

Peters Township Sanitary Authority
Summary Report
of
Tapping Fee Calculation and Connection Charges

June 30, 2008
Update No. 2 – August 12, 2008

Summary Report

Tapping Fee Calculation and Connection Charges

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1.0 Introduction

This Summary Report summarizes the calculations, and describes the methodology used in the calculation of the Peters Township Sanitary Authority's tapping fee and connection charges in accordance with Act 57 of 2003. The Summary Report in conjunction with its Appendix comprises the detailed itemization of the tapping fee calculation. The appendices contain a copy of Act 57 2006, the original engineering report, Update No. 1, and other support data.

The Authority engaged KLH Engineers, Inc. to prepare the original engineering study identifying the allowable costs and to calculate the maximum amount allowable for each fee as required by Act 57 of 2003, which states recalculations of fees were to be performed by July 1, 2005. The Authority adopted by resolution the Tapping and Connection Fees on June 13, 2005 with an effective date July 1, 2005. The Authority will review and update the calculation periodically for any additional facilities, the current Engineer News Record index and any revisions to the outstanding debt. Below is a list of Updates:

Update No. 1 – June 13, 2006
Update No. 2 – August 12, 2008

2. 0 Description of Organization

The Peters Township Sanitary Authority, a municipal corporation organized under the provision of the Municipal Authorities Act of 1945, as amended, was incorporated on March 20, 1964 and its corporate life is extended until August 1, 2024 for the purpose of providing and maintaining a sanitary sewer collection, conveyance, and treatment systems for the western portion of Peters Township.

The sewerage system is comprised of the Brush Run Water Pollution Control Plant (BRWPCP) with a design flow of 2.0 Million Gallons per Day (MGD), with approximately 84 miles of sewers, and the Donaldson's Crossroads Water Pollution Control Plant (DCWPCP) with a design flow of 1.2 MGD, and approximately 45 miles of sewer. The Marella Manor Service Area has approximately 1.5 miles of sewers and the wastewater receives treatment in the ALCOSAN system.

3.0 Description of Tapping Fee and Connection Charges

The Authority follows the requirements set forth in the Pennsylvania Municipality Authorities Act of 1945 which provides for an authority to charge enumerated fees to property owners who desire or are required to connect to the authority's sewer system. Act 57 of 2003, amended the Municipality Authorities Act as it pertains to tapping fee and connection charges. For simplicity, references to the law governing calculation of tapping fee will reference Act 57 of 2003.

Act 57 of 2003 provides for the following fees to be charged to customers desiring to or required to connect to the Authority's sewer system:

Connection Fee – a fee based on the actual cost of connection of the property from sewer main to the property line, or it may be based on the average cost of previously installed connections.

Customer Facilities Fee – a fee based on the actual cost of facilities from the property line to the building being served.

Tapping Fee – is comprised of the capacity part, the collection part, and may include a special purpose part and/or a reimbursement part.

An authority is not required to charge tapping fees and connection charges, but if it does so the fees shall be established in accordance with Act 57 of 2003. An authority may charge fees in an amount equal to the maximum amount allowable, or it may charge any amount less than the maximum amount.

The basic concept of charging tapping fees is to recover a portion of embedded fixed capital investment costs from new customers as they connect to the sewer system. When sewage treatment and disposal facilities are constructed by a public agency, such as treatment plants, interceptors, trunk sewers, and sewer mains, they are designed and constructed to not only provide service to the existing customer base, but also to serve the growth needs of the community. The existing customers, through years of the debt service payment portion of their sewer use charge, or by the use of surplus funds, pay for the cost of constructing facilities that will someday be utilized by future customers. The tapping fee provides a mechanism to recover from the new customer revenues that reimburse the existing customer base for the unencumbered fixed assets which provide sewage treatment and disposal, and which the existing customer base paid for.

4.0 Summary of Adopted Tapping Fee and Connection Charges

The Peters Township Sanitary Authority adopted Resolution No. 07-08-08 on August 12, 2008, at its regular scheduled public meeting, establishing the following tapping fee and connection charges effective September 1, 2008. The Connection, Customer Facilities, and Tapping Fees are payable at the time the new customer makes application for a Sewer Connection Permit.

