



TECHNICAL SERVICES DEPARTMENT
WATER & SANITATION DIVISION

Water and Wastewater Quality Report
(July 2025 – September 2025)

Submitted by:
Technical Services Department
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A. BACKGROUND INFORMATION

This report indicates an overview of water quality status for the last three months (i.e. July 2025 – September 2025) across Mkhondo Local Municipality jurisdiction area. The report is generated from the monthly water quality results received from Gert Sibande District Municipality Water Quality Laboratory. The report provides summary information on water quality results as required for legislation compliance and thus includes percentage characterisation of water quality against national standards limit/standards for the specified period.

1. OVERVIEW WATER QUALITY RESULTS

Mkhondo Local Municipality serves as the Water Service Authority (WSA) and Water Service Provider (WSA). The municipality provides access to water for the communities within its jurisdiction in accordance with the constitution of the Republic of South Africa (Act 108 of 1996), the Municipal Structures Act (Act 117 of 1998), Municipal Systems Act (Act 32 of 2000) and Water Services Act (Act 108 of 1997).

1.1 MKHONDO LM TREATMENT WORKS

1.1.1 Mkhondo Water Treatment Works

	Design Capacity	Population	Abstraction	Communities Supplied
Mkhondo WTW	12.4	124 727	Assegai	Town, Harmony Park, Group 10, Kempville, Retiefville, eThandukukhanya, Rustplaas, Maphepheni and eNkonjaneni.
Saul Mkhize Ville WTW	7.5	60 431	Heyshope	Saul Mkhize Ville, KwaNgema, Emabola and Malayinini
Amsterdam WTW	6.3	27 596	Gobosch Dam	Town, KwaThandeka, Winnie Mandela and eFrance
Rural Boreholes	525 BH	28 346	Ground water	Rural villages

1.1.2 Mkhondo Wastewater Treatment Works

	Design Capacity	Population	Discharge	Communities Servicing
Mkhondo WWTW	10	124 727	Klipmesselspruit River	Town, Harmony Park, Group 10, Kempville, Retiefville, and eThandukukhanya.
Amsterdam WWTW	3	27 596	iThole River	Town, KwaThandeka, Winnie Mandela and eFrance

1.2 WATER LABORATORY IN USE

The municipality is using a SANAS accredited laboratory, Gert Sibande District Municipality Water Quality Testing Laboratory. The laboratory does perform some of the water and wastewater analysis in-house and outsource others to be tested at Aquatico Laboratories (PTY) Ltd and B.N Kirk (Natal) cc. (SANAS accredited laboratories) as per the National Specification of drinking water, SANS 241:2015 requirements and General effluent standards.

There are 49 sampling points which are sampled monthly; thus 147 points are sampled quarterly for both water and wastewater compliance quality analysis.

1.3 WATER QUALITY PARAMETERS

Each sampled point is required to be analysed; 17 water quality parameters are tested ranging from:

- Microbiological (*E.coli*, Total coliform, Heterotrophic count).
- Physical (Conductivity, pH and Turbidity).
- Chemical group (Free chlorine, Sodium, Fluoride, Chloride, Nitrate, Nitrite, Sulphate, Iron, Manganese, and Aluminium) are analysed.

1.4 WASTEWATER QUALITY PARAMETERS

Mkhondo wastewater treatment works are required to comply with the general effluent standards; thus 11 parameters are analysed per sample site (Upstream, downstream, inlet and outlet). Analysed parameters are Chemical Oxygen Demand, pH, Total Suspended Solids, Conductivity, Ortho-Phosphate, Nitrate, Nitrite, Fluoride, free Chlorine, Total Coliform and *E.coli*.

1.5 MKHONDO LM WATER QUALITY OVERVIEW

A.5.1. Water Quality

Table: 1 Drinking water quality overview for July 2025 – September 2025.

Water Quality Compliance SANS 241:2015														
For July 2025 – September 2025														
Water Treatment Works	No. of Samples	Treated Volume (m3)	Percent Compliance with SANS 241:2015											
			Acute microbiological health			Acute chemical health			Chemical health Aesthetic			Operational		
			Excellent ≥99%	Good ≥95%	Unacceptance <95%	Excellent ≥99%	Good ≥97%	Unacceptance <97%	Excellent ≥99%	Good ≥97%	Unacceptance <97%	Excellent ≥95%	Good ≥97%	Unacceptance <97%
Mkhondo Supply System	53	1 093 534	89%			99%			93%			74%		
Amsterdam Supply System	18	159 100	68%			99%			80%			70%		
Saul Mkhize Supply System	27	214 200	99%			99%			99%			97%		
Rural Boreholes Supply System	24	68 954	95%			99%			97%			72%		

A.5.2. Wastewater Quality

Table: 2 Wastewater quality overview for July 2025 – September 2025.

