

Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

SITE DETAILS

Site: BAT Zambia - Lusaka

Address: Plot # PH1 IND 53 & 54, LS MFEZ, Chifwema Road,, 10101, Lusaka, ZAMBIA

Contact Person: Sophia Mapulanga AWS Reference Number: AWS-000536

Site Structure: Single Site

CERTIFICATION DETAILS

Certification status: Certified Core

Date of certification decision: 2023-Aug-28

Validity of certificate: 2026-Aug-28

AUDIT DETAILS

Audited Service(s): AWS Standard v2.0 (2019)

Audit Type(s): Initial Audit Audit Start Date: 2023-Jun-20 Lead Auditor: Warrick Stewart

Audit team participants:

Warrick Stewart, Lead Auditor

Site Participants:

Emanuel Chesire, BAT: Head of Operations – SAM Markets Sophia Sawomba Mapulanga, BAT: Sustainability Coordinator Tawela Mhango, BAT: Engineering & Sustainability Manager

Blessing Shumba, BAT: Head of Trade

Hazel Kakoma, BAT: HR BP

Wilson Chitsonga, BAT: Head of Finance

Chewe Hamabuyu, BAT: Legal & External Affairs (LEX) Executive

Stephen Muli, BAT: Area Sustainability Manager

Kaunda Lembalemba, BAT: Production of Supply Chain Manager Chipego Zulu Chileshe, BAT: Legal & External Affairs (LEX) Manager

Collins Chibomba, BAT: Engineering Tech

David Chipere, BAT: Electrical Tech

Ednalva Jamisse Matola, BAT: Production & EHS Coordinator (Mozambique)

Kimesh Naidoo, BAT: Managing Director (Zambia & Zimbabwe)



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AUDIT TIMES

Dates	Audit from	Duration	Auditor	Description
2023-Jun-2 0	08:00:00 - 17:15:00	09:15	Warrick Stewart	
2023-Jun-2 1	08:00:00 - 17:00:00	09:00	Warrick Stewart	
2023-Jun-2 2	08:00:00 - 14:00:00	06:00	Warrick Stewart	



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ADDITIONAL INFO

Summary of Audit Findings: A total of 24 findings were raised during the certification audit, 0 major non-conformities, 9 minor non-conformities, and 15 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 20/09/2023.

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

The audit team recommends certification of the BAT Lusaka Site at Core level pending approval of the corrective actions plan.

CLOSURE OF FINDINGS AND CORRECTIVE ACTION PLAN:

The Client has successfully submitted the corrective action plans addressing all findings. Proof of implementation has been requested for the Minors and this will be evaluated during the Surveillance Audit. The client is requested to upload evidence of implementation prior to the Surveillance Audit.



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Scope of Assessment: The scope of services covers the Initial certification audit for assessing conformity of the British American Tobacco (BAT) Lusaka, Zambia, site against the AWS International Water Stewardship Standard Version 2.

The BAT Lusaka site, Zambia, is located in the Lusaka South Multi-Facility Economic Zone (LS MFEZ), a Special Economic Zone designed to drive economic diversification and development. The LS MFEZ is approximately ten (10) kilometers from the Lusaka City Centre. The Lusaka Game Park, which is managed by the Zambia Wildlife Authority (ZAWA), is adjacent to the southern part of the MFEZ.

The site manufactures cigarettes, with the input tobacco primarily sources from BAT's operations in Kenya and Zimbabwe. The operation owns and operates various water-related infrastructure on-site, which range from abstracted water storage tanks, water pumps, and an intricate network of conveyance pipes that transport water to and from various water use and discharge points. Water is primarily used on site for the Heating, Ventilation, and Air Conditioning (HVAC) system for cooling of work areas and in WASH facilities (e.g., toilets, showers etc.).

Input water for the site is obtained from the MFEZ, which operates four (4) boreholes and a potable water treatment plant. The site discharges process and grey into an on-site drainage network, which is conveyed into the MFEZ provided wastewater lines that convey the effluent to a centralized MFEZ Effluent Treatment plant. After treatment the wastewater is then discharged on to land and most of it percolates into the Lusaka Dolomite Aquifer and part of it evaporates into the atmosphere.

All BAT Zambia storm water is collected on-site via a network of roof and surface drains, which is deposited into MFEZ storm water drains. The storm water is then channeled to a canal from which the water is ultimately discharged into the environment and it percolates into the aquifer and evaporates.

The site is located in the Chilongolo Catchment in terms of its receiving and discharge water. The catchment is devoid of any river system, but it hosts part of the Lusaka Aquifer system. This geological formation (Lusaka Dolomite) has high recharge potential for groundwater. The area is also characterised by shallow groundwater tables, and abundant surface karst features (karst morphology and sinkholes) that facilitate good permeability of the unsaturated zone.

The audit was conducted onsite on 20 - 22 June 2023.

The on-site site visit included the assessment of the input water point; the site's water piping network; water metering system; on-site water storage tanks; back-up water treatment system; Heating, Ventilation and Air-Conditioning (HVAC) system; chemical store and uses; fuel storage tanks; WASH facilities; waste management area; water-based fire suppression system; effluent discharge point; and storm water system as part of the audit.

FINDINGS

NUMBER OF FINDINGS PER LEVEL Observation 15 Minor 9



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

FINDING DETAILS

Finding No: TNR-004597

Checklist Item No: 1.2.1 Status: Open

Finding level: Observation

Due date: 2024-Jun-18

Checklist item: Stakeholders and their water-related challenges shall be identified. The

process used for stakeholder identification shall be identified. This

process shall:

- Inclusively cover all relevant stakeholder groups including vulnerable,

women, minority, and Indigenous people;

- Consider the physical scope identified, including stakeholders,

representative of the site's ultimate water source and ultimate receiving

water body or bodies;

- Provide evidence of stakeholder consultation on water-related interests

and challenges;

- Note that the ability and/or willingness of stakeholders to participate

may vary across the relevant stakeholder groups;

- Identify the degree of stakeholder engagement based on their level of

interest and influence.

Findings: The site identified the community including Vulnerable, Women,

Minority and Indigenous groups as least important role-players, as the site is located in an economic zone. The community was identified as needing to be kept informed and considered. These communities have limited influence and interest within the context of the economic zone. However, the site did not identify where these stakeholders are located. In particular those communities and/or areas that are currently or in the future are likely to be affected to reduced water quality were not

identified. Also, those closest to the site's ultimate water sources and

discharge points were not mapped spatially.



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Finding No: TNR-004536

Checklist Item No: 1.3.3

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2024-Jun-18

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: Water Balance 2023.xlsx reflects the water balance calculation results.

However, the discharge values are all estimates based on 90% of inflows and are not on actual meter readings. Inflows and usage are metered, but not outflows. Consequently, calculations provided were based on actual metered results for use (including evaporation losses for HVAC) and storage, but only estimates for outflows. The site is recommended to install water meters to correct this. Alternative more

accurate methodsfor calculating outflows are required.

Corrective action: Design changes need to be made to one of the wastewater channels

which will allow for the installation of a wastewater meter.

Finding No: TNR-004598

Checklist Item No: 1.4.2 Status: Open

Finding level: Observation

Due date: 2024-Jun-18

Checklist item: The embedded water use of outsourced services shall be identified, and

where those services originate within the site's catchment, quantified.

Findings: The site could list embedded water use in the catering services it

receives, but this almost certainly less than 5%.

Finding No: TNR-004818

Checklist Item No: 1.5.2 Status: Open

Finding level: Observation

Checklist item: Applicable water-related legal and regulatory requirements shall be

identified, including legally-defined and/or stakeholder-verified

customary water rights.

Findings: The site has a contract with MFEZ that includes the provision of potable

water to the size and receipt and treatment of the site's waste water.

This should be added to the site's list of water-related legal and

regulatory requirements.

WSAS WATER STEWARDSHIP ASSURANCE SERVICES

Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Finding No: TNR-004599

Checklist Item No: 1.5.4 Status: Open

Finding level: Observation

Due date: 2024-Jun-18

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: Additional biological data would be of value once additional studies are

undertake in the catchment and/or identified by the site.

Finding No: TNR-004543

Checklist Item No: 1.5.5

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2024-Jun-18

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: The site identified the following IWRAs in the catchment: Offsite

Boreholes (MFEZ), Lusaka National Park (as a key feature within the Aquifer Recharge Zones), Lusaka Dolomite Aquifer, and Aquifer Recharge Zones in 1.5.5_IWRA_CATCHMENT.pdf. This includes the status of these IWRAs, a justification for their identification, how the site

affects the IWRM, and Water Related Risks to these IWRAs.

However, these IWRAs have not been mapped spatially in the evidence provided for this indicator. The sources of information used to identify and assess their status were also not documented (e.g., scientific

information, stakeholder engagement etc.).

Corrective action: Map out all identified IWRAs and define the source of information used

to identify the IWRAs - Refresh training on IWRAs identification, amend the current list of identified IWRAs to include the source of information

used to identify the IWRA.

Map out all identified IWRAS and retain a map of IWRAs.

WSAS WATER STEWARDSHIP ASSURANCE SERVICES

Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Finding No: TNR-004600

Checklist Item No: 1.8.1 Status: Open

Finding level: Observation

Due date: 2024-Jun-18

Checklist item: Relevant catchment best practice for water governance shall be

identified.

Findings: The development, implementation, review and updating of a WSP does

not in itself constitute best practice, as it is a key requirement of the AWS Standard. The site in encouraged to expand on the identification process annually by benchmarking across other BAT facilities.

competitors, engaging with stakeholders and environmental bodies and

researching international Best Practice.

Finding No: TNR-004975

Checklist Item No: 1.8.4 Status: Open

Finding level: Observation

Checklist item: Relevant catchment best practice for site maintenance of Important

Water-Related Areas shall be identified.

Findings: The current list of identified Best Practice in IWRAs is unambitious in its

possibility. The site in encouraged to expand on the identification process annually by benchmarking across other BAT facilities,

competitors, engaging with stakeholders and environmental bodies and

researching international Best Practice.

Finding No: TNR-004602

Checklist Item No: 1.8.5

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2024-Jun-18

Checklist item: Relevant sector and/or catchment best practice for site provision of

equitable and adequate WASH services shall be identified.

Findings: Some of the detailed practices identified are standard/minimum sector

practice (e.g., Toilets, Hand Sanitization Stations, First Aid Room), whilst others are best practices (female hygiene products, Mother's room for

pregnant or breast-feeding parents).

The site did not identify any best practices within the catchment.

Corrective action: Conduct research of best practices in WASH provision in catchment

contexts to identify best practices and consult with stakeholders in the

WASH sector on catchment best practices e.g., ACTION AID,

NWASCO, LWSC.



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Audit Number: AO-000593

Finding No: TNR-004605

Checklist Item No: 2.1.1

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2024-Jun-18

Checklist item: 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.

Findings: The site disclosed its commitment in two locations within the building

and one outside the building within the site, but none are accessible to the public without having to enter the site, which has access control in place. The site disclosed its commitment during its stakeholder meeting, via its PPTX presentation, to its key stakeholders but not the general

public.

Corrective action: Install a weatherproof frame that will be stuck outside the factory gate on

one of the entrance pillars.

Finding No: TNR-004607

Checklist Item No: 2.2.1

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2024-Jun-20

Checklist item: 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.

Findings: The License Permit Tracker worksheet in the Legal Register includes

expiry dates and trigger dates for submission of renewal applications,

but not the responsible parties.

Corrective action: Include columns in the tracker that have process descriptions and

responsible person for each listed item.



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Audit Number: AO-000593

Finding No: TNR-004608

Checklist Item No: 2.2.1 Status: Open

Finding level: Observation

Due date: 2024-Jun-18

Checklist item: 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.

Findings: The site could benefit from documenting its process to maintain legal

compliance in more detail beyond the Legal Register and 1.5.2_WATER RELATED LEGAL REQUIREMENTS.pdf, as per the explanation

provided on site during the audit (see the auditor comment on the site's

explanation of the process).

Finding No: TNR-004821

Checklist Item No: 3.2.2 Status: Open

Finding level: Observation

Due date: 2024-Jun-18

Checklist item: 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.

Findings: The site's chemical store (external cage) is not bunded, which poses a

potential risk of contamination of the site's and MFEZ's storm water

system, including the downstream receiving environment.

Finding No: TNR-004647

Checklist Item No: 3.6.1 Status: Open

Finding level: Observation

Due date: 2024-Jun-18

Checklist item: 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.

Findings: 1.3.8_LEVELS OF WASH.pdf reflects the WASH facilities and ratios of

toilets for men and women. The on-site audit confirmed that adequate and a sufficient number of WASH facilities are available across the site. However, the total number of showers and WASH facilities per building

have not been quantified.



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Finding No: TNR-004625

Checklist Item No: 3.7.2

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2024-Jun-18

Checklist item: 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.

