Update on Bbos water issues

Following last week's storm and power outage most properties in Bbos experienced murky/black water once the power eventually returned. Several properties have been affected in the past and some have also been affected again in the past week.

Previously the municipality and treatment plant operators, Veolia, have indicated to us that this may be due to soil entering into the pipes. Based on the last weeks experience, it does look like there is an issue with sediment periodically getting into our water.

The morning (06.00) after the power returned this is what our water looked like in Olienhout.

Over the next 2-3 hours sediment settled out of the water.

I sent these pictures through to the municipality engineers and they agreed it looked like sediment - likely manganese or iron given the dark colour. The local soil has a high content of these metals, which is removed at the treatment plant. Their presence in the water would suggest soil/sediment is getting into the pipes.

Veolia took the 06.00 water sample and then a later sample taken at 12.30 when the water had cleared.

The results came back as follows:

28-09-2023	**BBos 20 Olienhout Str. Samples**		
Paul Giess	0761481969	paulgiess@yahoo.com	
Time	**06.00 hrs**	**12.31 hrs**	
Colour	>500	6	PtCo
pH	9.7	8.74	
EC	78.4	58.4	mS/m
Turbidity	4355	0.59	NTU
Fe	95.2	0.05	mg/l
Mn	>16	0.1	mg/l

The 06.00 sample was clearly way off acceptable drinking water quality according to South African National Standards (SANS 241) [e.g., Turbidity should be < 1 NTU and Mn should be < 0.5 mg/l].

Clearly the black water is an anomaly caused by sediment entering the system. Fortunately it seems to be a short-lived event and it is encouraging to see that the water quality returned to acceptable levels very soon afterwards.

The statement from the municipality accompanying the results is:

The results indicate that the black water as experienced early in the morning was most probably caused by the empty water network being refilled which stirred up sediment in the pipes and caused the high turbidity and manganese readings in the morning.

It is the municipality's intention to install a generator and additional tanks to enable the more continuous operation of the treatment works and boreholes, and to reduce the regular stop/start scenario caused by load shedding, if the necessary funding can be secured for this purpose. Unfortunately, the severe damage caused to infrastructure by the recent flooding will put further strain on current municipal budgets.

So we seem to have an issue with pulses of sediment circulating in the piping system of the village that is likely linked to load shedding and periodic treatment plant operation. Outside of these sediment pulses the water quality remains good. The installation of the generator at the plant is part of the attempt to stabilise the system, but we are likely to see further instances of sediment pulses given ongoing load shedding and the difficulties of keeping the generator fuelled.

Please keep sending me records / photographs of water issues so that the Homeowners Association can keep engaging the municipality when issues arise.