



Rate Change - Page 1)	839	844
Moran Exhibit 2		
(Notice of Proposed		
Rate Change - Page 2)	839	844
Moran Exhibit 3		
(Notice of Proposed		
Rate Change - Page 3)	839	844
Owen Exhibit 1		
(Family Monthly Bill)	854	860
Owen Exhibit 2		
(Two Retired Adults		
Monthly Bill)	854	860
Owen Exhibit 3		
(One Person Monthly Bill)	854	860
Owen Exhibit 4		
(Aqua PA Summer 2024)	855	860
Minter Exhibit 1		
(Schedule of Rates)	867	872
Minter Exhibit 2		
(List of Charges)	868	872

Minter Exhibit 3		
(eFiling Cover Letter)	868	872
Minter Exhibit 4		
(Formal Complaint)	868	872
Day Exhibit 1		
(Detailed Testimony)	890	895
Day Exhibit 2		
(Set 1 Interrogatories)	890	895
Day Exhibit 3		
(Whitepaper)	891	895
Day Exhibit 4		
(Wastewater Plant Performance)	891	895
Day Exhibit 5		
(Phillips Meter Read)	892	895
Day Exhibit 6		
(Electricity Consumption Data)	892	895
Blough Exhibit 1		
(Letter dated 8/8/24)	904	907

Wright Exhibit 1		
(Letter dated 5/29/24)	913	916
Wright Exhibit 2		
(Payment Screenshot)	913	916
Wright Exhibit 3		
(Payment Screenshot)	913	916
Wright Exhibit 4		
(Payment Screenshot)	913	916
Ciamacca Exhibit 1		
(Property Line		
Responsibility Letter		
with Attachments -		
<b>Confidential)</b>	923	925
Rock Exhibit 1		
(Letter)	946	948

separate mailing



NOTICE OF PROPOSED WATER RATE CHANGES

CATHERINE MORAN  
DIT# R-2024-341822  
FOR TELEPHONIC  
HEARING 8/14/24  
1PM

Dear Customer

Aqua Pennsylvania, Inc. ("Aqua" or "Company") filed a request with the Pennsylvania Public Utility Commission ("PUC") on May 23, 2024 to increase your water rates as of July 22, 2024. A full investigation of this request by the PUC could delay the change until February 2025. This notice describes our request, the PUC's role, and what actions you can take.

**AQUA'S RATE REQUEST**

Aqua is requesting a total overall rate increase of \$126.7 million per year for our water and wastewater operations. This covers capital investments in system repairs and improvements that Aqua made since April 2023 and are projected through December 2025. It also covers the cost of operation and maintenance, like chemicals and power, essential to providing reliable utility service. Since the last rate case, Aqua plans to invest approximately \$950 million in infrastructure and other service improvements.

**THE RATES YOU PAY DIRECTLY BENEFIT YOUR COMMUNITY**

The investments Aqua has made in our water and wastewater systems have increased system reliability and capacity and helped prevent service interruptions. The rates you pay for are used for repairs and improvements including, but not limited to, the following:

- Replacement and rehabilitation of approximately 200 miles of aging water mains
- Replacement and repair of valves, fire hydrants, customer service lines and other parts of our approximately 5,900-mile distribution system
- Replacement and repair of treatment plants and wells, the installation of critical equipment, including laboratory equipment, that ensures compliance with all water quality regulations, disinfection, treatment for PFAS and other contaminants
- Replacement and repair of pumping stations, water storage tanks, emergency generators to ensure the continued ability to meet system demands and all regulatory requirements
- Focus on protecting system operations and customer information from cyberattack

Aqua's commitment to ongoing system investments helps ensure water quality and uninterrupted service. It also helps protect our customers from critical systems failures that many U.S. communities are now facing due to aging water and wastewater infrastructure.

If the Company's entire request is approved, the typical water bill for:



- Residential customers with a 5/8-inch meter using 3,870 gallons a month would increase from \$78.21 to \$97.01 per month.
- Commercial customers with a 5/8-inch meter using 37,900 gallons a month would increase from \$512.33 to \$634.36 per month.
- Industrial customer with a 5/8-inch meter using 227,600 gallons a month would increase from \$2,519.88 to \$3,129.86 per month.

Aqua's filing with the PUC also requests a combined revenue requirement for the Company's water and wastewater operations.

To learn more about our request, or to address any other questions you might have, contact Aqua at 877.987.2782. You can find the rates we asked for in Original Tariff Water – PA P.U.C. No. 4 and Original Tariff Sewer – PA P.U.C. No. 4, filed with the PUC or on our website at Aquawater.com. You may review the material we filed with the PUC at our office in Bryn Mawr, Pennsylvania. You can also ask us to send you a copy of our Statement of Reasons, which is a plain-language summary of why we need to raise our rates.

**PUC ROLE**

The state agency that approves rates for public utilities is the PUC. The PUC will review and investigate the requested rate increase. Aqua must prove that the requested rates are reasonable. After examining the evidence, the PUC may grant all, some or none of the request or may reduce existing rates. **As a result, the final effect on your bill may be different than Aqua's request.**

**ACTIONS YOU CAN TAKE**

You may challenge the Company's request by:

#### **PUC ROLE**

The state agency that approves rates for public utilities is the PUC. The PUC will review and investigate the requested rate increase. Aqua must prove that the requested rates are reasonable. After examining the evidence, the PUC may grant all, some or none of the request or may reduce existing rates. **As a result, the final effect on your bill may be different than Aqua's request.**

#### **ACTIONS YOU CAN TAKE**

You may challenge the Company's request by:

1. Sending a letter to the PUC. You can tell the PUC why you object to the requested rate increase in your letter. You can also tell the PUC about any other concerns you have about the Company. This information can be helpful when the PUC investigates the rate request. Send your letter to the Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265.
2. Attending or presenting testimony at PUC public input hearings. You can attend or be a witness at a PUC public hearing. The PUC holds public input hearings if it opens an investigation of the Company's rate increase request and if there is enough interest in the case. At these hearings you

may present your views in person to the PUC judge and to Company representatives. Testimony under oath becomes part of the rate case record. The PUC holds these hearings in the service area of the Company. For more information, call the PUC at 800.692.7380.

3. Becoming a party by filing a formal complaint. If you want to be a party to the case, you must file a formal complaint. You then have an opportunity to take part in all hearings about the rate increase request. You can receive copies of all materials distributed by the other parties. Formal complaints should be filed with the PUC before Jul. 22, 2024. If no one files a formal complaint, the PUC may grant all, some or none of the request without holding a hearing before a PUC judge. You can request a formal complaint form by writing to the Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265, or by going to its website: [www.puc.pa.gov](http://www.puc.pa.gov).

### MAIN DIVISION



CATHERINE MORAN  
102 DENBIGH TER  
WEST CHESTER, PA 19380-1147



M1-315551

Return Service Requested

PRESORTED  
FIRST-CLASS MAIL  
U.S. POSTAGE  
PAID  
SOUTHEASTERN, PA  
PERMIT NO. 229



762 W. Lancaster Ave.  
Bryn Mawr, PA 19010



Main Division

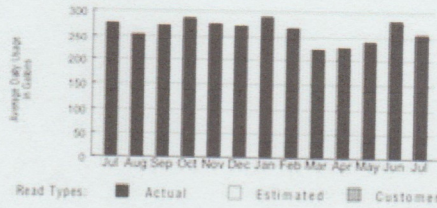
M1

Meter Data	Meter	Size	Billing Period	Days	Read Type	Meter Readings	Usage	Units
	21114628	5-8	07/09/24	29	Actual	256200	7,500	Gallons
			06/10/24		Actual	248700		
Average Daily Usage = 258 Gallons			Total Days: 29		Total Usage:		7,500	Gallons

**Billing Detail**

Amount Owed from Last Bill	\$ 378.59
Total Payments Received	378.59
Remaining Balance	0.00
Customer Charge Water	20.51
2,000 gallons @ \$0.01305 per gallon	26.10
Next 5,500 gallons @ \$0.015451 per gallon	84.98
Current Water Charges	131.59
Customer Charge Sewer	98.95
7,500 gallons @ \$0.012837 per gallon	96.28
Current Sewer Charges	195.23
Distribution System Improvement Charge (Water)	5.61
State Tax Adjustment Surcharge - Water	0.41 Credit
Distribution System Improvement Charge (Sewer)	3.34
State Tax Adjustment Surcharge - Sewer	0.18 Credit
Amount Due	\$ 335.18

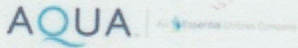
**Water Usage History**



**Message Center** (see reverse side for other information)

- Effective July 1, 2024, the allowable water DSIC is 4.26%. The PA Public Utility Commission permits a maximum water DSIC of 7.50%.
- Effective July 1, 2024, the allowable wastewater DSIC is 1.71%. The PA Public Utility Commission permits a maximum wastewater DSIC of 5.00%.
- Effective January 1, 2024, the allowable water State Tax Adjustment Surcharge (STAS) is -0.31%.
- Effective January 1, 2024, the allowable wastewater State Tax Adjustment Surcharge (STAS) is -0.09%.

