

WASHINGTON TOWNSHIP MUNICIPAL AUTHORITY

ACT 57 OF 2003 - TAPPING FEES

TAPPING FEE REPORT AND CALCULATIONS FOR THE WASTEWATER SYSTEM

REPORT DATE:
MAY 24, 2010

WASHINGTON TOWNSHIP
FRANKLIN COUNTY, PENNSYLVANIA

COMPLETED BY:
CET ENGINEERING SERVICES, INC.



1240 NORTH MOUNTAIN RD.
HARRISBURG, PA 17112
PH: 717-541-0622
FAX: 717-541-8004

I. Introduction

Act 57-2003 was adopted by the General Assembly of Pennsylvania amending the Pennsylvania Municipality Authorities Act of 1945, to grant the right to authorities to charge enumerated fees to property owners who desire to or are required to connect to the sewer system. This tapping fee report focuses on those property owners who desire or are required to connect to the Washington Township Municipal Authority (Authority) sewer system. Such fees include tapping fees, which are in addition to any charges assessed against the property owner in the construction of a sewer main by the Authority, as well as any other user charges imposed by the Authority. Tapping fees are necessary to ensure that the cost of needed capital improvements be applied to new developments in a manner that will allocate equitably the cost of those improvements among property owners.

Act 57-2003 provides for the imposition of three (3) separate fees that are designed to allow for the recovery of certain specific capital costs. These fees are the only capital fees that can be levied against a new connection other than for assessments. The fees may include some or all of the following fee components, which shall be separately set forth in an appropriate resolution adopted by the Authority:

- Connection Fee
- Customer Facilities Fee
- Tapping Fee (four components):
 - Capacity Part
 - Distribution Part
 - Special Purpose Part
 - Reimbursement Part

Definitions for the various fee components are provided within this report. Tapping fees are calculated in accordance with Act 57-2003 regulations. Recommendations for implementation of the proposed tapping fees for the Authority's sewer system are presented in this report.

The Authority's wastewater collection facilities are owned and operated by the Authority, and serve customers in Washington Township, Franklin County, Pennsylvania.

II. Fee Components

The allowable fee components provided in Act 57-2003 include a Connection Fee, a Customer Facilities Fee and a Tapping Fee. Act 57-2003 does not require that these fees be imposed, rather it establishes specific requirements that must be met if they are imposed. A description of each of the aforementioned fees follows.

A. Connection Fee

1. Description

The Connection Fee, as defined in Act 57-2003, may be charged based on:

- a. the actual cost of installing the sewer service line and associated appurtenances from the sewer main to the property line of the property connected, or
- b. the average cost of installing the sewer service line and associated appurtenances from the sewer main to the property line, based on installations of similar type and size, or

- c. the average cost of installing the sewer service line and associated appurtenances from the sewer main to the property line trended to the current cost using published cost indexes.

The Authority may either construct these facilities itself or require that the property owner construct them. If the Authority constructs these facilities, the Connection Fee will be based on the actual cost of construction of installing the sewer service line and associated appurtenances from the sewer main to the property line of the property connected. If the Authority does not perform the construction, the Authority will charge a fee for inspecting the construction.

B. Customer Facilities Fee

1. Description

The customer facilities fee, as defined in Act 57-2003, covers the actual cost of installing the sewer service line and associated appurtenances from the property line to the dwelling or building to be served. This fee may be charged only if the Authority installs the customer facilities and is based on the actual cost of the customer facilities installed. If the Authority does not perform the construction, the cost of the inspection may be included as the customer facilities fee.

C. Tapping Fee Description

The tapping fee is based on four (4) fee components, which must be separately set forth in a resolution adopted by the Authority in order to establish these fees. The four parts of the tapping fee are calculated separately, as follows:

1. Capacity Part

The capacity part of the tapping fee is based on the cost of such facilities, including, but not limited to, treatment, pumping, transmission, trunk interceptor and outfall mains, storage, sludge treatment or disposal facilities, interconnections or other general system facilities. The cost of capacity-related facilities is described below. The cost of future facilities is also permitted under the capacity part of the tapping fee. The cost of future facilities shall not exceed their reasonable estimated cost and may only be taken into consideration if the Authority has taken action to construct or acquire such facilities. The basis for charging the capacity part of the tapping fee is that other users have already paid for or are paying for the capacity that will be used by the new customers. Therefore, new customers should pay their fair share of these facilities.

