



Water and Sewer Monthly Report - March 2022

Public Works
4058 St. Francis Blvd. NW
St. Francis, MN 55070

TO Mayor & Council

JOB Water and Sewer Monthly Report

WATER AND SEWER	TASK	DESCRIPTION	QUANTITY	UNITS
Water	Inspect Facility Daily	Facility Inspection	23	Inspections
Water	Operational Hours	Hours spent at facility	46	Hours
Water	Calculate Influent and Effluent	Calculate gallons pumped for both influent and effluent.	Daily	Calculation
Water	Calculate Chemicals	Calculate treatment chemicals used daily.	Daily	Calculations
Water	Chemical Adjustment	Adjust chemicals based on lab testing results.	As Needed	Chemical Adjustments
Water	Daily Labs	Perform lab on chlorine, fluoride, orthophosphate, iron and manganese.	60	Labs
Water	Well House	Inspect daily, take readings, drawdowns, and pump runtimes.	23	Inspections
Water	Bacteria Samples	Take set of monthly bacteria samples.	5	Samples Per Set
Water	Water Treatment Report			
		Total Raw water	12.47	Million Gallons
		Total Finished water	12.22	Million Gallons
		Average Daily Flow	.394	Million Gallons
		Average Chlorine	.72	Mg/l
		Average Raw Iron	.98	Mg/l
		Average Raw Manganese	.086	Mg/l
		Average Fluoride	.75	Mg/l
		Iron Removal	99	%
		Manganese Removal	85	%

Wastewater	Wastewater Treatment Report			
Wastewater	Monthly Sampling	Perform required monthly sampling: 8 Influent (29 Constituents); 8 Effluent (50 Constituents); Monitoring wells (25)	72	Constituents
Wastewater	Operational Hours	Hours spent at facility.	184	Hours
Wastewater	Inspect Operations Building	Daily inspection of building.	23	Inspections
Wastewater	Inspect Pre-treatment Building	Daily inspection of building.	23	Inspections
Wastewater	Inspect Tertiary Building	Daily inspection of building.	23	Inspections
Wastewater	D.O Readings	Take Required D.O Readings.	31	D.O Readings
Wastewater	pH Readings	Take Required pH Readings.	31	pH Readings
Wastewater	Inspections	Inspect 8 lift stations daily and calculate pump runtimes.	184	Lift Station Inspections
Wastewater	Daily Lab	Process Control Test	72	Tests
Wastewater Flows/Results				
		Discharge Point	Seelye Brook	
		Total Influent	11.2	Million Gallons
		Total Effluent	11.31	Million Gallons
		Reuse effluent	.154	Million Gallons
		Influent TSS	265	Mg/l
	Limit: (30 mg/l)	Effluent TSS	0	Mg/l
	Limit: (85 %)	TSS % Removal	100	% Removal
		Influent CBOD	198	Mg/l
	Limit: (15 mg/l)	Effluent CBOD	0	Mg/l
	Limit: (85 %)	CBOD % Removal	100	% Removal
		Influent Phosphorus	5.1	Mg/l
	Limit: (1 mg/l)	Effluent Phosphorus	0	Mg/l
		Phosphorus % Removal	100	% Removal
		Influent Ammonia Nitrogen	27.6	Mg/l
	Limit: (Seasonal) 1.4 mg/l	Effluent Ammonia Nitrogen	0	Mg/l
		Ammonia Nitrogen % Removal	100	% Removal

Water/ Sewer	Monthly Tasks			
Water/Sewer	Locates	Process Locate Requests	31	Utility Locate Requests
Water/Sewer	Water/Sewer Connections	Inspect Water and Sewer	2	Inspections
Water/Sewer	Water Miscellaneous	Work orders: re-reads, high	16	Work Orders
Water/Sewer	Monthly Projects			
Wastewater Treatment Facility	UV Bulbs	Staff replaced UV Bulbs used for disinfection.	120	Bulbs
Wastewater Treatment Facility	Anoxic Tank Mixers	Mixers failed due to water intrusion. Both have been sent in for new seals and a stator	2	Mixers
Water Treatment Facility	Detention Tank	Staff drained and cleaned the detention tank that is used for the removal of iron.	1	Tank
Water and Wastewater Facilities	SCBA Test	Each year, staff must have a fit test and mask fitting to use SCBA's to change chlorine tanks.	4	Test
Building Committee	Building Tours	Staff tour comparable facilities.	3	Facilities
Water Treatment Facility	Treatment Aid Equipment and Line Replacement	Staff replaced lines that carry treatment aids.	300	Feet
Poppy Street	Neighborhood Meeting	Staff attended Poppy street meeting for proposed reconstruction.	1.5	Hours
Lift Stations	Happy to report no plugged pumps this month. 😊			

*Each time a lift station pump is pulled due to plugging, it is equal to two man-hours.