Findings: The site has engaged with their Nairobi and Heidelberg factories to

obtain information on WATER STRESS LEVEL, AMOUNT OF WATER

USED IN m3, WATER QUALITY, and WATER RISKS AND

MITIGATION of the products they supply to BAT Lusaka (see Zambia Indirect Water Use.xlsx.msg). Efforts made by these two supplier in reducing their indirect water use are reflected in AWS-000461 -BAT-South-Africa-Heidelberg-2022-Initial-Certification-Report.pdf and

AWS-000460-BAT-Kenya-Likoni-2022-Certification-Report.pdf.

However, these two sites are more advanced in their AWS journey, so they have shared with BAT Lusaka what they have implemented in terms of reducing indirect water use. To date the site has not proactively engaged with these sites to encourage further improved indirect water

use practices, but is planning to do so shortly.

Corrective action: One on one interaction with indirect water users to take place to allow

for more discussions and benefits of best practices for the users to

adopt.

Finding No: TNR-004626

Checklist Item No: 3.9.2 Status: Open

Finding level: Observation

Due date: 2024-Jun-18

Checklist item: Actions towards achieving best practice, related to targets in terms of

water balance shall be implemented.

Findings: Opportunity exists for the site to more explicitly document progress to

date in relation to the targets set, which as explained in 2.3.2 should be

quantified to the greatest extent possible.

Also, targets than span multiple years have not been broken down into

constituent parts relevant for each year of assessment.



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Finding No: TNR-004820

Checklist Item No: 3.9.3 Status: Open

Finding level: Observation

Due date: 2024-Jun-18

Checklist item: Actions towards achieving best practice, related to targets in terms of

water quality shall be implemented.

Findings: As with 3.9.2, opportunity exists for the site to more explicitly document

progress to date in relation to the targets set, which as explained in 2.3.2

should be quantified to the greatest extent possible.

Finding No: TNR-004627

Checklist Item No: 3.9.4 Status: Open

Finding level: Observation

Due date: 2024-Jun-18

Checklist item: Actions towards achieving best practice, related to targets in terms of

the site's maintenance of Important Water-Related Areas shall be

implemented.

Findings: As with 3.9.2 and 3.9.3, opportunity exists for the site to more explicitly

document progress to date in relation to the targets set, which as explained in 2.3.2 should be quantified to the greatest extent possible.



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Finding No: TNR-004628

Checklist Item No: 3.9.5 Status: Open

Finding level: Observation

Due date: 2024-Jun-18

Checklist item: Actions towards achieving best practice related to targets in terms of

WASH shall be implemented.

Findings: The site identified a number of on-site WASH activities as best

practices, but in reality only the following actually constitute best

practice:

- Mother's room for pregnant or breast-feeding parents.

- Sanitary bins for disposal of menstrual waste.

Status of implementation to date between 2021 and June 2023 is

reflected in the Status and Comments fields of

Water_Stewardship_Plan_finish.xlsx.

However, these actions were not included in the WSP. The site also implemented a campaign to encourage a maximum of 4min showers,

but this was also not included in the WSP.

As with 3.9.2, 3.9.3, and 3.9.4, opportunity exists for the site to more explicitly document progress to date in relation to the targets set, which

as explained in 2.3.2 should be quantified to the greatest extent

possible.

The site did not identify any off-site WASH best practices in its WSP.

Finding No: TNR-004629

Checklist Item No: 4.1.1 Status: Open

Finding level: Observation

Due date: 2024-Jun-18

Checklist item: Performance against targets in the site's water stewardship plan and the

contribution to achieving water stewardship outcomes shall be

evaluated.

Findings: As identified in 2.3.2 and 3.9.2, opportunity exists for the site to more

explicitly document the targets it sets, to support effective evaluation.



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Finding No: TNR-004646

Checklist Item No: 4.1.3 Status: Open

Finding level: Observation

Due date: 2024-Jun-18

Checklist item: The shared value benefits in the catchment shall be identified and where

applicable, quantified.

Findings: Some of the current benefits may be slightly over-stated (e.g., social re

Improved WASH within the communities; environmental re "no sinkholes") and may require minor revision to ensure they accurately

reflect what has actually been achieved/delivered to date.

Finding No: TNR-004634

Checklist Item No: 5.1.1

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2024-Jun-18

Checklist item: The site's water-related internal governance, including positions of those

accountable for compliance with water-related laws and regulations shall

be disclosed.

Findings: AWS publication.pdf provides an overview of the site's water

governance, which was shared with the site's key stakeholders.

However, this does not include details of the positions accountable for compliance with water-related laws and regulations and the hierarchy between those accountable for water and the senior-most leadership at the site level (CEO or equivalent) or the board. This information is reflected in the site's Water Stewardship Strategy, but it has not been

shared publicly nor with key stakeholders.

Corrective action: - Periodic use of print media accessible to the public to communicate

details of sites water governance

- publish the position in the company annual report.



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Finding No: TNR-004636

Checklist Item No: 5.3.1

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2024-Jun-18

Checklist item: A summary of the site's water stewardship performance, including

quantified performance against targets, shall be disclosed annually at a

minimum.

Findings: The site's WSP and an overview of the site's AWS journey was shared

with key stakeholders via a summary of the consultative workshop held

(see Re Stakeholder Consultative Meeting on Water Related

Opportunities in Kafue Catchment Area.msg), but this did not include

any details of the site's quantified performance.

Corrective action: Detailed table showing the sites targets from base line year to date will

be shared with the stakeholders on the next combined stakeholder engagement. The site must ensure that this contains more than just

targets but also the performance against those targets.

Finding No: TNR-004637

Checklist Item No: 5.4.1

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2024-Jun-18

Checklist item: The site's shared water-related challenges and efforts made to address

these challenges shall be disclosed.

Findings: Over the past 2 years the site has been involved in several initiatives

and activities aimed at supporting addressing shared water challenges as reflected in 5.4.1.pdf. This has included actions and consultations with LuWSi, MFEZ, Manja Pamodzi etc. This list of shared water challenges were refined and added to during the consultative workshop.

However, the contents of 5.4.1.pdf has not been shared publicly.

Corrective action: The site will be involved in several initiatives and activities aimed at

supporting addressing shared water challenges and this will be shared

publicly..



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Report Details		
Report	Value	
Report prepared by	Warrick Stewart	
Report approved by	Mia Antoni-Naidoo	
Report approved on (Date)	12 July 2023	

Proposed date for next audit

Surveillance

2024-Jun-18

Stakeholder Announcements

Date of publi	cation Location
12/04/2023	WSAS and AWS Websites
Comment	The audit was announced by WSAS and AWS via both of their websites on 7 May 2023, as well as by BAT via the Zambia Daily Mail newspaper and email to their identified stakeholders on 7 July 2023 due to an oversight in earlier publication. The late announcement by BAT provided stakeholders with an opportunity to make input into the audit process and/or interact with the auditor for 30 days after the on-site audit during the report review period.
Comment	Stakeholder interviews were conducted with the Lusaka South Multi-Facility Economic Zone (LSMFEZ) and the Lusaka National Park (Zambia Department of National Parks & Wildlife (DNPW)) in person on 21 June 2023. WWF Zambia and the Water Resources Management Authority (WARMA) were interviewed virtually on 22 and 28 June 2023 respectively.



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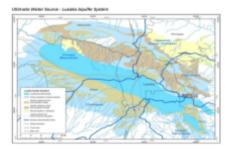
Catchment Information

Catchment Information

The site is located in the Chilongolo Catchment, which is devoid of any river system but it hosts part of the Lusaka Aquifer system. This geological formation (Lusaka Dolomite) has high recharge potential for groundwater. The area is also characterised by shallow groundwater tables and abundant surface karst features (karst morphology and sinkholes) that facilitate good permeability of the unsaturated zone.



Site Catchment map 2.jpg



Site Catchment map 1.jpg



Site boundary.jpg



Alliance for Water Stewardship (AWS)

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Client Description and Site Details

Client/Site Background

The BAT Zambia site is situated at Plot F10723, Chifwema Road, Off Leopards Hill Road, Lusaka. The site is located in the Lusaka South Multi-Facility Economic Zone (LSMFEZ or MFEZ), a Special Economic Zone designed to drive economic diversification and development. The LSMFEZ is approximately ten (10) kilometers from the Lusaka City Centre. The MFEZ has a designated area of 2,100 hectares of land in a rectangular configuration measuring seven (7) kilometers by three (3) kilometers. The area adjacent to the southern part of the Zone is the Lusaka National Park, which is managed by the former Zambia Wildlife Authority (ZAWA) now the Department of National Parks & Wildlife (DNPW).

The site is located in the Chilongolo Catchment in terms of its receiving and discharge water. The catchment is devoid of any river system, but it hosts part of the Lusaka Aquifer system. This geological formation (Lusaka Dolomite) has high recharge potential for groundwater. The area is also characterised by shallow groundwater tables, and abundant surface karst features (karst morphology and sinkholes) that facilitate good permeability of the unsaturated zone.

The operation owns and operates various water-related infrastructure on-site, which range from abstracted water storage tanks, water pumps, and an intricate network of conveyance pipes that transport water to and from various water use and discharge points.

The site obtains its input water from the MFEZ, who is its Water Service Provider and it (the MFEZ) obtains its (ground) water from the Lusaka Dolomite Aquifer. The MFEZ abstracts water from 4 boreholes and treats the water for supply to certain companies within MFEZ, including BAT.

The BAT site discharges process and grey into an on-site drainage network, which is conveyed into the MFEZ provided wastewater lines that convey the effluent to a centralized Effluent Treatment plant. After treatment the wastewater is then discharged on to land and most of it percolates into the Lusaka Dolomite Aquifer and part of it evaporates into the atmosphere.

All BAT Zambia storm water is collected on-site via a network of roof and surface drains, which is deposit into MFEZ storm water drains. The storm water is then channeled to a canal from which the water is ultimately discharge into the environment and it percolates into the aquifer.

Summary of Shared Water Challenges

Summary of Shared Water Challenges

The shared water challenges in the catchment include:

- i) Uncontrolled borehole drilling;
- ii) High number of sinkholes;
- iii) Deforestation;
- iv) Lack of enforcement of existing water-related laws;
- v) Inactive authorities;
- vi) Flooding;
- vii) High mineral content of water;
- viii) Over abstraction of groundwater; and
- ix) Lowering of the water table.



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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.	⊘ Yes
Comment	The site occupies as single catchment; the Chilongolo catchment.	
0.1.1.2	The scope of the proposed certification shall be under the control of a single management system.	⊘ Yes
Comment	The site is 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.	⊘ Yes
Comment	The site is homogeneous with respect to its primary production system, water management product range, and the main market structures.	i,



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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:



- 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.

Comment

Evidence:

1.1.1_SITE PHYSICAL SCOPE.pdf

Comments:

1.1.1_SITE_PHYSICAL_SCOPE.pdf comprehensively reflects the physical scope of the site both descriptive and via mapping, including the regulatory landscape and zone of stakeholder interests. This includes:

- The 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 (MZEF) and its ultimate water source;
- Stormwater discharge points and ultimate receiving (terrestrial) environment, as there are no nearby receiving water bodies;
- Effluent discharge points and waste water service provider and ultimate receiving water body or bodies; and
- The Chilongolo catchment that the site affects and is reliant upon for water.
- 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:

Q Obs.

- Inclusively cover all relevant stakeholder groups including vulnerable, women, minority, and Indigenous people;
- Consider the physical scope identified, including stakeholders, representative of the site's ultimate water source and ultimate receiving water body or bodies;
- Provide evidence of stakeholder consultation on water-related interests and challenges;
- Note that the ability and/or willingness of stakeholders to participate may vary across the relevant stakeholder groups;
- Identify the degree of stakeholder engagement based on their level of interest and influence.

WSAS

WSAS WATER STEWARDSHIP ASSURANCE SERVICES

Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment

The site undertook stakeholder mapping broadly across the catchment, including speaking to government stakeholders to determine what other water-related stakeholders there are in the catchment. They then engaged MFEZ to identify companies in the Economic Zone, and then communicated with and met these companies.

The institutions that deal with water-related issues were engaged, that led to the site joining LuWSI. This led to the site then identifying a range of community stakeholders.

