance against targets, is disclosed on their website. https://www.ptc.com.pk/group/sites/pak_ampc26.nsf/vwPagesWebLive/DOAMQFGG/$FILE/medMDC9U7YK.pdf?openelement (Ref: 5.1.1 & 5.2.1 & 5.3.1 Governance Structure).
5.4	**Disclose efforts to collectively address shared water challenges, including: associated efforts to address the challenges; engagement with stakeholders; and co-ordination with public-sector agencies.**	
5.4.1	The site's shared water-related challenges and efforts made to address these challenges shall be disclosed.	Efforts of the site regarding AWS actions are disclosed on their website. https://www.ptc.com.pk/group/sites/pak_ampc26.nsf/vwPagesWebLive/DOAMQFGG/$FILE/medMDC9U7YK.pdf?openelement (Ref: 5.4.1 & 5.4.2 Shared Challenges Disclosure).
5.4.2	Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be identified.	Efforts made by site to engage and coordinate and support public sector agencies are available. (Ref: 5.4.1 & 5.4.2 Shared Challenges Disclosure).
5.5	**Communicate transparency in water-related compliance: make any site water-related compliance violations available upon request as well as any corrective actions the site has taken to prevent future occurrences.**	
5.5.1	Any site water-related compliance violations and associated corrections shall be disclosed.	No such incident available
5.5.2	Necessary corrective actions taken by the site to prevent future occurrences shall be disclosed if applicable.	No such incident available
5.5.3	Any site water-related violation that may pose significant risk and threat to human or ecosystem health shall be immediately communicated to relevant public agencies and disclosed.	No such incident available

7. AUDIT FINDINGS

Four minor non-conformities were raised during the audit process. The findings raised during the audit were provided to PTC Akora Khattak, who responded afterwards to the findings through an action plan sent to SGS for review. Once the action plan was approved by the Lead Auditor then report was reviewed by the Certifier.

Table 7.2 Minor Non-Conformities Raised during the AWS Audit Process

No.	Type	Ref.	Details	Response by PTC Akora Khattak	Relevant References
1	Minor Non-Conformance	01MINCAR	Indicator 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. *Water related challenge that would be threat to good water balance for people or environment an indication of annual high and low variances is not quantified.* *Water related challenge is of high impact should be quantified and seasonal variations should be measured)*	On 18 February 2022, BAT Akora Khattak provided a corrective action plan for 01MINCAR, which consisted of: Root Cause Analysis: Site's water extraction (which is only 0.16% of the total water extraction in district Nowshera, ref. 1.5.3 catchment water balance) is not considered a threat to the catchment communities or environment. Hence, seasonal variances were not tracked visually in the form of a chart. Corrective Action: Daily meter readings for water consumption at site	(Ref. 1.5.3 catchment water balance)

No.	Type	Ref.	Details	Response by PTC Akora Khattak	Relevant References
				and departmental level are available. The missing element, i.e. visual representation in chart form on an annual horizon will be implemented and maintained from this year. Implementation deadline: 31 December 2022. **Based on our review, the corrective action plan is acceptable.**	
2	Minor Non-Conformance	02MINCAR	Indicator 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. *Water quality-related challenge was not identified (For example, tube wells) water parameters are within compliance, but may be gradually increasing over time, it will be indicating future non-compliance and risk. Such type of study or future challenges was not found.*	On 18 February 2022, PTC Akora Khattak provided a corrective action plan for 02MINCAR, which consisted of: Root Cause Analysis: While a trend analysis exists for ground-water table depth to track any water quantity challenge, the site is still working on establishing a trend analysis of water quality parameters for early detection of any water quality challenges. Corrective Action:	(Ref. 1.3.4 Water Quality Reports & 1.3.8 for Management Procedure)

No.	Type	Ref.	Details	Response by PTC Akora Khattak	Relevant References
				Multi-parameter analysis of site's water on a monthly basis is done and reports were shared during the audit as well. A management procedure is also in place describing how to respond and take action in case any water quality parameter becomes non-compliant. However as per the highlighted minor non-conformance, a trend analysis of water quality parameters will be implemented which will be used to detect any paramter which are gradually deteriorating even if it is within compliance range currently. Implementation deadline: 31 December 2022. **Based on our review, the corrective action plan is acceptable.**	
3	Minor Non-Conformance	03MINCAR	Indicator 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	On 18 February 2022, PTC Akora Khattak provided a corrective action plan for 03MINCAR, which consisted	(Ref. 1.3.7 Water Cost Sheet)

No.	Type	Ref.	Details	Response by PTC Akora Khattak	Relevant References
			the site shall be identified and used to inform the evaluation of the plan in 4.1.2. *Cost for stakeholder consultation efforts is not identified.* *• Cost spent for electricity bills of tube wells is not identified.* *• Total amount spent on energy for the movement of water* *• Total amount spent on energy for the heating and cooling of water*	of: Root Cause Analysis: While an extensive effort was made to consolidate all water-related costs in a dedicated file, a few minor elements were missed Corrective Action: A Water Cost sheet is shared which includes the following costs • Total Annual Costs • Total Amount Spent on Payrolls of Water Related Staff (Highlighted in the snapshot below). Water Network maintenance is outsourced for the site on service charge basis. • Training Costs are included within the cost of outsourced services and are managed by the vendor themselves.	