(a) Capacity-Related Facilities: The capacity part cost may not include facilities contributed to the Authority by any person, government, agency, or portions of facilities paid for with contributions or grants other than tapping fees. Outstanding debt related to the facilities shall be subtracted from the cost except when calculating the initial tapping fee imposed for connection to facilities exclusively serving new customers. In regards to tapping fees or components related to facilities initially serving exclusively new customers, the Authority may increase the tapping fee by an amount calculated by multiplying the tapping fee by the weighted average interest rate on the debt related to such facilities applicable for the period since the fee was initially established, or the last increase of the tapping fee. An increase in the tapping fee as previously described may only occur on an annual basis. The existing facilities cost is to be determined by one of three methods, described as follows:

- ◆ *Historical Costs Trended to Current Cost* — Original costs trended to current costs using published cost indices, such as the ENR Construction Cost Index of 20 Cities. All grants and contributions must be deducted before trending original costs to current value, and then trend the net amount.
- ◆ *Historical Costs Plus Interest and Other Financing Fees* — Original costs plus the interest portion of the annual debt service and other financing fees paid on bonds.
- ◆ *Replacement Costs* — To the extent that historical cost is not ascertainable, the tapping fee may be based upon an engineer's reasonable written estimate of current replacement costs. This estimate will include an itemized listing of the components of the actual facilities for which historical cost is not ascertainable.

(b) Future Facilities: The cost of facilities to be constructed or acquired in the future that may increase the system design capacity may be included in the calculation of the capacity part. The cost of such facilities shall not exceed their reasonable estimated cost of construction or acquisition. The facilities must be included in a duly adopted annual budget or a five-year capital improvement plan. In addition, the Authority shall have taken at least two of the following actions showing a commitment toward constructing or acquiring the facilities such as the following:

- ◆ Obtained financing for the facilities.
- ◆ Entered into a contract obligating the Authority to construct or pay for the cost of construction of the facilities or its portion thereof in the event multiple parties are constructing said facilities.
- ◆ Obtained a permit for the facilities.
- ◆ Obtained title to or condemned additional real estate upon which the facilities will be constructed.
- ◆ Entered into a contract obligating the Authority to purchase or acquire facilities owned by another.
- ◆ Prepared an engineering feasibility study specifically related to the facilities, which recommends the construction of the facilities within five years.
- ◆ Entered into a contract for the design or construction of the facilities or adopted a budget which includes the use of in-house resources for the design or construction of the facilities.

(c) Grants and Contributions: Contributions include any capacity facilities constructed and dedicated to the Authority by developers. Grants and capital contributions from other agencies are subtracted before the current cost is determined.

(d) Calculation: The Capacity Part of the tapping fee, per unit of design capacity, shall not exceed the total cost of the facilities divided by the system design capacity of all such facilities. Where the cost of the facilities to be constructed or acquired in the future are included in the calculation of the capacity part, the total cost of the facilities shall be divided by the system design capacity plus the additional capacity to be provided in the future. Nothing shall prevent the Authority from allocating its capacity-related facilities to different sections or districts of its sewer system, nor shall the Authority be prohibited from imposing additional capacity-related tapping fees on specific groups of existing customers such as commercial or industrial customers, in conjunction with additional capacity requirements for such customers.

2. Collection Part

The collection part of the tapping fee is based on the cost of collection facilities required to provide sewer service, such as mains and pump stations. This fee may only include facilities that provide existing service. The cost, methods, and criteria used to calculate the collection part of the tapping fee are the same as those used to calculate the capacity part of the tapping fee, as found in Section II.C.1.(a), (c), and (d). Future facilities are not permitted to be included in the collection part.

