CERTIFICATION REPORT

Alliance for Water Stewardship (AWS)

Audit Number: AO-001490

WSAS WATER STEWARDSHIP ASSURANCE SERVICES

SITE DETAILS

Site: **BAT South Africa - Heidelberg**
Address: 1 Prinsloo Street, 1441, Heidelberg, SOUTH AFRICA
Contact Person: Stephen Muli
AWS Reference Number: AWS-000461
Site Structure: Single Site

CERTIFICATION DETAILS

Certification status: Certified Core
Date of certification decision: 2025-Jun-18
Validity of certificate: 2028-Jun-17

AUDIT DETAILS

Audited Service(s): AWS Standard v2.0 (2019)
Audit Type(s): Re-Certification Audit
Audit Start Date: 2025-Mar-24
Audit End Date: 2025-Mar-26
Lead Auditor: Warrick Stewart

Audit team participants:
Warrick Stewart, Lead Auditor

Site Participants:
Midah Masemola, Sustainability Manager
James Venter, Utilities Process Lead
Kefilwe Ntlatleng, Engineering & Services Manager
Phindile Mnguni, EHS Coordinator
Carel De Meyer, EHS Coordinator
Sibusiso Motubame, Utilities Manager
Ammar Butt, IWS & Production Manager
Zandile Ndarala, HRBP BAT
Rolando Castillo, Factory Manager

AUDIT TIMES

Dates	Audit from	Duration	Auditor	Description
2025-Mar-25	08:00:00 - 16:00:00	08:00	Warrick Stewart	
2025-Mar-26	08:00:00 - 13:00:00	05:00	Warrick Stewart	
2025-Mar-24	08:00:00 - 16:00:00	08:00	Warrick Stewart	

CERTIFICATION REPORT

Alliance for Water Stewardship (AWS)

Audit Number: AO-001490

ADDITIONAL INFO

Summary of Audit Findings: During the certification audit, 13 minor non-conformities and 22 observations were raised.

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 30 days of receipt of the audit report by 14 June 2025.

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

The audit team recommends re-certification of British American Tobacco (BAT) Heidelberg, South Africa, at Core level pending approval of the corrective actions plans.
CLOSURE OF FINDINGS AND CORRECTIVE ACTION PLAN:

The Client has successfully resolved 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.

Scope of Assessment: The scope of services covers the recertification audit for assessing conformity of British American Tobacco (BAT) Heidelberg, South Africa against the AWS International Water Stewardship Standard Version 2.

The BAT Heidelberg site is located in the south of the town of Heidelberg in the Gauteng Province of South Africa, approximately 50km south-east of Johannesburg. Site facilities include primary and secondary manufacturing departments, municipal potable water input line, on-site boreholes, storage tanks for both process water and fire suppression, reverse osmosis plants and additional process water treatment, pump houses, related pipework, diesel storage tanks and dispensing station, chemical stores, waste handling and storage area, offices, a canteen and various small kitchens in key office areas, WASH facilities for all staff and contractors present on site, a stormwater management system, and a line for the transportation of combined effluent and process waste water to the nearby ERWAT Heidelberg waste water treatment works.

The facility is located in the Vaal River Catchment.

The audit was conducted onsite on 24 - 26 March 2025.

The onsite site visit included the assessment of the site's water-related infrastructure, as well as on-site and nearby catchment Important Water-Related Areas (IWRAs). This included the primary and secondary manufacturing departments and water-related support infrastructure, the on-site IWRAs identified by BAT Heidelberg, select catchment IWRAs immediately adjacent to and in close proximity to the site, and the nearby Blesbokspruit sub-catchment that the ERWAT Heidelberg waste water treatment works is located in.

FINDINGS

NUMBER OF FINDINGS PER LEVEL

Observation	22
Minor	13

FINDING DETAILS

Finding No:	TNR-017421
Checklist Item No:	1.1.1
Status:	Open
Finding level:	Observation
Checklist item:	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.
Findings:	None of the evidence provided reflects the pipework for input water from the Lesedi Municipality and wastewater within the site.

Finding No:	TNR-017694
Checklist Item No:	1.2.1
Status:	Open
Finding level:	Observation
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 Ratanda community is located immediately downstream of the ERWAT WWTW, which the site engages with through the Lesedi Education and Awareness Forum (LEAF) and Lesedi Municipality (Community Services). However, the site did not identify the Ratanda community as a stakeholder in their own right.

Finding No:	TNR-018101
Checklist Item No:	1.2.2
Status:	Open
Finding level:	Observation
Checklist item:	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.
Findings:	Stakeholders Mapping 2024 update.xlsx reflects the influence and interest of the site's stakeholders on it within the catchment and considering the site's ultimate water source and ultimate receiving water body for wastewater. However, the influence and/or interest of the site on its stakeholders has not been documented.

Finding No:	TNR-017381
Checklist Item No:	1.3.4
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2026-Mar-23
Checklist item:	Water quality of the site's water source(s), provided waters, effluent and receiving water bodies shall be quantified. Where there is a water-related challenge that would be a threat to good water quality status for people or environment, an indication of annual, and where appropriate, seasonal, high and low variances shall be quantified.
Findings:	To date the site has not quantified the water quality of the Blesbokspruit, as the ultimate receiving water body of the site's treated effluent. Also, the water quality of the groundwater the site is accessing from its boreholes was not quantified.
Corrective action:	Obtain information from the competent authority about water quality of the Blesbokspruit River; Conduct Water Quality Monitoring Program for: - Conduct an analysis of the Blesbokspruit river quality (effluent receiving body) – upstream and downstream of the discharge point. - Conduct an analysis of site's groundwater boreholes (abstraction points).

Finding No:	TNR-017695
Checklist Item No:	1.3.6
Status:	Open
Finding level:	Observation
Checklist item:	On-site Important Water-Related Areas shall be identified and mapped, including a description of their status including Indigenous cultural values.
Findings:	IWRA on site.xlsx documents three on-site IWRAs. However, one is a storm water trench, so it is actually site water-related infrastructure. The other two on-site IWRAs have not been evaluated to determine whether they qualify as IWRAs in terms of the AWS definition, despite the wealth of information available through South Africa's formal categorisation and assessment processes for various types of freshwater ecosystems including the different categories of wetlands.

Finding No:	TNR-017370
Checklist Item No:	1.3.7
Status:	Open
Finding level:	Observation
Checklist item:	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.
Findings:	Opportunity exists to expand Generated Values.xlsx to include a description or quantification of the social, cultural, environmental, or economic water-related value generated by the site beyond only its water savings projects, particularly in light of the other water stewardship activities the site has and is implementing. This is important as it needs to be identified to inform the evaluation of the plan in 4.1.2. The site has not considered values beyond the activities within their fenceline.

Finding No:	TNR-017371
Checklist Item No:	1.4.1
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2026-Mar-23
Checklist item:	The embedded water use of primary inputs, including quantity, quality and level of water risk within the site's catchment, shall be identified.
Findings:	Input suppliers.xlsx documents the site's primary inputs with embedded water, but does not include any quantification yet. The water risk within the site's catchment was identified, but not water quality.
Corrective action:	Conduct a survey with the suppliers requesting the following information: - Average annual water consumption or data specific to the last year (in m^3). - Quantity of inputs/products produced (in kg, tons, m^3, units, etc.). - Water consumption per unit of input/product produced. The first two data points will be used to calculate the water consumption per input (e.g., m^3/kg). However, if preferred, the provider may also directly provide this indicator for the last year (e.g., m^3/kg). Additionally, ask them to share any best practices they have adopted and the outcomes generated. Take the opportunity to ask whether they currently implement any water-related best practices or if they would be interested in collaborating on initiatives in this area. This survey will also be used as an opportunity to gather their feedback on the challenges identified in the watershed, whether they agree with them and if they have identified any additional challenges from their perspective.

Finding No:	TNR-017372
Checklist Item No:	1.4.2
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2026-Mar-23
Checklist item:	The embedded water use of outsourced services shall be identified, and where those services originate within the site's catchment, quantified.
Findings:	Service Providers.xlsx documents the site's outsourced services with embedded water use. All of these services originate within the site's catchment, but the water use has not been quantified for any yet.
Corrective action:	Conduct a survey with the Service Providers requesting the following information: - Average annual water consumption or data specific to the last year (in m^3). - Quantity of inputs/products produced (in kg, tons, m^3, units, etc.). - Water consumption per unit of input/product produced. The first two data points will be used to calculate the water consumption per input (e.g., m^3/kg). However, if preferred, the provider may also directly provide this indicator for the last year (e.g., m^3/kg). Additionally, ask them to share any best practices they have adopted and the outcomes generated. Take the opportunity to ask whether they currently implement any water-related best practices or if they would be interested in collaborating on initiatives in this area. This survey as an opportunity to gather their feedback on the challenges identified in the watershed, whether they agree with them and if they have identified any additional challenges from their perspective.

Finding No:	TNR-017696
Checklist Item No:	1.5.1
Status:	Open
Finding level:	Observation
Checklist item:	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.
Findings:	Opportunity exists to document public policy relevant to the site and its catchment.

Finding No:	TNR-017374
Checklist Item No:	1.5.3
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2026-Mar-23
Checklist item:	The catchment water-balance, and where applicable, scarcity, shall be quantified, including indication of annual, and where appropriate, seasonal, variance.
Findings:	1.5.3 Status of IVRS 18 March 2025 reflects the water storage capacity in the Vaal River catchment, including the schematic mapping and quantification of storage and distribution, as provided by Rand Water that is the legally mandated water authority. It also includes projected and actual monthly uses by the two water service authorities and urban users in the catchment from May 2024 to April 2025. However, this does not include all the relevant aspects of a water balance and specifically excludes some key users/abstractors (e.g., agriculture) and total discharge. Balance_Status.pptx documents the findings of Integrated Vaal River System Reconciliation Strategy Study: Phase2 (2018), including various response actions. However, this does not quantify the actual catchment water-balance in the form of inputs, uses, and outflow data. As scarcity is a catchment challenge, an indication of annual, and where appropriate, seasonal, variance is required but was not provided.
Corrective action:	Identify and compile data from additional water users (e.g., agriculture, industry, mining) through public databases. - Collect discharge data. - Access the seasonal variation from the basin using Water Balance App: https://livingatlas.arcgis.com/waterbalance/. - Creat a document using data avalilable from: 1) Water Risk Filter (WWF) - https://riskfilter.org/water/home 2) Aqueduct (WRI) - https://www.wri.org/aqueduct 3) Aquastat (FAO) - https://data.apps.fao.org/aquastat/?lang=en 4) Un Water (UN) - https://sdg6data.org/en/maps

Finding No:	TNR-017697
Checklist Item No:	1.5.4
Status:	Open
Finding level:	Observation
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:	No biological status information was provided for the catchment, although bacteriological data was provided for potable water provided by Rand Water Supply.

