

**Application of SUEZ Water Pennsylvania Inc. for the Acquisition of Wastewater Assets of
the Township of Mahoning Pursuant to 66 Pa. C.S. §1329
Application Filing Checklist – Wastewater
Docket No. A-2018-_____**

15. Plant in Service.
- a. Provide an inventory of the used and useful plant assets to be transferred. Identify separately any utility plant that is held for future use.³

RESPONSE:

- a. See enclosed Engineer's Assessment required by 66 Pa. C.S. § 1329(a)(4).

³ The inventory is to be developed from available records, maps, work orders, debt issue closing documents funding construction projects, and other sources to ensure an accurate listing of utility plant by utility account.



Mahoning Township
Assessment of Tangible Assets

March 2018

Prepared by
Larson Design Group
1000 Commerce Park Drive, Suite 201
Williamsport, PA 17701

	PAGE
Background	1
Water and Sanitary Sewer System	1
Overview of the Study.....	1
Lands and Right of Way.....	2
Water Storage Tanks.....	3
300,000 Gallon Tank.....	3
500,000 Gallon Tank.....	3
75,000 Gallon Tank.....	3
Water Booster Stations.....	3
Route 11	3
Montgomery Village Booster Station	3
Edgewood Booster Station.....	3
Woods of Welsh Booster Station	4
Pressure Reducing Station	4
Chlorination Building	4
Storage Building	4
Sewage Pumping Stations	4
Route 11	4
Maria Joseph Pump Station	4
Telemetry System.....	4

List of Appendices

- Appendix 1 Waterline
- Appendix 2 Gravity Sewer
- Appendix 3 Forcemains



Mahoning Township

Water and Sewer System Assets

Background

Overview of the Township's Water and Sewer Facilities

Water and Sanitary Sewer System

The Township's water and sanitary sewer system consists of facilities for pumping, storage and distribution of potable water and the collection and conveyance of sanitary sewage to customers in Mahoning, Valley and Cooper Townships, Montour County, Pennsylvania.

The water system includes approximately twenty (20) miles of water distribution piping, three (3) water storage tanks and four (4) water booster/pumping stations. The Township obtains potable water from Danville Borough via piping interconnections at Route 11 and Bloom Road. Water is metered at the Route 11 connection using a 6" turbine type flow meter. The meter at Bloom Road is a 4" turbine type meter. Each meter is installed in an underground concrete vault. The Township is permitted to operate the water system under Pennsylvania Public Water Supply Permit PWSID 4470010. The Township's Water Allocation Permit, WA-47-1006A, authorizes the Township to purchase up to 765,000 gallons of water per day from Danville Borough.

The sanitary sewer system includes approximately 26 miles of vitrified clay and PVC gravity sewers and three (3) pumping stations. Wastewater is conveyed to the Danville Municipal Authority for treatment and disposal. Flow metering stations located at Spring Street and Route 11 meter wastewater flows from the Township system where it enters Danville's collection system. A third unmetered connection is located at Lower Street. There are approximately 50 residential dwelling units located in the Lower Street service area.

Overview of the Study

The Engineer's inventory of assets was determined using accounting records of the Township and Mahoning Township Municipal Authority, mapping of the sewer and water systems, construction records and input from Township staff. Following is a listing of assets and available information:

Lands and Right of Way

Description	Date Recorded	Deed Book/Page Number
Montgomery Village Water Booster Station (0.911 acres)	October 23, 1978	407/0265
Route 11 Interceptor Sewer (1.231 acres)	March 16, 1983	407/0271
Wood of Welsh Water Booster Station and Maintenance Building (1.7 acres)	September 12, 1961	407/0275
Water Storage Tank Site (1.7 acres and 0.323 acres)	September 12, 1961 and January 17, 1989	407/0278
Perpetual Easement	May 29, 190	115/974
Perpetual Easement	June 4, 1985	128/1577
Right-of-Way	November 2, 1989	149/782
Assignment of Easement Agreements	June 1, 1990	151/1500
Easement	November 18, 1991	159/996
Easement	November 18, 1991	159/1000
Easement	November 18, 1991	159/1004
Easement	November 22, 1993	173/566
Assignment of Easements and Rights-of-Way	April 26, 1994	176/537
Assignment of Rights-of-Way and Easement	November 2, 1995	184/825
Indenture for Easement	August 1, 1995	183/96
Indenture for Easement	August 1, 1995	183/100
Indenture for Easement	August 1, 1995	183/104
Perpetual Easement	July 8, 1997	194/270
Deed of Dedication – Utility Easement	June 3, 1998	199/1577
Easement	March 7, 2001	219/1416
Grant of Easement for Water Line	October 21, 1998	202/1413
Easement	December 6, 1999	211/923
Deed of Easement	March 31, 2000	213/499
Easement Agreement	June 18, 2008	314/85
Easement Agreement	June 18, 2008	314/90
Easement	May 7, 2009	324/685
Deeds of Right-of-Way or Other Easements	September 26, 2011	49/460

Water Storage Tanks

300,000 Gallon Tank

The tank is a welded steel tank with a concrete foundation. The tank was constructed in 1968. The tank was sandblasted and painted in 2008.