Table 1A Residential Tapping Fee and Connection Charges (Applies to Single Family and Multi-Family Dwellings)		
	Where Wye is Available	Where Tap/Saddle Installation by Authority
Connection Fee	\$ 68.00	\$ 304.00
Customer Facilities Fee	\$ 51.00	\$ 51.00
Rounding Discount	(\$28.00)	(\$4.00)
Tapping Fee		
Capacity Part	\$ 1,589.00	\$ 1,589.00
Collection Part	\$ 1,519.00	\$ 1,519.00
Total of all Fees	\$ 3,200.00	\$ 3,460.00

Table 1B Non-Residential Tapping Fee and Connection Charges		
	Where Wye is Available	Where Tap/Saddle Installation by Authority
Connection Fee	\$ 68.00	\$ 304.00
Customer Facilities Fee	\$ 51.00	\$ 51.00
Discount	(\$28.00)	(\$4.00)
Tapping Fee		
Capacity Part	\$6.16/gallon ¹	\$6.16/gallon
Collection Part	\$5.89/gallon	\$5.89/gallon
Total of all Fees	\$91.00 + \$12.05/gallon	\$351.00 + \$12.05/gallon

¹ The charge is per gallon of capacity needs of the non-residential customer, based upon the maximum monthly average day capacity requirement, with a minimum required capacity of 258 gpd.

5.0 Procedures Used in the Calculation of the Tapping Fee and Connection Charges

The following paragraphs describe the procedures and methods used in calculating the various cost components.

5.1 Connection Fee

The Connection Fee may be based on the actual cost of connection of the property being served from the sewer main to the property line, or it may be based on the average cost of previously installed connections. The Connection Fee would include costs associated with the customer's facilities installed from the sewer main to the property line or easement line. A typical installation includes a wye fitting with the sewer main, and all necessary fittings and piping to extend the service connection to the property line or easement line.

The Authority typically does not install the service connection extension for the majority of new customers that connect today, with these facilities installed by the customer acquiring service. Thereby, the Authority does not have a direct cost in the construction of the service connection extension for most new connections. The Authority does however require all new customers to make application for a Sewer Connection Permit which requires review and approval by the Authority, and clerical processing of the Sewer Connection Permit. The Authority also inspects portions of the service connection. Therefore these administrative and inspection costs are included in the Connection Fee, based on the average cost of previously installed sewer connections.

In rare instances where property subdivides along an existing sewer main there may not be a wye fitting available for the connection of a new property. This is determined during the application review process. When this circumstance arises, the Authority requires the sewer main to be tapped and a saddle installed, with the materials supplied and work performed by the Authority staff. In these cases the material cost and average labor costs are added to the base Connection Fee.

Table 2A and 2B set forth the basis for the Connection Fee based on average cost from previously installed facilities, for when a wye is available, and when a tap and saddle is required.

	2008 Unit Price per Hour	Average Hours of Effort	Average Cost	Fee Charged
Inspection Time	\$34.10	0.75	\$25.58	
Administrative Time	\$ 42.98	1.0	<u>\$42.98</u>	
		Total	\$68.56	\$68.00

Connection Fee – Table 2B (Cont'd)

Table 2B				
Average Cost Basis, Installation of Tap and Saddle				
	2008 Unit Price per Hour	Average Hours of Effort	Average Cost	Fee Charged
Inspection Time	\$34.10	0.75	\$25.58	
Administrative Time	\$42.98	1.5	\$64.47	
Labor for installation	\$34.10	2.0	\$68.20	
Material for installation	\$146.07		\$146.07	
		Total	\$304.32	\$304.00

5.2 Customer Facilities Fee

The Customer Facilities Fee is based on actual cost to install the sewer lateral from the property line of the proposed dwelling or building being served. The Authority requires the cost and construction of those facilities to be by the property owner who requested the connection. Throughout the construction process, the Authority performs a series of inspections consisting of a visual inspection at the pipe bedding stage, witnessing of water tightness tests after backfilling is completed, and a final inspection after all work is complete to verify compliance with the Authority's Rules and Regulations. The minimum amount of time to complete all three inspections is 1.5 hours. Table 3 sets forth the time and allowable cost of performing the inspection of the customer's sewer lateral.