Finding No:	TNR-017375
Checklist Item No:	1.5.5
Status:	Open
Finding level:	Observation
Checklist item:	Important Water-Related Areas shall be identified, and where appropriate, mapped,and their status assessed including any threats to people or the natural environment, using scientific information and through stakeholder engagement.
Findings:	The site's current information on catchment IWRAs does not reflect due consideration of South Africa's various formal water resource categorisations and assessment results.

Finding No:	TNR-017376
Checklist Item No:	1.5.6
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2026-Mar-23
Checklist item:	Existing and planned water-related infrastructure shall be identified, including condition and potential exposure to extreme events.
Findings:	The site water-related infrastructure information does not consider the potential exposure to extreme events for all infrastructure.
Corrective action:	Evaluate the exposure to extreme events for each piece of infrastructure. A column has been added to the respective spreadsheet for this purpose.

Finding No:	TNR-017377
Checklist Item No:	1.5.7
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2026-Mar-23
Checklist item:	The adequacy of available WASH services within the catchment shall be identified.
Findings:	Water supply and sanitation in Vaal River Basin.pptx documents the water supply conditions as at 2000, but does not include any information related to other WASH aspects (e.g., sanitation, number of homes with and without piped water etc.). The site has also not considered WASH information potentially reflected in the Lesedi Local Municipality's Integrated Development Plan (IDP).
Corrective action:	Update with 2024/2025 data and submit the correct evidence for the maintenance/surveillance audit.

Finding No:	TNR-017383
Checklist Item No:	1.6.2
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2026-Mar-23
Checklist item:	Initiatives to address shared water challenges shall be identified.
Findings:	Initiatives.xlsx documents the site's current and proposed on-site actions to address the shared water-related challenges reflected in Shared Challenges.xlsx, but does not consider current and proposed initiatives beyond the site's fenceline and being championed by other stakeholders.
Corrective action:	Identify local water-related initiatives carried out by NGOs, governments, companies, and other stakeholders in the basin, and complete the spreadsheet accordingly.

Finding No:	TNR-017698
Checklist Item No:	1.7.1
Status:	Open
Finding level:	Observation
Checklist item:	Water risks faced by the site shall be identified, and prioritized, including likelihood and severity of impact within a given timeframe, potential costs and business impact.
Findings:	Opportunity exists for the site to describe/define each identified risk and the root cause of each, so it is clear what the risk actually is, and therefore ultimately result in the associated opportunities/risk mitigation actions being targeted and effective.

Finding No:	TNR-017699
Checklist Item No:	1.7.2
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2026-Mar-23
Checklist item:	Water-related opportunities shall be identified, including how the site may participate, assessment and prioritization of potential savings, and business opportunities.
Findings:	Water Risk and Opportunities v1.xlsx documents the various opportunities identified by the site, including opportunities to mitigate the risks (i.e., how the site may participate), and related actions, as well as worksheets describing the methodology applied. However, this does not include a prioritization of potential savings, and the identification of business opportunities.
Corrective action:	Two columns have been added to the spreadsheet for evaluation of: Business Opportunities: how the opportunity can generate direct or indirect value for the business (e.g., reduction of fines/fees, reputational improvement, new products, increased resilience, competitive advantage). Potential Savings: quantitative or qualitative estimates of water or operational cost savings, such as m^3/year saved or $/year in savings. - Please complete the fields for each of these columns for both newly identified risks and existing risks.

Finding No:	TNR-017400
Checklist Item No:	1.8.3
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2026-Mar-23
Checklist item:	Relevant sector and/or catchment best practice for water quality shall be identified, including rationale for data source.
Findings:	The site identified BP18, "Maintain continuous monitoring of quality results to identify patterns of increase or decrease in parameters" as best practice but this is a standard EHS practice that can hardly be considered as best practice and is insufficient to conform to the indicator. It indicates insufficient analysis undertaken on identifying what could be (further) best practices on water quality
Corrective action:	Prioritize feasibility study for ETP so that effluent water can be treated, as indicated in the WSP. - Consult water authorities, river basin organizations, or NGOs for regional data and initiatives addressing shared water quality challenges. - Consult water authorities, river basin organizations, or NGOs for regional data and initiatives addressing shared water quality challenges. - Adopt less polluting cleaning products or processes to reduce contaminants at source. - Support initiatives to measure water quality in receiving rivers and streams etc. - Update the spreadsheet to reflect the actions taken.

Finding No:	TNR-017403
Checklist Item No:	1.8.4
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2026-Mar-23
Checklist item:	Relevant catchment best practice for site maintenance of Important Water-Related Areas shall be identified.
Findings:	The site in 1.8_Best Practices v1.xlsx identified the planting of trees as its the best practice for IWRAs (BP13). However, not any tree planting in any location constitutes a best practice on important water related areas.
Corrective action:	Review the spreadsheet 1.5.5, 'IMPORTANT WATER-RELATED AREAS OFF SITE', to consider South Africa's formal water resource categorizations' in order to complete the columns "Status" and "Comments". - Find existing initiatives in the target area that already exists to gather efforts and add to the actions to the "1.8_Best Practices". - Review "1.5.5 IMPORTANT WATER RELATED AREAS OFF SITE" to identify actions that can be taken for the main IWRA, then add these to the "1.8_Best Practices " spreadsheet. For example: Blesbokspruit wetland has problems with invasive plants and water quality, the site could think of an action to reduce this vulnerability. - Ensure all IWRA-related actions are justified with reference to how they maintain or enhance water-related functions and address identified threats. - Protect Amphibians (e.g., Frogs) in Marsh Areas, Clean-Up Campaigns, Control of Invasive Plant Species, Water Quality Monitoring and actions to reduce pollution/ Collaborate with Catchment Partners.

Finding No:	TNR-017404
Checklist Item No:	1.8.5
Status:	Open
Finding level:	Observation
Checklist item:	Relevant sector and/or catchment best practice for site provision of equitable and adequate WASH services shall be identified.
Findings:	Opportunity exists to identify additional onsite and offsite WASH best practices that could potentially be implemented.

Finding No:	TNR-017384
Checklist Item No:	2.1.1
Status:	Open
Finding level:	Observation
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:	Once of these commitments, namely "Commitment we alignment to existing sustainability actions in the Vaal River Catchment", could lead tc the site supporting ad hoc actions that are not aligned to existing catchment sustainability plans.

Finding No:	TNR-017700
Checklist Item No:	2.3.2
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2026-Mar-23
Checklist item:	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.
Findings:	Quantified targets were set for some actions, but not the majority of the primary objectives/themes. The site also structured its evaluation of performance in the WSP as the percentage of actions completed in relation to the number of actions set, as opposed to progress in relation to the quantitative targets set (e.g., increase water recycling to 25%, reduce water withdrawn by 10% etc.). The site identified "Upgrade, improvement and provision of WASH" and "Conduct Legionella analyses" as its best practices for WASH in Best Practices v1.xlsx. However, the exact proposed upgrades, improvements and provision of WASH to be implemented were not clearly specified as to what exactly would be implemented that constitutes best practice. Also, detailed actions and targets for this were not specified to enable assessment of implementation and evaluation of performance. Opportunity exists for the site to consider actions beyond it's fenceline, as well as greater opportunities regarding IWRAs and WASH in the catchment. Also, the proposed tree planting is unlikely to meaningfully contribute to any AWS outcomes. Also, a number of the best practices that the site committed to implementing have not been reflected in the current WSP.
Corrective action:	Define SMART Indicators for All Targets, - Ensure that each of the AWS outcomes (good water governance, sustainable water balance, good water quality, important water-related areas, safe WASH) has at least one targeted, measurable action in the WSP. - Also add targets for stakeholders (including service providers and input suppliers). - Review the Best Practices file (e.g., Best Practices v1.xlsx) and ensure all relevant commitments are represented with detailed actions in the WSP. - Restructure performance tracking to monitor progress by performance of the targets. - Identify opportunities to support shared water challenges outside the site’s boundaries

Finding No:	TNR-017701
Checklist Item No:	3.1.2
Status:	Open
Finding level:	Observation
Checklist item:	Measures identified to respect the water rights of others including Indigenous peoples, that are not part of 3.2 shall be implemented.
Findings:	The site has not provided a definitive conclusion as to whether there are any water rights of others that are applicable to the site and and/or its catchment beyond legal rights.

Finding No:	TNR-017709
Checklist Item No:	3.4.1
Status:	Open
Finding level:	Observation
Checklist item:	Status of progress towards meeting water quality targets set in the water stewardship plan shall be identified.
Findings:	However, the chemical spill kit in the site's primary chemical store was empty, with no spill kit nearby. However, a sump was present in the chemical store to collect any chemicals that could potentially be spilled. Also, the site's waste handling facility had at least one drum of adhesive with an open lid, which could fill with rainwater and spill over, although it was noted that the facility is all hard ground and has a sump to collect any spills.

Finding No:	TNR-018097
Checklist Item No:	3.5.1
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2026-Mar-23
Checklist item:	Practices set in the water stewardship plan to maintain and/or enhance the site's Important Water-Related Areas shall be implemented.
Findings:	To date the site has implemented tree planting, as per the WSP. However, this was done on the site's vacant land and it is not clear how this action serves to maintain and/or enhance the Important Water-Related Areas identified by the site. The actions on IWRAs need to related more clearly to the identified IWRAs and their status issues or threats.
Corrective action:	Review the spreadsheet 1.5.5, 'IMPORTANT WATER-RELATED AREAS OFF SITE', to consider South Africa's formal water resource categorisations in order to complete the columns "Status" and "Comments".' - Re-evaluate the current condition and main pressures on each IWRA (e.g., erosion, pollution, invasive species, habitat loss). - Align Actions with IWRA Needs: Redefine WSP actions to directly address the specific threats or enhancement needs of each IWRA. Suggested activities: Marsh Areas Clean-Up Campaigns, Control of Invasive Plant Species at the wetland (Stakeholder - Thekga)

Finding No:	TNR-017708
Checklist Item No:	3.6.1
Status:	Open
Finding level:	Observation
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:	The eye wash station in the site's primary chemical store had not been maintained. No expiry date was present on the eye wash bottle that appeared to be a number of years old and the contents had likely expired.

Finding No:	TNR-018099
Checklist Item No:	3.7.1
Status:	Open
Finding level:	Observation
Checklist item:	Evidence that indirect water use targets set in the water stewardship plan, as applicable, have been met shall be quantified.
Findings:	The site has planned at least one engagement and has achieved it. However, this is only data gathering to understand embedded water use (for 1.4.1 and 1.4.2). Further targets or actions have not been set. Once the findings on 1.4.1 and 1.4.2 are addressed, the site should revisit target setting on indirect water use.