Act 57-2003 allows the property owner to construct sewer extensions (collection facilities), unless the Authority can show that it can construct sewer extensions at a lower cost and within the same time period. If the Authority constructs the sewer extension, it can charge the owner for the collection part of the tapping fee that is calculated for the construction of the extension. If the property owner constructs the sewer extension, the Authority can require the property owner to reimburse the Authority for reasonable and necessary expenses incurred as part of the expansion. These costs can include the cost of plan review, construction inspection, administrative fees, legal services and engineering services. If the Authority hires an independent firm to provide the engineering review and construction supervision, those costs can be charged to the property owner.

3. Special Purpose Part

The special purpose part of the tapping fee is applicable only to a particular group of customers, serving a particular purpose or serving a specific area based upon the cost of the facilities. The special purpose part of the tapping fee is based on the cost of such facilities, including, but not limited to, sewer mains and pumping stations. This fee may include only those facilities that provide existing service. The same methods and criteria used to calculate the special purpose part of the tapping fee are the same as was used in the determination of the capacity part of the tapping fee, Section II.C.1.(a), (c), and (d). Future facilities are not permitted to be included in the special purpose part. If the Authority chooses to construct special purpose facilities at its own expense, the design capacity may be expressed in terms of the number of equivalent dwelling units (EDUs) to be served by the facilities. The Authority shall discontinue collection of the Special Purpose Part Tapping Fee after the Special Purpose Part fees have been imposed on the total number of design capacity units used in the original calculation. The special purpose part of the tapping fee is calculated separately for each applicable group of users.

4. Reimbursement Part

The reimbursement part of the tapping fee is only applicable to the users of certain specific facilities when a fee required to be collected from such users will be reimbursed to the person at whose expense the facilities were constructed. A written agreement between the Authority and the person at whose expense such facilities were constructed is required in order to obtain reimbursement.

5. Other Tapping Fee Criteria

- (a) The same cost shall not be included in more than one part of the tapping fee.
- (b) No tapping fee may be based upon or include the cost of expanding, replacing, updating or upgrading facilities serving only existing customers in order to meet more stringent

efficiency, environmental, regulatory or safety standards, or to provide better service to, or meet the needs of, existing customers.

(c) The costs used in calculating the tapping fee shall not include operation and maintenance costs, which are expenditures made during the life of the sewer system for labor, materials, utilities, equipment accessories or appurtenances and other items that are necessary to manage and maintain the system capacity, performance, and to provide service for which the sewer system was constructed. Costs or expenses to reduce or eliminate groundwater I/I may not be included in the cost of facilities used to calculate tapping fees, unless these costs result in an increase in system design capacity.

(d) When calculating sewer tapping fees, the design capacity required by a new residential customer shall not exceed an amount established by multiplying 90 gallons per capita per day for sewer capacity times the average number of persons per household as established by the most recent census data. As per 2000 U.S. Census data, Washington Township, Franklin County, Pennsylvania has an average of 2.52 persons per household, and is used in the attached calculations. Alternatively, the design capacity for wastewater systems can be determined by the average residential water consumption per residential customer plus 10%. A third alternative for sewer capacity states the average sewage flow per residential customer determined by a measured sewage flow study can be used. The study shall calculate the average sewage flow, over at least 12 months, per residential customer in the lesser of three or all residential subdivisions greater than 10 lots which have collection systems connected to the Authority's facilities within the most recent five years.

(e) If any person required to pay a tapping fee submits to the Authority an opinion from a professional engineer challenging the validity of the calculation of design capacity required to serve new residential customers, the Authority will have 30 days to obtain a written certification from another professional engineer verifying that the results are valid.

(f) The Authority has the right to use lower design capacity requirements and impose lower tapping fees for multifamily residential dwellings.

(g) If the Authority charges a connection fee, customer facilities fee or tapping fee, it shall do so only pursuant to a resolution adopted at a public meeting. The Authority shall have available for public inspection a detailed itemization of all calculations clearly showing the maximum fees allowable for each part of the tapping fee and the manner in which the fees were determined.

(h) No connection fee, customer facilities fee, tapping fee or any similar fee may be imposed by the Authority except as provided for in Act 57-2003.