No.	Type	Ref.	Details	Response by PTC Akora Khattak	Relevant References
				• Cost spent for electricity bills of tube wells is not identified. – estimation will be done based on electricity unit rate, tubewell motor wattage and usage duration. • Total amount spent on energy for the movement of water – estimation will be done based on electricity unit rate, pumps wattage and usage duration. • Total amount spent on energy for the heating and cooling of water – estimation will be done based on electricity unit rate, HVAC equipment wattage and usage duration. Implementation deadline: 31 December 2022. **Based on our review, the corrective action plan is**	

No.	Type	Ref.	Details	Response by PTC Akora Khattak	Relevant References
				acceptable.	
4	Minor Non-Conformance	04MINCAR	Indicator 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. *Water related challenge and threat to good water quality status has not been quantified. Annual, and seasonal, high and low variances are not identified.*	On 18 February 2022, PTC Akora Khattak provided a corrective action plan for 04MINCAR, which consisted of: Root Cause Analysis: Water quality, including physical, chemical, and biological status of the catchment is identified. However, Auditor pointed out water-related challenge, annual and seasonal, high and low variances are not identified. This was not described and provided. Corrective Action: Water Quality Related challenges are identified in Catchment IWRA 1.5.5 (e.g. Water Quality challenges were identified in Drinking water backed by test reports of community water supply). Actions taken by site so far are also mentioned therein. The above is based on once-off testing activity	(Ref:1.5 .5 Water Quality Related challenges are identified in Catchment IWRA)

No.	Type	Ref.	Details	Response by PTC Akora Khattak	Relevant References
				conducted by site for the catchment. For the variances, site will incorportate further testings in its annual monitoring plan that will generate the data points for variance analysis. Implementation deadline: 31 December 2022. **Based on our review, the corrective action plan is acceptable.**	

7 SUMMARY

Based on the review of documents presented by PTC Akora Khattak, the interview with PTC Akora Khattak managers and employees, the interview with local stakeholders, and the on-site reconnaissance, PTC Akora Khattak, has paid great attention to its water stewardship. A considerable quantity of effort and work has been put into the preparation for the audit of AWS certification.

Four minor non-conformities were raised during the audit process. They were considered partially meeting the AWS Core criterion requirement, and some small adjustments were requested to make to the documentation in order to be considered fully compliant. PTC Akora Khattak, has provided SGS acceptable corrective action plans to address all minor non-conformities. We will further ascertain their compliance to the AWS Standard when performing the surveillance assessement in 2022.

8 OPPORTUNITIES FOR IMPROVEMENT

This is the initial conformity assessment for **PTC Akora Khattak**, against the AWS Standard, and more attention is paid to the documented plan and implementation to date. Less focus was placed on the evaluation of **PTC Akora Khattak,s** performance against the indicators as this was the first year of operation under the intention of conformity to the AWS Standard. Therefore, it allows for many areas for improvement going forward.

Besides the follow-up of implementation of corrective action plans to address all minor non-conformities, the future audits will additionally evaluate **PTC Akora Khattak,s** performance against the AWS Standard indicators and how this is monitored and presented as compliance. Thus, **SGS recommends** that **PTC Akora Khattak,** develop practicable ways to monitor its performance against the AWS Standard indicators, and keep relevant records in anticipation of future audits. Below are the area for the improvement.