Evidence

1.2.1.2 Stakeholder mapping.xlsx

1.2.4.1 Stakeholders meeting report -BAT AWS implementation.pdf

1.2.1.2 Stakeholder mapping.xlsx

1.2 UNDERSTAND RELEVANT STACKHOLDERS.pdf

1.2.1.2 Stakeholder engagements and communications.zip BAT Zambia - WARMA mapping letter - 2022-09-06_signed IMG 0680

Invitation to the LuWSI Training on Water Stewardship and Environmental Management Letter of Interest for AWS meeting LSMFEZ

Letter of Interest to Join LUWSI 2023

RE AWS Agenda Alignment

Re REQUEST FOR WATER MAPPING FOR MFEZ CATCHMENT AREA
UPDATE ON YOUR APPLICATION TO JOIN LUWSI AND INVITATION TO PARTICIPATE IN
THE 2023 LUWSI PRIORITIZATION WORKSHOP
WARMA Response

Comments:

The site's stakeholder Identification, Assessment, Categorising, Prioritising, Level of Engagement Determination, and Consultative Meetings is documented in 1.2_UNDERSTAND RELEVANT STACKHOLDERS.pdf

The stakeholders and their water-related challenges have been identified in: 1.2.1.2 Stakeholder mapping.xlsx

Consultation undertaken to date between September 2022 and May 2023 is reflected in: 1.2.1.2 Stakeholder engagements and communications.zip

1.2.4.1 Stakeholders meeting report -BAT AWS implementation.pdf

The site identified relevant neighbours, organs of state (including regulators, ministries, government stakeholders that may be impacted), non-profit organisations (in the water, WASH, and conservation sectors), communities (but only broadly so), and specific private sector role-players. These were also mapped spatially in 1.2_UNDERSTAND RELEVANT STACKHOLDERS.pdf, except for communities.

The stakeholder mapping document (1.2.1.2 Stakeholder mapping.xlsx) includes the following criteria: Stakeholder Names, Type, Address, Influence/ Power of stakeholder, Interest(High/Low), Engagement matrix (Approach based on Priority), Degree of Influence and engagement strategy, Communication Method, Role (Linkage to the Site), Contact Person and Details, Expectations of Stakeholder and their water related challenges, Shared Water Challenges, and (Current) Engagement Status.

This evidence also includes the following:

- Relevant stakeholder groups, including vulnerable, women, minority, and Indigenous people;
- Identification of the physical scope, 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;
- Consideration of the ability and/or willingness of stakeholders to participate varying across the relevant stakeholder groups; and
- The degree of stakeholder engagement based on their levels of interest and influence.

WSAS



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

The site is legally not allowed to engage in activities deemed as advertising, nor can it engage with children and youth below 18 years of age. They can engage with communities indirectly (e.g., through LuWSI), but that needs to be focused on over 18s in terms of recipients.

The site identified the community including Vulnerable, Women, Minority and Indigenous groups as least important role-players, as the site is located in an economic zone. The community was identified as needing to be kept informed and considered. These communities have limited influence and interest within the context of the economic zone. However, the site did not identify where these stakeholders are located. In particular those communities and/or areas that are currently or in the future are likely to be affected to reduced water quality were not identified. Also, those closest to the site's ultimate water sources and discharge points were not mapped spatially and identified.

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.





Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

1.2.1.2 Stakeholder mapping.xlsx

1.2.4.1 Stakeholders meeting report -BAT AWS implementation.pdf

1.2.1.2 Stakeholder mapping.xlsx

1.2_UNDERSTAND RELEVANT STACKHOLDERS.pdf 1.2.1.2 Stakeholder engagements and communications.zip BAT Zambia - WARMA mapping letter - 2022-09-06_signed

IMG 0680

Invitation to the LuWSI Training on Water Stewardship and Environmental Management

Letter of Interest for AWS meeting_LSMFEZ Letter of Interest to Join LUWSI 2023

RE AWS Agenda Alignment

Re REQUEST FOR WATER MAPPING FOR MFEZ CATCHMENT AREA

UPDATE ON YOUR APPLICATION TO JOIN LuWSI AND INVITATION TO PARTICIPATE IN

THE 2023 LuWSI PRIORITIZATION WORKSHOP

WARMA Response

Comments:

The site's stakeholder Identification, Assessment, Categorising, Prioritising, Level of Engagement Determination, and Consultative Meetings is documented in 1.2_UNDERSTAND RELEVANT STACKHOLDERS.pdf

The stakeholders and their water-related challenges have been identified in: 1.2.1.2 Stakeholder mapping.xlsx

Consultation undertaken to date between September 2022 and May 2023 is reflected in:

1.2.1.2 Stakeholder engagements and communications.zip

1.2.4.1 Stakeholders meeting report -BAT AWS implementation.pdf

The site identified relevant neighbours, organs of state (including regulators, ministries, government stakeholders that may be impacted), non-profit organisations (in the water, WASH, and conservation sectors), communities (but only broadly so), and specific private sector role-players. These were also mapped spatially in 1.2_UNDERSTAND RELEVANT STACKHOLDERS.pdf, except for communities.

The stakeholder mapping document (1.2.1.2 Stakeholder mapping.xlsx) includes the following criteria: Stakeholder Names, Type, Address, Influence/ Power of stakeholder, Interest(High/Low), Engagement matrix (Approach based on Priority), Degree of Influence and engagement strategy, Communication Method, Role (Linkage to the Site), Contact Person and Details, Expectations of Stakeholder and their water related challenges, Shared Water Challenges, and (Current) Engagement Status.

This evidence also includes the following:

- Relevant stakeholder groups, including vulnerable, women, minority, and Indigenous people;
- Identification of the physical scope, 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;
- Consideration of the ability and/or willingness of stakeholders to participate varying across the relevant stakeholder groups; and
- The degree of stakeholder engagement based on their levels of interest and influence.
- 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.





Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

Water-related incident response considerations are documented in:

ZAEHS-SOP-48-1 - Spill Management Procedure.docx

ZAEHS-SOP-48 - Emergency Release Response Procedure.docx

Emergency situations.docx and .pdf

1.3.1_INCIDENT RESPONSE PLANS IDENTIFICATION.pdf

Comments:

1.3.1_INCIDENT RESPONSE PLANS IDENTIFICATION.pdf reflect the identification of a range of potential water-related incidents including flooding, drought, contamination, supply interruptions etc.

Response measures were developed for the above identified water related emergencies and are reflected in:

ZAEHS-SOP-48-1 - Spill Management Procedure.docx

ZAEHS-SOP-48 - Emergency Release Response Procedure.docx

Emergency situations.docx

1.3.2 Site water balance, including inflows, losses, storage, and outflows shall be identified and mapped



Comment Evidence:

Water Intensity.xlsx Water Balance 2023.xlsx

1.3.2 Site Water balance and Map 2.docx

ZAEHS-SOP-48-1 - Spill Management Procedure.docx

ZAEHS-SOP-48 - Emergency Release Response Procedure.docx

Emergency situations.docx

1.3.1_INCIDENT RESPONSE PLANS IDENTIFICATION.pdf

Comments:

1.3.2_Site_Water_balance_and_Map_2.docx spatial reflects the site water balance in terms of input water, storage on site, metering, on-site use, and discharge as a schematic.

Water_Balance_2023.xlsx reflects the water balance calculation results. However, the discharge values are all estimates based on 90% of inflows and are not on actual meter readings. No calculations were provided based on actual metered results for use, storage, evaporation losses, and outflows.

Water_Intensity.xlsx reflects water withdrawal volumes and associated graphs.

The site moved from monitoring the withdrawal on an annual basis to monthly to improve on the pace at which the site responds to water related incidents.

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.



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1.3.3



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

Water Intensity.xlsx Water Balance 2023.xlsx

1.3.2 Site Water balance and Map 2.docx

Comments:

Water_Balance_2023.xlsx reflects the water balance calculation results. However, the discharge values are all estimates based on 90% of inflows and are not on actual meter readings. Inflows and usage are metered, but not outflows. Consequently, calculations provided were based on actual metered results for use (including evaporation losses for HVAC) and storage, but only estimates for outflows.

Water Intensity.xlsx reflects water withdrawal volumes and associated graphs.

The site moved from monitoring the withdrawal on an annual basis to monthly to improve on the pace at which the site responds to water related incidents, and is now doing so on a weekly basis (as of April 2023).

The site communicated that service providers for metering of wastewater advised that the make-up of the wastewater (i.e., solids content) would make metering difficult. However, the site did not provide evidence of the technical constraints for such metering, and metering of wastewater containing solids is possible via magnetic or ultrasonic flow meters.

Finding No: TNR-004536

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.

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.





Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

Water Quality Trend.xlsx 1.3.4_WATER QUALITY_2.pdf

ZAEHS-SOP-48-1 - Spill Management Procedure.docx

ZAEHS-SOP-48 - Emergency Release Response Procedure.docx

Emergency situations.docx

1.3.1_INCÍDENT RESPONSE PLANS IDENTIFICATION.pdf BAT RESULTS 230609 161048 - MFEZ water sample 1.3.4.pdf

April August

BAT DECEMBER 2020 REPORT (1)

BAT JANUARY 2020 Report BAT JULY 2020 FINAL BAT JUNE 2020 Final Report BAT MARCH 2020 Report BAT MAY 2020 Report FINAL BAT MAY 2020 Report BAT NOVEMBER 2020-Final

BAT October 2020 Emissions Report BAT OCTOBER REPORT 2020

BAT SEPTEMBER REPORT 2020 FINAL

Emissions Analysis- 20

February Report 3.zip

BAT April 2019 Emissions Report BAT AUGUST 2019 REPORT BAT DECEMBER 2019 Report BAT JULY 2019 Emissions Report BAT June 2019 Emissions Report BAT March 2019 Emissions Report BAT May 2019 Emissions Report BAT NOVEMBER 2019 Report BAT OCTOBER 2019 Report

BAT September 2019 Emissions Report

Emissions Analysis- 19 BAT APRIL 2021 BAT Aug 2021 BAT December 2021 BAT July 2021 BAT June 2021

BAT MAY2021 BAT NOVEMBER 2021 BAT October 2021

BAT Sep 2021

British American Tobacco Zambia Occupational Hygiene Survey Report March 2021

Emissions Analysis-21

February January March

Occupational Hygiene Survey

2022 March BAT BAT April 2022 Report BAT August 2022 BAT January 2022 BAT JULY 2022 BAT JUNE 2022 BAT May 2022 Report

BAT Report December 2022 BAT Report NOVEMBER 2022 BAT Report OCTOBER 2022 Rev 1

WSAS



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

BAT SEPTEMBER 2022 REPORT February 2022 BAT BAT 2023 April BAT 2023 February BAT compressor results BAT Report January 2023 BAT REPORT March 2023 HVAC Water Analysis Results

Comments:

The site has developed an internal and external water monitoring plan to better understand its site and catchment water quality respectively, to better understand site's water quality status from infeed water to discharge water quality, including potential water quality issues that may be caused by the area around site.

Drinking and Effluent Water Quality monthly monitoring data is reflected in Water_Quality_Trend.xlsx from 2019 to April 2023. This includes WHO Drinking Water Limits, ZEMA (Effluent) Discharge Limits, and Trade Effluent Limits for relevant parameters. This data reflects monthly variances.

The results of individual and annual sampling are reflected in various sampling reports and datasheets (e.g., BAT DECEMBER 2019 Report.docx, Emissions Analysis- 19.xlsx, BAT REPORT March 2023.pdf, HVAC Water Analysis Results.pdf etc.).

The site verbally requested MFEZ's raw and effluent water quality data, but only received the raw water data. Consequently, the site obtained permission and undertook their own monitoring of the MFEZ effluent water quality (BAT RESULTS_230609_161048 - MFEZ water sample 1.3.4.pdf).

1.3.5 Potential sources of pollution shall be identified and if applicable, mapped, including chemicals used or stored on site.



Comment

Evidence:

List of Chemicals ZM05 2022.xlsx
INVENTORY OF POLLUTION SOURCES.xlsx
BAT CONTAMINATION MAP.xlsx
1.3.5_POTENTIAL SOURCES.pdf
ZAEHS-SOP-48-1 - Spill Management Procedure.docx
ZAEHS-SOP-48 - Emergency Release Response Procedure.docx
Emergency situations.docx
1.3.1 INCIDENT RESPONSE PLANS IDENTIFICATION.pdf

Comments:

The on-site activities of the operation include several environmental aspects that present opportunities for the pollution of water resources. To understand these environmental aspects, risks, and impacts the site conducted an assessment to identify pollution sources or points and establish control measures for each.

The assessment identified the location or origin of each pollutant, activities that generate the pollutant, as well as the associated impact of the pollutant on the environment including water resources and the control measures in place. The following documents reflect this:

- List_of_Chemicals_ZM05_2022.xlsx
- BAT_CONTAMINATION_MAP.xlsx
- INVENTORY_OF_POLLUTION_SOURCES.xlsx.
- 1.3.6 On-site Important Water-Related Areas shall be identified and mapped, including a description of their status including Indigenous cultural values.



WSAS



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

1.3.2 Site Water balance and Map 2.docx

1.3.6 IWRA SITE.pdf

ZAEHS-SOP-48-1 - Spill Management Procedure.docx

ZAEHS-SOP-48 - Emergency Release Response Procedure.docx

Emergency situations.docx

1.3.1_INCIDENT RESPONSE PLANS IDENTIFICATION.pdf

Comments:

No natural IWRAs are present on the site.