RETURN THIS PORTION WITH YOUR PAYMENT



Aqua Pennsylvania, Inc.  
762 W. Lancaster Avenue • Bryn Mawr, PA 19010-3489

MAKE CHECK PAYABLE TO:  
**Aqua PA**

Account Number

Please do not remit payment to the above address

Cyc=1007 Tup=5177872

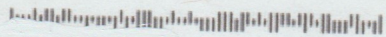
Seq=26804

DUE DATE  
08/02/2024

TOTAL AMOUNT DUE  
\$ 335.18

Amount Enclosed

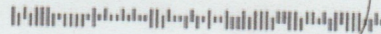
\$



97 GLOUCESTER CT  
DOWNTOWN PA 19335-1120

00042978403240690000000335180

**AQUA PENNSYLVANIA**  
PO BOX 70279  
PHILADELPHIA PA 19176-0279



*1 month*  
*2 adults, 3 children*

**OWEN EX**  
**1**

**Aqua Pennsylvania, Inc.**  
762 W. Lancaster Avenue  
Bryn Mawr, PA 19010-3489

Toll Free: **877.987.2782**  
Fax: **866.780.8292**  
**Aquawater.com**

Questions about your water/sewer service? Contact us before the due date.  
Bill Date **July 11, 2024**  
Total Amount Due **\$ 195.47**  
Current Charges Due Date **August 02, 2024**

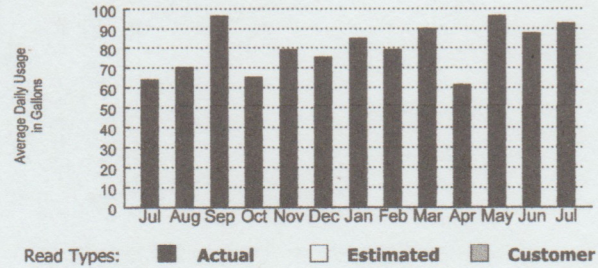
### Meter Data

Meter	Size	Billing Period	Days	Read Type	Meter Readings	Usage	Units
21091966	5/8	07/09/24	29	Actual	78800	2,700	Gallons
		06/10/24		Actual	76100		
Average Daily Usage = 93 Gallons		Total Days: 29		Total Usage:		2,700	Gallons

### Billing Detail

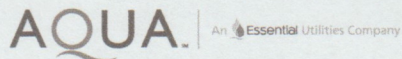
Amount Owed from Last Bill .....	\$ 196.65
Total Payments Received .....	196.65
<b>Remaining Balance .....</b>	<b>0.00</b>
Customer Charge Water .....	20.51
2,000 gallons @ \$0.01305 per gallon .....	26.10
Next 700 gallons @ \$0.015451 per gallon .....	10.82
Current Water Charges .....	57.43
Customer Charge Sewer .....	98.95
2,700 gallons @ \$0.012837 per gallon .....	34.66
Current Sewer Charges .....	133.61
Distribution System Improvement Charge (Water) .....	2.45
State Tax Adjustment Surcharge - Water .....	0.18 Credit
Distribution System Improvement Charge (Sewer) .....	2.28
State Tax Adjustment Surcharge - Sewer .....	0.12 Credit
<b>Amount Due .....</b>	<b>\$ 195.47</b>

### Water Usage History



### Message Center (see reverse side for other information)

- Effective July 1, 2024, the allowable water DSIC is 4.26%. The PA Public Utility Commission permits a maximum water DSIC of 7.50%.
- Effective July 1, 2024, the allowable wastewater DSIC is 1.71%. The PA Public Utility Commission permits a maximum wastewater DSIC of 5.00%.
- Effective January 1, 2024, the allowable water State Tax Adjustment Surcharge (STAS) is -0.31%.
- Effective January 1, 2024, the allowable wastewater State Tax Adjustment Surcharge (STAS) is -0.09%.



**Aqua Pennsylvania, Inc.**  
762 W. Lancaster Avenue • Bryn Mawr, PA 19010-3489

Please do not remit payment to the above address

Cyc=10G7 1up=5177872

Seq=26608



118 CHAPEL CT  
DOWNTOWN PA 19335-1106

*2 retired adults  
1 month*

Account Number

Withdrawn on or after  
**08/02/2024**

**TOTAL AMOUNT DUE**  
**\$195.47**

### Do Not Pay

If your Current Balance is less than the Total Amount Due listed on this statement, the lesser amount will be withdrawn.

**OWEN EX**  
**2**

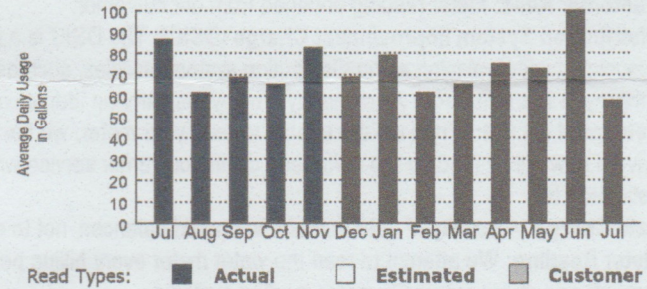
**Meter Data**

Meter	Size	Billing Period	Days	Read Type	Meter Readings	Usage	Units
21114756	5/8	07/09/24	29	Actual	70100	1,700	Gallons
		06/10/24		Actual	68400		
Average Daily Usage = 58 Gallons		Total Days: 29		Total Usage:		1,700	Gallons

**Billing Detail**

Amount Owed from Last Bill .....	\$ 392.02
Total Payments Received .....	392.02
<b>Remaining Balance</b> .....	<b>0.00</b>
Customer Charge Water .....	20.51
1,700 gallons @ \$0.01305 per gallon .....	22.19
Current Water Charges .....	42.70
Customer Charge Sewer .....	98.95
1,700 gallons @ \$0.012837 per gallon .....	21.82
Current Sewer Charges .....	120.77
Distribution System Improvement Charge (Water) .....	1.82
State Tax Adjustment Surcharge - Water .....	0.13 Credit
Distribution System Improvement Charge (Sewer) .....	07
State Tax Adjustment Surcharge - Sewer .....	0.11 Credit
<b>Amount Due</b> .....	<b>\$ 167.12</b>

**Water Usage History**



*Ihenson* *Substitute teacher*

**Message Center** (see reverse side for other information)

- Effective July 1, 2024, the allowable water DSIC is 4.26%. The PA Public Utility Commission permits a maximum water DSIC of 7.50%.
- Effective July 1, 2024, the allowable wastewater DSIC is 1.71%. The PA Public Utility Commission permits a maximum wastewater DSIC of 5.00%.
- Effective January 1, 2024, the allowable water State Tax Adjustment Surcharge (STAS) is -0.31%.
- Effective January 1, 2024, the allowable wastewater State Tax Adjustment Surcharge (STAS) is -0.09%.

M E M O

To: Honorable Gail Chiodo  
Honorable Alphonso Arnold III

CC: Ms. Christina Biggica

From: Mary Kay Owen/Aqua PA Customer

Date: August 5, 2024

RE: Aqua PA 2024 Request for Rate Increase

Aqua PA is requesting *again*, to significantly increase residential customer water/wastewater rates.

**Philadelphia Inquirer May 17, 2022:**

*“A half-million Aqua Pennsylvania [water and wastewater customers](#) are about to experience the impact of rising infrastructure costs.*

*Rates for 440,000 [Aqua](#) water customers are set to go up about 10% this week, according to an order posted Monday by the [Pennsylvania Public Utility Commission](#). Rates for [Aqua](#)’s 40,000 wastewater customers will go up 51% or more.”*

Now, two years later, Aqua PA is petitioning to increase rates another 20% for wastewater **AND** 19% for water!

Here are **current** customer bills:

Aqua Mandated Monthly charge for Wastewater: \$98.95  
Aqua Mandated Monthly charge for Water: \$20.51  
Combined Mandated *Monthly* Fee \$119.46 ***prior to any usage***

July 11, 2024, Actual **Monthly** Bills (from my neighbors--please see attached scans)

One Person (me) **\$167.12** Retired Couple **\$195.47** Family (2 adults/3 children): **\$335.18**

Please refuse this latest rate increase in fairness to PA residents who have been repeatedly bulldozed by special interests, exorbitantly paid CEOs, and lobbyists. We are unable to further trim family budgets to accommodate repeated, unreasonable, and costly utility costs.

Thank you for your consideration.

OWEN EX

4

SCHEDULE OF RATES

## RATE ZONE 11 – METERED

The rates under this schedule apply to all customer classes in the territories served subject to Rate Zone 11 rates as noted in the Description of Territories Served section under this tariff unless otherwise specifically identified below.