Finding No:	TNR-018100
Checklist Item No:	3.7.2
Status:	Open
Finding level:	Observation
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 suppliers and service providers to obtain their indirect water use data, but the site has not engaged with them on water use reductions or other actions. Once the findings on 1.4.1 and 1.4.2 are addressed, the site should plan and implement engagement accordingly.

Finding No:	TNR-017397
Checklist Item No:	3.8.1
Status:	Open
Finding level:	Observation
Checklist item:	Evidence of engagement, and the key messages relayed with confirmation of receipt, shall be identified.
Findings:	Opportunity exists for the site to engage with the new representative at Rand Water in the future.

Finding No:	TNR-017399
Checklist Item No:	3.9.3
Status:	Open
Finding level:	Observation
Checklist item:	Actions towards achieving best practice, related to targets in terms of water quality shall be implemented.
Findings:	The site identified "Maintain continuous monitoring of quality results to identify patterns of increase or decrease in parameters" as its sole best practice for water quality. The site has been undertaking monitoring of quality results for stormwater, effluent, and now recently for groundwater. However, as per 1.8.3, the site's identified best practice for water quality does not constitute best practice, only standard practice.

Finding No:	TNR-017402
Checklist Item No:	3.9.4
Status:	Open
Finding level:	Observation
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:	The site did implement the planting of trees as per the best practice that was identified by the site in 1.8_Best Practices v1.xlsx. However, not any tree planting is best practice on IWRAs, and the actions planned need to align with the status problems or threats identified in the IWRA(s).

Finding No:	TNR-017407
Checklist Item No:	4.1.1
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2026-Apr-20
Checklist item:	Performance against targets in the site's water stewardship plan and the contribution to achieving water stewardship outcomes shall be evaluated.
Findings:	The site has identified its evaluation in column N (Progress) in its WSP. However, the progress percentage is currently reflected as the number of actions completed in relation to the number of actions set, as opposed to progress in relation to the quantitative targets set (e.g., increase water recycling to 25%, reduce water withdrawn by 10% etc.). This has resulted in the site not reflecting actual performance in relation the targets set, but rather overall progress in completion of all actions per "theme".
Corrective action:	Revise Performance Metrics: Align progress tracking with quantitative targets, not just completion of actions (e.g., measure % reduction in water use directly). - Define measurable targets for quantitative indicators; - Integrate data into WSP progress updates or create a separate control spreadsheet

Finding No:	TNR-017408
Checklist Item No:	4.1.2
Status:	Open
Finding level:	Observation
Checklist item:	Value creation resulting from the water stewardship plan shall be evaluated.
Findings:	The site has documented the Shared Value Benefits to the site and the catchment in column P of its WSP, but this has not been separated between value benefits to the site versus the catchment.

Finding No:	TNR-017409
Checklist Item No:	4.1.3
Status:	Open
Finding level:	Observation
Checklist item:	The shared value benefits in the catchment shall be identified and where applicable, quantified.
Findings:	The site has documented the Shared Value Benefits to the site and the catchment in column P of its WSP, but this has not been separated between value benefits to the site versus the catchment.

CERTIFICATION REPORT

Alliance for Water Stewardship (AWS)

Audit Number: AO-001490

Finding No:	TNR-017411
Checklist Item No:	4.4.1
Status:	Open
Finding level:	Observation
Checklist item:	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.
Findings:	Opportunity exists for the site to revise its targets and actions in the future based on other lessons learnt and progress to date.

Report Details

Report	Value
Report prepared by	Warrick Stewart
Report approved by	Carla Oberdiek
Report approved on (Date)	13 May 2025

Surveillance

Proposed date for next audit
2026-Mar-23

Stakeholder Announcements

Date of publication	Location
27/01/2025	https://watersas.org/stakeholder-announcements/
27/01/2025	https://a4ws.org/wp-content/uploads/2025/01/AWS-000461_BAT-Heidelberg-_StakeholderAnnouncement_Month01_v3.pdf

Comment: The site's Re-Certification Audit was announced on the WSAS and AWS websites as follows:
- https://watersas.org/stakeholder-announcements/
- https://a4ws.org/wp-content/uploads/2025/01/AWS-000461_BAT-Heidelberg-_StakeholderAnnouncement_Month01_v3.pdf

Comment: Virtual stakeholder interviews were conducted with the following stakeholders on 26 and 31 March respectively:
- Lesedi Municipality: Senior Manager - Water, Sanitation & Solid Waste
- Thekga, a local non-profit organisation involved in environmental projects.
- ERWAT (Ekurhuleni Water Care Company): Heidelberg wastewater treatment plant.

Catchment Information

Catchment Information
The site is located in the Vaal River catchment.

It obtains its input water via boreholes and from the Lesedi Local Municipality. Lesedi obtains treated potable water from Rand Water, for reticulation to its customers. This treated potable water is sourced form the Vaal Dam.

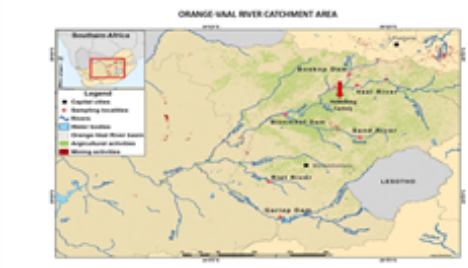
The site's process wastewater and sanitary effluent is mixed on site and piped to the ERWAT Heidelberg WWTW, which is treated and then discharged into the Blesbokspruit sub-catchment.

The catchment upstream of the Vaal dam is dominated by extensive and intensive agriculture and to a lesser extent by mining, urban settlements, and commercial and industrial activities. However, downstream areas are dominated by extensive formal and informal settlement across large parts of the Gauteng Province.

Water shortage have been experienced in recent years due to poor management and maintenance of bulk water infrastructure by Rand Water, as well as delays to Phase 2 of the Lesotho Highlands Water Project (LHWP) - a large-scale water transfer scheme between Lesotho and South Africa designed to supply South Africa with water from the Senqu/Orange River in Lesotho.

BAT Heidelberg site locality map within the Vaal River Catchment map 1.JPG

BAT Heidelberg site locality map in relation to the Malmani Dolomite Aquifer.JPG



BAT Heidelberg site locality map within the Vaal River Catchment map 2.JPG

IWRAs located near the BAT Heidelberg site.JPG

Client Description and Site Details

Client/Site Background

The BAT Heidelberg site is located in the south of the town of Heidelberg in the Gauteng Province of South Africa, approximately 50km south-east of Johannesburg. The facility is located in the Vaal River Catchment. Site facilities include primary and secondary manufacturing departments, municipal potable water input line, on-site boreholes, storage tanks for both process water and fire suppression, reverse osmosis plants and additional process water treatment, pump houses, related pipework, diesel storage tanks and dispensing station, chemical stores, waste handling and storage area, offices, a canteen and various small kitchens in key office areas, WASH facilities for all staff and contractors present on site, a stormwater management system, and a line for the transportation of combined effluent and process waste water to the nearby ERWAT Heidelberg waste water treatment works (WWTWs). Treated wastewater from the ERWAT Heidelberg WWTWs is ultimately discharged into the Blesbokspruit sub-catchment. The site identified three on-site Important Water-Related Areas (IWRAs) and seventeen catchment Important Water-Related Areas (IWRAs).

BAT Heidelberg site locality map.JPG

Summary of Shared Water Challenges

Summary of Shared Water Challenges
The site identified the following shared water challenges in the catchment:
- The water basin faces extremely high water stress (in terms of water quantity)
- Aging Infrastructure
- legal Dumping inside manholes (Toxic/Hazardous Chemicals)
- Lack of treatment of wastewater from industry
- Insufficient municipal government Treatment Plant Capacity
- Water supply limitations, caused by population growth that is not accompanied by upgrading and/or expansion of local infrastructure
- Frequent Power Outages, with associated electrical equipment damage (pumps, motors)
- The water basin faces low/medium water quality risk
- Rapid urbanisation and population growth
- Reliance on transfers from Lesotho and the Tugela River system
- Wasteful/excessive water use, with high levels of non-revenue water
- Unlawful irrigation
- Surface water contamination (diffuse pollution, discharges from industry and municipalities)
- Groundwater contamination (mainly due to acid mine drainage)
- Poor wastewater treatment
- Lack of invasive species management and assessment
- Climate change exacerbating hydrologic extremes
- Multiple crises planning documents from multiple government agencies, resulting in fragmented planning
- Lack of data/assessment on affordability of water, especially for low-income communities
- Sections of the population without access to adequate water and sanitation
- Financial mismanagement of municipal water services institutions
- Inadequate maintenance of water infrastructure.

0.1	**General Requirements for Single Sites, Multi-Sites and Groups**	
0.1.1	*Eligibility Criteria*	
0.1.2		
0.1.2.1	*Have any water source locations and water-related discharge locations been visited during the audit, if so, which and where? If none were visited please provide justification.*	Yes
Comment	The site's boreholes and input water locations were visited on site. The stream immediately downstream of the site's north-eastern stormwater egress and the Blesbokspruit into which the ERWAT Heidelberg wastewater treatment works is located were also visited.	
0.1.1.1	*The site(s) occupy one catchment OR an exception has been granted.*	Yes
Comment	The site is located in a single catchment, the Vaal River 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 under the control of a single management system.	
0.1.1.3	*The scope of the proposed certification shall be homogeneous with respect to primary production system, water management, product or service range, and the main market structures.*	Yes
Comment	The site is homogeneous with respect to its primary production system, water management, product range, and the main market structures.	

1	STEP 1: GATHER AND UNDERSTAND

1.1 *Gather information to define the site's physical scope for water stewardship purposes, including: its operational boundaries; the water sources from which the site draws; the locations to which the site returns its discharges; and the catchment(s) that the site affect(s) and upon which it is reliant.*

1.1.1 *The physical scope of the site shall be mapped, considering the regulatory landscape and zone of stakeholder interests, including:*
- 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.

Obs.

Comment

Evidence:
Vaal River Catchment Area.pptx
1.5.5 IWRA Offsite Map.pptx
1.1.1 Site water layout Map.xlsx

Comments:
Vaal River Catchment Area.pptx, 1.5.5 IWRA Offsite Map.pptx, and 1.1.1 Site water layout Map.xlsx each include a map of the spatial location of the site.

Vaal River Catchment Area.pptx and 1.5.5 IWRA Offsite Map.pptx map the catchment the site is located in, including primary and secondary rivers, the aquifers within the catchment including the Malmani Dolomitic Aquifer that the site is dependent upon for some of its input water, as well as Important Water-Related Areas (IWRAs) in the catchment.