The site identified the following artificial on-site important water-related infrastructure: Water storage tanks (3), Water supply network, and Wastewater network.

1.3.7 Annual water-related costs, revenues, and a description or

quantification of the social, cultural, environmental, or economic water-related value generated by the site shall be identified and used to

inform the evaluation of the plan in 4.1.2.

Comment Evidence:

1.3.7_WATER RELATED COSTS_REVENUES_VALUES.pdf

Comments:

The site's water related costs to date from 2021 to April 2023 are reflected in

1.3.7_WATER_RELATED_COSTS_REVENUES_VALUES.pdf, including Total volume of water consumed, Cost for Repairs & Maintenance, Water treatment costs, Water Stakeholder

Engagement, Labour Cost etc.

The site did not identified any water related revenues as sales are not directly linked to water.

The site did not generate any water-related revenues in the period under review.

Water related value generated through the site's activities were described for Social,

Environmental, and Economic aspects.

1.3.8 Levels of access and adequacy of WASH at the site shall be identified.



Yes

Yes



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

> IMG-20230612-WA0005.ipa IMG-20230612-WA0004.jpg Wash Facility Standard.docx Public Health Act.pdf

BAT Water Dispenser MAP.xlsx

BAT Toilets MAP.xlsx

ZAEHS-SOP-48-1 - Spill Management Procedure.docx

ZAEHS-SOP-48 - Emergency Release Response Procedure.docx

Emergency situations.docx

1.3.1 INCIDENT RESPONSE PLANS IDENTIFICATION.pdf

Toilet Pictures.zip 20221007 115044 20221007 115056 20221007_115112 20221007_115124 20221007_115130 20221007_115207 20221007 115211 20221007_115218 20221007_115305 20221007_115312 20221007_115320 20220927 074635 20220927 074638 20220927_074645 20220927_075300 20220927_075306 20220927 075310 20220927 075315 20220927_075001 20220927_075008 20220927 075016 20220927 074535

20220927 074540 20220927 074545 20220927_074549

20220927_074555 20220927_074600

20220927 074725

20220927 074757

20220927_074804 20220927_074813

20220927_074816 20220927_074830

20220927_074837

Comments:

The site has documented and quantified its WASH facilities in 1.3.8_LEVELS_OF_WASH.pdf_2.pdf.

Wash_Facility_Standard.docx and Public_Health_Act.pdf reflect the legal requirements for WASH in Zambia.

BAT Water Dispenser MAP.xlsx reflects the spatial location of water dispensers.

BAT Toilets MAP.xlsx reflects the spatial location of restrooms (stated as toilets) and the number of Toilets, Urinals, Sanitary Bins, Showers (as Men and Ladies "Show Room"), and Sanitizing stations, as well as the number and ratio of toilets.



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Contractors have access to WASH facilities (including Toilets, Urinals, Sanitary Bins, Showers, and Sanitizing stations) at the Change Room.

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.



Comment Evidence:

Indirect use of Water (1).xlsx

Comments:

The site has identified and quantified the embedded water use of primary inputs, including the quantity, quality and level of water risk within the site's catchment in Indirect_use_of_Water_(1).xlsx via the following criteria: Material, Contribution % to product, Supplier, Origin, Use, Water stress level, Material/Service Water Foot Print, Annual Usage in kg (site), Embedded Water/ Indirect Water, Water quality, Water risks and Mitigations, Actions related to the risk, and Comment. This includes a comprehensive set of Key Primary Raw Materials and Packaging Materials sourced externally.

1.4.2 The embedded water use of outsourced services shall be identified, and where those services originate within the site's catchment, quantified.

Q Obs.

Comment Fvidence:

Indirect use of Water (1).xlsx

Comments:

The site has identified and quantified the embedded water use of key outsourced services and where those services originate within the site's catchment in Indirect_use_of_Water_(1).xlsx. The assessment includes the following criteria: Material, Contribution % to product, Supplier, Origin, Use, Water stress level, Material/Service Water Foot Print, Annual Usage in kg (site), Embedded Water/ Indirect Water, Water quality, Water risks and Mitigations, Actions related to the risk, and Comment.

The site could list embedded water use in the catering services it receives, but this is almost certainly less than 5%.

- 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.





Alliance for Water Stewardship (AWS)

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Comment Evidence:

1.5.1 WATER GOVERNANCE INITIATIVES.pdf

Initiative Examples.zip

KBWSP II FEASIBILITY STUDY REPORT

LuWSI Strategy_2021-2023-2

Comments:

Water governance initiatives have been identified in

1.5.1_WATER_GOVERNANCE_INITIATIVES.pdf, including relevant national public policies, legislation, major publicly-led initiatives under way, Lusaka Kafue Bulk Supply Project, and relevant goals to help inform the site of possible opportunities for water stewardship collective action.

The Ministry was engaged to determine if a Chilongolo Catchment Plan exists and one does not. The Ministry committed to sharing any information they have, but this has not been received yet.

Information was also obtained from Lusaka Water, but the information provided did not relate to the site's catchment area.

1.5.2 Applicable water-related legal and regulatory requirements shall be

identified, including legally-defined and/or stakeholder-verified

Q Obs.

customary water rights.

Comment Evidence:

ZAEHS-SOP-40 - Monitoring of Changes to Acts and Regulations.docx

EHS legal Compliance_Revised_20230622.xls

Laws.zip Petroleum Act Public Health Act

The Local Government Act No. 2 of 2019

The-Environmental-Management-Licencing-Regulations-2013-PT

VOLUME 24- Factories Act

Water and Sanitation Act No.28 of 1997

Water_Resources_Management, Act No. 21 of 2011

MFEZ contract - Confidential.pdf MFEZ contract - snip.docx

Comments:

Applicable water-related legal and regulatory requirements were identified in 1.5.2_WATER_RELATED_LEGAL_REQUIREMENTS.pdf.

The site has a Legal Compliance Register (EHS_legal_Compliance.xls) and has documented its Legal Compliance Program and associated activities. It also has also copies of applicable water-related legislation.

During the stakeholder consultation process, the stakeholders confirmed that their are not any legally-defined and/or stakeholder-verified customary water rights within the catchment.

The site has a contract with MFEZ that includes the provision of potable water to the size and receipt and treatment of the site's waste water. This should be added to the site's list of water-related legal and regulatory requirements.

The catchment water-balance, and where applicable, scarcity, shall be quantified, including indication of annual, and where appropriate,

Yes

seasonal, variance.

1.5.3



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

MASTER PLAN MFEZ BAT.pdf

lu brochure.pdf

BRITISH AMERICAN TOBACCO Catchment Mapping report.pdf

1.5.3 CATCHMENT WATER BALANCE.pdf

Comments:

The catchment water-balance is summarised in 1.5.3_CATCHMENT_WATER_BALANCE.pdf

based on lu_brochure.pdf (Bäuml et al., 2012) and

BRITISH_AMERICAN_TOBACCO_Catchment_Mapping_report.pdf (pg. 14, based on Mbale

et al., 2012).

Scarcity has been assessed in terms of vulnerability to over-abstraction in both these reports.

Hydrographs in BRITISH_AMERICAN_TOBACCO_Catchment_Mapping_report.pdf reflect monthly monitoring data for groundwater levels at two groundwater stations in the MZEF from

2019 - 2023.

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.

Obs.

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Comment

Evidence:

1.5.4 CATCHMENT WATER QUALITY.pdf

BAT RESULTS_230609_161048 - MFEZ water sample 1.3.4.pdf

Comments

Ground water quality data for the catchment is summarised in

1.5.4_CATCHMENT_WATER_QUALITY.pdf, including physicochemical and microbial data.

Further information is also documented in lu_brochure.pdf (Bäuml et al., 2012) and

BRITISH_AMERICAN_TOBACCO_Catchment_Mapping_report.pdf.

The site verbally requested MFEZ's raw and effluent water quality data, but only received the raw water data. Consequently, the site obtained permission and undertook their own monitoring of the MFEZ effluent water quality (BAT RESULTS_230609_161048 - MFEZ water

sample 1.3.4.pdf).

No data was provided of annual and/or seasonal, high and low variances in water quality. This is relevant, as the data reflects that water quality is impaired in parts of the catchment that is a threat to good water quality status for people and/or environment. The site consulted widely with various public and civil society stakeholders and no data for annual and/or seasonal, high and low variances in water quality for the Chilongolo (seasonal) system is known.

Additional biological data would be of value once additional studies are undertake in the catchment and/or identified by the site.

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.

in progress

WSAS



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

1.5.5 IWRA CATCHMENT.pdf

Comments:

The site identified the following IWRAs in the catchment: Offsite Boreholes (MFEZ), Lusaka National Park (as a key feature within the Aquifer Recharge Zones), Lusaka Dolomite Aquifer, and Aquifer Recharge Zones in 1.5.5_IWRA_CATCHMENT.pdf. This includes the status of these IWRAs, a justification for their identification, how the site affects the IWRM, and Water Related Risks to these IWRAs.

However, these IWRAs have not been mapped spatially in the evidence provided for this indicator. The references sources of information used to identify and assess their status were also not documented (e.g., scientific information, stakeholder engagement etc.).

Finding No: TNR-004543

1.5.6 Existing and planned water-related infrastructure shall be identified,

including condition and potential exposure to extreme events.

Yes

Comment Evidence:

1.5.6_INFRASTRUCTURE PLAN.pdf RE Water and Sewer network .msg

1.5.6.pdf

Comments:

1.5.6_INFRASTRUCTURE_PLAN.pdf is a high-level summary of the Existing Infrastructure and Planned Water Related Infrastructure in the catchment, including future plans of the Lusaka Water and Sewerage Company (LWSC) and MFEZ.

1.5.6.pdf includes information on specific infrastructure (e.g., boreholes, potable and waste water treatment works, piping system etc.), including the condition of the infrastructure and its potential exposure to extreme events.

1.5.7 The adequacy of available WASH services within the catchment shall

be identified.

₹ Yes

Comment Evidence:

1.5.6_INFRASTRUCTURE PLAN.pdf

Comments:

1.5.6_INFRASTRUCTURE_PLAN.pdf includes an overview and statistics of WASH services availability in urban, peri-urban, and rural parts of the catchment, including drinking water, sanitation, and the condition of such services where they are poor.

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.



Comment Evidence:

1.2.4.1 Stakeholders meeting report -BAT AWS implementation.pdf 1.6.1 SHARED WATER CHALLENGES.pdf

Comments:

A meeting was held by BAT Zambia with stakeholders in the Chilongolo Catchment on 30 May 2023 to identify Shared Water Challenges. The suite of Shared Water Challenges that were identified and prioritized is reflected in 1.6.1_SHARED_WATER_CHALLENGES.pdf, including the identification of impact on water resources/end users.

WSAS



Alliance for Water Stewardship (AWS)

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1.6.2 Initiatives to address shared water challenges shall be identified. ۷es

Comment Evidence:

1.6.2 INIATIVES TO ADDRESS SHARED WATER CHALLENGES.pdf

A suite of initiatives to address Shared Water Challenges, as identified in 1.6.1, is reflected in 1.6.2 INIATIVES TO ADDRESS SHARED WATER CHALLENGES.pdf.

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

Yes

Evidence: Comment

> RFS Water Portfolio Export.xlsx RFS Water Portfolio Export (1).xlsx Water Risk Assessment.xlsx

costs and business impact.

Comment:

Water risks faced by the site were identified in Water Risk Assessment xlsx across the following water resources: Storage Tanks, Supply from MFEZ Water, Discharge point of waste water, and Catchment. This includes an assessment of Likelihood, Consequence (Severity), (An Overall) Risk Rating, Mitigations, Investment Cost, and By Who. The WWF Water Risk Filter was used in this process, as reflected in RFS_Water_Portfolio_Export.xlsx.

1.7.2 Water-related opportunities shall be identified, including how the site may participate, assessment and prioritization of potential savings, and business opportunities.

Yes

Comment

Evidence:

Water related Opportunities Register fin.xlsx

Water-related opportunities were identified, including how the site may participate, and an assessment and prioritization of potential savings, and business opportunities are reflected in Water related Opportunities Register fin.xlsx.

This includes assessment of the Probability (of achieving the opportunity), Prob. Rating Benefit (if opportunity is encountered), Ben. Rating "Opp Factor (Prob x Ben)", Potential Savings, "Opportunity Pursuit Plan (suggested for Opp Factors >=12), May reference external planning document", Status, Likelihood, Previous Occurrences, Potential Benefit to Water Stewardship Actions On-site, Potential Benefit to Water Stewardship in the Actions in Catchment, Potential improvement in legal compliance, Potential improvement to Good Water Governance Improvement to Company Reputation, and Potential Cost of Implementation.