QUARTERLY SERVICE & CONSUMPTION CHARGES (\$)

		Gallons per Quarter	Rate Zone 11 Quarterly (\$)	
<u>RESIDENTIAL</u>	Base		\$ 136.38	
	Excess 1	0 to 15,000	\$ 23.2590	per 1000 gallons
	Excess 2	15,001 and over	\$ 33.4350	per 1000 gallons
<u>COMMERCIAL 1 &amp; PUBLIC</u>	Base		\$ 187.56	
	Excess 1	0 to 15,000	\$ 34.8500	per 1000 gallons
	Excess 2	15,001 and over	\$ 44.8680	per 1000 gallons
<u>COMMERCIAL 2</u>	Base		\$ 187.56	
	Excess 1	0 to 15,000	\$ 44.5800	per 1000 gallons
	Excess 2	15,001 and over	\$ 50.0000	per 1000 gallons
<u>INDUSTRIAL</u>	Base		\$ 934.65	
	Excess 1	0 to 15,000	\$ 44.5800	per 1000 gallons
	Excess 2	15,001 and over	\$ 50.0000	per 1000 gallons

**COMMERCIAL 1 class (Rate Zone 11 - New Garden Division only)**

Shall be defined as each commercial, retail, industrial or institutional establishment and each bedroom unit of a motel, hotel or boardinghouse, having sanitary facilities, including stores, food markets, professional offices, mushroom houses, automotive repair garages and establishments not regularly preparing and/or dispensing food or beverages, but excluding those uses enumerated in the Commercial 2 class, and excluding industrial establishments discharging biodegradable industrial waste.

**COMMERCIAL 2 class (Rate Zone 11 - New Garden Division only)**

Shall be defined as each restaurant, bar, institution or establishment regularly preparing and/or dispensing food or beverages, whether for consumption on or off the premises, including but not limited to stores, food markets, delicatessens, food marts, schools, day-care centers, or other establishments requiring food-handling licensing, and beauty parlor and service stations.

2/17/2021	5/15/2024	USAGE DATA			CHARGES				\$ 68,597.44	\$ 18,380.88	\$ 50,216.56
DOS	Thou Gals	ACTUAL							ACTUAL	SAVINGS	ADJUSTED
1275	932	GPD	731.0	225.0							
		EDU	3.25	GPD/EDU	Defined in AQUA Tariff					BASE	ADJUSTED BILL
DOS	TOTAL	Excess 1	Excess 2	EDU	BASE	EXC1 \$	EXC2 \$	Total	IF 4-EDU	for 4-EDU	
91	54	15	39	11	\$ 2,063.16	\$ 522.75	\$ 1,749.85	\$ 4,335.76	\$ 1,312.92	\$ 3,022.84	
92	63	15	48	11	\$ 2,063.16	\$ 522.75	\$ 2,153.66	\$ 4,739.57	\$ 1,312.92	\$ 3,426.65	
90	40	15	25	11	\$ 2,063.16	\$ 522.75	\$ 1,121.70	\$ 3,707.61	\$ 1,312.92	\$ 2,394.69	
91	52	15	37	11	\$ 2,063.16	\$ 522.75	\$ 1,660.12	\$ 4,246.03	\$ 1,312.92	\$ 2,933.11	
90	89	15	74	11	\$ 2,063.16	\$ 522.75	\$ 3,320.23	\$ 5,906.14	\$ 1,312.92	\$ 4,593.22	
94	88	15	73	11	\$ 2,063.16	\$ 522.75	\$ 3,275.36	\$ 5,861.27	\$ 1,312.92	\$ 4,548.35	
90	43	15	28	11	\$ 2,063.16	\$ 522.75	\$ 1,256.30	\$ 3,842.21	\$ 1,312.92	\$ 2,529.29	
91	50	15	35	11	\$ 2,063.16	\$ 522.75	\$ 1,570.38	\$ 4,156.29	\$ 1,312.92	\$ 2,843.37	
91	82	15	67	11	\$ 2,063.16	\$ 522.75	\$ 3,006.16	\$ 5,592.07	\$ 1,312.92	\$ 4,279.15	
91	113	15	98	11	\$ 2,063.16	\$ 522.75	\$ 4,397.06	\$ 6,982.97	\$ 1,312.92	\$ 5,670.05	
91	41	15	26	11	\$ 2,063.16	\$ 522.75	\$ 1,166.57	\$ 3,752.48	\$ 1,312.92	\$ 2,439.56	
91	43	15	28	11	\$ 2,063.16	\$ 522.75	\$ 1,256.30	\$ 3,842.21	\$ 1,312.92	\$ 2,529.29	
90	78	15	63	11	\$ 2,063.16	\$ 522.75	\$ 2,826.68	\$ 5,412.59	\$ 1,312.92	\$ 4,099.67	
92	96	15	81	11	\$ 2,063.16	\$ 522.75	\$ 3,634.31	\$ 6,220.22	\$ 1,312.92	\$ 4,907.30	

14 QTRS  
4.2YRS

GPD                      EDU

593.4	2.64
684.8	3.04
444.4	1.98
571.4	2.54
988.9	4.40 over 4 EDU
936.2	4.16 over 4 EDU
477.8	2.12
549.5	2.44
901.1	4.00
1241.8	5.52 HIGHEST Q
450.5	2.00
472.5	2.10
866.7	3.85
1043.5	4.64 over 4 EDU

AQUA PA	RATES
	<b>COMMERCIAL 1</b>
BASE	\$ 187.56 per EDU/QTR
EXCESS 1	0-15000 \$ 34.85 per Thous
EXCESS 2	>15001 \$ 44.87 per Thous

**COMPLAINT**

Paying for 11 EDU

Highest QTR = 5.5 EDU

4 yr AVG EDU = 3.25 EDU

**REQUEST**

Lower my EDU count to 4 EDU based on usage history

**MINTER EX**  
**2**



Commonwealth of Pennsylvania  
**Pennsylvania Public Utility Commission**  
 Harrisburg, PA 17105-3265  
**EFILING - FILING DETAIL**

<b>Date Created</b>	<b>Filing Number</b>
7/14/2024	2616011

Your filing has been electronically received. Upon review of the filing for conformity with the Commission's filing requirements, a notice will be issued acknowledging acceptance or rejection (with reason) of the filing. The matter will receive the attention of the Commission and you will be advised if any further action is required on your part.

The date filed on will be the current day if the filing occurs on a business day before or at 4:30 p.m. (EST). It will be the next business day if the filing occurs after 4:30 p.m. (EST) or on weekends or holidays.

**Representing:** MTEK SALES AND SERVICE  
**Case Description:** Formal Complaint To Proposed Rate Case Increase  
**Transmission Date:** 7/14/2024 4:03 PM  
**Filed On:** 7/15/2024 8:00 AM  
**eFiling Confirmation Number:** 2616011

File Name	Document Type	Upload Date
Formal Complaint To Proposed Rate Increase.pdf	Formal Complaint to Proposed Rate Increase	7/14/2024 4:02:28 PM
MTEK SALES AND SERVICE CALCULATIONS - AND REQUEST TO LOWER EDU's TO ACTUAL USAGE.pdf	Formal Complaint to Proposed Rate Increase	7/14/2024 4:02:54 PM
DOC044.pdf	Formal Complaint to Proposed Rate Increase	7/14/2024 4:03:15 PM

For filings exceeding 250 pages, the PUC is requiring that filers submit one paper copy to the Secretary's Bureau within three business days of submitting the electronic filing online. Please mail the paper copy along with copy of this confirmation page to Secretary, Pennsylvania Public Utility Commission, 400 North Street, Harrisburg PA 17120 a copy of the filing confirmation page or reference the filing confirmation number on the first page of the paper copy.

**No paper submission is necessary for filings under 250 pages.**

You can view a record of this filing and previous filings you have submitted to the PUC by using the links in the Filings menu at the top of the page. Filings that have been submitted within the last 30 days can be viewed by using the Recent Filings link. Older filings can be viewed by using the search options available in the Filing History link.

# PENNSYLVANIA PUBLIC UTILITY COMMISSION

## Formal Complaint to Proposed Rate Increase

Filing this form will make you a party to a legal proceeding or case.  
If you do not wish to be a party to the case, consider filing a Comment to Proposed Rate Increase.

To complete this form, please type or print legibly in ink.

### 1. Customer (Complainant) Information (required)

Provide your name, mailing address, county, telephone number(s), e-mail address and utility account number. It is your responsibility to update the Commission with any changes to your address and to where you want documents mailed to you. Failure to provide this information may cause your complaint to be considered as deficient.

Name Henry Clark Minter III  
Street/P.O. Box 992 Reginald Dr Apt # \_\_\_\_\_  
City West Chester State PA Zip 19382  
County CHESTER

Telephone Number(s) Where We Can Contact You During the Day (required):

( ) \_\_\_\_\_ (home) (484) 401-5401 (mobile)

E-mail Address (required): Hcminter@gmail.com

Utility Account Number (from your bill): 0026429501496501

If your complaint involves utility service provided to a different address or in a different name than your mailing address, please list this information below.

Name MTEK SALES & SERVICE  
Street/P.O. Box 1300 BALTIMORE PIKE  
City TOUGHKENSAMON State PA Zip 19374

### 2. Name of Utility

Provide the full name of the utility who filed the proposed rate increase about which you are complaining. The name of your utility is on your bill.

AQUA PENNSYLVANIA

### 3. PUC Case Docket Number

Provide the Public Utility Commission case docket number (if known). It begins with the letter "R" and contains the year of filing and a 7-digit code, such as R-2014-1234567.

R-2024-3047822



4. Type of Utility Service

Check the box listing the type of utility service that is the subject of your complaint (check only one):

- ELECTRIC
- GAS
- WATER
- STEAM HEAT
- STORM WATER
- WASTEWATER/SEWER
- TELEPHONE/TELECOMMUNICATIONS (local, long distance)
- MOTOR CARRIER (e.g. taxi, moving company, limousine)

5. Reason for Complaint

Explain why you oppose the company's proposed rate increase. Use additional paper if you need more space.