1.1.1 Site water layout Map.xlsx in the Site's Infrastructure worksheet includes a map of the site boundaries (in black) and the water-related infrastructure on site including boreholes, storage tanks, pump station, RO plant, primary pipework for input water from the boreholes and the process water network, pipework for the fire suppression sprinkler system, and the factory wastewater discharge point from the site.

The site has a hardcopy engineering drawing of the pipework for input water from the Lesedi Municipality and wastewater within the site, but it is not mapped electronically and the hardcopy was not shown as evidence. Capturing this electronically is on the site's action plan for implementation.

The Site's Infrastructure worksheet in Site water layout Map.xlsx illustrates the location of the nearest Lesedi Municipality potable water reservoir that provides input water to the site, and the "Supplier to Lesedi" worksheet illustrates the location of the potable water treatment plants that feed this reservoir and primary water body from which Rand Water and then Lesedi Municipality receives water.

Vaal_River_Catchment_Area.pptx illustrates the Vaal River Catchment, from which potable water is provided to the site by the Lesedi Municipality. This is the catchment that the site affects and is reliant upon for water.

ERWAT is the waste water utility that receives the site waste water. The location of this treatment works is illustrated in the Effluent Treatment Plant worksheet in 1.1.1 Site water layout Map.xlsx, as well as its ultimate receiving water body being the Blesbokspruit.

1.2 *Understand relevant stakeholders, their water related challenges, and the site's ability to influence beyond its boundaries.*

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

Obs.

Comment

Evidence:
Stakeholders Mapping 2024 update.xlsx
Stakeholder Forum invitation emails: RSVP needed _ BAT Heidelberg Water Stewardship Forum (Tue_ 18 Feb) (1).msg, Follow-up _ INVITE _ BAT Water Stewardship Forum (1).msg, You're Invited _ BAT South Africa Water Stewardship Stakeholder Forum.msg etc.
Screenshot_of_engagement_with_Lesedi_and_Kevali_(WSP_discussion_and_shared_challenges_discussions)_-_recording_available
RE_ERWAT_Meeting_-_AWS
Water_Stewardship_Stakeholder_Engagement_Meeting_11_March_2025_-_Context
WS_Stakeholder_Engagement_Attendance_Register_Feb_2024.pdf

Comments:
Stakeholders Mapping 2024 update.xlsx documents the site's relevant stakeholder groups including vulnerable, women, minority groups. It includes the degree of stakeholder engagement based on their level of interest and influence. It includes the specific water-related interests and challenges of the different stakeholders. There are no Indigenous people within the surrounding region.

The Ratanda community is located immediately downstream of the ERWAT WWTW, which the site engages with through the Lesedi Education and Awareness Forum (LEAF) and Lesedi Municipality (Community Services). However, the site did not identify the Ratanda community as a stakeholder in their own right.

RSVP needed _ BAT Heidelberg Water Stewardship Forum (Tue_ 18 Feb) (1).msg, Follow-up _ INVITE _ BAT Water Stewardship Forum (1).msg, and You're Invited _ BAT South Africa Water Stewardship Stakeholder Forum.msg etc. reflect the site's engagement with stakeholders through the site's Water Stewardship Forum held on 18 February 2025.

AWS_Stakeholder_Engagement_Attendance_Register_Feb_2024.pdf and AWS_Stakeholder_Engagement_Attendance_Register_Feb_2024.pdf reflect the site's AWS engagement with external stakeholders in 2024.

Water_Stewardship_Stakeholder_Engagement_Meeting_11_March_2025_-_Context was presented to the stakeholders that participated in the Forum meeting on 11 March 2025.

Screenshot_of_engagement_with_Lesedi_and_Kevali_(WSP_discussion_and_shared_challenges_discussions)_-_recording_available.docx reflects stakeholder consultation with the Lesedi Municipality and Kevali on shared water-related challenges.
RE_ERWAT_Meeting_-_AWS reflects the same for a meeting with ERWAT.

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.*

Obs.

Comment	Evidence: Stakeholders Mapping 2024 update.xlsx Comments: Stakeholders Mapping 2024 update.xlsx reflects the influence and interest of the site's stakeholders on it within the catchment and considering the site's ultimate water source and ultimate receiving water body for wastewater. However, the influence and/or interest of the site on its stakeholders has not been documented.
1.3	*Gather water-related data for the site, including: water balance; water quality, Important Water-Related Areas, water governance, WASH; water-related costs, revenues, and shared value creation.*
1.3.1	*Existing water-related incident response plans shall be identified.* ✓ Yes
Comment	Evidence: Water Contingency Plan.xlsx Emergency_Release_Response_Plan Comments: Water Contingency Plan.xlsx is the site's water-related incident response plan that includes identification, assessment, and planned mitigation (through prevention and corrective action) for the following risks: - Interruption of water supply from Lesedi Municipality (Sporadic water supply due to no or low water pressure/volume) - Interruption of water supply from Boreholes (due to no or low water pressure/volume/dry boreholes) - Floods - Droughts - Inefficiency in water treatment (RO Plant failure) - Water equipment failure (pumps failure) - Fire - Contamination of infeed water (municipal) - Contamination of infeed water (borehole) - Abstraction of borehole water above abstraction permit limits - Power failure/load shedding - Protest/demonstration by community members/neighbors against the company's water use - Public health emergency e.g., a pandemic, waterborne disease outbreaks - Blockage of municipal storm water drains - Failure/breakdown of municipal waste water facility (ERWAT) - Contaminated ground water or deteriorating aquifer water quality. Emergency_Release_Response_Plan.docx is the site's emergency response plan relating to spills, to aid in water-related emergencies and events, and their mitigation.
1.3.2	*Site water balance, including inflows, losses, storage, and outflows shall be identified and mapped* ✓ Yes
Comment	Evidence: Site Water Map.xlsx Comment: Site Water Map.xlsx maps and quantifies the site's water balance, including inflows, losses, storage, and outflows.

1.3.3	*Site water balance, inflows, losses, storage, and outflows, including indication of annual variance in water usage rates, shall be quantified. Where there is a water-related challenge that would be a threat to good water balance for people or environment, an indication of annual high and low variances shall be quantified.*	Yes

Comment

Evidence:
Site Water Map.xlsx
Enercon_2024_Utilities

Comments:
Site Water Map.xlsx maps and quantifies the site's water balance, including inflows, losses, storage, and outflows.

Metering has been installed to enable the site to track and manage its primary water uses and potential losses. This is part of an ongoing process that is currently at level 1 and 2 metering, with additional metering being installed over time to achieve level 3 in time. The next major metering installation is for discharge, as this is currently calculated, as per the site's current WSP. Quotations have already been requested for this.

In winter the air handling units need to be run more to achieve moisture requirements, which does result in greater seasonal water use.

Enercon_2024_Utilities reflects the site's seasonal variance in water use via daily, weekly, and monthly demand, and as intensity in relation in targets

1.3.4	*Water quality of the site's water source(s), provided waters, effluent and receiving water bodies shall be quantified. Where there is a water-related challenge that would be a threat to good water quality status for people or environment, an indication of annual, and where appropriate, seasonal, high and low variances shall be quantified.*	in progress

Comment

Evidence:
Root Cause Analysis - Storm Water Feb 2025.xlsx
Effluent Sewer Water Quality ReportBATSA_2025 Sample.pdf
Effluent Sewer Water Quality ReportBATSA_2024 Sample.pdf
Lesedi_Jan2025.pdf
12month_Zuikerbosch_Raw__Jan2025.pdf
23 January 2024 to 22 January 2025
Copy_of_BAT_Utilities_Internal_Kevali_February_2025
Heidelberg wcw requested data.xlsx (Confidential)
RATANDA WCW LLM REQUESTED DATA.xlsx (Confidential)

Comments:
Lesedi_Jan2025.pdf quantifies the quality of potable water provided by Rand Water Supply to Lesedi Municipality from 21 December 2024 to 22 January 2025.
12month_Zuikerbosch_Raw__Jan2025.pdf documents the quality of water from 23 January 2024 to 22 January 2025 for the Zuikerbosch potable water treatment works that feeds Lesedi's reservoir for Heidelberg.

Currently the site is capturing its internal water quality data, as reflected in Copy_of_BAT_Utilities_Internal_Kevali_February_2025.

Root Cause Analysis - Storm Water Feb 2025.xlsx documents the Root Cause Analysis undertaken by the site as part of annual sampling for storm water. The site's stormwater is sampled on an ad hoc basis, but not regularly and not for the receiving waterbody. During this sampling, elevated levels of zinc were identified, despite there being not zinc in the production process. An additional sample was taken, but no elevated zinc was detected. Further investigations are ongoing and more frequent sampling will be undertaken once the investigation has been completed and corrective actions identified.

Effluent Sewer Water Quality ReportBATSA_2025 Sample.pdf and Effluent Sewer Water Quality ReportBATSA_2024 Sample.pdf reflect site effluent investigations.

The site reached out to ERWAT to obtain the quality of their treated effluent, but were advised that this needed to be requested through Lesedi. This was then obtained from Lesedi. Heidelberg wcw requested data.xlsx and RATANDA WCW LLM REQUESTED DATA.xlsx reflect the effluent quality of the ERWAT Heidelberg WWTW after treatment between July 2021 and June 2024, but these datasets are highly confidential.

To date the site has not quantified the water quality of the Blesbokspruit, as the ultimate receiving water body of the site's treated effluent. Also, the quality of the water the site is accessing from its boreholes was not quantified.

Finding No: TNR-017381

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

Yes

Comment

Evidence:
Sources of Contamination.xlsx
Contamination Map.xlsx

Comments:
Sources of Contamination.xlsx and Contamination Map.xlsx map and describe the site's potential sources of pollution, including chemicals used and/or stored on site.

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

Obs.

Comment

Evidence:
1.3.6_IWRA on site (1).xlsx
IWRA On Site.pptx

Comments:
IWRA on site.xlsx documents three on-site IWRAs. However, one is a storm water trench, so it is actually site water-related infrastructure. The other two on-site IWRAs have not been evaluated to determine whether they qualify as IWRAs in terms of the AWS definition, despite the wealth of information available through South Africa's formal categorisation and assessment processes for various types of freshwater ecosystems including the different categories of wetlands.

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.*

Obs.

Comment

Evidence:
Generated Values.xlsx
Water Spen FY'24 till '25.xlsx

Comments:
Generated Values.xlsx describes and quantifies (where currently possible) the social, environmental, and economic water-related value generated by the site through water savings projects, as well as the cost of these initiatives to date.

Water Spen FY'24 till '25.xlsx documents and quantifies the site's water-related costs from 2022 to end February 2025.

Opportunity exists to expand Generated Values.xlsx to include a description or quantification of the social, cultural, environmental, or economic water-related value generated by the site beyond only its water savings projects, particularly in light of the other water stewardship activities the site has and is implementing. This is important as it needs to be identified to inform the evaluation of the plan in 4.1.2.