500,000 Gallon Tank

The tank is a welded steel tank with a concrete foundation. The tank was constructed in 1991. According to Township records the tank was sandblasted and painted in 2008. The 300,000 gallon and 500,000 gallon tanks are installed on the same site. The overflow elevation of each tank is 872.

75,000 Gallon Tank

The tank is a welded steel tank with a concrete foundation. The tank was constructed around 2007 to serve water customers in the Woods of Welsh Housing Development. Water is supplied to the tank from a water booster station located near the Township's two other storage tanks. The overflow elevation of the tank is 1,207.92. The tank normal operating level is 1,203.

Water Booster Stations

Route 11

The Route 11 Water Booster Station is located along Route 11 approximately 600' west of the intersection of Woodbine Drive and Route 11. Township records do not include the original construction date. The station contains three (3) pumps. Pump 1 is rated for 500 gallons per minute (gpm) at 165 feet TDH. The pump is a close coupled pump with a 30 hp 1,665 rpm motor. Pump 1 runs continuously to supply pressure to the Woodbine Land service area. Pumps 2 and 3 are close coupled pumps with 50 hp motors. These pumps are rated at 700 gpm at 165' TDH. One of these pumps starts when the tank level reaches a predetermined level or pressure in the distribution system drops below a set point. The pumps alternate automatically. According to Township records the station was upgraded in 2003 and installation of a new standby generator which powers both the Route 11 Sewage Pump Station and Water Booster Station was completed in 2013.

Montgomery Village Booster Station

The Montgomery Village Booster Station contains two (2) horizontal split case pumps with 25 hp motors. Each pump is rated for 600 gpm at 150' TDH. This station supplies water to the 300,000 and 500,000 gallon tanks. The pumps are started and stopped based on predetermined levels in the water storage tanks. The pumps alternate lead and lag position automatically. Chlorine can be added at this station if needed to maintain adequate chlorine residual. Township records do not indicate an original construction date.

Edgewood Booster Station

This station is located at the intersection of Red Lane and Kaseville Road. The station boosts water pressure in the Edgewood Development. The pumps are rated at 40 gpm at 145' TDH. One pump runs continuously, and they alternate every 24 hours. The station was constructed in 1999.

Woods of Welsh Booster Station

The Woods of Welsh Booster Station is located near the Red Lane Tank Site. The station was constructed around 2007 to supply water to the Woods of Welsh Housing Development. The booster station operates from preset tank levels in the Woods of Welsh water storage tank.

Pressure Reducing Station

There are 3 pressure reducing stations in Mahoning's water distribution system.

- Kaseville Road: The station is located along Kaseville Road approximately 500' south of the intersection with Frosty Hills Drive.
- Woodbine Drive: The station is located east of Woodbine Drive, south of Bloom Road.
- Bloom Road: The station is located at the intersection of Bloom Road and Laura Drive.

Chlorination Building

The Township installed facilities to boost the chlorine residual to the Woods of Welsh Development in 2009. This facility is located on Township property just north of Red Lane and east of Welsh Road. This site also houses the Woods of Welsh Booster Station and a storage building.

Storage Building

The Township constructed a storage building to store spare water and sewer supplies. The storage building and contents are to be conveyed with the water and sewer system.

Sewage Pumping Stations

Route 11

The Route 11 Sewage Pumping Station is located on the same site as the Route 11 Water Booster Station. The station is equipped with two (2) 525 gpm constant speed pumps. A Muffin Monster sewage grinder was installed in the station in 1995 and the generator was replaced in 2013 to provide standby power to both the sewage pump station and water booster station.

Maria Joseph Pump Station

The Maria Joseph Pump Station is located along Grotto Drive in the Maria Joseph complex. The station is equipped with 2 submersible pumps rated at 150 gpm each. The station was installed in 1998.

Telemetry System

A telemetry system was originally installed to monitor the water and sewer system in 2005. The system was upgraded in 2013 and 2014.