I FEEL MY BUSINESS HAS BEEN OVERCHARGED SIGNIFICANTLY SINCE AQUA PURCHASED THE NEW GARDEN WASTEWATER SYSTEM

SEE ATTACHMENTS

6. Requested Relief

How do you want your complaint to be resolved? Use additional paper if you need more space.

I WOULD LIKE MY BASE CHARGE TO BE ADJUSTED BASED ON ACTUAL USAGE CURRENTLY CHARGED FOR 11 EDU ACTUAL USAGE IS APPROXIMATELY 4 EDU.

7. Legal Representation - SELF REPRESENTATION

If you are filing a Formal Complaint to Proposed Rate Increase as an individual on your own behalf, you are not required to have a lawyer. You may represent yourself at the hearing.

If you are represented by a lawyer **in this matter**, provide your lawyer's name, address, telephone number, and e-mail address, (all required contact information). Please make sure your lawyer is aware of your complaint. If represented by a lawyer, both you and your lawyer must be present at your hearing.

Lawyer's Name \_\_\_\_\_

Street/P.O. Box \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Area Code/Phone Number \_\_\_\_\_

E-mail Address \_\_\_\_\_

Note: Corporations, associations, partnerships, limited liability companies and political subdivisions are required to have a lawyer represent them at a hearing and to file any motions, answers, briefs or other legal pleadings.

8. Verification and Signature

You must sign your complaint. Individuals filing a Formal Complaint to Proposed Rate Increase must print or type their name on the line provided in the verification paragraph below and must sign and date this form in ink. If you do not sign the Formal Complaint to Proposed Rate Increase, the PUC will not accept it. By filing this Formal Complaint to Proposed Rate Increase, you will be a party to the case. If you efile your formal rate complaint, an electronic signature is acceptable.

**Verification:**

I Heidi Clark Minton DTA, hereby state that the facts above set forth are true and correct (or are true and correct to the best of my knowledge, information and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Heidi Clark Minton DTA  
(Signature of Complainant)

7-10-24  
(Date)

PRESIDENT - MTRK SALES & SERVICE

Title of authorized employee or officer (only applicable to corporations, associations, partnerships, limited liability companies or political subdivisions)

Note: If the Complainant is a corporation, association, partnership, limited liability company or political subdivision, the verification must be signed by an authorized officer or authorized employee. If the Formal Complaint to Proposed Rate Increase is not signed by one of these individuals, the PUC will not accept it.

9. **How to File and Receive Service**

**You should electronically file your Formal Complaint to the Proposed Rate Increase with the Secretary.** To do so, establish an account free of charge on the PUC's eFiling system, which may be accessed at <http://www.puc.pa.gov/efiling/default.aspx>.

**If you do not electronically file your Formal Complaint to Proposed Rate Increase, mail the completed form (along with any attachments) to the address listed below:**

By overnight delivery, certified, priority mail – retain tracking information as proof of submission.

Secretary Pennsylvania Public Utility Commission 400 North Street 2 <sup>nd</sup> Floor Harrisburg, Pennsylvania 17120
---

**Note: Formal Rate Complaints sent by fax or e-mail will not be accepted.**

**Methods of Service by the Commission**

You have three options on how you would like to receive all communication from the Commission about your Complaint. By selecting one of the following three options, you are agreeing to receive all hearing notices, orders, and related documents about your Complaint in the manner selected.

**Select one of the following options for receiving all communications from the Commission:**

- a. **eFiling:** You agree to open and use an eFiling account – free of charge through the Commission's website. By selecting this method you will be eServed. (This is the best way to receive, file, and submit documents). If you have an existing eFiling account, you will automatically receive eService.

Initial here if you are selecting eFiling: HCW  
(And create an eFiling account at <http://www.puc.pa.gov/efiling/default.aspx>.)

- b. **Email:** You agree to receive all documents by email (using the email you provided on page 1). Please note that you will only be able to receive documents from the Commission by email and will not be able to file documents by Email or Fax. To submit documents to the Commission you must create an eFiling account accessed at <http://www.puc.pa.gov/efiling/default.aspx> or mail your submissions.

Initial here if you are selecting Email service: \_\_\_\_\_

- c. **First Class Mail:** You agree to be served only by First Class Mail (at the address on page 1 of this form).

Initial here if you are selecting First Class Mail service: \_\_\_\_\_

**\*If you do not select one of the three options above and you do not have an eFiling account, the Commission will serve all documents to you by First Class Mail at the address listed on page 1 of this form.**

**If you have any questions about filling out this form, please contact the Secretary's Bureau at 717-772-7777.**

**Keep a copy of your Formal Complaint to Proposed Rate Increase for your records.**

## EXHIBIT 1 OF 6 - DETAILED TESTIMONY

### INTRODUCTION

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23

My name is John Day, a homeowner in Lake Harmony, Pennsylvania. I have filed a formal complaint with the Commission, Docket No. C-2024-3049878. I also have active party status in this case to represent myself and the concerns of many homeowners in Lake Harmony, a highly mixed-use community.

I submit this detailed testimony in support of my formal complaint, to address the unjust application of an industry practice by Aqua PA for determining the wastewater rates in Lake Harmony. This practice and the corresponding proposed rates, are discriminatory for wastewater customers within the same rate zone for the same level of service. For example, unmetered customers consuming 1,000 gallons of water per month will be charged \$437 more annually than their metered counterparts – violating the principles of Pennsylvania utility ratemaking and Pennsylvania law.

In support of my testimony at the telephonic hearings on 14 August 2024 and this detailed written testimony, I have furnished the following exhibits:

*Exhibit 2* – Discovery findings via interrogatory questions, including the four sets propounded and served to Aqua PA by me, which are referenced throughout my written testimony and exhibits. I thank the staff of Aqua PA for the time and courtesies they extended to me in replying to my questions.

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

24 *Exhibit 3* – A 15-page, white paper titled, “*An Improper Application of Standard Industry*  
25 *Practice: Unmetered Rates & Lake Harmony, Pennsylvania,*” that reviews the flaws in the  
26 industry practice, as it has been applied to Lake Harmony. Just to be clear, I do not take  
27 issue with the merit of standard industry practices, nor their being applied to unmetered  
28 customers in communities that align with residential wastewater demand across the Aqua  
29 system. Rather, I take issue with this industry practice being applied to Lake Harmony,  
30 an outlier to the averages of the Aqua system. The whitepaper enumerates Commission  
31 decisions on contextual rulemaking and additionally offers suggestions for how the  
32 present situation might be remedied.

33

34 *Exhibit 4* – – Flow analyses of the Kidder Split Rock Wastewater Treatment Plant, which  
35 corroborates the seasonal and mixed use of Lake Harmony homes. This exhibit required  
36 transposing 5 years of monthly wastewater treatment data into a usable format for  
37 statistical analysis, from which meaningful charts were generated.

38

39 *Exhibit 5* – An actual meter read from Lake Harmony homeowner James Phillips, who  
40 installed a water meter at his own expense in October 2022, and has graciously provided  
41 the data from that read.

42

43 *Exhibit 6* – Electricity consumption data for 481 Moseywood Rd (Day household), showing  
44 daily consumption at about 37% of the average for Carbon County, Pennsylvania, and  
45 despite all-electric heating and cooking. This exhibit required downloading 730 days of  
46 electricity consumption data into a usable format for statistical analysis.

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

47

48 Taken together, I believe my voluntary effort with this matter has gone above and beyond  
49 the call of duty in the formal complaint process. It's astonishing and disappointing that  
50 Aqua's study and report to the 2022 Commission Order consisted of merely a single  
51 paragraph and an Excel table. While this complainant – on his own time – has participated  
52 in the rigor and protocols of active-party status, compounded and served four sets of  
53 interrogatory questions, researched and compiled 25 pages of detailed testimony, and  
54 compiled highly informative and annotated Exhibits.

55

56 This stark contrast of effort, I contend, highlights a profound disregard for the  
57 Commission's public policy mission and regulatory authority in the Commonwealth. In a  
58 utility base rate case, the burden of proof falls on the utility to justify its rates. In actuality,  
59 the burden of proof has fallen upon this complainant to demonstrate a flawed rate  
60 structure – Flat rates based on assumptions that are flat wrong.

61

62 I am participating with active-party status for the second time in three years – not because  
63 I enjoyed it so much the last time around. Hardly. But rather there is a fundamental  
64 unjustness that must be redressed. And with every month that goes by, this unjust and  
65 unreasonable cost to my family and many other Lake Harmony homeowners is only  
66 compounding.

67

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

68 I am indebted to the support of my fellow Lake Harmony homeowners who share their  
69 frustration with wastewater rates, and entrusted me to represent their concerns through  
70 the discovery phase. I am grateful for the procedural guidance received along the way –  
71 as I am not an attorney, and have had no legal team, research department, or  
72 administrative assistance. I am most grateful to my wife and daughter, as my attention  
73 on this matter has come from our time together as a family.



## EXHIBIT 1 OF 6 - DETAILED TESTIMONY

94 2. Set the lowest system-wide wastewater rate for Lake Harmony until accurate data  
95 justifies higher rates.