Understand best practice towards achieving AWS outcomes: 1.8 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.

Q

Obs.



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

1.8 BEST PRACTICES fin 2.pdf

Comments:

The site identified the following governance best practices in 1.8_BEST PRACTICES fin 2.pdf:

- A comprehensive water stewardship plan that is well-implemented, routinely reviewed and updated.
- Engaging with peer organizations and stakeholders to promote water stewardship.
- Demonstrating support for good water governance and stewardship with appropriate authorities, including establishing or participating in Public-Private Partnerships.
- Facilitating or contributing to multi-stakeholder governance platforms.

However, the development, implementation, review and updating of a WSP does not in itself constitute best practice, as it is a key requirement of the AWS Standard.

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.



Comment

Evidence:

1.8 BEST PRACTICES fin 2.pdf

Comments:

The site identified the following sector and/or catchment water balance best practices in 1.8 BEST PRACTICES fin 2.pdf:

- Water Replenishment
- Training of workers so that they are aware of the good water conservation practices, leak reporting and water stewardship principles.
- Leak detection, correction, and follow- up programs
- Suspension of all lawn watering activities
- Recycling of HVAC condensate
- Lifting underground pipes and putting them at ground level.

1.8.3 Relevant sector and/or catchment best practice for water quality shall be identified, including rationale for data source.



Comment

Evidence:

1.8_BEST PRACTICES fin 2.pdf

Comments:

The site identified the following sector and/or catchment water quality best practices in 1.8 BEST PRACTICES fin 2.pdf

- Water quality testing and monitoring beyond legal compliance
- Good Waste Management practices (on-site waste segregation and community recycling/clean-up initiatives), as the site is a Zero Landfill operation.
- Tree planting (the site explained this as an action to reduce erosion to improve in-stream water quality).

The site has partnered with Lusaka National Park to plant trees in the National Park which is recognized as aquifer recharge zone and improves forest cover.

1.8.4 Relevant catchment best practice for site maintenance of Important Water-Related Areas shall be identified.

Q Obs.

WSAS



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

1.8_BEST PRACTICES fin 2.pdf

Comments:

The site identified the following catchment best practice for site maintenance of Important

Water-Related Areas in 1.8_BEST PRACTICES fin 2.pdf:

- IWRA monitoring program to observe changes

- Tree planting in water recharge zones

- Routine maintenance schedule for water tanks.

1.8.5 Relevant sector and/or catchment best practice for site provision of

equitable and adequate WASH services shall be identified.

Q Obs.

Comment

=vidence:

1.8 BEST PRACTICES fin 2.pdf

Comments:

The site identified the following sector and/or catchment best practice for site provision of equitable and adequate WASH services in

1.8 BEST PRACTICES fin 2.pdf:

- Provision of adequate WASH Facilities

- Maintenance of onsite WASH facility.

Some of the detailed practices identified are standard/minimum sector practice (e.g., Toilets, Hand Sanitization Stations, First Aid Room), whilst others are best practices (female hygiene products, Mother's room for pregnant or breast- feeding parents).

The site did not identify any best practices within the catchment.



Alliance for Water Stewardship (AWS)

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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 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.

Comment

Evidence:

2.1.1_COMMITMENT.pdf
Zambia AWS Stewardship Policy 23.pdf
1.2.4.1 Stakeholders meeting report -BAT AWS implementation.pdf
AWS SCM.pptx

Comments:

The site has a signed Water Stewardship Policy (see 2.1.1_COMMITMENT.pdf) through which it commits to various actions, which collectively address the sub-requirements of this indicator including:

- 1. The site implementing and disclosing progress on water stewardship program(s) to achieve improvements in AWS water stewardship outcomes.
- 2. That the site implementation will be aligned to and in support of existing catchment sustainability plans.
- 3. That the site's stakeholders will be engaged in an open and transparent way
- 4. That the site will allocate resources to implement the Standard.

The site disclosed its commitment in two locations within the building and one outside the building within the site, but none are accessible to the public without having to enter the site, which has access control in place. The site disclosed its commitment during its stakeholder meeting, via its PPTX presentation, to its key stakeholders but not the general public.

Finding No: TNR-004605

- **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.





Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

EHS legal Compliance Revised 20230622.xls

ZAEHS-SOP-40 - Monitoring of Changes to Acts and Regulations.docx

1.5.2_WATER RELATED LEGAL REQUIREMENTS.pdf

Comments:

The site has documented its legal obligations in EHS_legal_Compliance.xls, but the responsible persons/positions have not been completed in the Legal register. At the beginning of each year, the site's sustainability team reviews and updates its legal register after consultation with the legal affairs team.

The site implements a Legal Compliance Program, as reflected in 1.5.2_WATER RELATED LEGAL REQUIREMENTS.pdf to ensure legal compliance. The site explained its processes for submissions to regulatory agencies, which are reflected in the Legal Register (EHS_legal_Compliance.xls). The site uses the Legal Register to track the expiry dates of permits, to ensure applications for renewal are submitted timeously and new permits are obtained prior to the expiry of the "old" permit. Greenline (a consultancy firm) is used to submit applications to ZEMA 6 to 9 months before expiry as specified in the legal register. The site also undertake annual H&S inspections in October. If there are any changes on the site, including operations, these are reflected in the legal register.

The License Permit Tracker worksheet in the Legal Register includes expiry dates and trigger dates for submission of renewal applications, but not the responsible parties.

The site explained that the far right fields in the other worksheets of EHS_legal_Compliance.xls relate to actions to be taken to address corrective actions, not actions to address ongoing legal obligations and the responsible parties.

Finding No: TNR-004607 Finding No: TNR-004608

- 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

Evidence:

2.3.1_WATER STEWARDSHIP STRATEGY ZAMBIA.pdf

Comments:

The site's water stewardship strategy is reflected in

2.3.1_WATER_STEWARDSHIP_STRATEGY_ZAMBIA.pdf, which includes overarching mission, vision, and goals of the organization towards good water stewardship in line with this AWS Standard.

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.



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

Water_Stewardship_Plan_finish_Revised_20230622.xlsx Water_Stewardship_Plan_finish.xlsx (old version)

Comments

The site's WSP is reflected in Water_Stewardship_Plan_finish.xlsx. Stewardship Plan worksheet is the version prior to evaluation in May 2023, which was revised and finalised as New Stewardship Plan worksheet.

The Plan includes the following criteria: Focus Area, Target, Measurement and monitoring method, Action, Timeline, Budget Allocation(ZMK), Responsible (Person), (Their) Position, Status (of Implementation), Comments, Link to best practice, Stakeholders feedback, and (Link to) AWS Outcome. The targets and actions have been quantified, or at a minimum described qualitatively, and clear timelines for implementation have been specified.

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.



Comment Evidence:

RE Water and Sewer network .msg

Emergency Situations.pdf Re BAT Water Meter.msg

1.2.4.1 Stakeholders meeting report -BAT AWS implementation.pdf

UPLOAD SITE BCP ONCE PROVIDED (RECOVERY OF MANUFACTURING PROCESSES)

Comments:

The site's Water Related Emergency Situations Plan (see Emergency_Situations.pdf) reflects the actions that the site will take under a range or water-related emergency situations, as identified in 1.3.1_INCIDENT_RESPONSE_PLANS_IDENTIFICATION.pdf and assessed in Water Risk Assessment.xlsx.

The following documents reflect key procedures to be followed for emergency releases and spills:

- ZAEHS-SOP-48 Emergency Release Response Procedure.docx
- ZAEHS-SOP-48-1_-_Spill_Management_Procedure.docx

1.2.4.1 Stakeholders meeting report -BAT AWS implementation.pdf reflects the interaction with relevant public-sector and infrastructure agencies to identify risks, that informed co-ordination for the plan to mitigate and/or adapt to identified water risks. The site also engaged further with MFEZ and the Municipal Council on the back of the consultation.



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

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.	⊘ Yes



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment

3.1.1 GOOD WATER GOVERNANCE.pdf reflects the actions implemented by the site regarding good governance. Further evidence thereof is reflected in the various documents. correspondence, photographs, and videos listed below as follows:

BAT.pdf

Project Restoration

BRITISH AMERICAN TOBACCO Catchment Mapping report

Re BAT Catchment Area Mapping

IMG-20230322-WA0031 IMG-20230322-WA0034 VID-20230322-WA0035 VID-20230611-WA0015

INVITATION TO THE 4TH SOLID WASTE MANAGEMENT PARTNERSHIP FORUM

Invitation to the LuWSI Training on Water Stewardship and Environmental Management

17.CR2 20.JPG

IMG-20220603-WA0005 National Park Samples

Trees to plant for World Environmental day

Acepptance letter BAT

REPORT 2023 LUWSI PRIORITIZATION WORKSHOP

DCP Program IMG 0317 IMG 0416

IMG-20220820-WA0081

Manja Pamodzi District Clean up

MicrosoftTeams-image (3)

MicrosoftTeams-image

Thank You

20230306_115702

20230306_121455

Borehole Water Samples

MFEZ Water samples

Re BAT Water Meter

RE Water and Sewer network

1.2.4.1 Stakeholders meeting report -BAT AWS implementation

AWS SCM

IMG-20230605-WA0008

IMG-20230605-WA0009

IMG-20230605-WA0013

20230309_112342

20230309_112843

20230309_113258 20230316_122007

20230316 134119

AWS Alignment Meeting- Vinnid - Attendance report 5-22-23

Re AWS Agenda

24285

24467

20220917 090052

WED&SW Write Up fin

AWS STAKEHOLDER CONSULTATIVE INVITATION- PS MOWDS

AWS STAKEHOLDER INVITATIONS -Roland imperial tobacco

AWS STAKEHOLDER INVITATIONS - WWF

AWS STAKEHOLDER INVITATIONS Kafue City Council

AWS STAKEHOLDER INVITATIONS Lusaka Multi Facility Zone

AWS STAKEHOLDER INVITATIONS Lusaka National Park

AWS STAKEHOLDER INVITATIONS_Ministry of Water Development and Sanitation_

AWS STAKEHOLDER INVITATIONS Trade Kings



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

AWS STAKEHOLDER INVITATIONS Water Resources Management Authority

AWS Stakeholder Meeting Programme

Re (External)REQUEST FOR CONFIRMATION FOR ATTENDANCE OF THE

STAKEHOLDER CONSULTATIVE MEETING

Re AWS Agenda Alignment

RE REQUEST FOR CONFIRMATION FOR ATTENDANCE OF THE STAKEHOLDER

CONSULTATIVE MEETING 2

Re REQUEST FOR CONFIRMATION FOR ATTENDANCE OF THE STAKEHOLDER

CONSULTATIVE MEETING

[Untitled]

20230427_171308 20230427_171321

BIG TREE_signed

IMG-20230611-WA0011

IMG-20230611-WA0014

KTC_signed LCC_signed

Lusaka Water signed

MicrosoftTeams-image (4)

MINISTRY OF WATER SANITATION _signed

NWASCO (002)_signed

RE AWS Agenda Alignment Trade Kings

Re AWS Alignment Engagement

RE AWS Certification Engagement

ROTOTECH (002) signed TRADE KINGS _signed

ZESCO SUB Station_signed

Measures identified to respect the water rights of others including 3.1.2

Indigenous peoples, that are not part of 3.2 shall be implemented.

Yes

Evidence: Comment

3.1.2 MEASURES TO RESPECT WATER RIGHTS.pdf

Comments:

The site documented that through consultation, no customary or other rights over and above those applicable to general citizens were identified. Consequently, no measures were identified to respect the water rights of others beyond legal requirements.

Implement system to comply with water-related legal and regulatory 3.2

requirements and respect water rights.

3.2.1 A process to verify full legal and regulatory compliance shall be

implemented.

Ves



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

2023 receipts.pdf

ZAEHS-SOP-40 - Monitoring of Changes to Acts and Regulations.docx

EHS legal Compliance Revised 20230622.xls

1.5.2 WATER RELATED LEGAL REQUIREMENTS.pdf

2022.zip

IMG-20211209-WA0003 IMG-20211209-WA0004 IMG-20211209-WA0005 IMG-20220824-WA0000

Comments:

The site provided evidence of payments made in March 2023 to the Kafue Local Council for all applicable permits required from them.

The site tracks is legal compliance in EHS_legal_Compliance.xls. If any non-compliances are identified, the site then identifies corrective actions, responsible parties for rectification, timelines to do so, and the status of implementation. However, no non-compliances were reflected in the EHS_legal_Compliance tracker.

The site has never received any non-compliance notices from ZEMA and the site has informed them of its AWS journey.

During the external stakeholder interviews, the interviewees advised that they are not aware of the site having had any instances of water-related non-compliance.

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.

Q Obs.