The site has not considered values beyond the activities within their fenceline.

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

Yes

Comment

Evidence:
WASH on site.xlsx
Revamped Wash Rooms.docx
Layout

Comments:
WASH on site.xlsx documents and quantifies the site's WASH facilities across genders, including restrooms/toilets, sinks/basins, showers, and drinking water fountains. The ratio of the maximum number individuals utilising each WASH facility type per gender type during the shift with the most workers was also quantified.

Revamped Wash Rooms.docx documents with photographs the WASH improvements made on site.

Layout documents with photographs, the location, number and ownership/rental type for each WASH facility installation (e.g., handwash basins, drinking water dispensers, soap dispensers, female sanitary product bin etc.).

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.*

in progress

Comment

Evidence:
Input suppliers.xlsx

Comments:
Input suppliers.xlsx documents the site's primary inputs with embedded water, but does not include any quantification yet. The water risk within the site's catchment was identified, but not water quality.

Finding No: TNR-017371

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

in progress

Comment

Evidence:
Service Providers.xlsx

Comments:
Service Providers.xlsx documents the site's outsourced services with embedded water use. All of these services originate within the site's catchment, but the water use was not been quantified for any yet.

Finding No: TNR-017372

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.*

Obs.

Comment

Evidence:
Governance_in_the_target_area
LLM Presentation for Lesson sharing - 3-4 February 2025 (1).ppt

Comments:
Governance_in_the_target_area documents and describes a suite of water governance related initiatives being undertaken in the catchment, the responsible parties, the spatial scope of each, the types of initiative by category, and links to further information.

LLM Presentation for Lesson sharing - 3-4 February 2025 (1).ppt is a presentation by the Lesedi Municipality documenting the various water-related initiatives in the municipal area, including recommended additional actions.

Opportunity exists to document public policy relevant to the site and its catchment.

1.5.2 *Applicable water-related legal and regulatory requirements shall be identified, including legally-defined and/or stakeholder-verified customary water rights.*

Yes

Comment

Evidence:
National Water Act 1998.xlsx
Facilities Regulation (FR) 2004.xlsx
All_legal_requirements_for_wastewater_discharge
EHS Legal Register 2024.docx
H15 - P78 - Monitoring of Changes to Acts and Regulations.docx

Comments:
National Water Act 1998.xlsx sets out the site's obligations in terms of both this Act and the Water Services Act, 108 of 1997, including the relevance, site controls and the site's type of evidence of compliance.

Facilities Regulation (FR) 2004.xlsx documents the site's legal obligations to its employees and business partner regarding on-site facilities, such as WASH; working, eating, and eating facilities; and others.

All_legal_requirements_for_wastewater_discharge documents the requirements in terms of the National Building Regulations and Building Standards Act, 103 of 1977 and the Lesedi Local Municipality By Laws Enacted In Terms of The National Building Regulations and Building Standards Act and Empowered By The Municipal Systems Act.

EHS Legal Register 2024.docx documents the site's full extent of legal requirements, including water-related legal obligations such as the National Environmental Management Act (NEMA), National Water Act etc.

H15 - P78 - Monitoring of Changes to Acts and Regulations.docx is the site's internal procedure for the monitoring of changes to applicable Acts and Regulations.

1.5.3 *The catchment water-balance, and where applicable, scarcity, shall be quantified, including indication of annual, and where appropriate, seasonal, variance.*

in progress

Comment

Evidence:
1.5.3 Status of IVRS 18 March 2025
Non Revenue Water Intervention.pptx
Balance_Status.pptx
Copy of Targets Dec 2024 LLM

Comments:
1.5.3 Status of IVRS 18 March 2025 reflects the water storage capacity in the Vaal River catchment, including the schematic mapping and quantification of storage and distribution, as provided by Rand Water that is the legally mandated water authority. It also includes projected and actual monthly uses by the two water service authorities and urban users in the catchment from May 2024 to April 2025. However, this does not include all the relevant aspects of a water balance and specifically excludes some key users/abstractors (e.g., agriculture) and total discharge.

Balance_Status.pptx documents the findings of Integrated Vaal River System Reconciliation Strategy Study: Phase2 (2018), including various response actions. However, this does not quantify the actual catchment water-balance in the form of inputs, uses, and outflow data.

As scarcity is a catchment challenge, an indication of annual, and where appropriate, seasonal, variance is required but was not provided.

Copy of Targets Dec 2024 LLM is a database of the site's groundwater use in relation to its water use license groundwater abstraction limits from July to December 2024.

Non Revenue Water Intervention.pptx documents the details of a Non-Revenue Water Intervention planned and implemented in DMA-Bergsig (Heidelberg Ext 9) of the Lesedi Municipality, although this does not related directly to a water balance calculation.

Finding No: TNR-017374

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.

Comment

Evidence:
The Baseline Water Stress indicator from the Water Risk Filter and the Water Stress indicator from Aqueduct indicate that the region is facing water stress.docx
VereenigingRaw_Jan2025.pdf
Lesedi_Jan2025.pdf
12month_Zuikerbosch_Raw _Jan2025.pdf
12month_Vereeniging_Raw_Jan2025.pdf
12month_Vereeniging_Raw_Jan2025 - Copy.pdf
12month_Lesedi_Jan2025.pdf
12month_Lesedi_Feb2022, to 12month_Lesedi_Sep2024
https://www.dws.gov.za/iwqs/microbio/report/WMA2004/index.aspx

Comments:
The Baseline Water Stress indicator from the Water Risk Filter and the Water Stress indicator from Aqueduct indicate that the region is facing water stress.docx is an extract from the Aqueduct Water Risk Filter. It reflects that the Vaal Water Basin is an Extremely High Physical Water Quantity Risk Area, and a Low-Medium Physical Water Quality Risk Area.

Lesedi_Jan2025.pdf quantifies the physical, chemical, and bacteriological quality of potable water provided by Rand Water Supply to Lesedi Municipality from 21 December 2024 to 22 January 2025, as well as the same periods from 2021 to 2024.

VereenigingRaw_Jan2025.pdf quantifies the physical, chemical, and bacteriological quality of potable water provided by Rand Water Supply to Lesedi Municipality from 21 December 2024 to 22 January 2025.

12month_Zuikerbosch_Raw _Jan2025.pdf, 12month_Vereeniging_Raw_Jan2025.pdf, 12month_Vereeniging_Raw_Jan2025 - Copy.pdf, and 12month_Lesedi_Jan2025.pdf quantify the physical, chemical, and bacteriological quality of raw water provided by Rand Water Supply to these municipalities from 23 January 2024 to 22 January 2025, recognising though that the values are averages.

The water quality of the Malmani Dolomite Aquifer, from which the site obtains groundwater, was not quantified.

No biological status information was provided for any of these water sources, although bacteriological data was provided for potable water provided by Rand Water Supply and is reflected at https://www.dws.gov.za/iwqs/microbio/report/WMA2004/index.aspx

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.*

Obs.

Comment

Evidence:
IWRA off site.xlsx
1.5.5 IWRA Offsite Map

Comments:
IWRA off site.xlsx documents three catchment 17 IWRAs, with descriptions, importance information (although not based on any of South Africa's formal water resource categorisations or assessments), general status comment with further explanation, impact on the site, impact from the site, related stakeholders, planned actions etc. 1.5.5. IWRA Offsite Map.pptx maps the location of most of these IWRAs, but not all.

The above information does not reflect due consideration of South Africa's various formal water resource categorisations and assessment results.

1.5.6 *Existing and planned water-related infrastructure shall be identified, including condition and potential exposure to extreme events.*

in progress

Comment

Evidence:
Water-related infrastructure in the target area.xlsx

Comments:
Water-related infrastructure in the target area.xlsx documents a suite of 17 different water-related infrastructure types in the catchment, including for each, their age, served population, comments, main problems, and status.

However, none of this information considers the potential exposure to extreme events for each.

Finding No: TNR-017376

1.5.7 *The adequacy of available WASH services within the catchment shall be identified.*

in progress

Comment

Evidence:
Water supply and sanitation in Vaal River Basin.pptx

Comments:
Water supply and sanitation in Vaal River Basin.pptx documents the water supply conditions as at 2000, but does not include any information related to other WASH aspects (e.g., sanitation, number of homes with and without piped water etc.).

The site has also not considered WASH information potentially reflected in the Lesedi Local Municipality's Integrated Development Plan (IDP).

Finding No: TNR-017377

1.6 *Understand current and future shared water challenges in the catchment, by linking the water challenges identified by stakeholders with the site's water challenges.*

1.6.1 *Shared water challenges shall be identified and prioritized from the information gathered.*

Yes

Comment

Evidence:
Shared Challenges.xlsx

Comments:
Shared Challenges.xlsx documents 22 identified shared challenges, including a description of each, the chronology (present/past), main stakeholders involved, causes, mitigation priority, and related AWS outcome.

1.6.2 *Initiatives to address shared water challenges shall be identified.*

in progress

Comment

Evidence:
Shared Challenges.xlsx
Initiatives.xlsx

Comments:
Initiatives.xlsx documents the site's current and proposed on-site actions to address the shared water-related challenges reflected in Shared Challenges.xlsx, but does not consider current and proposed initiatives beyond the site's fenceline and being championed by other stakeholders.

Finding No: TNR-017383

1.7 *Understand the site's water risks and opportunities: Assess and prioritize the water risks and opportunities affecting the site based upon the status of the site, existing risk management plans and/or the issues and future risk trends identified in 1.6.*

1.7.1 *Water risks faced by the site shall be identified, and prioritized, including likelihood and severity of impact within a given timeframe, potential costs and business impact.*

Obs.

Comment

Evidence:
Water Risks and Opportunities v1.xlsx

Comments:
Water Risks and Opportunities v1.xlsx documents the various risks and opportunities identified by the site, including a description of each, the potential impact, mitigation cost, type, probability, impact, results of the risk assessment, opportunities to mitigate the risks, and related actions, as well as worksheets describing the methodology applied.

However, opportunity exists to describe/define each risk identified by the site and the root cause of each, so it is clear what the risk actually is, and therefore ultimately result in the associated opportunities/risk mitigation actions being targeted and effective.

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

in progress

Comment

Evidence:
Water Risk and Opportunities v1.xlsx

Comments:
Water Risk and Opportunities v1.xlsx documents the various opportunities identified by the site, including opportunities to mitigate the risks (i.e., how the site may participate), and related actions, as well as worksheets describing the methodology applied.

However, this does not include a prioritization of potential savings, and the identification of business opportunities.