Wastewater Quality Compliance SANS 241:2015											
For July 2025 – September 2025											
Water Treatment Works	No. of Samples	Treated Volume (m3)	Percent Compliance with SANS 241:2015								
			Microbiological			Chemical			Physical		
			Excellent ≥90%	Good ≥70%	Unacceptance <50%	Excellent ≥90%	Good ≥70%	Unacceptance <50%	Excellent ≥90%	Good ≥70%	Unacceptance <50%
Mkhondo WWTW	16	554 405	0.00%			33%			67%		
Amsterdam WWTW	16	400 178	00%			74%			83%		

B. ACTION PLAN

SOURCE	HAZARD/RISK	ROOT CAUSE	ACTION PLAN	PROGRESS	TIME FRAME	PERSONNEL RESPONSIBLE
Piet Retief Water Supply System	<ul style="list-style-type: none"> Microbiological Failures (Total coliforms and <i>E.coli</i>) Operational non-compliances (Free Chlorine and Turbidity) 	Water Shortages to communities within Mkhondo due to prolonged power outages and major water breaks.	Repairs of electrical failures and major water breaks Supply of water to affected areas.	Repairs of electrical failures were attended to. Repairs on major water breaks were attended to.	On-going	Electricians/Reticulation team/Technicians
		The chemical dosing and chlorine injection systems are not up to standard.	Refurbishment project of the treatment works is in progress, the chemical dosing and chlorine systems are within the scope of works.	The project is at 80%	26 February 2026	PMU
		Water Quality Compliance Monitoring not followed according to the SANS 241:2015	Water Quality Testing Equipment need to be replaced and added.	Procurement is in progress	30 December 2025	Technicians/SM
		Delays in delivery of chemical flocculants and Chlorine Gas Cylinders.	Payment of Service provider in time.	Requested finance department release outstanding payments for all deliveries received.	30 December 2025	GM/SM

Amsterdam Water Supply System	<ul style="list-style-type: none"> Microbiological Failures (Total coliforms and <i>E.coli</i>) Operational non-compliances (Free Chlorine and Turbidity) 	The Filtration and chlorination systems are dysfunctional.	Replacement of filtration and chlorination systems Pilot Valve system needs to be repaired	Waiting for pilot valve material to be delivered	Replacement of filtration and chlorination systems 30 December 2025	Technicians/SM
Saul Mkhize Water Supply System	<ul style="list-style-type: none"> Microbiological Failures (Total coliforms and <i>E.coli</i>) 	The chemical dosing and chlorine injectors systems are not operational.	HTH is in use while the request is in progress.	Request for repairs has been submitted to finance for approval	30 January 2026	Technicians/SM
Borehole Rural Supply System	<ul style="list-style-type: none"> Microbiological Failures (Total coliforms and <i>E.coli</i>) 	Underground water has been contaminated due to human animal nature activities.	Disinfection is required more frequently. Installation of disinfection units need to be implemented	Currently the borehole storage tanks are disinfected monthly.	On-going	Technicians
Amsterdam Waste Water Treatment Works	<ul style="list-style-type: none"> Microbiological Failures (Total coliforms and <i>E.coli</i>) 	Mechanical equipment failure and blockages of the systems. Chlorine system not functional.	Maintenance plan needs to be implemented accordingly. Refurbishment of Chlorine System.	Mechanical equipment has been repaired Upgrade of the treatment works is on the tender stage	30 January 2025 On-going	Maintenance team/ Technicians
Piet Retief Waste Water Treatment Works	<ul style="list-style-type: none"> Microbiological Failures (Total coliforms and <i>E.coli</i>) Chemical and Physical non-compliances (Free Chlorine, TSS, COD, etc.) 	Mechanical and Electrical Equipment failure.	Repairs of Mechanical and Electrical Equipment	Repairs are at 50%	30 January 2025	Maintenance team/ Technicians

C. INTERVENTIONS

- Currently blue and green drop status is at 54,46% and 54% respectively, 2025 green drop assessment/BDPAT reports are not received yet.
- Refurbishment of Piet Retief WTW is at 78% construction. completion date is 28 February 2026.
- Upgrade of the Amsterdam WWTW is at the tender stage.
- Awareness campaigns on water quality and water conservation are ongoing.