96 3. Allow customers to install meters at their own expense, and providing annual,  
97 actual consumption data for billing adjustments.

### 98 ***Complaint 2: Misleading Billing Practices***

99 Aqua PA's acquisitions of other water and wastewater systems across Pennsylvania have  
100 increased wastewater rates for existing consumers, without itemizing the associated  
101 expense in consumer bills. Lack of enumerating this expense is at odds with  
102 Pennsylvania's Unfair Trade Practices and Consumer Protection Law, as the present  
103 approach to tariff presentation and billing suggests that said expenses are related to  
104 meter size and volumetric consumption when they are not.

105 Remedy Sought - Explicitly list a system acquisition assessment in all water and  
106 wastewater tariffs and consumer bills to ensure transparency and avoid misleading  
107 consumers.

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

108 **AN INAPPROPRIATE STANDARD INDUSTRY PRACTICE**

109 During Aqua's 2021 base rate case, I testified about the shortcomings of using a  
110 systemwide average for water consumption to determine flat, unmetered rates. This  
111 testimony, along with other formal complaints, was incorporated into the Attorney  
112 General's Office of Consumer Advocate's (OCA) litigation on the matter.

113 The presiding Administrative Law Judge, Mary Long in the 2021 rate case, agreed with  
114 the OCA that Aqua should study the reasonableness of its unmetered rates, noting that  
115 while 4,000 gallons per month may be the industry standard, the method may not result  
116 in fair rates in areas with varied housing types. Unique circumstances in Aqua's service  
117 territory may warrant a different flat rate calculation method.

118  
119 Aqua objected to the ALJ's ruling to perform a study and report, and the issue was taken  
120 up by the Commissioners, who overruled Aqua's objection. The Commission Order  
121 stated:

122  
123 *"The flat charge should be reasonable and appropriate, and sufficient to cover the*  
124 *intended costs. The challenge is the development of a reasonable flat-rate charge. In this*  
125 *regard, we cannot ignore the disparity in the rates charged to metered and unmetered*  
126 *customers in certain divisions where Aqua serves both types of customers, as illustrated by*  
127 *the OCA. For these reasons, we agree with the ALJ's recommendation that directs Aqua*  
128 *to study and report the results in the next base rate proceeding, in order to determine*

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

129 *whether different methods of calculating a flat rate would be more reasonable for some*  
130 *systems rather than applying a system-wide average to each system. Accordingly, Aqua*  
131 *Exception No. 10 [objecting to study and report] is denied.”*

132

133 Aqua PA’s response last month to the 2022 PUC Order was less than satisfactory. Aqua’s  
134 analysis of comparing Lake Harmony homeowner’s wastewater rates using a system-  
135 wide average for water consumption versus the method of a zone-based average is not  
136 relevant to the matter at hand, nor the impetus of the 2022 Commission Order.<sup>1</sup> The  
137 charge of the Commission Order was related to studying alternative methods for  
138 calculating flat rate more reasonable for a mixed-use community such as Lake Harmony..

139

140 The information that follows is more illustrative of the research, inquiry, and analysis that  
141 is foundational to responding to the PUC’s 2022 Order. These findings corroborate the  
142 mixed-use nature of the Lake Harmony community and highlight the unjust implications  
143 of flat, unmetered rates. For your review, I present the following assessments:

144

- 145 ● Lake Harmony Residential Patterns
- 146 ● Lake Harmony Wastewater Treatment Patterns
- 147 ● Comparative Wastewater Rates – Rate Zone 4

148

149

---

<sup>1</sup> Aqua reply to OCA XIII-16

## EXHIBIT 1 OF 6 - DETAILED TESTIMONY

### 150 **Lake Harmony Residential Patterns**

151

152 Utility billing and service addresses offer insights into the characteristics of a community.

153 Significant discrepancies between these addresses often indicate a mixed-use

154 environment and/or the presence of second homes. In areas with short-term rentals, such

155 as vacation homes, the billing address often belongs to the property owner or

156 management company rather than the rental property itself. This pattern is prevalent in

157 tourist-heavy mixed-use areas, where residential properties may be rented out.

158

159 Data from Kidder Township is insightful and corroborates a mixed-use community.<sup>2</sup> A

160 review of billing addresses for township property tax mailing show the following:

161

162 ● Over 50% of Lake Harmony homeowners serviced by Aqua have their property tax  
163 invoices mailed to an address other than Kidder Township – of those, seventy-five  
164 percent (75%) are residents of Pennsylvania

165 ● 35% of all homes in Kidder Township serviced by Aqua PA are permitted by the  
166 township for short-term rentals – 65% are not

167

168 Specific to homes offering short-term rentals, Air DNA reports a 38% occupancy rate in

169 Lake Harmony.<sup>3</sup>

170

---

<sup>2</sup> Data source: Kidder Township, PA, Contact Suzanne Brooks, Township Manager

<sup>3</sup> Data Sources: Awning, AirDNA, 2023

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

171 **Lake Harmony Wastewater Treatment Patterns<sup>4</sup>**

172

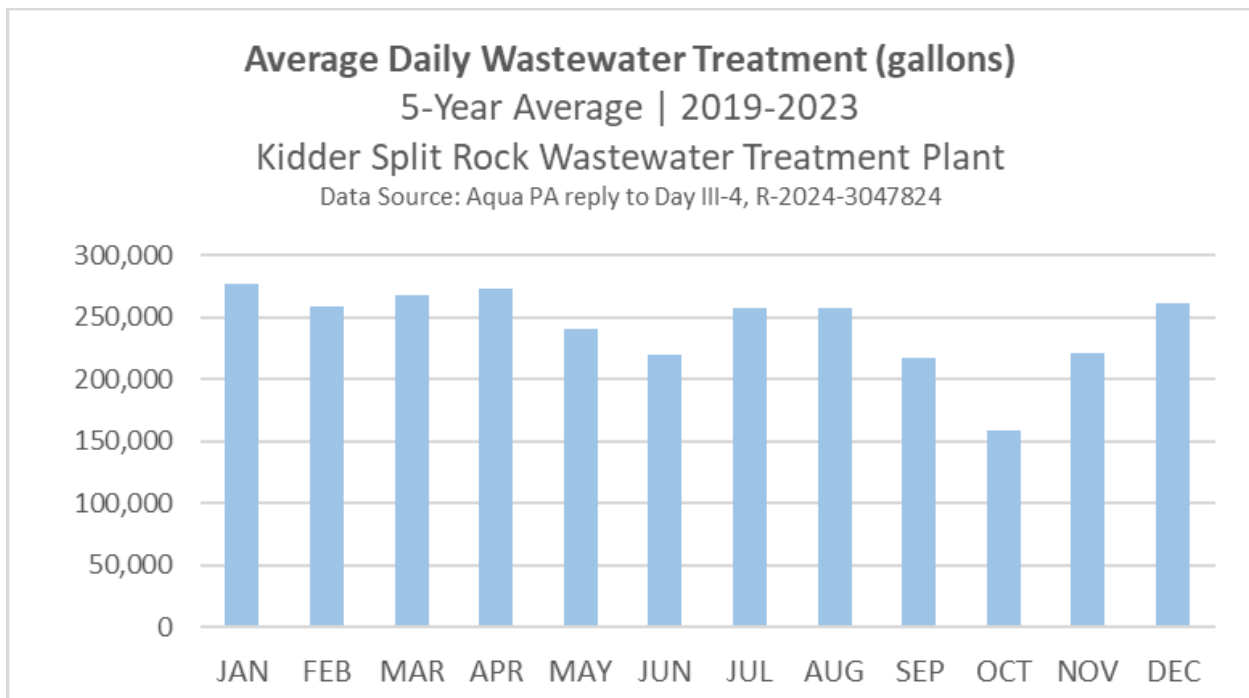
173 Five-year monthly averages of wastewater treatment volume show a consistent upward  
174 and downward pattern during certain months of the year, indicative of seasonal use..

175 Looking at monthly averages of daily consumption over a period of five years removes  
176 anomalous behavior during any given month of a year – as was the case in 2021 when

177 the average daily wastewater flow exceeded the plant’s treatment capacity in three  
178 months, and contributed to 2021 having the highest waste treatment volume for all five

179 years analyzed.<sup>5</sup>

180



181

182

<sup>4</sup> These analyses use wastewater treatment data that is inclusive of infiltration and inflow(I&I) volume. For more information about I&I estimates, see Aqua Reply to Day IV-4.