Comment Evidence:

3.2.2_MEASURES TO RESPECT WATER RIGHTS IN LEGISLATION.pdf

Comments:

The site is fully aware of its legal obligations regarding water rights and has put in place a range of measures to respect the water rights enshrined in the water related laws, as reflected in 3.2.2 MEASURES TO RESPECT WATER RIGHTS IN LEGISLATION.pdf.

The site's chemical store (external cage) is not bunded, which poses a potential risk of contamination of the site's and MFEZ's storm water system, including the downstream receiving environment.

- 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)

Audit Number: AO-000593

Comment Evidence:

Water Stewardship Plan finish.xlsx

VESTEE INVESTMENTS LTD-BAT FACILITIES QUARTERLY REPORT.pdf

Actions towards Water Balance.pdf

Alliance Water Stewardship Training - Attendance report 3-21-23 (2).csv Alliance Water Stewardship Training - Attendance report 3-20-23 (1).csv

SZBLK_Opera23060716540.pdf SZBLK_Opera23060716530.pdf SZBLK_Opera23060716510.pdf SZBLK_Opera23060716490.pdf

FW RFQ- Plumbing and Water Line Maintenance.msg

Future Water Metering.docx

Water Intensity.xlsx Water Balance 2023.xlsx

SZBLK_Opera23061006520.pdf SZBLK_Opera23060716580.pdf SZBLK_Opera23060716571.pdf SZBLK_Opera23060716570.pdf SZBLK_Opera23060716561.pdf SZBLK_Opera23060716560.pdf SZBLK_Opera23060716550.pdf

SZBLK Opera23060716541.pdf

Comments:

The site has implemented the following actions towards meeting the site's water balance targets as reflected in Actions towards Water Balance.pdf and supported by the various other evidence listed above:

- Analyzing how water is used, by metering all key points so that any variations in water inflow is detected.
- · Recycling of HVAC water.
- Recycling of water from air receiver (execution commenced on 20 June 2023. Contractor appointed and is now on site).
- Suspended water of lawns around the factory.
- Lifted the underground pipes to above ground to ensure the leaks that appear are easily spotted.
- · Quarterly checking of actions
- · Monthly reporting on water use
- 9 out of 29 meters installed to date
- Implementing a leak or fault inspection and reporting, followed up by actions to eliminate leaks.
- Various actions in response to leaks and other incidents (in Incident Log in Water Balance 2023.xlsx.
- Sensitizing employees/visitors on how to improve efficiency on basic daily activities, and communication such as signage to switch off taps when not in use and reporting leakages immediately.
- Installing water efficient fittings i.e., water misters in the bath for toilet basins.
- Getting the employees on the plan so they can do their part in conserving water in their day-to-day tasks.
- 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.





Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

Water Intensity.xlsx Water Balance 2023.xlsx

Water_Stewardship_Plan_finish.xlsx

Comments:

The site has implemented the following water efficiency actions:

- Analyzing how water is used, by metering all key points so that any variations in water inflow is detected.
- · Recycling of HVAC water.
- Recycling of water from air receiver (execution commenced on 20 June 2023. Contractor appointed and is now on site).
- · Suspended water of lawns around the factory.
- Lifted the underground pipes to above ground to ensure the leaks that appear are easily spotted.
- · Quarterly checking of actions
- · Monthly reporting on water use
- 9 out of 29 meters installed to date
- Implementing a leak or fault inspection and reporting, followed up by actions to eliminate leaks.
- Various actions in response to leaks and other incidents (in Incident Log in Water Balance 2023.xlsx.
- Sensitizing employees/visitors on how to improve efficiency on basic daily activities, and communication such as signage to switch off taps when not in use and reporting leakages immediately.
- Installing water efficient fittings i.e., water misters in the bath for toilet basins.
- Getting the employees on the plan so they can do their part in conserving water in their day-to-day tasks.
- 3.3.3 Legally-binding documentation, if applicable, for the re-allocation of water to social, cultural or environmental needs shall be identified.



Comment

Evidence:

3.3.3_WATER REALLOCATION.pdf

Comments:

The site has not reallocated water in the period under review and no water reallocation is being implemented by BAT Zambia to social, cultural or environmental needs.

- 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.





Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

Water_Stewardship_Plan_finish.xlsx

Water Quality Trend.xlsx
1.3.4_WATER QUALITY_2.pdf
BAT April 2019 Emissions Report
BAT AUGUST 2019 REPORT
BAT DECEMBER 2019 Report
BAT JULY 2019 Emissions Report
BAT June 2019 Emissions Report
BAT March 2019 Emissions Report
BAT May 2019 Emissions Report
BAT NOVEMBER 2019 Report
BAT OCTOBER 2019 Report

BAT September 2019 Emissions Report

Emissions Analysis- 19 BAT APRIL 2021 BAT Aug 2021 BAT December 2021 BAT July 2021 BAT June 2021 BAT MAY2021 BAT NOVEMBER 2021 BAT October 2021

BAT Sep 2021 British American Tobacco Zambia Occupational Hygiene Survey Report March 2021

Emissions Analysis-21

February January March

Occupational Hygiene Survey

2022 March BAT
BAT April 2022 Report
BAT August 2022
BAT January 2022
BAT JULY 2022
BAT JUNE 2022
BAT May 2022 Report

BAT May 2022 Report
BAT Report December 2022
BAT Report NOVEMBER 2022
BAT Report OCTOBER 2022 Rev 1
BAT SEPTEMBER 2022 REPORT

February 2022 BAT BAT 2023 April BAT 2023 February BAT compressor results BAT Report January 2023 BAT REPORT March 2023 HVAC Water Analysis Results

April August

BAT DECEMBER 2020 REPORT (1)

BAT JANUARY 2020 Report BAT JULY 2020 FINAL BAT JUNE 2020 Final Report BAT MARCH 2020 Report BAT MAY 2020 Report FINAL

BAT MAY 2020 Report BAT NOVEMBER 2020-Final

BAT October 2020 Emissions Report BAT OCTOBER REPORT 2020

WSAS



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

BAT SEPTEMBER REPORT 2020 FINAL Emissions Analysis- 20 February

Comments:

To date the site has implemented the following actions in response to the targets it set:

- Monitor and analyze Municipal water quality
- Trend and analyze of Municipal water quality results
- Monitor through monthly First Aid incidence summary
- Sampling and analysis of waste water
- Root cause analysis and action planning to be done if any anomalies are found
- Share water quality results with MFEZ and the national park to drive awareness

The site's Water Quality Trend data (Water Quality Trend.xlsx) generally reflects that most of the parameters monitored are within specification in relation to the benchmarked standards. However, turbidity exceeds the minimum standards for ZEMA environmental discharge, although the site only uses the ZEMA standard for benchmarking purposes as the site does not discharge directly into the environment. Additionally the turbidity trends seem to be random as the site has not found a pattern or any seasonal variations. Additionally a sample from MFEZ was collected from the waste water treatment plant and the turbidity results were within the regulatory limits and therefore safe to be discharged to the environment.

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.



Comment

Evidence:

Water Stewardship Plan finish.xlsx

3.4.2_WATER QUALITY SHARED WATER CHALLENGE.pdf

Comments:

Despite the site documenting that "According to the stakeholder consultations, wastewater quality has not been identified as a shared water challenge with the catchment.", water quality challenges in parts of the catchment regarding groundwater resources were noted in evidence for Step 1. Consequently, this indicator requires the site to identified, and where applicable, quantify, continual improvement to achieve best practice for the site's effluent.

The site identified sampling of the discharge water of MFEZ's Effluent Treatment Plant as constituting best practice. This is scheduled to be undertaken every 2 years and was last done by the site in 22 May 2023.

- 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.





Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

Borehole Water Samples.msg

Trees to plant for World Environmental day.msg

National Park Samples.msg IMG-20220603-WA0005.jpg

20.JPG 17.CR2

Project Restoration.msg

BAT.pdf

VESTEE INVESTMENTS LTD-BAT FACILITIES QUARTERLY REPORT.pdf

SZBLK_Opera23061006520.pdf SZBLK_Opera23060716580.pdf SZBLK_Opera23060716571.pdf SZBLK_Opera23060716570.pdf SZBLK_Opera23060716561.pdf SZBLK_Opera23060716560.pdf SZBLK_Opera23060716550.pdf SZBLK_Opera23060716541.pdf SZBLK_Opera23060716540.pdf SZBLK_Opera23060716540.pdf SZBLK_Opera23060716510.pdf SZBLK_Opera23060716510.pdf SZBLK_Opera23060716510.pdf SZBLK_Opera23060716490.pdf

FW RFQ- Plumbing and Water Line Maintenance.msg

Comments:

No IWRA's are present on the site, consequently no practices to maintain and/or enhance the site's Important Water-Related Areas can be implemented.

The site is undertaking monitoring of MFEZ's discharged effluent in support of protection of the aquifer system (Borehole Water Samples.msg). The site has also supported the Lusaka National Park by planting trees in the Park in 2022 in support of habitat restoration and rainfall percolation (see Trees to plant for World Environmental day.msg and 17.jpg). The site also undertook sampling of two boreholes in the Park, to help the Park understand the current quality of its groundwater resource (see National Park Samples.msg). The site has entered into an MoU to support a catchment restoration project, in partnership with Vivo Energy, the Zambia Environmental Management Agency, WWF Zambia, and other partners (see Project Restoration.msg).

- 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.

Q Obs.



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

1.3.8_LEVELS OF WASH.pdf IMG-20230612-WA0005.jpg IMG-20230612-WA0004.jpg BAT Water Dispenser MAP.xlsx

BAT Toilets MAP.xlsx

1.3.8 LEVELS OF WASH.pdf

CamScanner 06-22-2023 11.09 Cleaning Checklist.pdf

Clause in CBA.docx

2.pdf Toilet Pictures.zip 20221007 115044 20221007 115056 20221007 115112 20221007_115124 20221007_115130 20221007_115207 20221007_115211 20221007 115218 20221007_115305 20221007_115312 20221007_115320 20220927_074635 20220927 074638 20220927 074645 20220927_075300 20220927_075306 20220927_075310 20220927 075315 20220927 075001 20220927_075008 20220927_075016 20220927_074535 20220927 074540 20220927 074545 20220927 074549 20220927_074555 20220927_074600 20220927_074725 20220927 074757

Comments:

20220927_074804 20220927_074813 20220927_074816 20220927_074830 20220927_074837

1.3.8_LEVELS OF WASH.pdf reflects the WASH facilities and ratios of toilets for men and women. The on-site audit confirmed that adequate and a sufficient number of WASH facilities are available across the site. However, the total number of showers and WASH facilities per building have not been quantified.

A contracting company(NEMCHEM) undertakes maintenance of WASH facilities on site, including a roster for maintenance. A copy of the cleaning checklist from the past week was provided as evidence (CamScanner 06-22-2023 11.09_Cleaning Checklist.pdf).

The Collective Bargaining Agreement (CBA) that the site has with its workers includes provisions for WASH facilities and ceasing of work if these are not functional.

WSAS



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

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.

Comment Evidence:

3.6.2 EVIDENCE OF NOT IMPINGING ON WASH RIGHTS.pdf

Comments:

The site is in a commercial/urban and peri-urban setting. There are no indigenous peoples or communities present in the catchment with customary or other WASH rights over and above those afforded to all citizens in Zambia. Despite this, the site is voluntarily monitoring the quality of MFEZ treated effluent to protect water resources in the catchment.

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.



Comment Evidence:

Water_Stewardship_Plan_finish.xlsx

sign off.pdf [Untitled].pdf

Zambia Indirect Water Use.xlsx.msg

Re AWS Agenda.msg

AWS Alignment Meeting- Vinnid - Attendance report 5-22-23.csv

20230316_134119.jpg 20230316_122007.jpg 20230309_113258.jpg 20230309_112843.jpg 20230309_112342.jpg

Comments:

Site identified the following actions for implementation:

- Discuss water related issues and best practices on water management with suppliers
- Engage with the suppliers on water use.

To date, 3 suppliers have been engaged on water, but follow-up consultation is still planned by the site to discuss best practices that the suppliers could potentially implement.

The site has been in discussions with its tobacco suppliers (BAT Nairobi, GLT Thika, and BAT South Africa) regarding indirect water use, which will likely also be added to the new version of the WSP.

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.



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

Zambia Indirect Water Use.xlsx.msg

AWS-000461-BAT-South-Africa-Heidelberg-2022-Initial-Certification-Report.pdf

AWS-000460-BAT-Kenya-Likoni-2022-Certification-Report.pdf

Comments:

The site has engaged with their Nairobi and Heidelberg factories to obtain information on WATER STRESS LEVEL, AMOUNT OF WATER USED IN m3, WATER QUALITY, and WATER RISKS AND MITIGATION of the products they supply to BAT Lusaka (see Zambia Indirect Water Use.xlsx.msg). Efforts made by these two suppliers in reducing their indirect water use are reflected in AWS-000461-BAT-South-Africa-Heidelberg-2022

-Initial-Certification-Report.pdf and AWS-000460-BAT-Kenya-Likoni-2022

-Certification-Report.pdf.

