

## Minneapolis Water Works Monthly Plant Effluent Water Analysis for: March 2024

Physical and Chemical Wate
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Julius and the second	a control Carrier
	Plant Effluent Average Value
Temperature, River Water Average (°C)	8.3
Total Organic Carbon (ppm* as C)	2.95
Total Dissolved Solids (ppm)	139
Turbidity (NTU)	0.04
Alkalinity-Total (ppm as CaCO <sub>3</sub> )	56
Ammonia Nitrogen (ppm as N)	0.90
Total Chloramine Residual (ppm as NH2Cl)	4.0
Fluoride-F (ppm as F)	0.69
pH	9.04
Nitrate - NO <sub>3</sub> (ppm as N)	0.59
Nitrite - NO <sub>2</sub> (ppm as N)	< 0.015
Phosphate-PO <sub>4</sub> (ppm as PO <sub>4</sub> )	0.75
Sulfate - SO <sub>4</sub> (ppm as SO <sub>4</sub> )	30.4
Total Hardness (grains per gallon) EDTA method	5.8
Total Hardness (ppm as CaCO <sub>3</sub> ) EDTA method	100

## Chemical Water Quality - Inorganic Metals

## **Plant Effluent Average Value**

## **Chemical Element**

Aluminum-Al (ppm as Al)	0.02
Arsenic-As (ppm as As)	Not Detected
Cadmium-Cd (ppm as Cd)	Not Detected
Calcium-Ca (ppm as Ca)	35.6
Chloride-Cl (ppm as Cl)	29.3
Chromium (ppm as Cr)	< 0.01
Copper-Cu (ppm as Cu)	< 0.01
Iron-Fe (ppm as Fe)	Not Detected
Lead-Pb (ppm as Pb)	Not Detected
Magnesium-Mg (ppm as Mg)	2.71
Manganese-Mn (ppm as Mn)	< 0.01
Sillca-Si (ppm as SiO <sub>2</sub> )	4.4
Sodium-Na (ppm as Na)	11.5
Zinc-Zn (ppm as Zn)	< 0.01
*ppm = parts per million	