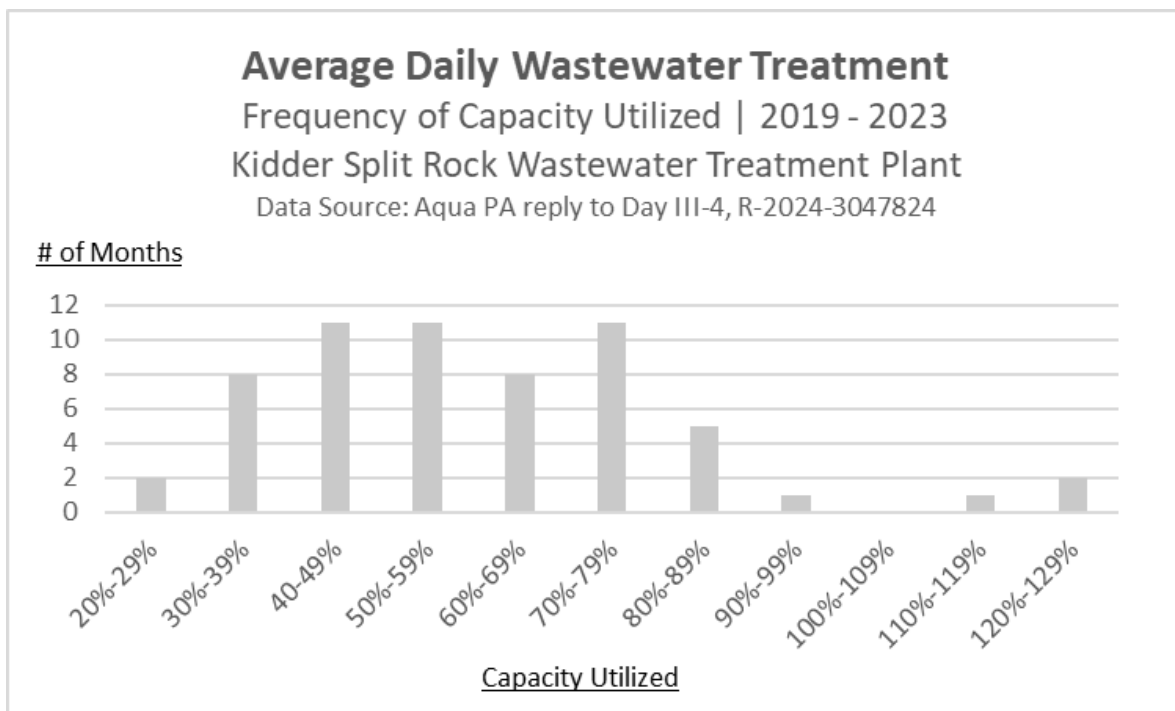
<sup>5</sup> See Day Exhibit 4. On account of time constraints, this testimony doesn’t pursue an explanation for the three, outlier months in 2021 where treatment volume exceeded capacity.

## EXHIBIT 1 OF 6 - DETAILED TESTIMONY

183  
184 Not surprising for the allure of Lake Harmony, months in Winter and Summer generate  
185 the most wastewater treatment activity – Proximity to nearby ski areas that operate from  
186 December to April and lake-related enjoyment during the warmest temperatures of July  
187 and August. .

188  
189 In reviewing demand distribution trends for wastewater treatment over a period of 60  
190 months, the data shows that, for 32 of the 60 months (roughly the median), the plant's  
191 average daily treatment ran at 59% or less of its 400,000-gallon daily capacity. Bear in  
192 mind, this is plant processing volume for the combined demand of both residential and  
193 commercial accounts and includes all processing for inflow and infiltration. Lack of water  
194 metering data prevents a break-out by sector, or the percent of inflow and infiltration.

195



196

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

197 **Comparative Wastewater Rates – Rate Zone 4**

198

199 Lake Harmony’s flat, unmetered rates are based upon the Aqua PA system wide average  
200 because, according to Aqua, the homes are unmetered for water.<sup>6</sup> While that may be true  
201 for many of Aqua’s customers in Lake Harmony, there are in fact homes with water meters  
202 installed but not in use for purposes of utility reading.<sup>7</sup> For example, Mr. James Phillips,  
203 who’s family frequents their home nearly every weekend, installed a water meter in June  
204 2022. Mr. Phillips regularly photo-logs his meter readings, and reports his family’s  
205 average monthly water consumption has been 1,390 gallons per month over a period of  
206 22 months.<sup>8</sup> Mr. Phillip’s water consumption is 36% of Aqua’s system wide average.

207

208 While Mr. Phillips represents a single data point, Aqua PA’s objection to a water metering  
209 pilot proposed by the Attorney General’s Office of Consumer Advocate in 2021 has  
210 prevented the collection of a wider sample base.<sup>9</sup>

211

212 The table below illustrates the inequity of billing rates proposed for Rate Zone 4 between  
213 metered and unmetered homeowners. The consumption rate of 1,000 gallons monthly (8  
214 days of home use) would be typical for a couple who use their property on weekends a

---

<sup>6</sup> Aqua reply to Day I-1

<sup>7</sup>Aqua PA has not fulfilled the burden of proof with evidence for how many homes in Kidder Township have water meters. This complainant is personally aware of homes metered for water in the Split Rock area of Lake Harmony and homeowners with private wells who have chosen to install meters at their own expense.

<sup>8</sup> See Day Exhibit 5 - Phillips Meter Read

<sup>9</sup> Aqua replies to Day III-10, Day IV-2B

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

215 couple times per month. Given the aforementioned service and billing address data  
 216 comparisons, homeowners with this usage profile may be more prevalent than expected.

217

<b>Rate Zone 4 - Wastewater Billing Inequity - 5/8 inch meter<sup>10</sup></b>	
<b>Proposed Metered</b>	<b>Proposed Unmetered</b>
Homeowner consumes 1,000 gallons of water monthly	Homeowner consumers 1,000 gallons of water monthly
<b>Monthly billing of \$98.90</b> (\$86.12 base + \$12.6810 per thousand gallons)	<b>Monthly billing of \$135.20</b> (flat rate)
<b>Annualized</b>	
On an annualized basis, for the two scenarios above, unmetered homeowners are paying <b>\$436.90</b> (\$437 rounded) more than their metered counterparts for the same level of wastewater treated. <sup>11</sup>	

218

219 The annualized difference of \$437, as detailed above, is on top of Aqua’s Rate Zone 4  
 220 having wastewater rates considerably higher than the average of wastewater rates across  
 221 all rate zones within the Aqua system, as illustrated in the table below.

222

<b>Wastewater Rates Comparison</b>	<b>Average for Aqua Rate Zones<sup>12</sup></b>	<b>Rate Zone 4 Metered</b>	<b>Rate Zone 4 Unmetered</b>
<i>Base Charge</i>	\$57.91	\$86.12	\$135.20
<i>Volumetric per 1,000 gallons</i>	\$11.43	\$12.68	

<sup>10</sup> Aqua reply to Day I-10

<sup>11</sup> Aqua reply to Day I-11

<sup>12</sup> Aqua reply to Day III-5. In the case of the Day household, this annualized difference is larger on account of monthly water consumption ranging from 700-750 gallons. See Aqua Reply to Day III-8.

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

223

## EXHIBIT 1 OF 6 - DETAILED TESTIMONY

### VIOLATIONS OF RATEMAKING PRINCIPLES AND LAW

224  
225

226 Utility ratemaking is governed by Pennsylvania law, not a standard industry practice.

227 Accordingly, the issue of unmetered rates in Lake Harmony are governed by the following:

228

229 • *Pennsylvania Public Utility Code* – Under 66 Pa. C.S. § 1301, rates must be just  
230 and reasonable. The law mandates that utilities provide adequate, efficient, safe,  
231 and reasonable service at just and reasonable rates.

232

233 • *Pennsylvania's Unfair Trade Practices and Consumer Protection Law* – Codified  
234 at 73 P.S. § 201-1 et seq., this law protects consumers from unfair or deceptive  
235 business practices.

236

237 Principles of Pennsylvania utility ratemaking include: Fair and Reasonable Rates; Non-  
238 Discrimination, and; Transparency. I will walk through why I believe Aqua's present  
239 unmetered rates for Lake Harmony homeowners violate these principles.

240

241 → **Principle of Fair and Reasonable Rates**

242

243 The best practice in utility ratemaking is to align charges with the actual cost of service.

244 For metered customers, rates are based on actual usage, which is a fair representation

245 of their demand on the wastewater system. Unmetered customers, however, are charged

246 a flat rate, which may not accurately reflect their usage. This discrepancy can lead to

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

247 unmetered customers being overcharged relative to their actual usage, violating the  
 248 principle of fair and reasonable rates. Wastewater rates for Lake Harmony homeowners  
 249 increased by 100% between 2019 and 2022, as summarized in the table below.<sup>13</sup> These  
 250 increases have produced a Rate Zone with a base charge that is trending nearly 50%  
 251 higher than the average base rate for wastewater, and 11% higher for the volumetric  
 252 charges. Unmetered status for low-volume wastewater customers in Rate Zone 4  
 253 compounds the inequity exponentially.

254

<b>Rate Zone 4</b>	<b>2021 base rate case</b>	<b>Base rate case prior to 2021</b>
Metered Base Rate	<b>Up 33.5%</b> – from \$62 to \$86.12 per month	n/a - only flat rates (see below)
Metered Volumetric Charge	<b>Up 33.5%</b> – from \$0.95 to \$1.281 per 1000 gallons	
Unmetered Flat Rate based on systemwide average consumption	<b>Up 33.4%</b> – from \$100 to \$135 per month	<b>Up 60%</b> – from \$62.50 per month to \$100

255

256 When unmetered homeowners in Rate Zone 4 are charged based on an “assumed”  
 257 average water usage of 3,870 gallons per month, those who consume significantly less  
 258 are unfairly overcharged compared to their metered counterparts. This flat rate does not  
 259 reflect their actual usage, leading to overpayment and unnecessary financial strain,  
 260 especially for those whose home is seldom used.