Finding No: TNR-017699

1.8 *Understand best practice towards achieving AWS outcomes: Determining sectoral best practices having a local/catchment, regional, or national relevance.*

1.8.1 *Relevant catchment best practice for water governance shall be identified.*

Yes

Comment

Evidence:
Best Practices v1.xlsx

Comments:
Best Practices v1.xlsx reflects governance best practices as its Water Stewardship Plan (WSP) actions BP15 and BP16, which are to:
- Share annual Good Water Governance Report and updated Water Stewardship Plan (WSP) with stakeholders and request feedback.
- Participation in local events related to water.

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.*

Yes

Comment

Evidence:
Best Practices v1.xlsx

Comments:
Best Practices v1.xlsx reflects the site's identified water balance best practices as BP01 to BP12, which are as follows:
- Recover 40% on average of condensate for reuse in Boilers
- Recovery of compressor condensate
- Recovery of cooling towers TDS blowdown and drainlines
- Recovery of DEMIN Plant reject water
- Using RO Brine water for RO backwash cycles
- Feeding Boilers with recycled & recovered water
- Using RO Brine for toilets flushing
- Feeding cooling towers with recycled & recovered water
- Regular leak audits
- Water consumption tracker
- Collect water spills from utilities tunnel and store in flow bins
- Meter incoming and outgoing water for site.

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

in progress

Comment

Evidence:
Best Practices v1.xlsx
Copy of BAT Utilities Internal Kevali February 2025.xlsx

Comments:
Best Practices v1.xlsx reflects relevant sector and/or catchment best practice for water quality as BP18, "Maintain continuous monitoring of quality results to identify patterns of increase or decrease in parameters." However, this does not actually constitute best practice, only good practice. Also, no data source was provided for this practice.

Finding No: TNR-017400

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

in progress

Comment

Evidence:
Governance in the target area.xlsx
Best Practices v1.xlsx

Comments:
The site in 1.8_Best Practices v1.xlsx identified the planting of trees as its the best practice for IWRAs (BP13). However, this does not actually constitute a best practice.

Finding No: TNR-017403

1.8.5 *Relevant sector and/or catchment best practice for site provision of equitable and adequate WASH services shall be identified.*

Obs.

Comment	Evidence: WASH on site.xlsx Best Practices v1.xlsx Governance in the target area.xlsx Comments: The site identified BP 14 "Upgrade, improvement and provision of WASH" and BP17 "Conduct Legionella analyses" as its best practices for WASH in Best Practices v1.xlsx. These are the best practices the site committed to implementing, not just best practices that could be implemented. Opportunity exists to identify additional onsite and offsite WASH best practices that could potentially be implemented.

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.*	Obs.
Comment	Evidence: BATSA Heidelberg - AWS Letter of Commitment - 2025-01.docx.pdf Comments: BATSA Heidelberg - AWS Letter of Commitment - 2025-01.docx.pdf includes all of the sub-requirements of this indicator. Also, Website_Link_for_Stakeholders_RE_Completed_Complete_with_Docusign_BATSA_Heidelberg_-_AWS_Letter_of_Commitment_-_2025-01_DRAFT reflects the site's commitment being shared publicly online. However, once of these commitments, namely "Commitment we alignment to existing sustainability actions in the Vaal River Catchment", could lead to the site supporting ad hoc actions that are not aligned to existing catchment sustainability plans.	
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.*	Yes

Comment

Evidence:
Monitoring of Changes to Acts and Regulations.docx
Monitoring of Changes to Acts and Regulations.pdf
Link to Legal System or Process.docx
EHS Legal Register 2024
H15 - P78 - Monitoring of Changes to Acts and Regulations

Comments:
EHS Legal Register 2024 documents the site's various legal obligations. Link to Legal System or Process.docx is a link to the site's online legal library service provider.

H15 - P78 - Monitoring of Changes to Acts and Regulations is the site's procedure to monitor and respond to any changes in legal requirements and ensure ongoing compliance for existing approvals. This includes the responsible persons/positions within the site's organisational structure, and tracks the status of current approvals and the process for submissions to regulatory agencies.

Monitoring of Changes to Acts and Regulations.docx and Monitoring of Changes to Acts and Regulations.pdf are older versions of the above procedure.

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:
Water Strategy.docx
Water Stewardship Policy A4.pdf
H15 - B002-Water Stewardship Strategy Manual

Comments:
Water Strategy.docx and H15 - B002-Water Stewardship Strategy Manual document the site's mission, vision, and goals towards good water stewardship in line with this AWS Standard.

Water Stewardship Policy A4.pdf is BAT South Africa's water stewardship policy, which includes the national company's mission, vision, objectives and KPIs 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.

in progress

Comment

Evidence:
AWS_Stewardship Plan 2024 & 2025_v2.xlsx

Comments:
AWS_Stewardship Plan 2024 & 2025_v2.xlsx is the site's WSP, which includes 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.

The site's WSP includes a total of 36 actions across the following criteria identified by the site:
- Stakeholder engagement
- Water quality
- IWRA(green mash at the plant)
- Indirect water use
- Water saving initiatives
- WASH
- Healthy status of Important Water-Related Areas
- Sustainable water balance
- Legal Compliance.

These were then each documented based on the following aspects: Target, Measurement and monitoring method, Action Number, Action, Action- immediate or longterm, Frequency, Proposed, Timeline, Budget(rands), Responsible (Position), Status (of progress), Status Review, and AWS Outcome.

However, quantified targets were set for some actions, but not the majority of the primary objectives/themes.

The site also structured its evaluation of performance in the WSP as the percentage of actions completed in relation to the number of actions set, as opposed to progress in relation to the quantitative targets set (e.g., increase water recycling to 25%, reduce water withdrawn by 10% etc.).

The site identified "Upgrade, improvement and provision of WASH" and "Conduct Legionella analyses" as its best practices for WASH in Best Practices v1.xlsx. However, the exact proposed upgrades, improvements and provision of WASH to be implemented were not clearly specified as to what exactly would be implemented that constitutes best practice. Also, detailed actions and targets for this were not specified to enable assessment of implementation and evaluation of performance.

Opportunity exists for the site to consider actions beyond it's fenceline, as well as greater opportunities regarding IWRAs and WASH in the catchment. Also, the proposed tree planting is unlikely to meaningfully contribute to any AWS outcomes.

Also, a number of the best practices that the site committed to implementing have not been reflected in the current WSP.

Lastly, Status for "In Progress" and "Closed" could be strengthened by being more detailed and specific regarding status of progress and timing of closure.

Finding No: TNR-017700

2.4 *Demonstrate the site's responsiveness and resilience to respond to water risks*

2.4.1	*A plan to mitigate or adapt to identified water risks developed in co-ordination with relevant public-sector and infrastructure agencies shall be identified.*	Yes
Comment	Evidence: Water_Contingency_Plan Water Risk and Opportunities.xlsx Comments: The site's Water_Contingency_Plan (1.3.1) and Water Risk and Opportunities.xlsx identify the site's risks including preventive and corrective actions for each, and the activation of responses from relevant government entities where required. The Water Contingency Plan was informed by inputs from governance.	

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

Comment

Evidence:
5700476700 Kevali Chemical Group Pty Ltd Quote QUT03114 - 3 x Water Tankers to Ratanda Communicty - 18 July 2023.pdf
5700476003 Kevali Chemical Croup Pty Ltd Quote QUT01822 - 3 x Water Tankers to Ratanda Community - 31 May 2023.pdf
Supplying Water to Communities 30 May 2023.pptx
RE_ERWAT_Meeting_-_AWS.msg

Comments:
Supplying Water to Communities 30 May 2023.pptx, 5700476700 Kevali Chemical Group Pty Ltd Quote QUT03114 - 3 x Water Tankers to Ratanda Communicty - 18 July 2023.pdf and 5700476003 Kevali Chemical Croup Pty Ltd Quote QUT01822 - 3 x Water Tankers to Ratanda Community - 31 May 2023.pdf reflect the voluntary potable water provided by the site to community members in the Ratanda Community in 2023.

RE_ERWAT_Meeting_-_AWS.msg reflects further engagement by the site with ERWAT.

3.1.2 *Measures identified to respect the water rights of others including Indigenous peoples, that are not part of 3.2 shall be implemented.* 🔍 Obs.

Comment

Evidence:
Measures To Be Taken To Respect Water Rights in the Upper Vaal Basin.pdf

Comments:
Measures To Be Taken To Respect Water Rights in the Upper Vaal Basin.pdf describes the South African context regarding customary water rights and indigenous peoples. However, the site has not provided a definitive conclusion as to whether there are any water rights of others that are applicable to the site and and/or its catchment beyond legal rights.

3.2 *Implement system to comply with water-related legal and regulatory requirements and respect water rights.*

3.2.1 *A process to verify full legal and regulatory compliance shall be implemented.* ✓ Yes

Comment

Evidence:
Monitoring of Changes to Acts and Regulations.docx
Monitoring of Changes to Acts and Regulations.pdf
Link to Legal System or Process.docx
EHS Legal Register 2024
H15 - P78 - Monitoring of Changes to Acts and Regulations

Comments:
EHS Legal Register 2024 documents the site's various legal obligations. Link to Legal System or Process.docx is a link to the site's online legal library service provider.

H15 - P78 - Monitoring of Changes to Acts and Regulations is the site's procedure to monitor and respond to any changes in legal requirements and ensure ongoing compliance for existing approvals. This includes the responsible persons/positions within the site's organisational structure, and tracks the status of current approvals and the process for submissions to regulatory agencies.

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.*

Yes

Comment

Evidence:
Monitoring of Changes to Acts and Regulations.pdf
Monitoring of Changes to Acts and Regulations.doc
Kevali stormwater and effluent quality reports
Effluent_Sewer_Water_Quality_ReportBATSA_2025_Sample
Effluent_Sewer_Water_Quality_ReportBATSA_2024_Sample

Comments:
The site's WSP under action 10 includes "100% compliance with set water quality parameters" as a key action.

The site undertakes borehole, effluent, stormwater, and ground sampling to identify water quality and ground contamination, to detect any potential pollution from the site and support rapid response, as reflected in the Kevali stormwater and effluent quality reports and the site's 2024 and 2025 Effluent Sewer Water Quality Reports.

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.*

Yes

Comment

Evidence:
Enercon 2024 Utilities.xlsx
AWS_Stewardship Plan 2024 & 2025_v2
3.3.1 Water Update 2025 Plans.pptx
2024_Water_Governance_Report_and_Water_Stewardship_Plan_(WSP)
Various correspondence with stakeholders, including the site's Water Stewardship Forum (see RE Water Stewardship Engagement.msg, RE Query from the Sapplive Website, 2024_Water_Governance_Report_and_Water_Stewardship_Plan_(WSP) etc.)

