Minneapolis Water Works
Monthly Plant Effluent Water Analysis for:
January 2016

Physical and Chemical Water Quality

	Plant Effluent Average Value
Temperature, River Water Average (°C)	1.1
Total Organic Carbon (ppm* as C)	5.49
Total Dissolved Solids (ppm)	182
Turbidity (NTU)	0.08
Alkalinity-Total (ppm as $CaCO_3$)	56
Ammonia Nitrogen (ppm as N)	0.82
Chlorine Residual (ppm Cl as Cl_2)	3.7
Fluoride-F (ppm as F)	0.69
pH	8.92
Nitrate - NO_3 (ppm as N)	1.08
Nitrite - NO_2 (ppm as N)	< 0.015
Phosphate-PO_4 (ppm as PO_4)	0.79
Sulfate - SO_4 (ppm as SO_4)	30.2
Total Hardness (grains per gallon) EDTA method	5.6
Total Hardness (ppm as $CaCO_3$) EDTA method	96

Chemical Water Quality - Inorganic Metals

Chemical Element	**Plant Effluent Average Value**
Aluminum-Al (ppm as Al)	0.01
Arsenic-As (ppm as As)	Not Detected
Cadmium-Cd (ppm as Cd)	Not Detected
Calcium-Ca (ppm as Ca)	32.2
Chloride-Cl (ppm as Cl)	28.5
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)	3.7
Manganese-Mn (ppm as Mn)	<0.01
Sillca-Si (ppm as Si)	10.5
Sodium-Na (ppm as Na)	15.4
Zinc-Zn (ppm as Zn)	Not Detected

*ppm = parts per million