261

---

<sup>13</sup> Aqua reply to Day III-7.

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

262 Our household is among many in the mixed-use community of Lake Harmony. As the  
263 Commission endeavors to consider all the facts for adjudicating this rate case, I share  
264 with you newly obtained data related to the home ownership profile, ergo the service and  
265 billing addresses for residential accounts that Aqua serves in Kidder Township. Kidder  
266 Township has provided valuable insights as it relates to the billing addresses or property  
267 tax invoices, which by law must be sent to every resident by postal mail. The data shows  
268 that over 50% of Kidder Township homeowners, who are served by Aqua, have their  
269 property tax invoice mailed to a physical address other than Lake Harmony<sup>14</sup> – seventy-  
270 five percent (75%) of whom are Pennsylvania residents. Reflective of the mixed-use  
271 nature of the community, the data shows that 35% of all homes in Lake Harmony are  
272 permitted for short-term rental – 65% are not.

273

274 The service versus billing address data supports ALJ Mary Long's 2021 opinion that  
275 suggested system wide averages may not be reasonable for all communities served by  
276 Aqua. Hence, the Commission Order of Aqua to explore alternative methods for  
277 developing a flat wastewater rate more reasonable for Lake Harmony homeowners.

278

279 Aqua's lack of water metering data from Lake Harmony (for which the Company objected  
280 to obtain<sup>15</sup>) combined with the Company not delivering a credible study and report (per  
281 the Commission Order), in addition to a standard industry practice being demonstrated  
282 as improper for the community (Day Exhibit 3) – means that Aqua can neither substantiate

---

<sup>14</sup> Kidder Township, PA - contact: Susanne Brooks, Township Manager.

<sup>15</sup> Aqua reply to Day III-10

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

283 nor justify its proposed wastewater rates for Lake Harmony as fair and reasonable, thus  
284 violating the principle of setting rates that reflect actual service costs.

285

286 → **Principle of Non-Discrimination**

287

288 Rates should be applied uniformly across similar classes of consumers to prevent unfair  
289 financial burdens on specific groups. The differential in charges between metered and  
290 unmetered customers raises concerns of discriminatory practices. This practice would  
291 contravene the principle of non-discrimination, which requires that all customers within  
292 the same class are treated equitably.

293

294 In Lake Harmony, It's common for home use to be measured in days during any given  
295 month. Aqua calculates its system wide average for daily water consumption at 127  
296 gallons.<sup>16</sup> Over the past six months, our home use in Lake Harmony has not exceeded 5  
297 days per month – which would equate to about 635 gallons of water consumption monthly.  
298 That is 16.4% of Aqua's systemwide average of 3,870 gallons per month, the standard  
299 industry practice Aqua uses to assess its flat, unmetered wastewater rate in Rate Zone  
300 4..

301

302 Rates must be just, reasonable, and reflective of the actual cost of providing the service  
303 .Charging customers an annualized difference of \$437 for the same service level within

---

<sup>16</sup> Aqua reply to Day II-3

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

304 the same rate zone is inherently discriminatory. The practice of imposing a flat rate on  
305 unmetered customers disproportionately affects those who consume less water, leading  
306 to discrimination within the same customer class. By charging a flat rate in Lake Harmony,  
307 Aqua unfairly burdens low-usage customers, effectively penalizing them for their  
308 conservation efforts and violating the principle of non-discrimination. It unfairly benefits  
309 high-use consumers with lower rates.

310

311 Aqua PA's objection to the metering pilot proposed by the OCA in the 2021 base rate  
312 case, sustained by the Commission, was a disservice to homeowners in Lake Harmony  
313 and the ratemaking process in general. The inability to collect water consumption data  
314 has thwarted fact-based information vital for equitable ratemaking. Look no further than  
315 this rate case, where Aqua has been unable to respond to discovery questions citing the  
316 lack of water consumption data<sup>17</sup> Aqua has affirmed that its objection to a water metering  
317 pilot proposed by the OCA has prevented metered data collection.<sup>18</sup>

318

319 Why the burden of proof for the OCA's proposed remedy in 2021 was reassigned to the  
320 OCA is beyond my understanding. What is clear to me is that the absence of water  
321 consumption data in Lake Harmony has prevented the full consideration of all facts during  
322 this base rate case, and left many Lake Harmony homeowners holding the bag with unjust  
323 rates for over two years.

324

---

<sup>17</sup> Aqua reply to OCA XI-14

<sup>18</sup> Aqua reply to Day III-10

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

325 In the Summer of 2022, as Lake Harmony homeowners began learning the outcome of  
326 the Commission’s decision, Aqua issued a press release announcing a \$365,000  
327 donation to the Philadelphia Zoo’s red panda and otter exhibit to promote the virtues of  
328 water conservation.<sup>19</sup> I concur that water conservation is important, and there are many  
329 homeowners in Lake Harmony who welcome being rewarded for it as well. A sum of  
330 \$365,000 is considerably more than the dollar amount required to purchase and install  
331 meters for all 1,023 Lake Harmony homeowners served by Aqua.<sup>20</sup>

332

333 Aqua advocates for metering water consumption as a way to incentivize conservation,  
334 yet justifies the use of unmetered rates where meters are not installed. This stance is  
335 inconsistently applied: promoting conservation through meters is beneficial where they  
336 exist, but is deemed unnecessary in their absence. The inconsistency is evident in the  
337 current rate case. In it’s reply to OCA II-5, Aqua referred to ALJ Mary Long's 2021 base  
338 rate case opinion to justify the Company’s direction to meter customers across its system  
339 – noteworthy, as Judge Long’s opinion was issued responding to the OCA’s  
340 representation of Lake Harmony homeowners’ complaints<sup>21</sup>

341

342 The Commission has also approved Aqua expending \$24-million – paid by ratepayers –  
343 to upgrade its aging accounting and financial management software system.<sup>22</sup> While I  
344 take no issue with the need for upgrading business-critical software, nor necessarily the

---

<sup>19</sup> Aqua reply to Day I-9

<sup>20</sup> Aqua reply to Day I-13 (individual meter cost, \$222)

<sup>21</sup> Aqua replies to OCA II-5; Day II-2, Day III-9

<sup>22</sup> Aqua reply to Day I-12

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

345 dollars expended, installing meters for all Lake Harmony homeowners would amount to  
346 0.9% of the amount expended on that software upgrade.

347

348 We're left to wonder if water meters would come sooner to town, if Kidder Township re-  
349 incorporated as a Zoo.

350

351 **→ Principle of Transparency**

352

353 A transparent rate-setting process is essential for maintaining consumer trust and  
354 ensuring accountability. Aqua PA's flat rate system lacks transparency, as it does not  
355 provide clear justification for why unmetered customers who use their home infrequently  
356 are paying more than their metered counterparts.

357

358 Customers look to principles, laws, and regulators to drive equitable ratemaking – not a  
359 standard industry practice. The rationale behind why some homeowners in Rate Zone 4  
360 are paying \$437 more annually for wastewater service has not been clearly and fully  
361 explained to homeowners in Lake Harmony. It has not been subjected to local public  
362 scrutiny. I contend it has only undermined consumer trust and violates regulatory  
363 standards for transparency. Consumers are unable to understand how their rates are  
364 determined or whether these rates are justified. The lack of transparency in the rate-  
365 setting process, the rate tariffs, and the billing invoice contravenes Pennsylvania's  
366 principles of utility ratemaking, which require clear and open communication with  
367 consumers.

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

368

369 Pennsylvania Act 12, passed in 2016, has only compounded consumer confusion. The  
370 acquisition costs of other utilities are now commingled into Aqua's base rate charges –  
371 expenses that have nothing to do with a customer's meter size or volumetric consumption.  
372 Nor is Aqua able to report the percent of a customer's monthly billing that is attributed to  
373 its acquisition of other utilities<sup>23</sup> – even after a \$24-million investment in new financial  
374 accounting and reporting software.

375

376 Equivalent Dwelling Units (EDU) for commercial operations have introduced additional  
377 complexity and ambiguity to Aqua's pricing methods and transparency within the Lake  
378 Harmony community.<sup>24</sup> Aqua acquired the Kidder / Split Rock system in 2012, but it has  
379 not indicated whether or when it has reassessed EDU assignments for commercial  
380 operations in Lake Harmony over the past 12 years to ensure their accuracy relative to  
381 current commercial activities. While the total of commercial EDUs and 1,050 residential  
382 accounts appears consistent with the EDU design capacity of the Kidder / Split Rock  
383 plant, the plant has been operating at an average of about 61% of its daily capacity over  
384 the past five years.<sup>25</sup> In short, the mixed-use community of Lake Harmony has  
385 consistently fallen short of 100% occupancy in combined residential and commercial  
386 sectors, yet the community is billed at flat, unmetered rates that *assume* full-time  
387 occupancy. Assumed versus actual water consumption and wastewater treatment

---

<sup>23</sup> Aqua reply to Day I-5; Day I-12.