6. Separate Accounting for Future Facility Costs

Any portion of tapping fees collected that are based on facilities to be constructed or acquired in the future shall be separately accounted for and expended only for that particular facility. Such accounting shall include, but not be limited to, the total fees collected as a result of including facilities to be constructed, the source of the fees collected and the amount of fees expended on specific facilities. The proportionate share of tapping fees based upon future facilities shall be refunded to the payer of such fees within 90 days of the occurrence of the following:

(a) The Authority abandons its plan to construct or acquire a facility, which is the basis of such fee.

(b) The facilities have not been placed into service within seven years after adoption of a resolution which imposes tapping fees, which are based upon facilities to be constructed or acquired in the future. Any refund held for 15 years shall include interest for the period the money was held.

7. Billing Disputes Resolution Process for Extensions

In the event the property owner is required to extend a main at its own expense, the Authority may require the property owner to make a deposit in advance of construction of the Authority's estimated reasonable and necessary costs of reviewing plans, construction inspections, administrative, legal, and engineering services. If the property owner disputes the billing amount related to plan review, construction inspection, administrative, legal and engineering services, the following steps must be taken:

(a) The property owner shall notify the Authority within 20 days that the billing is excessive, unreasonable, or unnecessary.

(b) If the property owner and the Authority cannot agree on a reasonable and necessary billing amount within 30 days of the billing date, the Authority and the property owner will mutually appoint a professional, of the same profession or discipline as was originally hired for engineering review of plans and inspection of improvements, licensed in Pennsylvania, to review the billings and make a determination as to the necessary and reasonable billings.

(c) The appointed professional will render a decision within 60 days of the billing date and the property owner will be required to pay the entire amount rendered immediately.

(d) If the Authority and the property owner cannot agree upon the professional to be appointed within 30 days of the billing date, the president judge of the judicial district in which the municipality is located shall appoint a professional who has not been retained by, or performed services for, the Authority or the property owner within the preceding five years.

(e) The fee of the professional appointed by the judge will be paid by the applicant if the payment amount is equal to or greater than the original bill. If the decision results in a payment amount that is less than the original bill by \$2,500.00 or more, the Authority must pay the fee of the appointed professional. If the decision results in a payment amount that is less than the original bill by \$2,499.00 or less, the Authority and the property owner must each pay one-half of the appointed professional's fee.

D. Tapping Fee Calculation

The following discussion describes the general methodology and assumptions used in the development of a revised tapping fee. Each of the four fee components is addressed.

1. Wastewater Treatment: Capacity Part

When available, actual costs, based on historical costs, were used to determine the capacity part of the tapping fee. When actual costs were not ascertainable, estimated replacement costs were used. Original construction costs were as per Authority records and include all costs that are eligible under Act 57. Original costs for the interceptor system and Cold Springs and Blue Ridge Summit Pumping Stations were not available; therefore estimated replacement costs were calculated and used in the capacity part

calculations. A detailed breakdown of estimated replacement costs for the interceptors and force mains is included in Exhibit A, and for pumping stations in Exhibit C.

Wastewater facilities where actual costs were used in the capacity part calculation include:

- a. the Authority's original wastewater treatment plant (1979);
- b. an odor control system, return sludge and utility water pump replacements/ modifications, and a chlorinator (1986);
- c. WWTP upgrade (1997);
- d. sludge thickener building (2004);
- e. WTMA administrative building (2009);
- f. MarPen Pumping Station (2004).

Wastewater facilities that used estimated replacement in the capacity part calculation include:

- a. MarPen Force Main (2010);
- b. Blue Ridge Summit Pumping Station and Force Main (2010);
- c. Cold Springs Pumping Station and Force Main (2010);
- d. Gravity trunks and interceptors (2010).

Attachment 1 provides a summary of the total project costs for the capacity part of the Authority's wastewater system. Grants and the value of facilities that were taken out of service and/or demolished were deducted from the actual costs for the original WWTP project of 1979 and the WWTP upgrade project of 1997, respectively. Grants were also deducted from the estimated replacement cost for the interceptor system. Exhibit B provides a detailed breakdown of the grant distribution. The ENR Construction Cost Index was used to trend original project costs to current costs. Outstanding debt relative to the capacity system totals approximately \$2,885,750, and was deducted from the total Capacity Part cost, resulting in a total Eligible Capacity Part Cost of \$24,822,914 (Attachment 1).