Waterline

ASBESTOS CEMENT	SIZE	LINEAR FEET
	4"	2084
	6"	34085
	8"	14795
	10"	2140
Subtotal		53104
DUCTILE IRON	SIZE	LINEAR FEET
	4"	1500
	6"	10400
	8"	30940
	10"	9950
	12"	10530
Subtotal		63320
PVC	SIZE	LINEAR FEET
	8"	440
Subtotal		440
TOTAL		116864

Gravity Sewer

SIZE	LINEAR FEET
4"	550
6"	40240
8"	82980
10"	4340
12"	4750
TOTAL	132860

Forcemains

SIZE	LINEAR FEET
4"	1550
10"	4610
TOTAL	6160

Mahoning Township Water and Sewer Department
Book Asset Detail as of 4/30/21018

Property Description	Included In Sale?	Date in Service	Expected Life	Original Cost	Description	NARUC Codes	Comments
General Assets							
Generator Upgrade		6/30/2012	10.00	31,386	Turbo-Generator - M	310.2	
Turbo Meter		7/8/2013	10.00	6,811	Meters-Water - M	330.4	
Radios		8/8/2013	10.00	9,957	Services installed - W1	346.5	
Root Cutter	NO	4/21/2015	10.00	1,653	Construction Equipment - M		
Subtotal				\$ 211,487			
Subtotal Excluding Assets not Included in Sale				\$ 157,719			
Water and Sewer System and Related Assets							
1 Original Water & Sewer Lines		1/1/1979					\$ 2,424,769
1a		1/1/1979	50.00	\$ 363,715	W - Pumping Equipment	311.4	
1b		1/1/1979	50.00	\$ 72,743	W - Treatment Equipment	320.3	
1c		1/1/1979	50.00	\$ 606,192	W - Mains	331.4	
1d		1/1/1979	50.00	\$ 169,734	WW - Force Mains	360.2	
1e		1/1/1979	50.00	\$ 727,431	WW - Mains - Gravity	361.2	
1f		1/1/1979	50.00	\$ 484,954	WW - Pumping Equipment	371.3	
2 Water Tank Purchased		9/30/1990	50.00	189,677	Elevated Steel Tanks - W1	330.4	
3 Water & Sewer Ext Lines		9/30/1980					42,712
3a		9/30/1990	50.00	19,220	W-Mains	331.4	
3b		9/30/1990	50.00	23,492	WW Mains-Gravity	361.2	
4 Additional Water Tank Purchased		9/30/1991	50.00	27,875	Elevated Steel Tanks - W1	330.4	
5 Restoration of Old Water Tank		9/30/1991	50.00	37,050	Elevated Steel Tanks - W1	330.4	
6 Addition to Sewer System		9/30/1992	50.00	113,097	Mains - Average All types - W1	361.2	
7 Addition to Sewer System		9/30/1993	50.00	26,826	Mains - Average All types - W1	361.2	
8 Muffin Monster		12/18/1995	50.00	38,500	Large Treatment Plant Equipment - W1	355.3	
9 Spring St. / Jade Ave Sewer		3/30/1997	50.00	183,934	Mains - Average All types - W1	361.2	
10 Meadows W/S Lines & Pump		5/30/1998					644,669
10a		5/30/1998		264,314	W - mains	331.1	
10b		5/30/1998		328,781	WW - Mains - Gravity	361.2	
10c		5/30/1998		51,574	WW - Pumping Equipment	371.3	
11 Edgewood Station		12/20/1999	50.00	169,641	Structures and Improvements - W1	311.4	
12 Route 11 Upgrade		9/30/2003	50.00	179,705	Electric Pumping Equipment - W1	311.4	
13 Storage Building		9/30/2004	20.00	26,469	Structures and Improvements - W1	304.5	
14 Telemetry		9/30/2005	50.00	77,856	Meter installations - W1	346.5	
15 Red Lane Project		9/30/2006	50.00	17,268	Mains - Average All types - W1	361.2	
16 Red Lane Project		9/30/2007	50.00	17,814	Mains - Average All types - W1	361.2	
17 Red Lane Project		9/30/2008	50.00	7,223	Mains - Average All types - W1	361.2	
18 Red Lane Project		9/30/2009	50.00	161,687	Mains - Average All types - W1	361.2	
19 Red Lane Valve		9/30/2008	50.00	6,890	Gate Valves - M	331.4	
20 Tank Refurbishing		9/30/2008	50.00	83,800	Elevated Steel Tanks - W1	330.4	
21 Paving		10/28/2009	20.00	7,400	Structures and Improvements - W1	304.5	
22 Red Lane Furnace		12/31/2009	20.00	1,500	Large Treatment Plant Equipment - W1	304.5	
23 Red Lane / Oak St. Project		12/21/2009					40,623
23a		12/21/2009	50.00	18,280	W - Mains	331.4	
23b		12/21/2009	50.00	22,343	WW - Mains - Gravity	361.2	
24 Chlorination Building		10/19/2009	20.00	5,589	Structures and Improvements - W1	320.3	
25 Chart Recorder Upgrade		2/8/2010	10.00	6,559	Structures and Improvements - W1	365.2	
26 In-Lining Project (Sewer)		6/30/2011	50.00	21,573	Services installed - W1	361.2	
27 Sewer Villa Sewer Rehab		6/30/2012	50.00	284,507	Services installed - W1	361.2	
28 Hydrants		8/15/2012	10.00	6,337	Hydrants Installed - W1	331.4	
29 Telemetry		10/11/2012	50.00	7,480	Meter installations - W1	346.5	
30 Red Lane Pump Station Paving		11/12/2012	20.00	4,625	Structures and Improvements - W1	339.1	
31 Route 11 Pump Station Upgrade		3/8/2013	50.00	9,120	Structures and Improvements - W1	371.3	
32 Route 11 Generator Upgrade		4/12/2013	50.00	118,905	Turbo-Generator - M	310.2	
33 Transducer		5/13/2013	10.00	2,441	Small Treatment Plant Equipment	371.3	
34 Telemetry		12/12/2013	50.00	9,679	Meter installations - W1	346.5	
35 Telemetry		5/21/2014	50.00	9,679	Meter installations - W1	346.5	
36 Cooper Twp. Connection (EI)		5/15/2014	50.00	19,173	Mains - Average All types - W1	361.2	
37 Bloom Road Water Project		5/15/2014	50.00	48,176	Mains - Average All types - W1	331.4	
38 Sewer Rehab		3/13/2014	50.00	64,015	Services installed - W1	361.2	
39 New 4" Sensus Complete		10/19/2014	10.00	5,944	Mains - Average All types - W1	331.4	
40 Re-line 33 fl. Clay Pipe		10/19/2014	50.00	4,035	Services installed - W1	361.2	
41 New Shed Rubber Roof		11/5/2014	20.00	2,100	Structures and Improvements - W1	304.5	