Table 3				
Cost Basis for Inspecting Customer's Facilities				
	2008 Unit Price per Hour	Minimum Hours	Minimum Cost	Fee Charged
Inspection Time	\$34.10	1.5	\$51.15	\$51.00

5.3 Tapping Fee

5.3.1 General

The Tapping Fee is designed to recover a portion of embedded fixed capital investment costs from new customers as they connect to the sewer system. It is based on the capital costs for sewer facilities and the capacity requirements of the customer.

The major elements involved in calculating the Tapping Fee are:

- The original total project costs for fixed capital assets providing sewerage service
- The in-service date of the fixed asset
- The details of any outstanding debt principle for those facilities
- The details of any grants received or assessments collected for those facilities
- The procedure and details regarding indexing capital costs to today's cost
- The system design capacity, and the design capacity of individual facilities
- The customer's design capacity required

5.3.2 Method of Calculating the Tapping Fee

Act 57 of 2003 provides for several alternative methods for calculating the tapping fee. The Authority has elected to use the historical cost trended to current cost with published cost indexes method. The historical cost is its acquired value (value at acquisition). This data was obtained from the Authority's financial records including Independent Auditor Reports, Fixed Asset Inventory, Act 339 Applications, Construction Requisitions and Project Summaries, Grant Documents, Assessment Records, Trust Indenture Documents, and other records. The in-service date is the date of substantial completion, when the Authority began to receive beneficial use of the asset. The cost index used is the Engineering News Record (ENR) Index Values.

5.3.3. Design Capacity

Act 57 of 2003 defines System Design Capacity as the design capacity of the system for which the tapping fee is being calculated which represents the total design capacity of the treatment facility. The Authority owns and operates two treatment plants, with a combined design and permitted capacity of 3.2 Million Gallons/Day (MGD). This value is the value contained in the Part II Construction Permit for each treatment facility. Therefore, the System Design Capacity is 3.2 MGD. This value is used as the design capacity for both the Capacity Part and the Collection Part of the Tapping Fee.

5.3.4 Customer's Design Capacity Required

Act 57 of 2003 provides several different methods for establishing the Customer's Design Capacity Required. For residential customers connecting to the sewer system the Authority has elected to use the prescribed 90 gallons/day (gpd) per capita per day times the average number of persons per household as established by the most recent census data provided by the United States Census Bureau.

The 2000 Census reports the Peters Township average persons per household is 2.87 persons/household. Therefore the residential Customer's Design Capacity Required for sewage service is established at:

$$90 \text{ gpd} \times 2.87 \text{ persons/household} = 258 \text{ gpd/household.}$$

This capacity requirement value is used for both single-family and multi-family residential customers.

Act 57 of 2003 does not describe a specific method for determining the design capacity requirements of non-residential customers. Therefore, the Authority has established the method for determining non-residential Customer's Design Capacity Requirements. The capacity requirements will be based upon the customer's maximum month daily average water consumption, as determined by the Authority based on available data, with a minimum 258 gallons per day. This capacity requirement corresponds to the design capacity of the treatment plants, that being the design maximum month daily average flow.

6.0 Summary of Tapping Fee Calculation

The Tapping Fee is comprised of the capacity part, the collection part, and may include a special purpose part and/or a reimbursement part. The facilities included in the individual parts consist of:

Capacity Part – Included in the Capacity Part are the cost of capacity-related facilities consisting of the sewage treatment plants, treated effluent outfalls, sludge treatment and disposal facilities, plant inlet sewers, and interceptor sewers.

Collection Part – Included in the Collection Part are the cost of the network of public sewer mains that extend to the properties being served. Also included are two sewage pumping stations constructed by the Authority which serve a limited number of customers.

Special Purpose Part – Included in the Special Purpose Part would be the cost of special purpose facilities that serve a particular group of customers or a specific area. This part may include for example sewage pumping stations, sewer mains, or industrial treatment facilities.

Reimbursement Part – The Reimbursement Part is applicable to certain specific facilities constructed by a party, other than the Authority, where a written agreement between the party and the Authority establishes a fee to be collected from users of the specific facilities as they connect, and reimbursed to the party at whose expense the facilities were constructed. *(This part should not be confused with the mandatory requirement that the Collection Part shall be reimbursed to the party constructing the sewer main when a new user connects directly to the sewer main with a service lateral).*

The Resolution adopted by the Authority has established both a Capacity Part and a Collection Part. The Special Purpose Part and Reimbursement Part, if adopted for specific projects will be contained in separate resolution adopting such Tapping Fee Parts.