Comments:
The site's progress towards meeting water balance targets set in the water stewardship plan to date is as follows:
- ≥ 1 engagement with our highest indirect water consumers: Email with Sebokeng Fuels in RE Water Stewardship Engagement.msg.
- Increase water recycling to 25%: Enercon 2024 Utilities.xlsx reflects achievement at end 2024 of 24.51% increase.
- Reduce water withdrawn by 10%: Enercon reflects achievement at end 2024 of 28%.
- 100% Compliance to all water regulations: Boreholes only been used for last 6 months and a service provider has been appointed to undertake the monitoring, to enable reporting to DWS in April 2025.
- Review current WSP and update plan based on new changes and projects. Communicate all changes with internal and external stakeholders: Review and reflected in latest WSP. 2024_Water_Governance_Report_and_Water_Stewardship_Plan_(WSP) reflects sharing of WSP with internal and external stakeholders.
- Update WSP with 2025 actions and plans: Reflected in latest WSP (AWS_Stewardship Plan 2024 & 2025_v2.xlsx)
- Plan meetings with relevant stakeholders on-site or one on one engagements to track water challenges: Various correspondence with stakeholders, including the site's Water Stewardship Forum.

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.*

Yes

Comment

Evidence:
Water Update 2025 Plans.pptx
Enercon 2024 Utilities.xlsx

Comments:
Enercon 2024 Utilities.xlsx reflects how the site has set annual targets to improve the site's water use efficiency and reduce volumetric total use, including the site's progress to date per month, annually and daily.

3.3.3 *Legally-binding documentation, if applicable, for the re-allocation of water to social, cultural or environmental needs shall be identified.*

Yes

Comment

Evidence:
Supplying Water to Communities 30 May 2023.pptx
QUT01822(BRI001)(Kevali Chemical Group (Pty) Ltd)(2023-05-31).pdf
5700476700 Kevali Chemical Group Pty Ltd Quote QUT03114 - 3 x Water Tankers to Ratanda Communicty - 18 July 2023.pdf
5700476003 Kevali Chemical Croup Pty Ltd Quote QUT01822 - 3 x Water Tankers to Ratanda Community - 31 May 2023.pdf

Comments:
The site voluntarily provided water to communities in 2023 when water shortages were experienced in the municipal area, but this was not associated with a legally binding agreement.

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.*

Obs.

Comment

Evidence:
Copy of BAT Utilities Internal Kevali February 2025.xlsx
Root Cause Analysis - Storm Water Feb 2025.xlsx
Effluent Sewer Water Quality ReportBATSA_2025 Sample.pdf
Effluent Sewer Water Quality ReportBATSA_2024 Sample.pdf
Lesedi_Jan2025.pdf

Comments:
- 100% compliance with set water quality parameters: Copy of BAT Utilities Internal Kevali February 2025.xlsx, Root Cause Analysis - Storm Water Feb 2025.xlsx,Effluent Sewer Water Quality ReportBATSA_2025 Sample.pdf, Effluent Sewer Water Quality ReportBATSA_2024 Sample.pdf, and Lesedi_Jan2025.pdf reflect the site's tracking of its input, effluent, and stormwater quality against its set targets, including investigation where a single anomaly or elevated parameter is identified.

However, the chemical spill kit in the site's primary chemical store was empty, with no spill kit nearby. However, a sump was present in the chemical store to collect any chemicals that could potentially be spilled. Also, the site's waste handling facility had at least one drum of adhesive with an open lid, which could fill with rainwater and spill over, although it was noted that the facility is all hard ground and has a sump to collect any spills.

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.*

Yes

Comment

Evidence:
BQ248 - BAT sampling and solution proposal Feb 2025 Rev 1.pdf

Comments:
To date the site has not formally identified best practice for its effluent, but as per the WSP this is planned for 2025. However, the site has already engaged with AECI to provide a technical proposal and quotation for the installation of a wastewater treatment plant (see 3.4.2 BQ248 - BAT sampling and solution proposal Feb 2025 Rev 1.pdf). Once the proposal from AECI has been received, best practice that the site can potentially practically achieve will be defined, and the site will then make a decision and work towards implementation.

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.*

No

Comment

Evidence:
20210604_105849.jpg
20240605_125954.jpg

Comments:
To date the site has implemented tree planting, as per the WSP. However, this action does not actually serve to maintain and/or enhance the site's Important Water-Related Areas. As per 1.3.6 the site still needs to define their on-site IWRAs more accurately, although catchment IWRAs have been well identified and documented.

Finding No: TNR-018097

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.*

Obs.

Comment

Evidence:
Revamped Wash Rooms.docx
Layout.xlsx

Comments:
Revamped Wash Rooms.docx and Layout.xlsx reflect adequate access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers onsite, including the quantification of each. During the audit it was observed that these facilities were more than sufficient in number, quality, and their maintenance.

However, the eye wash station in the site's primary chemical store had not been maintained. No expiry date was present on the eye wash bottle that appeared to be a number of years old and the contents had likely expired.

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.*

Yes

Comment

Evidence:
Effluent_Sewer_Water_Quality_ReportBATSA_2025_Sample
Effluent_Sewer_Water_Quality_ReportBATSA_2024_Sample
All legal requirements for wastewater discharge.xlsx

Comments:
The site is not impinging on the human right to safe water and sanitation of communities through their operations as effluent quality is monitored and maintained within legal limits, and the site has a process to address any elevated levels and/or exceedances in alignment with its legal obligations (as per Effluent_Sewer_Water_Quality_ReportBATSA_2025_Sample, Effluent_Sewer_Water_Quality_ReportBATSA_2024_Sample, and see All legal requirements for wastewater discharge.xlsx).

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.* Obs.

Comment

Evidence:
Input suppliers.xlsx
2025 Water Stewardship Stakeholder Forum _ BAT South Africa - Attendance report 3-11-25.txt
RE Query from the Sapplive Website.msg
RE Water Stewardship Engagement.msg

Comments:
The site identified ≥ 1 engagement with their highest indirect water consumers as its target for indirect water use, which it has achieved (see RE Query from the Sapplive Website.msg and RE Water Stewardship Engagement.msg).

However, this is just data gathering to understand embedded water use (for 1.4.1 and 1.4.2). Further targets or actions have not been set.

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.* Obs.

Comment

Evidence:
2025 Water Stewardship Stakeholder Forum BAT South Africa.ics
RE Query from the Sapplive Website.msg
RE Water Stewardship Engagement.msg

Comments:
The site has engaged with their suppliers and service providers to obtain their indirect water use data, but the site has not engaged with them on water use reductions or other actions. Once the findings on 1.4.1 and 1.4.2 are addressed, the site should plan and implement engagement accordingly.

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.* Obs.

Comment	Evidence: Water Information .ics Water Engagement.ics RE ERWAT Meeting - AWS.msg Comments: Water Information .ics, Water Engagement.ics, and RE ERWAT Meeting - AWS.msg reflect the site's engagements with ERWAT and Lesedi Municipality as the owners of key shared water-related infrastructure in the catchment. Opportunity exists for the site to engage with the new representative at Rand Water in the future.	
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.*	Yes
Comment	Evidence: Best_Practices_v1.xlsx Enercon_2024_Utilities.xlsx Comment: Best_Practices_v1 reflects "Recover 40% on average of condensate for reuse in Boilers" as the site's best practice for water governance. Enercon_2024_Utilities.xlsx in the Daily worksheet in the Condensate Efficiency column in cell BS487 reflects a 52% recovery for 2024.	
3.9.2	*Actions towards achieving best practice, related to targets in terms of water balance shall be implemented.*	Yes

Comment

Evidence:
Enercon DMS.ics
Enercon 2024 Utilities.xlsx
Best_Practices_v1

Comments:
Best_Practices_v1 reflects the following best practice actions for water balance, and Enercon 2024 Utilities.xlsx reflects the site's implementation results to date:
- Recovery of compressor condensate: Meter was installed in February 2025, but condensate collection was commenced in 2024 to enable capture back to the RO plant.
- Recovery of cooling towers TDS blowdown and drainlines: Line from cooling towards was re-routed back to RO plant for use in 2022/23 and a collection line for the chilling towers was also installed in March 2024.
- Recovery of DEMIN Plant reject water: DEMIN Plan reject water has been redirected to storage tanks for treatment at RO 2 underground.
- Using RO Brine water for RO backwash cycles: Freshwater was previously used for backwashing of the RO plants, but backwash water has been re-routed for reuse. The line was installed in 2024 and the meters installed in 2025.
- Feeding Boilers with recycled & recovered water: Was implemented in September 2022.
- Using RO Brine for toilets flushing: RO Brine was initially connected to enable use for flushing of toilets for the office block. As RO brine increased, this was expanded to the entire ring road completed. The next phase is expansion to the dispatch area too.
- Feeding cooling towers with recycled & recovered water: The pump station was expanded in February 2024 to enable feeding of the cooling towers with recycled and recovered water.
- Regular leak audits: These audits are conducted through weekly inspections and tracked in the Energon logs.
- Water consumption tracker: Tracked in the Energon logs, including daily, weekly and monthly consumption.
- Collect water spills from utilities tunnel and store in flow bins: This relates to draining of tanks and the sprinkler system. Flow bins are put in place for such planned events, to enable water capture for reuse such as irrigation of garden areas. This is also captured in the Enercon logs including volumes.
- Meter incoming and outgoing water for site: A meter was installed some time ago for incoming water and a quotation was received for installation of discharge meter during 2025.

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

Comment

Evidence:
Best_Practices_v1.xlsx
Enercon_2024_Utilities.xlsx
Copy of BAT Utilities Internal Kevali February 2025.xlsx
Root Cause Analysis - Storm Water Feb 2025.xlsx
Effluent Sewer Water Quality ReportBATSA_2025 Sample.pdf
Effluent Sewer Water Quality ReportBATSA_2024 Sample.pdf
Lesedi_Jan2025.pdf

Comment:
The site identified "Maintain continuous monitoring of quality results to identify patterns of increase or decrease in parameters" as its sole best practice for water quality. The site has been undertaking monitoring of quality results for stormwater, effluent, and now recently for groundwater.

However, as per 1.8.3, the site's identified best practice for water quality does not constitute best practice, only standard practice.

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

Comment	Evidence: 1.8_Best Practices v1.xlsx Comment: The site did implement the planting of trees as per the best practice identified in 1.8_Best Practices v1.xlsx. However, as per 1.8.4, the site's identified best practice for IWRAs does not constitute best practice.