However, these two sites are more advanced in their AWS journey, so they have shared with BAT Lusaka what they have implemented in terms of reducing indirect water use. To date the site has not proactively engaged with these sites to encourage further improved indirect water use practices, but is planning to do so shortly.

Finding No: TNR-004625

- 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.



Comment Evidence:

RE Water and Sewer network .msg Re BAT Water Meter.msg MFEZ Water samples.msg Borehole Water Samples.msg

Comments

The site provided evidence of its engagement with MFEZ regarding the following shared-water challenges in the Economic Zone:

- 1. Low yield from the borehole
- 2. Borehole 2 out of order
- 3. Minor leakages on the tanks
- 4. Sewer pipe burst
- 5. Discharge water quality from MFEZ ETP.

The correspondence listed above includes agreed actions by MFEZ to address these challenges.

- 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.





Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

Water Stewardship Plan finish.xlsx.

3.9 fin 2.pdf

AWS STAKEHOLDER CONSULTATIVE INVITATION- PS MOWDS AWS STAKEHOLDER INVITATIONS -Roland imperial tobacco

AWS STAKEHOLDER INVITATIONS -WWF

AWS STAKEHOLDER INVITATIONS_Kafue City Council AWS STAKEHOLDER INVITATIONS Lusaka Multi Facility Zone AWS STAKEHOLDER INVITATIONS_Lusaka National Park_

AWS STAKEHOLDER INVITATIONS_Ministry of Water Development and Sanitation_
AWS STAKEHOLDER INVITATIONS_Trade Kings_
AWS STAKEHOLDER INVITATIONS_Water Resources Management Authority _

AWS Stakeholder Meeting Programme

Re (External)REQUEST FOR CONFIRMATION FOR ATTENDANCE OF THE

STAKEHOLDER CONSULTATIVE MEETING

Re AWS Agenda Alignment

RE REQUEST FOR CONFIRMATION FOR ATTENDANCE OF THE STAKEHOLDER

CONSULTATIVE MEETING 2

Re REQUEST FOR CONFIRMATION FOR ATTENDANCE OF THE STAKEHOLDER

CONSULTATIVE MEETING

[Untitled]

20230427_171308 20230427_171321 BIG TREE signed

IMG-20230611-WA0011 IMG-20230611-WA0014

KTC_signed LCC_signed

Lusaka Water_signed MicrosoftTeams-image (4)

MINISTRY OF WATER SANITATION signed

NWASCO (002)_signed

RE AWS Agenda Alignment Trade Kings

Re AWS Alignment Engagement RE AWS Certification Engagement

ROTOTECH (002) signed TRADE KINGS _signed ZESCO SUB Station signed

BAT

Project Restoration

BRITISH AMERICAN TOBACCO Catchment Mapping report

Re BAT Catchment Area Mapping

IMG-20230322-WA0031 IMG-20230322-WA0034 VID-20230322-WA0035 VID-20230611-WA0015

INVITATION TO THE 4TH SOLID WASTE MANAGEMENT PARTNERSHIP FORUM

Invitation to the LuWSI Training on Water Stewardship and Environmental Management

20

IMG-20220603-WA0005 National Park Samples

Trees to plant for World Environmental day

Acepptance letter BAT

REPORT 2023 LUWSI PRIORITIZATION WORKSHOP

DCP Program IMG 0317 IMG 0416

IMG-20220820-WA0081



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Manja Pamodzi District Clean up MicrosoftTeams-image (3) MicrosoftTeams-image Thank You 20230306_115702 20230306_121455 Borehole Water Samples MFEZ Water samples Re BAT Water Meter RE Water and Sewer network 1.2.4.1 Stakeholders meeting report -BAT AWS implementation **AWS SCM** IMG-20230605-WA0008 IMG-20230605-WA0009 IMG-20230605-WA0013 20230309_112342 20230309_112843 20230309 113258 20230316 122007 20230316_134119 AWS Alignment Meeting- Vinnid - Attendance report 5-22-23 Re AWS Agenda 24285 24467 20220917 090052 WED&SW Write Up fin

Comments:

The site documented its best practice actions identified and implemented to date in 3.9.pdf. The first action (A comprehensive water stewardship plan that is well-implemented, routinely reviewed and updated.) does not in itself constitute best practice, but the other 3 listed do. Status of implementation to date between 2021 and June 2023 is reflected in the Status and Comments fields of Water_Stewardship_Plan_finish.xlsx. A suite of implementation actions in relation to these best practices were provided in the form of correspondence, reports, photographs, and videos.

3.9.2 Actions towards achieving best practice, related to targets in terms of water balance shall be implemented.

Q Obs.



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

3.9 fin 2.pdf

3.9.2 Actions towards achieving best practice towards Water Balance.pdf

Water Stewardship Plan finish.xlsx

Capex Requisition Form - Compressed Air Water Recovery.pdf

FW Capex Requisition Form - Compressed air water recovery project.msg

Re PO-Water Retention System Project.msg

Comments:

Actions implemented to date are reflected in 3.9 and 3.9.2 Actions towards achieving best practice towards Water Balance.pdf. This included:

- Analyzing and metering all key points so that any variations in water inflow is detected.
- Sensitizing employees/visitors on how to improve efficiency on basic daily activities, and communication such as signage to switch off taps when not in use and reporting leakages immediately.
- Implementing a leak or fault inspection and reporting, followed up by actions to reduce leaks.
- Installing water efficient fittings i.e. water misters in the bath for toilet basins.
- Getting the employees onboard with the plan so they can do their part in conserving water in day to day tasks.
- Recycling of HVAC condensate.
- Lifting of the underground pipes to above level.

Status of implementation to date between 2021 and June 2023 is reflected in the Status and Comments fields of Water Stewardship Plan finish.xlsx.

Capex Requisition Form - Compressed Air Water Recovery.pdf, FW Capex Requisition Form - Compressed air water recovery project.msg, and Re PO-Water Retention System Project.msg reflect the water recycling projects implemented.

Opportunity exists for the site to more explicitly document progress to date in relation to the targets set, which as explained in 2.3.2 should be quantified to the greatest extent possible. Targets than span multiple years have not been broken down into constituent parts relevant for each year of assessment.

3.9.3 Actions towards achieving best practice, related to targets in terms of water quality shall be implemented.

Q Obs.

Comment

Evidence:

3.9.3 Actions towards achieving best practice towards Water Quality.pdf

3.9 fin 2.pdf

Water_Stewardship_Plan_finish.xlsx

Comments:

The site identified the following actions related to this indicator:

- Water quality testing and monitoring beyond legal compliance
- Good Waste Management practices (on-site waste segregation and community recycling/clean-up initiatives)
- Tree planting.

Status of implementation to date between 2021 and June 2023 is reflected in the Status and Comments fields of Water Stewardship Plan finish.xlsx.

As with 3.9.2, opportunity exists for the site to more explicitly document progress to date in relation to the targets set, which as explained in 2.3.2 should be quantified to the greatest extent possible.

Actions towards achieving best practice, related to targets in terms of the site's maintenance of Important Water-Related Areas shall be implemented. **Q** Obs.

WSAS

3.9.4



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

Water Stewardship Plan finish.xlsx

3.9 fin 2.pdf

VESTEE INVESTMENTS LTD-BAT FACILITIES QUARTERLY REPORT.pdf

SZBLK_Opera23061006520.pdf SZBLK_Opera23060716580.pdf SZBLK_Opera23060716571.pdf SZBLK_Opera23060716570.pdf SZBLK_Opera23060716561.pdf SZBLK_Opera23060716560.pdf SZBLK_Opera23060716550.pdf SZBLK_Opera23060716541.pdf SZBLK_Opera23060716540.pdf SZBLK_Opera23060716540.pdf SZBLK_Opera23060716510.pdf SZBLK_Opera23060716510.pdf SZBLK_Opera23060716510.pdf SZBLK_Opera23060716490.pdf

FW RFQ- Plumbing and Water Line Maintenance.msg

Borehole Water Samples.msg

Comments:

The site identified the following best practices for IWRAs:

- IWRA monitoring program to observe changes.
- Tree planting in water recharge zones.

Status of implementation to date between 2021 and June 2023 is reflected in the Status and Comments fields of Water Stewardship Plan finish.xlsx.

As with 3.9.2 and 3.9.3, opportunity exists for the site to more explicitly document progress to date in relation to the targets set, which as explained in 2.3.2 should be quantified to the greatest extent possible.

3.9.5 Actions towards achieving best practice related to targets in terms of

WASH shall be implemented.

Q Obs.

Comment Evidence:

Water Stewardship Plan finish.xlsx

3.9.5 Actions towards achieving best practice towards ON-SITE WASH PROVISION.pdf

3.9.pdf

Comments:

The site identified a number of on-site WASH activities as best practices, but in reality only the following actually constitute best practice:

- Mother's room for pregnant or breast-feeding parents.
- Sanitary bins for disposal of menstrual waste.

Status of implementation to date between 2021 and June 2023 is reflected in the Status and Comments fields of Water_Stewardship_Plan_finish.xlsx.

However, these actions were not included in the WSP. The site also implemented a campaign to encourage a maximum of 4min showers, but this was also not included in the WSP.

As with 3.9.2, 3.9.3, and 3.9.4, opportunity exists for the site to more explicitly document progress to date in relation to the targets set, which as explained in 2.3.2 should be quantified to the greatest extent possible.

The site did not identify any off-site WASH best practices in its WSP.

WSAS



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

4	STEP 4: EVALUATE - Evaluate the site's performance.	
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. Q Obs.	
Comment	Evidence: Water Stewardship Plan finish_Revised_20230622.xlsx	
	Comments The evaluation results reflect performance to date for the proposed action (Timeline Performance that reflects a quantified status of progress), Evaluation of Target (Achieved; Ongoing process; Not Achieved as a summary of status/progress), and Additional Actions/Comments (Further information on the quantified status of progress and future actions proposed or required).	
	As identified in 2.3.2 and 3.9.2, opportunity exists for the site to more explicitly document the targets it sets, to support effective evaluation.	
4.1.2	Value creation resulting from the water stewardship plan shall be evaluated. Yes	
Comment	Evidence: 4.1.3 Value Creation and benefits .pdf	
	Comments: The site explained, and quantified where possible/available, the value creation resulting from the water stewardship plan in section 4.1.2 in 4.1.3 Value Creation and benefits.pdf.	
4.1.3	The shared value benefits in the catchment shall be identified and where applicable, quantified. Q Obs.	
Comment	Evidence: 4.1.3 Value Creation and benefits_Revised_202 .pdf 4.1.3 Value Creation and benefits.pdf	
	Comments: The site explained, and quantified where possible/available, the value creation resulting from the water stewardship plan in section 4.1.3 in 4.1.3 Value Creation and benefits.pdf.	
	However, some of the current benefits may be slightly over-stated and may require minor revision to ensure they accurately reflect what has actually been achieved/delivered to date.	
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.





Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

4.2 Annual Review-Water related incidences.pdf

Comments:

Three (3) water related emergencies were experienced in 2022/23 as reflected in 4.2 Annual Review-Water related incidences.pdf, namely:

- Covid-19 (due to link with WASH)
 Dysfunctional MFEZ water meter
- Sewer Overflow.

These were assessed in terms of their Significance Level, Root Cause, and Mitigation Measures to be implemented.

4.3 Evaluate stakeholders' consultation feedback

regarding the site's water stewardship performance, including the effectiveness of the site's engagement process.

4.3.1 Consultation efforts with stakeholders on the site's water stewardship

performance shall be identified.



Comment

Evidence:

Water Stewardship Plan finish.xlsx

AWS publication.pdf

Re Stakeholder Consultative Meeting on Water Related Opportunities in Kafue Catchment

Do Stokobo

Re Stakeholder Consultative Meeting on Water Related Opportunities in Kafue Catchment Area msg

BAT Zambia Alliance Water Stewardship Journey(1-11).xlsx

Comments:

The site's performance was shared with stakeholders as reflected in AWS publication.pdf and feedback from stakeholders on performance is reflected in BAT Zambia Alliance Water Stewardship Journey(1-11).xlsx. Correspondence regarding feedback on performance is reflected is Re Stakeholder Consultative Meeting on Water Related Opportunities in Kafue Catchment Area 2.msg and Re Stakeholder Consultative Meeting on Water Related Opportunities in Kafue Catchment Area.msg.

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

Evidence:

Water Stewardship Plan finish.xlsx (see Stewardship Plan and New Stewardship Plan worksheets).