Mahoning Township Water and Sewer Department
Book Asset Detail as of 4/30/21018

	Property Description	Included In Sale?	Date in Service	Expected Life	Original Cost	Description	NARUC Codes	Comments
42	Metal Roof Storage Shed		2/2/2015	20.00	8,400	Structures and Improvements - W1	304.5	
43	New Pipe		6/1/2015					5,790
43a			6/1/2015	50.00	2,608	W - Mains	331.4	
43b			6/1/2015	50.00	3,184	WW - Mains - Gravity	361.2	
44	Fairbanks Pump Rebuild		8/11/2015	10.00	7,588	Electric Pumping Equipment - W1	371.3	
45	Fire Hydrant Woodbine		8/13/2015	10.00	5,094	Hydrants Installed - W1	331.4	
	Subtotal				\$ 5,185,595			
	New/Recently Dedicated Facilities							Original construction costs unavailable. Estimated costs in 2017 and converted to year installed using ENR Construction Cost Indices.
	Hidden Ho/Woodbine Pl/Mortg V/Evergreen		1878					
	4" and 6" water mains and appurtenances			50.00	\$ 55,910	water distribution	331.4	
	8" gravity sewer and appurtenances			50.00	\$ 119,448	sewage collection	361.2	
	Peachtree/Woodbine Indust Park		1982					
	6-12" water mains and appurtenances			50.00	\$ 901,388	water distribution	331.4	
	8" gravity sewer and appurtenances			50.00	\$ 521,186	sewage collection	361.2	
	Delwood Drive/Hawkins		1998					
	6-10" water main and appurtenances			50.00	\$ 247,757	water distribution	331.4	
	8" gravity sewer and appurtenances			50.00	\$ 160,377	sewage collection	361.2	
	Strawberry Fields		2000					
	8" water main and appurtenances			50.00	\$ 218,433	water distribution	331.4	
	8" sewer main and appurtenances			50.00	\$ 331,257	sewage collection	361.2	
	Woods of Welsh		2004					
	6-8" water mains and appurtenances			50.00	\$ 688,141	water distribution	331.4	
	75,000 gallon water storage tank			50.00	\$ 210,000	water storage tank	330.4	
	Water booster station			10.00	\$ 200,000	water booster station	311.2	
	8" gravity sewer and appurtenances			50.00	\$ 621,113	sewage collection	361.2	
	Mahoning Terrace		2009					
	6" water main and appurtenances			50.00	\$ 203,535	water distribution	331.4	
	8" gravity sewer and appurtenances			50.00	\$ 310,650	sewage collection	361.2	
	Laxi Drive		2014					
	6" water main and appurtenances			50.00	\$ 42,742	water distribution	331.4	
	8" gravity sewer and appurtenances			50.00	\$ 50,665	sewage collection	361.2	
	Subtotal New/Recently Dedicated Facilities				\$ 4,882,602			
	Grand Total				\$ 10,279,684			
	Grand Total for Assets included in Sale				\$ 10,225,916			

Prepared by: David D. Walters, P.E.
Date: 7-May-18