

Addendum 1 to the Tuscarora Township
Phase I Sewer Expansion PER

Existing System Sewer Summary

Community Name: Tuscarora Township

NPDES Discharge Permit No. GW1810271

Collection Sewer: Gravity & FM

Type: (gravity, pressure, STED, vacuum)

Sewers	Footage	Material	Age	Condition	No. of Manholes	Age	Condition
8-inch	17700	PVC	7	good	72		7 good
FM	7400	HDPE	7	good	3		7 good

Lift Stations:

L.S. No.	Number	Pumping Capacity	Age	Condition
PS	2	300	7	good
Duplex	8	50	7	good

Treatment Type and Description: SEQUOX Package Plant

Units	Storage Volume	Sludge (ft)	No. of Aerators	Hp	Mechanical	Capacity	Age/Cond
Primary	NA				Anox. Tanks	12k gal	7 / good
Secondary	NA				Aeration Tanks	99k gal	7 / good
Tertiary	NA				Clarifier	40k gal	7 / good
					Digesters	61k gal	7 / good
					Storage/Decant	63k gal	7 / good

Discharge Type/Outfall: Rapid Infiltration Beds to Groundwater

Discharge Frequency: Continuous

Discharge Volume: 96k gpd

Discharge Effluent Criteria: 10.0 BOD/10.0 TSS/5.0 TIN/1.0 NH3/0.9 TP

Sewer Customer Information:

	No. of Existing Customers	Monthly Usage (gallons)	No. of Users after Project	Projected Total Usage	
Residential Dwellings	45	216000	215	1032000	4,800 gallons - 215 EDUs
Other Users	116	1449000	127	1608000	12,661 gallons - 335 EDUs
Totals		1665000		2640000	Total EDUs 550

Rate Structure:	Existing	Proposed	Average Monthly Billing at Current Rates (all customers)
Residential Customers:	33	35	
Commercial Customers:	71	73	
Bulk Customers:	2234	2234	\$74.25

Yearly O & M Cost Before Improvements: **\$156,000** Yearly O & M Cost After: **\$175,100**