The current permitted capacity of the Authority's WWTP is 1.94 MGD. An average daily wastewater contribution of 227 GPD per EDU was determined as per Act 57 regulations by multiplying 90 GPD by 2.52 persons per household as per 2000 Census data for Washington Township, Franklin County, Pennsylvania. A cost per gallon of \$12.80 was calculated by dividing the total Eligible Capacity Part cost by the Authority's permitted design capacity of 1.94 MGD. The cost of \$12.80/gallon times the average daily wastewater contribution of 227 GPD/EDU results in a Capacity Part tapping fee of \$2,902/EDU (Attachment 1).

2. Wastewater Treatment: Collection Part

Actual costs for the collection system were not ascertainable; therefore, estimated replacement costs were used to determine the Collection Part of the Tapping Fee. Replacement costs were based on 8-inch PVC sewer with an average depth of 8 feet. It was assumed that approximately 70% of the total collection system sewers are located within the street and 30% are located in right-of-way (ROW), based on GIS mapping of the Authority's collection system. Authority staff (using GIS) determined that approximately 43%, or 149,300 L.F., of the collection system was installed by developers, or is private, and the remaining 57%, or 200,100 L.F., was installed by the Authority. Therefore 43%, or \$29,122,911, was deducted from the collection system total estimated replacement cost of \$67,727,700. A detailed breakdown of the collection system cost estimate and developer contributions are included in Exhibit C. Outstanding debt relative to the collection system totals approximately \$1,951,400, and was deducted from the total Collection Part cost, resulting in a total Eligible Collection Part Cost of \$20,102,649 (Attachment 2).

The permitted capacity and methods used to calculate the cost/gallon for the collection part are the same as those used in the capacity part of the tapping fee. The collection part tapping fee of \$2,350/EDU was calculated by multiplying \$10.36/GPD by 227 GPD/EDU (Attachment 2).

5. Special Purpose Part

There are no costs associated with the special purpose part of the tapping fee for the sewer system at this time.

6. Reimbursement Part

There are no costs associated with the reimbursement part of the tapping fee for the sewer system at this time.

III. RECOMMENDATIONS

Based on the provisions of Act 57, it is recommended that the Authority revise their tapping fees for new connections to the wastewater system, not to exceed the following maximum allowable fees, as documented in this report:

Wastewater Treatment Facilities

Connection Fee	Actual cost of installation/inspection
Customer Facilities Fee	Actual cost of installation/inspection
Tapping Fee	
Capacity Part - Existing	\$ 2,902 per EDU
Collection Part	\$ 2,350 per EDU
	\$ 5,252 per EDU
Special Purpose Part	Not Applicable
Reimbursement Part	Not Applicable

Attachment 1
Washington Township Municipal Authority
Act 57 Tapping Fee Calculation: Capacity Part - Sewer

ENR Construction Cost Index for April 2010 = 8677

Facility	Year	Original Construction Costs ¹	Grants and Contributions	Adjusted Total Costs	Original ENR	2010 Eligible Cost
WWTP ²	1979	\$ 3,121,096	\$ 2,063,399 ²	\$ 1,057,697	3003	\$ 3,056,156
WWTP Modifications ³	1986	\$ 17,689	\$ -	\$ 17,689	4295	\$ 35,736
WWTP Upgrade	1997	\$ 5,589,351	\$ 252,299 ⁴	\$ 5,337,052	5826	\$ 7,948,781
Sludge Thickener Bldg	2004	\$ 296,244	\$ 100,000 ⁵	\$ 196,244	7115	\$ 239,327
WTMA Admin. Bldg.	2009	\$ 1,761,691	\$ -	\$ 1,761,691	8570	\$ 1,783,686
MarPen P.S.	2004	\$ 188,220	\$ -	\$ 188,220	7115	\$ 229,541
MarPen F.M. ⁶	2010	\$ 160,600	\$ -	\$ 160,600	7115	\$ 195,858
Blue Ridge Summit P.S. ⁷	2010	\$ 519,700	\$ -	\$ 519,700	8677	\$ 519,700
Blue Ridge Summit F.M. ⁶	2010	\$ 519,700	\$ -	\$ 519,700	8677	\$ 519,700
Cold Springs P.S. ⁷	2010	\$ 355,100	\$ -	\$ 355,100	8677	\$ 355,100
Cold Springs F.M. ⁶	2010	\$ 219,700	\$ -	\$ 219,700	8677	\$ 219,700
Interceptor Replacement Cost ⁶	2010	\$ 15,781,300	\$ 3,187,636 ²	\$ 12,593,664	8671	\$ 12,602,378
Total Cost		\$ 28,530,391	\$ 5,603,334	\$ 22,927,057		\$ 27,705,664