Table 4 provides a summary of the cost basis used in calculating the Capacity Part and Collection Part. The detailed itemization by project is contained in Appendix C.

Table 4		
Cost Basis per Gallon/Day (gpd)		
	Capacity Part	Collection Part
Trended Project Cost	\$22,695,070	\$18,956,736
Plus Available Surplus Funds	\$1,010,242	\$841,309
Minus O/S Debt	\$(3,360,000)	\$(345,429)
Allowable Project Cost Basis	\$20,345,312	\$19,452,616
Design Capacity (gpd)	3,200,000	3,200,000
Cost Basis per gpd	\$6.36	\$6.08

Grants and assessments collected toward the cost of the facilities were deducted from project cost prior to indexing, in the amounts of \$455,270 and \$3,022,497, for the Capacity and Collection Parts, respectively.

The maximum allowable residential tapping fee is the cost per gallon multiplied by the residential customer's design capacity requirements. As noted previously, this has been established as 258 gpd. Non-residential customer design capacity requirements will be based on the greater of the maximum month daily average water consumption or the minimum 258 gpd, as determined by the Authority based on available data.

In consideration thereof, the maximum allowable residential tapping fee for each part is shown below, along with the tapping fee part adopted.

Table 5				
Maximum Allowable Tapping Fee and Fee Adopted				
	Capacity Part		Collection Part	
	Maximum Allowable	Fee Adopted	Maximum Allowable	Fee Adopted
Residential	\$1,640.00	\$ 1,589.00	\$1,568.00	\$ 1,519.00
Non-Residential	\$6.36/gallon	\$6.16/gallon	\$6.08/ gallon	\$5.89/ gallon

6.1 Additional Discussion Regarding Special Purpose Part

The Special Purpose Part is applicable only to a particular group of customers or for serving a particular purpose or a specific area based upon the cost of the facilities, including, but not limited to, sewer mains, pumping stations and wastewater treatment facilities.

Where the Authority constructs the special purpose facilities at its own expense, the design capacity for the facility may be expressed in terms of the number of equivalent dwelling units to be served by the facilities. The costs may be trended forward, using a published cost index.

The provisions of Act 57 of 2003 regarding Special Purpose Part facilities and fees provide a cost effective alternative for recovering funds expended by the Authority. Prior to Act 57 the only alternatives were undertaking an assessment program or establishing a special rate district. A practical application of this provision would be to sewer existing dwellings with malfunctioning septic systems.

The Special Purpose Part is in addition to the Capacity and Collection fees. The Authority, when it adopts a Special Purpose Part, being project specific, will do so by separate resolution

6.2 Special Requirement Regarding Reimbursement of the Collection Part

The provisions of Act 57 of 2003, as incorporated into Section 5607 (31) of the Municipality Authorities Act requires where a property owner constructs at their expense any extension of a sewer system, the authority shall provide reimbursement to the property owner when the owner of another property not in the development for which the extension was constructed connects a service line directly to the sewer extension within ten years of the date of the dedication of the extension to the authority in accordance with the following provisions:

- Reimbursement shall be equal to the *Collection Part* of each tapping fee collected as a result of subsequent connections.
- An amount equal to 5% for administrative expenses may be deducted from each reimbursement.
- An itemized list will be provided along with an agreement to the property owner whose benefit reimbursement will be provided.
- Total reimbursement which a property owner may receive may not exceed the total cost of the installation.
- The authority shall notify by certified mail to the last known address of the property owner that installed the sewer extension of the available reimbursement within 30 days of receipt of the Collection Part of the tapping fee. If property owner does not claim the reimbursement payment within 120 days after notification, the payment shall become sole property of the Authority.

Tapping Fee Calculation Summary Report

APPENDIX

A - Act 57 of 2003

B - Adopting Resolution

C - Update Table

D - Peters Township Sanitary Authority Tapping Fee Calculation, 2005, KLH Engineers, Inc

E - US Census Data

F - Connection Fee Tap and Saddle Material Costs

G - Brush Run Sewerage System Project Cost Data

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