Comments:

The 2021 - 2023 WSP was reviewed and revised to WSP 2023 - 2025 based on lessons learnt, action and performance to date, new challenges and opportunities, and outstanding actions

Changes are reflected in the "Stakeholders feedback" column in the Stewardship Plan worksheet of Water Stewardship Plan finish.xlsx. Also, key lessons learned to date that informed changes have included the need to engage MFEZ more, the need to expand the breadth of stakeholders to be consulted, the need to be more explicit and quantifiable in the WSP, and that the WSP needs to be adaptive and revised as new conditions and/or information arises.

WSAS



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

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.

in progress

Comment Evidence:

AWS publication.pdf

Re Stakeholder Consultative Meeting on Water Related Opportunities in Kafue Catchment

Area 2.msg

Comments:

AWS publication.pdf provides an overview of the site's water governance, which was shared

with the site's key stakeholders.

However, this does not include details of the positions accountable for compliance with water-related laws and regulations and the hierarchy between those accountable for water and the senior-most leadership at the site level (CEO or equivalent) or the board. This information is reflected in the site's Water Stewardship Strategy, but it has not been shared

publicly nor with key stakeholders.

Finding No: TNR-004634

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.

Yes

Comment Evidence:

Re Stakeholder Consultative Meeting on Water Related Opportunities in Kafue Catchment

Area.msg

Water Stewardship Plan finish.xlsx

5-2-1 Stakeholder Consultative Meeting on Water Related Opportunities in Kafue Catchment

Area.msg

5-2-1 RE Stakeholder Consultative Meeting on Water Related Opportunities in Kafue

Catchment Area.msg

Comments:

An overview of the site's AWS journey was shared with key stakeholders via a summary of the consultative workshop held (see Re Stakeholder Consultative Meeting on Water Related Opportunities in Kafue Catchment Area.msg). The site also shared the "old" version of its WSP with its key stakeholders, both during and after the workshop, to facilitate input on the proposed actions and to inform the revision process.

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.

in progress

WSAS



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

Article Publishina.msa AWS publication.pdf

Re Stakeholder Consultative Meeting on Water Related Opportunities in Kafue Catchment

Area 2.msg

Comments:

The site's WSP and an overview of the site's AWS journey was shared with key stakeholders via a summary of the consultative workshop held (see Re Stakeholder Consultative Meeting on Water Related Opportunities in Kafue Catchment Area.msg), but this did not include any

details of the site's quantified performance.

Finding No: TNR-004636

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.

Finding No: TNR-004637

5.4.1 The site's shared water-related challenges and efforts made to address these challenges shall be disclosed.

in progress

Comment Evidence:

5.4.1.pdf

Re BAT Catchment Area Mapping.msg

BRITISH AMERICAN TOBACCO Catchment Mapping report.docx

Project Restoration.msg

BAT.pdf

Trees to plant for World Environmental day.msg

National Park Samples.msg IMG-20220603-WA0005.jpg

20.JPG 17.CR2

VID-20230611-WA0015.mp4 VID-20230322-WA0035.mp4 IMG-20230322-WA0034.jpg IMG-20230322-WA0031.jpg

REPORT 2023 LUWSI PRIORITIZATION WORKSHOP.pdf

Acepptance letter BAT.pdf

Thank You.msg

MicrosoftTeams-image.png MicrosoftTeams-image (3).png Manja Pamodzi District Clean up.msg

IMG 0416.CR2 IMG_0317.CR2

IMG-20220820-WA0081.jpg

DCP Program.msg

Comments:

Over the past 2 years the site has been involved in several initiatives and activities aimed at supporting addressing shared water challenges as reflected in 5.4.1.pdf. This has included actions and consultations with LuWSi, MFEZ, Manja Pamodzi etc. This list of shared water challenges were refined and added to during the consultative workshop. However, the contents of 5.4.1.pdf has not been shared publicly.

5.4.2 Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be identified.





Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Comment Evidence:

5.4.2.pdf

IMG-20230322-WA0031 IMG-20230322-WA0034 VID-20230322-WA0035 VID-20230611-WA0015

INVITATION TO THE 4TH SOLID WASTE MANAGEMENT PARTNERSHIP FORUM

MEETING

Invitation to the LuWSI Training on Water Stewardship and Environmental Management

17

IMG-20220603-WA0005 National Park Samples

Trees to plant for World Environmental day

Acepptance letter BAT

REPORT 2023 LUWSI PRIORITIZATION WORKSHOP

DCP Program IMG 0317 IMG 0416

IMG-20220820-WA0081

Manja Pamodzi District Clean up

MicrosoftTeams-image (3) MicrosoftTeams-image

Thank You 20230306_115702

20230306_121455 Borehole Water Samples

MFEZ Water samples

Re BAT Water Meter

RE Water and Sewer network

1.2.4.1 Stakeholders meeting report -BAT AWS implementation

AWS SCM

IMG-20230605-WA0008 IMG-20230605-WA0009

IMG-20230605-WA0013

20230309 112342

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20230309_113258 20230316_122007

20230316 134119

AWS Alignment Meeting- Vinnid - Attendance report 5-22-23

Re AWS Agenda

24285

24467

20220917_090052

WED&SW Write Up fin

AWS STAKEHOLDER CONSULTATIVE INVITATION- PS MOWDS

AWS STAKEHOLDER INVITATIONS -Roland imperial tobacco

AWS STAKEHOLDER INVITATIONS - WWF

AWS STAKEHOLDER INVITATIONS_Kafue City Council

AWS STAKEHOLDER INVITATIONS_Lusaka Multi Facility Zone_

AWS STAKEHOLDER INVITATIONS Lusaka National Park

AWS STAKEHOLDER INVITATIONS_Ministry of Water Development and Sanitation

AWS STAKEHOLDER INVITATIONS_Trade Kings_
AWS STAKEHOLDER INVITATIONS_Water Resources Management Authority _

AWS Stakeholder Meeting_Programme

Re (External)REQUEST FOR CONFIRMATION FOR ATTENDANCE OF THE

STAKEHOLDER CONSULTATIVE MEETING

Re AWS Agenda Alignment

RE REQUEST FOR CONFIRMATION FOR ATTENDANCE OF THE STAKEHOLDER



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

CONSULTATIVE MEETING 2

Re REQUEST FOR CONFIRMATION FOR ATTENDANCE OF THE STAKEHOLDER

CONSULTATIVE MEETING

[Untitled]

20230427_171308 20230427_171321 BIG TREE_signed IMG-20230611-WA0011 IMG-20230611-WA0014

KTC_signed LCC_signed

Lusaka Water_signed MicrosoftTeams-image (4)

MINISTRY OF WATER SANITATION signed

NWASCO (002)_signed

RE AWS Agenda Alignment Trade Kings Re AWS Alignment Engagement RE AWS Certification Engagement

ROTOTECH (002)_signed TRADE KINGS _signed ZESCO SUB Station_signed

BAT

Project Restoration

BRITISH AMERICAN TOBACCO Catchment Mapping report

Re BAT Catchment Area Mapping

Comments:

5.4.2.pdf reflects the efforts made by the site to engage stakeholders and coordinate and support public-sector agencies.

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.

Ves

Comment Evidence:

AWS publication.pdf

Comments:

AWS publication.pdf that was shared with key stakeholders reflects that "There were no water-related non-compliances recorded at our factory following the Internal Legal Compliance audit undertaken in March 2023.". The site confirmed that they have not had any water-related non-compliances since the commencement of implementation of the WSP (i.e., since 1 January 2021). No non-compliance events were known by the external stakeholders interviewed during the audit..

5.5.2 Necessary corrective actions taken by the site to prevent future occurrences shall be disclosed if applicable.



Comment Evidence:

AWS publication.pdf

Comments:

The site confirmed that they have not had any water-related non-compliances since the commencement of implementation of the WSP (i.e., since 1 January 2021). No non-compliance events were known by the external stakeholders interviewed during the audit.

WSAS



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

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.

Comment Evidence:

AWS publication.pdf

Comments:

The site confirmed that they have not had any water-related non-compliances since the commencement of implementation of the WSP (i.e., since 1 January 2021). No

non-compliance events were known by the external stakeholders interviewed during the

audit..







Alliance for Water Stewardship (AWS)

Audit Number: AO-000593

Photographic Evidence from Audit



Utilities Area fuel storage tanks with bunding.jpg



Factory internal waste sorting area.jpg



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593



MFEZ stormwater system adjacent to the site 3.jpg



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593



MFEZ stormwater system from the site.jpg



Laboratory spill kit contents.jpg



Alliance for Water Stewardship (AWS)

Audit Number: AO-000593



Office shower in restroom.jpg



Utilities Area domestic water treatment back-up system 3.jpg



Office restroom disabled toilet and basin and hand dryer.jpg

WSAS

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MFEZ stormwater system from the site 2..jpg



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Utilities Area first aid kit.jpg

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Chemical Store 2.jpg



Site water storage tanks.jpg



Office restroom basins.jpg

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Site Change Room urinals.jpg



Site stormwater system at downstream end of the site.jpg



Office restroom urinal.jpg



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Office restroom hand drier.jpg



Spill kits in Utilities Area.jpg



Office canteen.jpg

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Waste Recycling sorting area tobacco waste awaiting collection.jpg



Office drinking water station.jpg



BAT above ground water pipeline.jpg

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Site Change Room water storage tank and pump.jpg



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Office restroom toilet 2.jpg



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Bunded diesel storage tank.jpg



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Site Change Room shower.jpg



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Utilities area spill kit.jpg



Water line valve leak awaiting repair.jpg



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Utilities Area drinking water station.jpg



Alliance for Water Stewardship (AWS)



Office restroom female hygiene dispenser.jpg



Waste Recycling sorting area 2.jpg



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Stormwater system from roof 2.jpg



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Utilities water pumps and meters.jpg



Site Change Room kitchen and drinkign water dispenser.jpg



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Laboratory basin.jpg



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Office restroom toilet.jpg



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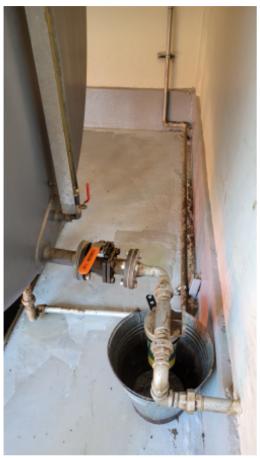
MFEZ stormwater system adjacent to the site 2.jpg



Factory sink.jpg



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Water line valve leak awaiting repair 2.jpg



Site Change Room kitchen basin.jpg



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MFEZ stormwater system adjacent to the site.jpg



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Utilities Area sanitation station.jpg



Office canteen kitchen basin.jpg



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Fire supperssion system in factory.jpg



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Site Water Stewardship Policy displayed in office area.jpg



Site Change Room cleaning schedule.jpg



Alliance for Water Stewardship (AWS)



Office canteen drinking water station.jpg



Alliance for Water Stewardship (AWS)



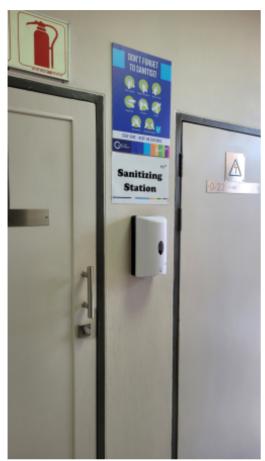
Utilities Area domestic water treatment back-up system 4.jpg



Office restroom basin.jpg



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Office sanitation station.jpg



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Site Water Stewardship Policy displayed in office area 2.jpg



Laboratory spill kits.jpg



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Stormwater system on site..jpg



Waste Recycling sorting area.jpg



Site Change Room restroom basins.jpg

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Site Change Room and water line.jpg



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Site Change Room toilet.jpg



Utilities Area domestic water treatment back-up system 2.jpg



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BAT AWS information 1.jpg



Utilities Area domestic water treatment back-up system.jpg



Site HVAC system.jpg

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Drinking water bottle supplies in office area.jpg



Chemical Store.jpg



Alliance for Water Stewardship (AWS)



Outside sewer manhole.jpg



Laboratory equipment.jpg



Alliance for Water Stewardship (AWS)



Utilities Area spill kit 2.jpg



Alliance for Water Stewardship (AWS)



Office fire suppression system.jpg



Alliance for Water Stewardship (AWS)



BAT AWS information 2.jpg

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Site water meters.jpg

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Site effluent egress point into MFEZ effluent pipeline system.jpg



Input water point.jpg



Bunded pumps.jpg

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MFEZ stormwater system downstream of the site..jpg



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Utilities Area fire suppression system.jpg

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Sewer manhole 8.jpg



Office restroom disabled toilet and basin.jpg



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Waste Recycling sorting area inside.jpg



Office lockers in restroom.jpg



Office kitchen.jpg

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Input water pipeline.jpg



Site HVAC chiller.jpg



Office canteen sanitation station.jpg

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Office canteen kitchen.jpg



Stormwater system from roof.jpg



Site pipeline to storage tanks.jpg

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