3.9.5 *Actions towards achieving best practice related to targets in terms of WASH shall be implemented.* Yes

Comment	Evidence: Revamped Wash Rooms.docx Layout.xlsx G22.1474_BAT (Legionella Sampling)_Heidelberg 2022 G24.1994_BATH (Legionella Sampling)_ Heidelberg 2024 Comments: The site identified "Upgrade, improvement and provision of WASH" and "Conduct Legionella analyses" as its best practices for WASH in Best Practices v1.xlsx. G22.1474_BAT (Legionella Sampling)_Heidelberg 2022 and G24.1994_BATH (Legionella Sampling)_ Heidelberg 2024 reflects the site testing every two years, but the site has internally committed and budgeted to undertaking annual testing from 2024 onwards. In terms of Upgrade, improvement and provision of WASH, the site has constructed a nursing mothers room, two gender neutral bathrooms, and provides free sanitary products to its female employees and contractors via the site's clinic. The site also conducts an annual wellness campaign linked to hygiene.

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.*

in progress

Comment

Evidence:
AWS_Stewardship Plan 2024 & 2025_v2.xlsx
Enercon 2024 Utilities.xlsx

Comments:
The site has identified its evaluation of performance against targets in column N (Progress) in its WSP. However, the progress percentage is currently reflected as the number of actions completed in relation to the number of actions set, as opposed to progress in relation to the quantitative targets set (e.g., increase water recycling to 25%, reduce water withdrawn by 10% etc.). This has resulted in the site not reflecting actual performance in relation the targets set, but rather overall progress in completion of all actions per "theme".

Finding No: TNR-017407

4.1.2 *Value creation resulting from the water stewardship plan shall be evaluated.*

Obs.

Comment

Evidence:
AWS_Stewardship Plan 2024 & 2025_v2.xlsx
Generated_Values
Screenshot of engagement with Lesedi and Kevali (WSP discussion and shared challenges discussions) - recording available.docx
Monthly Review 2025 Dashboard.xlsx
Generated values.xlsx

Comments:
The site has documented the Shared Value Benefits to the site in column P of its WSP, but this includes both value benefits to the site and the catchment.

Generated_Values reflects the sites financial value creation, including cost savings achieved for 2022, 2023 and 2024, as well as projected spending in 2025.

4.1.3 *The shared value benefits in the catchment shall be identified and where applicable, quantified.*

Obs.

Comment

Evidence:
AWS_Stewardship Plan 2024 & 2025_v2.xlsx
Generated values.xlsx
Screenshot of engagement with Lesedi and Kevali (WSP discussion and shared challenges discussions) - recording available.docx
Monthly Review 2025 Dashboard.xlsx

Comments:
The site has documented the Shared Value Benefits to the site and the catchment in column P of its WSP, but this has not been separated between value benefits to the site versus the catchment.

Generated_Values further describes some of the Shared Value Benefits to the catchment (and the site).

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.*	Yes
Comment	The site advised that it did not have any emergency incidents during the last year.	
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.*	Yes
Comment	Evidence: 2024_Water_Governance_Report_and_Water_Stewardship_Plan_(WSP).msg Comments: 2024_Water_Governance_Report_and_Water_Stewardship_Plan_(WSP) reflects the site having shared its WSP and Good Water Governance Report with its stakeholders on 6 January 2025, which includes the site's performance.	
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.*	Obs.
Comment	Evidence: AWS_Stewardship Plan 2024 & 2025_v2.xlsx Comments: The site's 2024 WSP was revised to include shared value benefits, lessons learnt, and the status review in its new 2025 version. Some additional water saving initiative actions were added into the 2025 version. Also, past actions that the site had completed were removed when the 2025 version was drafted. Opportunity exists for the site to revise its targets and actions in the future based on other lessons learnt and progress to date.	

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.* ✓ Yes
Comment	Evidence: https://www.batsa.co.za/sustainability-and-responsibility/bats-approach-to-sustainability BATSA Heidelberg - AWS Letter of Commitment - 2025-01_DRAFT.docx.pdf RE Completed Complete with Docusign BATSA Heidelberg - AWS Letter of Commitment - 2025-01_DRAFT.docx.msg Comments: The site's Good Water Governance Report was publicly disclosed on its website at https://www.batsa.co.za/sustainability-and-responsibility/bats-approach-to-sustainability, which included the site's water-related internal governance and the positions of those accountable for compliance with water-related laws and regulations.
5.2	*Communicate the water stewardship plan with relevant stakeholders.*
5.2.1	*The water stewardship plan, including how the water stewardship plan contributes to AWS Standard outcomes, shall be communicated to relevant stakeholders.* ✓ Yes
Comment	Evidence: 2024 Water Governance Report and Water Stewardship Plan (WSP).msg Water Stewardship Stakeholder Engagement Meeting_11 March 2025 - Context.pptx Comments: 2024 Water Governance Report and Water Stewardship Plan (WSP).msg reflects that the site's WSP was shared with its stakeholders on 6 January 2025. The content of this communication included how the plan contributes to AWS Standard outcomes via the shared value benefits created to date and the AWS Outcomes associated with the actions. This information was also shared with stakeholders via a meeting on 11 March 2025, as per Water Stewardship Stakeholder Engagement Meeting_11 March 2025 - Context.pptx.
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.* ✓ Yes

Comment	Evidence: 2024 Water Governance Report and Water Stewardship Plan (WSP).msg Water_Stewardship_Stakeholder_Engagement_Meeting_11_March_2025_-_Context.pptx Comments: 2024_Water_Governance_Report_and_Water_Stewardship_Plan_(WSP) reflects the site having shared its WSP and Good Water Governance Report with its stakeholders on 6 January 2025, which includes the site's performance. Water_Stewardship_Stakeholder_Engagement_Meeting_11_March_2025_-_Context.pptx reflects the site's water stewardship performance information shared with stakeholders on 11 March 2025.
5.4	*Disclose efforts to collectively address shared water challenges, including: associated efforts to address the challenges;engagement with stakeholders; and co-ordination with public-sector agencies.*
5.4.1	*The site's shared water-related challenges and efforts made to address these challenges shall be disclosed.* ✓ Yes
Comment	Evidence: 2024 Water Governance Report and Water Stewardship Plan (WSP).msg Water_Stewardship_Stakeholder_Engagement_Meeting_11_March_2025_-_Context.pptx Comments: 2024_Water_Governance_Report_and_Water_Stewardship_Plan_(WSP) reflects the site having shared its WSP and Good Water Governance Report with its stakeholders on 6 January 2025, which includes the site's shared water-related challenges and collective efforts made to address these challenges.
5.4.2	*Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be identified.* ✓ Yes
Comment	Evidence: OneDrive_2025-03-11.zip RE Completed Complete with Docusign BATSA Heidelberg - AWS Letter of Commitment - 2025-01_DRAFT.docx.msg AWS Stakeholder Engagement Attendance Register_Feb 2024.pdf AWS Stakeholder Engagement Attendance Register_April 2024.pdf 2025 Water Stewardship Stakeholder Forum _ BAT South Africa - Attendance report 3-11-25.txt 2025 Water Stewardship Stakeholder Forum BAT South Africa.ics Follow-up _ INVITE _ BAT Water Stewardship Forum.msg Follow-up _ INVITE _ BAT Water Stewardship Forum.msg (files 20-38) RSVP needed _ BAT Heidelberg Water Stewardship Forum (Tue_ 18 Feb).msg RSVP needed _ BAT Heidelberg Water Stewardship Forum (Tue_ 18 Feb).msg (files 1-19) You're Invited _ BAT South Africa Water Stewardship Stakeholder Forum.msg You're Invited _ BAT South Africa Water Stewardship Stakeholder Forum.msg (files 39-71) Comments: The various engagements by the site, and the associated correspondence, with public sector stakeholders reflect numerous interactions with Lesedi Municipality and ERWAT, amongst others, to facilitate coordinate and support of 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.* ✓ Yes

Comment	The site did not have any compliance violations during 2024, or 2025 to date.	
5.5.2	*Necessary corrective actions taken by the site to prevent future occurrences shall be disclosed if applicable.*	Yes
Comment	The site did not have any compliance violations during 2024, or 2025 to date.	
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.*	Yes
Comment	The site did not have any compliance violations during 2024, or 2025 to date.	

Photographic Evidence from Audit

Stormwater system.jpeg

Eye wash station in chemical store.jpeg

Bunded area for temporary storage of liquid waste in the Waste Handling Facility.jpeg

Waste Handling Facility.jpeg

Handwash basins in change room.jpeg

Blesbokspruit immediately downstream to the ERWAT Heidelberg wastewater treatment work and the Ratanda Community.jpg

Small wetland immediately downstream of the stormwater egress point in the northwest of the site.jpeg

Sump from Waste Handling Facility.jpeg

Chemical spill kit.jpeg

Diesel storage tank 3 with bunding.jpeg

Site storage tanks and pipework.jpeg

RO plant next to the site's storage tanks.jpeg

Outsourced forklifts.jpeg

Site water storage tanks.jpeg

Yes

Chemical spill kit contents.jpeg

Bunded chemical store.jpeg

Waste Handling Facility view 2.jpeg

Bunded store.jpeg

Wetland immediately downstream of the site's stormwater discharge point at the northeast of the site.jpg

Pump station next to the water storage tanks.jpeg

Waste Handling Facility view 3.jpeg

Empty spill kit in chemical store.jpeg

Toilet in change room with dispenser for female sanitary products.jpeg

One of the site's boreholes.jpeg

Shower in change room.jpeg

Emergency shower in chemical store.jpeg

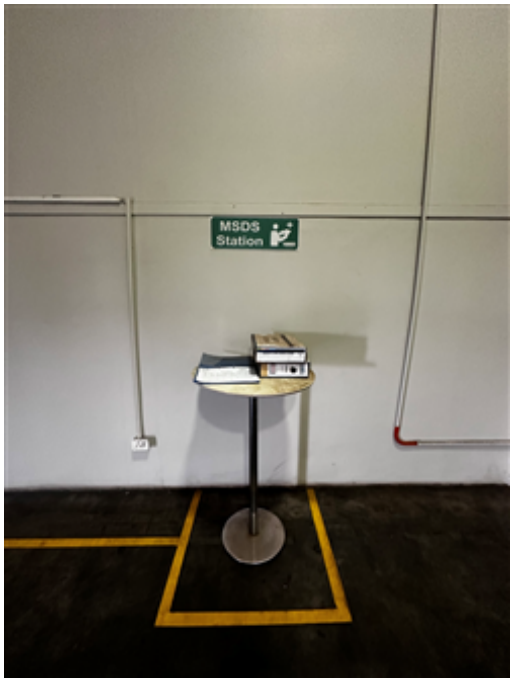
Urinals in change room.jpeg

Lockers in change room.jpeg

Stormwater manhole at egress point in the northwest of the site.jpeg

Stormwater egress point in the northwest of the site 2.jpeg

Stormwater drain.jpeg



MSDS Station.jpeg

Sewage manhole.jpeg

Site pipework.jpeg

Site water storage tanks next to the first RO plant.jpeg

Previous Findings	
All non-conformities raised in the previous audit have been satisfactorily closed.	Yes