1.3.2 OBS 1: It would be recommendable to keep the record of storm/rainwater balance of site (Ref: 1.3.2 & 1.3.3 Site Water Balance & AKF Water Balance Sheet).
1.3.5 OBS 2: Potential sources of pollution are identified that would be advisable to map . (Ref: 1.3.5 Pollution Sources).
1.3.5 OBS 3: Chemical dosing container for drinking water treatment plant is a potential source which are not identified it would be interesting to include it. (Ref: 1.3.5 Pollution Sources).
1.4.1OBS 4: It would be interesting to include the level of water risk within the site's catchment in the document (Ref: 1.4.1 Embedded Water for (Primary Inputs & 1.4.2 Primary Water for Outsourced).
1.5.1. OBS 5: Discussion and communication with relevant stakeholders can also be documented relevant to the governance and policies
1.5.1 OBS 6: Document should be developed only relevant to the physical scope of the site. (Irrelevant documents with respect to physical scope are found).
1.5.3 OBS 7: It would be interestin to quantify the seasonal variance for irrigation, river . (Ref: 1.5.3 Catchment Water Balance (with River Flows, Rainfall Data) & 1.5.3 Catchment Water Balance).
1.5.5 OBS 8: It would be advisable to deescribe properly the threats to people or to the natural environment through stakeholder's engagement . (Ref: 1.5.5 IWRA)
2.3.1 OBS 9: Strategy would be clear and concise explaining water targets and roadmap to achieve those targets and future adaptation. (Ref: BAT_ESG_Report_2020 & 2.1.1 & 2.3.1 AWS Policy)
2.3.2 OBS 10: It would be interesting to link between each target and the achievement of best practice to help address shared water challenges and the AWS outcomes . (Ref 2.3.2 AKF Water Stewardship Plan).
3.7.1 OBS 11: It would be recommendable to identify and quantify properly Indirect water use targets. (Evidence of improvement in indirect water use is identified and verified during site visit. 3.7.1 & 3.7.2 Indirect Water Targets).
3.8.1 OBS 12: It would be advisable to do the consultation and engagement more often. (Ref: 3.8.1 Evidence of Engagement & 1.4.1 Embedded Water for Primary Inputs).
4.1.3 OBS 13: The value creation could be categorized as economic, social and reputational values. (Ref: 4.1.2 & 4.1.3 Value Creation from AWS).

4.4.1 OBS 14: The site's water stewardship plan modification or adapted to incorporate any relevant information and lessons learned from the evaluations in this step or these changes would be recommendable to describe them properly. (Ref. 2.3.2 AKF Water Stewardship Plan).

9 CONCLUSIONS AND RECOMMANDATIONS

The organization has demonstrated effective involve of its management system and is capable of achieving its policy objectives, as well as the intended results of the respective management system.

Given the evidence review and the on-site visit inspections performed, SGS recommends that, based on the results of this audit, PTC Akora Khattak (AWS-000427) is awarded AWS Core Certification with yearly surveillance audits.

10 REFERENCES

REF001: Physical Scope

REF002: Key AWS Stakeholders with Challenges

REF003: Stakeholder Identification

REF004: Emergency Response Plan

REF005: Site Water Balance & AKF Water Balance Sheet

REF006: Confidential Documents

REF007: Pollution Sources

REF008: Site IWRA

REF009: Water Budget File , LA VSMs & LDMs

REF010: WASH Services

REF011: Embedded Water for Primary Inputs

REF012: Primary Water for Outsourced

REF013: Water Governance Initiatives

REF014: Water Related Legal Requirement

REF015: Catchment Water Balance (with River Flows, Rainfall Data

REF016: Catchment Water Balance

REF017: Catchment Water Quality

REF018: IWRA

REF019: Water Infrastructure

REF020: Shared Water Challenges)

REF021: Water Risks

REF022: Water Related Opportunities

REF023: Best Practices for water stewardship

REF024: Catchment Best Practices

REF025: Best Practices for Water Quality

REF026: Commitment on Water Stewardship

REF027: Legal and Regulatory Requirement

REF028: : BAT_ESG_Report_2020 & 2.1.1 & 2.3.1 AWS Policy

REF029: AKF Water Stewardship Plan

REF030: Plan for External Risks

REF031: Mitigation to Identified Risks

REF032: Good Practices Support

REF033: Measures to Water Rights

REF034: Verify Legal Process

REF035: Legal Water Rights

REF036: Key Water Reuse Initiatives

REF037: Key Water Reuse Initiatives & AKF Complex ESG Glide path

REF038: Quality Targets and Progress

REF039: Water Quality Progress

REF040: IWRA Plan Implementation

REF041: WASH Provision

REF042: WASH Provision at site

REF043: : Audit interviews and stakeholder consultation during AWS audit

REF044: Indirect Water Targets

REF045: Evidence of Engagement

REF046: Actions for Water Governance

REF047: Actions for Water

REF048:Balance & AWS Audit site visit

REF049: Actions for Water Quality

REF050: Actions for IWRA Improvement

REF051: Actions for WASH Services

REF052: Performance against Targets

REF053: Value Creation from AWS

REF054: Emergency Response Actions

REF055: Consultation Efforts

REF056: AKF Water Stewardship Plan

REF057: Governance Structure

REF058: Shared Challenges Disclosure

REF059: Response to Finding 01MINCAR

REF060: Response to Finding 02MINCAR

REF061: Response to Finding 03MINCAR

REF062: Response to Finding 04MINCAR