Water works: Point M Pipe 3 **Date: 01 January - 31 March 2023**

Health Determinands

Determinand	Risk	Unit	Minimum	Average	Maximum	SANS 241:2015 Limits
E. coli or faecal coliforms	Acute health	Count per 100 mL	0	0#	0	Not detected
Nitrite as N	Acute health	mg/L	<0.10	<0.10	<0.10	≤ 0.9
Nitrate as N	Acute health	mg/L	0.56	0.56	0.56	≤ 11
Combined Nitrate plus Nitrite ratio	Acute health		0.16	0.16	0.16	≤ 1
Sulfate as SO_4^{2-}	Acute health	mg/L	2.21	2.21	2.21	≤ 500
Cyanide (recoverable) as CN^-	Acute health	µg/L	<25.00	<25.00	<25.00	≤ 200
Free Chlorine	Chronic health	mg/L	0.05	0.07	0.20	≤ 5
Fluoride as F^-	Chronic health	µg/L	<100.00	<100.00	<100.00	≤ 1500
Antimony as Sb	Chronic health	µg/L	<2.00	<2.00	<2.00	≤ 20
Arsenic as As	Chronic health	µg/L	<2.00	<2.00	<2.00	≤ 10
Barium as Ba	Chronic health	µg/L	13.60	13.60	13.60	≤ 700
Boron as B	Chronic health	µg/L	<25.00	<25.00	<25.00	≤ 2400
Cadmium as Cd	Chronic health	µg/L	<1.00	<1.00	<1.00	≤ 3
Total chromium as Cr	Chronic health	µg/L	<5.00	<5.00	<5.00	≤ 50
Copper as Cu	Chronic health	mg/L	<0.05	<0.05	<0.05	≤ 2
Iron as Fe	Chronic health	mg/L	<0.02	<0.02	<0.02	≤ 2
Lead as Pb	Chronic health	µg/L	<4.00	<4.00	<4.00	≤ 10
Manganese as Mn	Chronic health	mg/L	<0.01	<0.01	<0.01	≤ 0.4
Mercury as Hg	Chronic health	µg/L	<0.50	<0.50	<0.50	≤ 6
Nickel as Ni	Chronic health	µg/L	10.00	<10.00	<10.00	≤ 70
Selenium as Se	Chronic health	µg/L	<2.00	<2.00	<2.00	≤ 40
Uranium as U	Chronic health	µg/L	<1.00	<1.00	<1.00	≤ 30
Total organic carbon as C	Chronic health	mg/L	2.00	2.00	2.00	≤ 10
Chloroform	Chronic health	µg/L	10.60	10.60	10.60	≤ 300
Bromoform	Chronic health	µg/L	<10.00	<10.00	<10.00	≤ 100
Dibromochloromethane	Chronic health	µg/L	<10.00	<10.00	<10.00	≤ 100
Bromodichloromethane	Chronic health	µg/L	<10.00	<10.00	<10.00	≤ 60
Combined trihalomethane ratio	Chronic health		0.40	0.40	0.40	≤ 1

Aesthetic Determinands

Determinand	Risk	Unit	Minimum	Average	Maximum	SANS 241:2015 Limits
Colour	Aesthetic	mg/L Pt-Co	2.90	2.90	2.90	≤ 15
Conductivity at 25 °C	Aesthetic	mS/m	10.60	11.10	11.60	≤ 170
Total dissolved solids	Aesthetic	mg/L	68.00	68.00	68.00	≤ 1 200
Turbidity	Aesthetic	NTU	0.10	0.24	0.40	≤ 5
Sulfate as SO_4^{2-}	Aesthetic	mg/L	2.21	2.21	2.21	≤ 250
Ammonia as N	Aesthetic	mg/L	0.27	0.27	0.27	≤ 1.5
Chloride as Cl^-	Aesthetic	mg/L	7.68	7.68	7.68	≤ 300
Sodium as Na	Aesthetic	mg/L	<5.00	<5.00	<5.00	≤ 200
Zinc as Zn	Aesthetic	mg/L	<0.03	<0.03	<0.03	≤ 5
Iron as Fe	Aesthetic	mg/L	<0.02	<0.02	<0.02	≤ 0.3
Manganese as Mn	Aesthetic	mg/L	<0.01	<0.01	<0.01	≤ 0.1
Phenols	Aesthetic	µg/L	<10.00	<10.00	<10.00	≤ 10

Operational Determinands

Determinand	Risk	Unit	Minimum	Average	Maximum	SANS 241:2015 Limits or UW Internal Operating Limit*
Total coliforms	Operational	Count per 100 mL	0	0#	0	≤ 10
Heterotrophic plate count	Operational	Count per mL	0	0#	2	≤ 1000
Somatic coliphages	Operational	Count per 10 mL	0	0#	0	Not detected
Turbidity	Operational	NTU	0.10	0.24	0.40	≤ 1
pH at 25° C	Operational	pH units	8.0	N/A	9.1	≥ 7.4 to ≤ 8.2*
Aluminium as Al	Operational	µg/L	50.10	50.10	50.10	≤ 300
Free chlorine	Operational	mg/L	0.05	0.07	0.20	0.8 - 1.4*
Total chlorine	Operational	mg/L	1.30	1.71	2.20	

Value represents the median
When only one sample taken within date range, minimum = average = maximum.
N/A cannot be calculated since some results are below detection limit.