D. CONCLUSION

The quality monitoring of drinking water and wastewater effluent is paramount to Mkhondo Local Municipality. *All incidents of non-compliance are immediately identified through operational testing and monitoring and timeously resolved to ensure compliance to SANS 241:2015.*

For more technical information or queries can be directed to the Water and Sanitation Division (*Ms THA Mazibuko, 017 004 0232, Email:tmazibuko@mkhondo.gov.za*).

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E. QUARTELY WATER QUALITY STATEMENT

AMSTERDAM, eMKHONDO, SAUL MKHIZE VILLE and RURAL WATER SUPPLY SCHEMES

Statement from the Municipal Manager **MJ Mkhonza**:

It gives me great pleasure to present water quality results for the second quarter of financial year 2025/2026 to the residents of Mkhondo Local Municipality, for Amsterdam, Saul Mkhize Ville and Mkhondo and Rural Water Supply Schemes. This publication illustrates our commitment on the provision of Quality Water Services to the residents of the municipality.

Publication of Quarterly Water and Wastewater Quality Results are available to the public through: **Municipal website:** www.mkhondo.gov.za, **Municipal notice boards** and the **IRIS system:** <http://ws.dwa.gov.za/iris>.

Amsterdam Water supply scheme utilizes 1 water treatment works which is 6.3ml/day. Treated water is distributed to over 27 596 populations which include Amsterdam and surrounding areas. Mkhondo water supply scheme abstract water from Assegai River for treatment in 2 water treatment plants with a combined capacity of 12.4ml/day and distribute to over 124 727 population including communities at Mkhondo and the surrounding areas. Saul Mkhize Ville water supply scheme receives water from Heyshope Dam and has a capacity of 7.5ml/day which provides water to a population of approximately 60 431 in Kwa-Ngema, Dirkiesdorp and Saul Mkhize Ville.

I urge the residents of Mkhondo local municipality to work with the municipality in ensuring that the use of clean water is sparingly and not misused. The municipality ensures compliance in Drinking Water Quality Standards as stipulated in SANS 241:2015. Consumer's responsibilities in Section 6 of our Water Services Customers Charter includes the following:

- Adherence to Municipal Bylaws,
- Pay for services over and above any free allocation.
- Water conservation and water demand management.