Capacity Part Cost	\$ 27,705,664
Outstanding Debt ⁸	\$ 2,882,750
Total Eligible Capacity Part Cost	\$ 24,822,914
WWTP Permitted Capacity, MGD	1.94
Cost/gallon ⁹	\$ 12.80
Gallons/EDU ¹⁰	227
Tapping Fee - Capacity Part	\$ 2,902

- (1) Original construction costs are as per Township records and includes all eligible costs per Act 57.
- (2) Per 1991 Tap-In Fee calculation which references EPA Audit Date #C-420865-01. See Exhibit B for grant distribution details.
- (3) Includes odor control for station #6000 (\$9,057), return sludge and utility water pump replacements/modifications (\$5,532) and chlorinator (\$3,100).
- (4) Represents cost of demolished or replaced equipment.
- (5) Innovative Technology Grant received for a total of \$100,000.
- (6) See Exhibit A for detailed cost breakdown.
- (7) See Exhibit C for detailed cost breakdown.
- (8) Total outstanding debt is \$4,435,000. The capacity part costs make up approximately 56% of the total system costs, therefore approximately 56% of the debt is applied to the Capacity Part.
- (9) Calculated by dividing the total eligible capacity part cost by the WWTP permitted capacity.
- (10) Calculated per Act 57 guidelines by multiplying 90 GPD by 2.52 persons per household for Washington Township as per 2000 U.S. Census Data.

Attachment 2
Washington Township Municipal Authority
Act 57 Tapping Fee Calculation: Collection Part - Sewer

ENR Construction Cost Index for April 2010 = 8677

Facility	Year	Project Cost	Contributions / Grants	Adjusted Total Costs	Original ENR	2010 Eligible Cost
Collection System Replacement ¹	2010	\$ 67,727,700	\$ 45,673,651 ^{2,3}	\$ 22,054,049	8677	\$ 22,054,049
Total Cost		\$ 67,727,700	\$ 45,673,651	\$ 22,054,049		\$ 22,054,049

Collection Part Cost	\$ 22,054,049
Outstanding Debt ⁴	\$ 1,951,400
Total Eligible Collection Part Cost	\$ 20,102,649
WWTP Permitted Capacity, MGD	1.94
Cost/gallon ⁵	\$ 10.36
Gallons/EDU ⁶	227
Tapping Fee - Collection Part	\$ 2,350

- (1) Estimated replacement cost is based on approximately 349,500 feet of collection sewers and 1,600 manholes; refer to Exhibit D for detailed breakdown of costs.
- (2) Grant contribution of \$16,550,740 per 1991 Tap-In Fee calculation which references EPA Audit Date #C-420865-01. See Exhibit B for grant distribution details.
- (3) Approximately 43% of the collection system was contributed to WTMA by developers, therefore 43% of total project cost was deducted (\$67,727,700 * 43% = \$29,122,911).
- (4) Total outstanding debt is \$4,435,000. The collection system costs make up approximately 44% of the total system costs, therefore approximately 44% of the debt is applied to the collection system.
- (5) Calculated by dividing the total eligible capacity part cost by the WWTP permitted capacity.
- (6) Calculated per Act 57 guidelines by multiplying 90 GPD by 2.52 persons per household for Washington Township per 2000 U.S. Census Data.