

Circular 007-2024

17 January 2024

Dear Residents,

VILLAGE WATER SUPPLY UPDATE:

As most of you are acutely aware we have had water supply problems again over the past weekend. This was caused by a pump failure on the borehole plant which caused the Water Treatment Plant to run out of water.

Considering the urgency and impact on residents, we have made the decision to remain on the JHB Water supply until such time as Alveo can fully resolve the issues with the pump as well as add additional storage capacity to prevent such demand issues going forward.

Alveo is committed to implementing these measures swiftly and efficiently and will provide regular updates on progress made. We in return will advise residents.

We have had residents' comment that they have noticed residue in their kettles and basins and that some have noticed a blue coloration in the water. It is worth noting that we have been receiving water from both the Water Treatment Plant as well as JHB Water over the past weeks. This could explain the white residue and the blue coloration as JHB Water has had lots of repairs done to the system over the last weeks with all the outages in the area. Alveo commented that when LSI (Langelier Saturation Index) falls between -0.5 and 0.5, we consider it within the normal range, indicating a low potential for scaling. Consequently, they do not routinely test for calcium and magnesium (As they are not harmful) unless deemed necessary. However, to address our concerns, Alveo will include tests for calcium, magnesium, and LSI in the upcoming sampling round to ensure there is no hardness in the water that could lead to lime scaling.

Regarding the blue coloration issue, this phenomenon can be associated with elevated copper levels or a low pH facilitating copper leaching from pipes. Our water quality results indicate a pH above 7 at the WTP as well as at the borehole, making it unlikely for leaching to occur. Below shows the water test results from 18 December 2023 which confirms the pH is 7.7.

Analyses in mg/ℓ (Unless specified otherwise)	UOM %	Method ID	Risk	SANS 241 : 2015 Limits	Sample Identification	
					Broadacres Retirement Village SPN719	
Sample Number					23-31326	
Date/Time Sampled					N/A	
pH - Value @ 25 °C	A	7.7	WLAB065	Operational	≥5 to ≤ 9.7	7.7
Electrical Conductivity in mS/m @ 25°C	A	7.0	WLAB065	Aesthetic	≤170	81.7
Suspended Solids at 105°C	A	8.6	WLAB004	---	---	1.3
Colour in PtCo Units	A	---	WLAB006	Aesthetic	≤15	2
Turbidity in N.T.U	A	7.6	WLAB005	Operational/Aest	≤1 / ≤5	0.1
Free Residual Chlorine as Cl ₂	N	---	WLAB036	Chronic health	≤5	<0.1
Total Coliform Bacteria (MPN/100 ml)	A	6.1	WLAB021	Operational	≤10	<1
E. coli (MPN/100 ml)	A	5.0	WLAB021	Acute health	Not detected	<1
Heterotrophic Plate Count (cfu/1 ml)	A	4.5	WLAB021	Operational	≤1 000	<10
Iron as Fe (µg/l)	A	8.1	WLAB015	Chronic health/Aest	≤ 2000 / ≤300	<25
Manganese as Mn (µg/l)	A	8.3	WLAB015	Chronic health/Aest	≤ 400 / ≤100	<25

I would like to thank residents for your patience and feedback throughout this period, as it is only through feedback and physical testing that we can ensure the Village Water Treatment Plant is capable of providing us with suitable water security.

Kind regards,



Wilma Swart
Village Manager