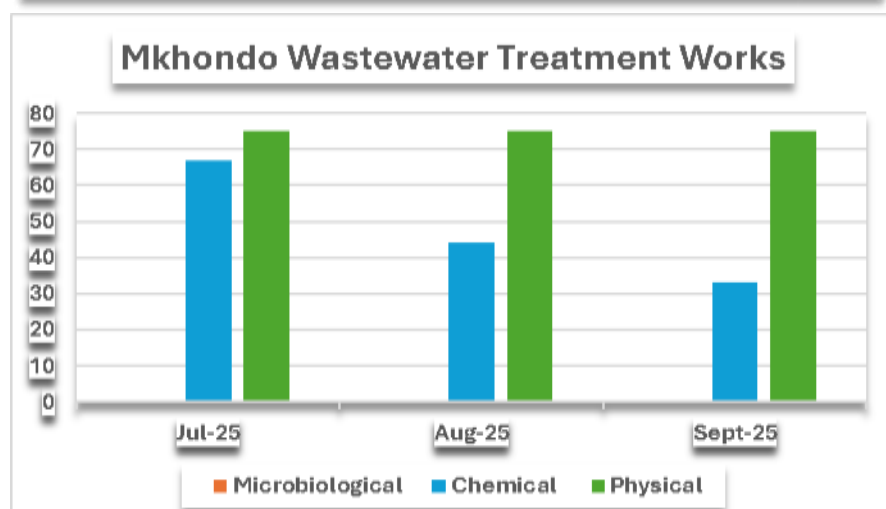
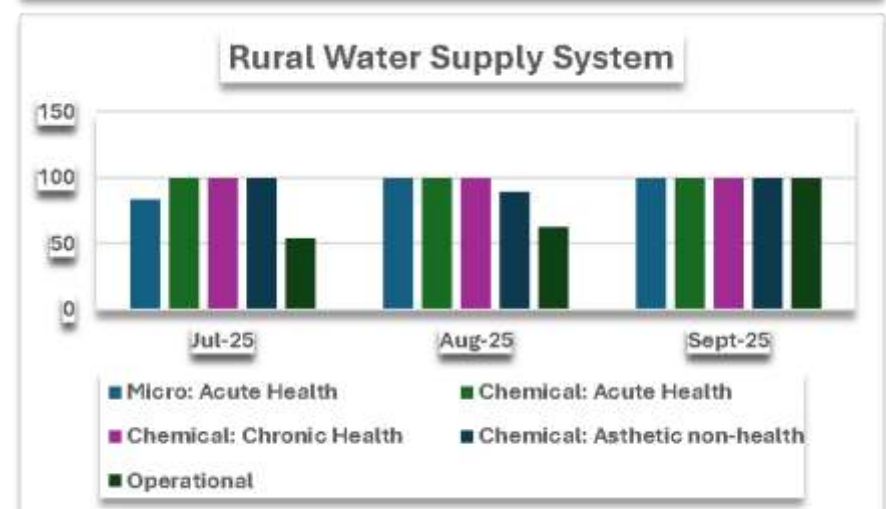
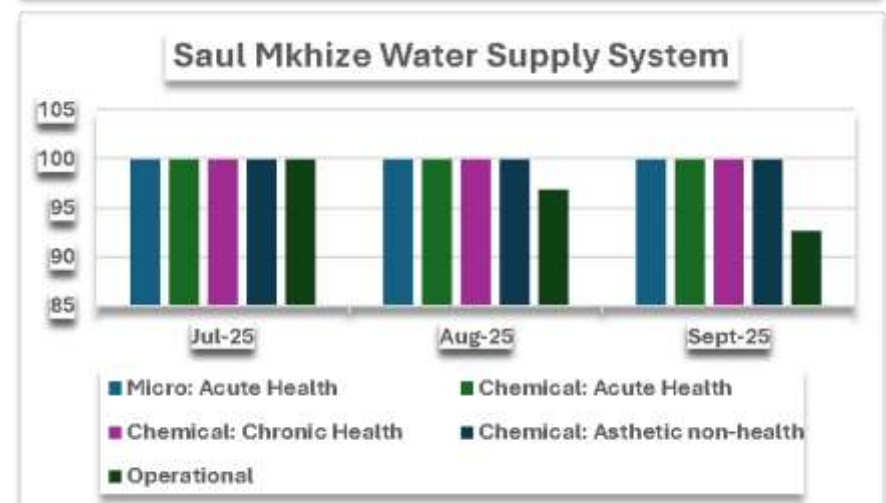
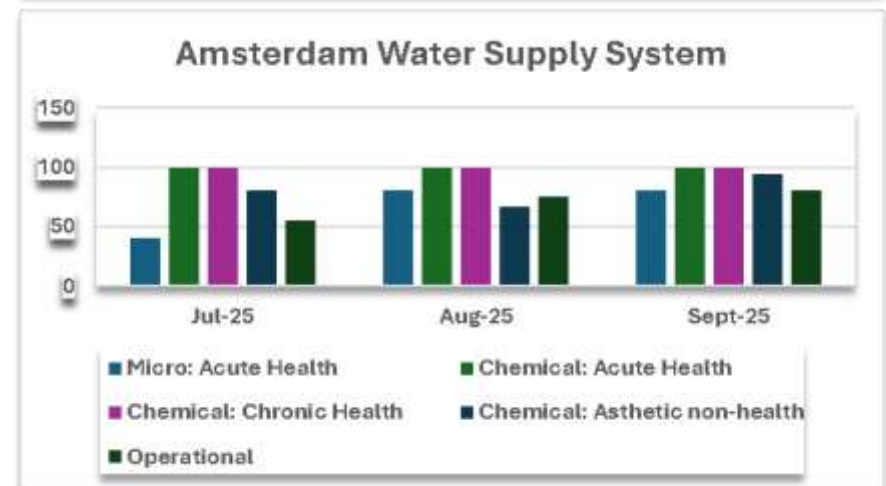
"SAVE WATER, SAVE LIFE"

Yours Sincerely

MJ Mkhonza
Municipal Manager

WATER AND WASTEWATER QUALITY RESULTS:

Over 2533 analyses were conducted on the sampling points of eMkhondo, Amsterdam, Saul Mkhize, and the Wastewater Treatment Works, since the inception of agreement between Mkhondo Local Municipality and Gert Sibande District Municipality Water Testing Laboratory in September 2021 and the results are graphed as follows:



For enquires related to this article you are welcome to contact **Ms THA Mazibuko**, Senior Manager: Water and Sanitation Division (017 004 0232).