Water and Waste Water Quality Analysis Results for the Month June 2015

Sampling and analysis was done for the months of June 2015 by Amatola Water Scientific Lab for the entire Makana i.e. Grahamstown, Alicedale and Riebeeck East in Bulk and Reticulation, supply both Water and Waste Water.

Water quality results are subdivided into Physical, Chemical and Microbiological requirements.

Table 1: Summary of water quality compliance

	Final - WTW			Reticulation Network			SANS 241 Limits
Section	No of Tests	Failures(No)	Complianc e (%)	No of Tests	Failures	Complia nce (%)	
Physical	60	9	85	96	15	84.38	≥93 Excellent ≥90 Good <90 Unacceptable
Chemical	55	0	100	87	0	100	≥ 95 Excellent ≥ 93 Good <93 Unacceptable
Microbiological / Bacteriological	50	1	98	80	3	96.25	≥ 97 Excellent ≥ 95 Good <95 Unacceptable
Total Monthly Compliance	165	10	93.94	263	18	93.16	

Monthly Quality Statistics

The results indicate concentration of *Turbidity* in final water at James James Kleynhans which is due to high solids from the raw water from Glenmeville dam, operational processes like backwashing has been increased and is constantly being monitored to improve the condition.

Concentrations of *Turbidity* in final water at Waainek is also shown and is due to the maintenance that has been conducted in Howieson's Poort pump station and refurbishment of filters that led to the maximum use of lay dams and decommissioning of some filters.

Concentrations of *Turbidity* are also shown on the distribution network served by the James Kleynhans, the reason is the result of the final water from the plants and the aged pipes and constant repairs. Flushing is constantly done to minimise the concentration in the network.

The concentration indicated in Riebeeck East reservoir and network and also Alicedale communal taps has been addressed by Amatola Water, cleaning of reservoir has been done and refurbishment of filters is being conducted.

Daily monitoring is conducted at all plants by the Process Controllers to monitor compliance and no major failures have been indicated for the months of June 2015 and July 2015.

Comparison has been done with analysis conducted by Environmental Health for the month of July and it provides assurance that water is safe for drinking. Attached is the copy of the results.