<sup>24</sup> Aqua replies to SCH I-5, I-7, I-8, I-9, I-13, I-14

<sup>25</sup> Day Exhibit 4

## EXHIBIT 1 OF 6 - DETAILED TESTIMONY

388 between residential and commercial sectors is not available, as Aqua objected to a  
389 proposed water metering pilot in the 2021 base rate case that would have offered insights  
390 into residential water consumption – which has manifested into a situation of consumer  
391 speculation and the Company’s plausible deniability for both or either sectors.

### 392 **THE COMPOUNDING COSTS TO LAKE HARMONY HOMEOWNERS**

393 Aqua PA’s proposed 2024 rate tariff for Rate Zone 4 will charge metered and unmetered  
394 wastewater customers different rates, resulting in an annualized cost difference for  
395 homeowners with the same water consumption profile. Take the difference of \$437  
396 annually for those consuming 1,000 gallons of water monthly – over 15 years, this annual  
397 cost difference amounts to nearly \$11,000 per homeowner, assuming a 7% annual  
398 interest return.

399

400 Shareholders of the Aqua PA monopoly for wastewater service are no more entitled to  
401 investment returns than its customers.<sup>26</sup> If Aqua is entitled to investment returns through  
402 the wastewater rates Lake Harmony homeowners pay, then it logically follows that Lake  
403 Harmony homeowners are entitled to the investment returns they lose due to unjust rates  
404 – e.g. returns that support savings for retirement, children’s college education, etc.  
405 Therefore, it is unjust for Aqua PA to propose a discriminatory rate structure that causes

---

<sup>26</sup> As a regulated monopoly operating in a free market economy, there is ample argument that Aqua PA is less entitled to its investment returns than its customers. Other utility sectors in Pennsylvania offer consumer choice in electrical generation suppliers, cable television services, and internet service providers. These choices empower customers with options to save money in accordance with price and/or level of use.

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

406 significant financial loss to homeowners without considering the potential investment  
407 returns they forgo.

408 While it's generally acknowledged that Aqua PA needs to meet its revenue requirements,  
409 this cannot be achieved at the expense of fairness and equity for ratepayers. The current  
410 flat rate system based on inaccurate assumptions places an unjust burden on the  
411 homeowners of Lake Harmony. The Commission's 2022 Order mandated a  
412 reassessment of this rate structure precisely because it recognized these issues. Aqua  
413 PA's minimal response to the Commission's Order does not meet the required standards  
414 of thoroughness and fairness.

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

415

**CONCLUSION**

416 Utility ratemaking is governed by Pennsylvania law, not a standard industry practice. The  
417 unjust rates in Lake Harmony / Kidder Township stem from Aqua’s self-serving and  
418 improper application of standard industry practices, compounded by its refusal to obtain  
419 actual water consumption data. Aqua’s stance has resulted in an endless loop of plausible  
420 deniability. Meanwhile, with each passing month, the unreasonable costs imposed on my  
421 family and many other Lake Harmony homeowners continue to escalate.

422

423 The flat, unmetered wastewater rates in Lake Harmony are predicated upon a commodity  
424 (water) that isn’t measured. This won’t change unless either Aqua PA deviates from its  
425 standard industry practice or the Pennsylvania Public Utilities Commission orders the  
426 commodity to be measured via metering. Consequently, the status quo leaves  
427 complainant homeowners in Lake Harmony twisting in the wind. This status quo bias  
428 benefits the utility but is detrimental to the homeowners and could be seen as neglecting  
429 the utility’s responsibility to ensure fair billing practices. Regulatory inaction a failure to  
430 protect consumers’ interests and enforce fair billing practices.

431

432 Consumers who use a fraction of Aqua’s systemwide average water consumption are  
433 unjustly paying flat rates based on assumed usage, not actual usage – leading to  
434 inequitable treatment and unnecessary financial burdens. As previously testified, over  
435 80% of homeowners in Kidder Township served by Aqua have their property tax invoices

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

436 mailed to a billing address other than the township's zip code – 75% of them happen to  
437 be Pennsylvania residents.

438

439 There are unmetered homeowners in Lake Harmony who, under Aqua's proposed  
440 wastewater rates, will be paying \$437 annually more than their metered counterparts in  
441 Rate Zone 4. And, there likely will be homeowners who are paying less than their metered  
442 counterparts. This is a clear violation of principles of utility ratemaking and Pennsylvania  
443 laws. It is unjust and unreasonable, has discriminatory impacts, and lacks transparency.

444

445 As the testimony, fact-based evidence and exhibits I have submitted clearly show, Aqua's  
446 use of a standard industry practice in Lake Harmony is incompatible with Pennsylvania's  
447 principles of utility rate making and Pennsylvania law. Continuation of this ratemaking  
448 implementation, I contend, is knowingly and willingly overcharging dozens, possibly  
449 hundreds, of residential customers in Lake Harmony for their wastewater service..

450

451 Accordingly, I urge the Commission to suspend the use of this industry practice with  
452 homeowners in Lake Harmony and move us to a more equitable arrangement. Put to an  
453 end this bizarre burden of proof that has been put on ratepayers like myself, to seek just  
454 and reasonable rates in a manner that a vast majority of Aqua's wastewater customers  
455 enjoy.

456

**EXHIBIT 1 OF 6 - DETAILED TESTIMONY**

457 Your Honor, this concludes my remarks. I thank you for your audience, the valuable time  
458 of all parties in this rate case, and your consideration of the important issues and the data  
459 I have compiled and shared with you today.  
460  
461 I request that my testimony and supporting exhibits be entered into the public record.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Constance Heppenstall  
Christopher E. Manning  
Date: 7/22/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET I INTERROGATORIES**

---

**DAY-I-1** Provide all fact-based evidence demonstrating the monthly water consumption of homeowners in Lake Harmony aligns with Aqua PA's systemwide average of 3,850 gallons.

**RESPONSE**

As was ruled upon in the Company's last base rate case at Docket Nos. R-2021-3027385 and R-2021-3027386, it is standard industry practice to base flat rates on a system-wide average where metered information is unavailable. Lake Harmony customers are on private wells where usage is not metered, therefore Lake Harmony's flat rates are based upon the Aqua PA systemwide average. Please refer to pages 272 through 276 of the Opinion and Order issued by the Public Utility Commission at the aforementioned dockets where unmetered residential wastewater rates are ruled upon.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Christopher E. Manning  
Renee T. Marquis  
Date: 7/22/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET I INTERROGATORIES**

---

**DAY-I-2** As per the Rate Zone 4 wastewater rates for metered and unmetered service, does the monthly billing rate include expense allocations associated with system acquisitions outside of Rate Zone 4, resulting from the Pennsylvania Public Utility Commission's approval of Aqua PA's 1329 filings?  
If the reply to LH 1-2 is 'yes' -- Please enumerate for each system acquisition -- from previous years and those pending in this base rate case -- the respective expense allocations to Rate Zone 4 metered and unmetered wastewater rates.

**RESPONSE**

The Company's current Rate Zone 4 wastewater rates do not contain any expense allocation from the recent system acquisitions of East Whiteland and Lower Makefield made under Section 1329. As noted in the Company's response to DAY-I-8, Rate Zone 4, in this current proceeding, is included in the Wastewater Base cost of service study which does include systems acquired through Section 1329 not requiring separate cost of service studies.

The costs associated with systems acquired under Section 1329 included in the Wastewater Base cost of service study are not stated on a stand alone basis and are not proposed that way in accordance with consolidation and single tariff pricing. Costs from all systems included in the Wastewater Base cost of service study are included in the revenue requirement calculation for the Wastewater Base Operation. It is important to note that consolidation, including systems acquired through 1329 filings, has allowed customers in Rate Zone 4 to experience rate decreases and minimal rate increases under the proposed new rates.

As noted in the customer notice received by each customer in Rate Zone 4, the average residential customer using 3,870 gallons a month would see their bill decrease from \$136.18 to \$135.20 per month under the current rate proposal. The average unmetered residential customer would see their bill increase from

**EXHIBIT 2 OF 6 - DISCOVERY**

\$134.32 to \$135.20 per month under the current rate proposal. The average non-residential customer using 5,400 gallons a month would see their bill decrease from \$152.98 to \$151.87 per month under the current rate proposal. The average unmetered non-residential customer would see their bill increase from \$131.96 to \$134.33 per month under the current rate proposal.

Based on the above, the current rate proposal for the average customer in Rate Zone 4 is no more than a 1.8% increase. This increase is significantly less than the 14.23% overall revenue requirement increase requested from the Wastewater Base operation. This is due in part to the consolidation that occurs, which includes systems acquired under Section 1329 in the Wastewater base cost of service.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Christopher E. Manning  
Renee T. Marquis  
Date: 7/22/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET I INTERROGATORIES**

---

**DAY-I-3** The following questions refer to the systems, if any, enumerated in reply to LH 1-2.

For each system, please answer the following:

- A. Y/N – Does this system provide wastewater services to customers in Lake Harmony / Kidder Township.
- B. Provide all data and analysis on how this acquisition serves the public interest of wastewater customers in Lake Harmony / Kidder Township
- C. Is the expense for this system acquisition allocated in both the fixed rate and volumic charges for wastewater rates in Rate Zone 4? Explain methodology.
- D. How has Aqua PA ensured that the acquisition expense of this system does not unduly discriminate against any particular group of wastewater ratepayers in Rate Zone 4?

**RESPONSE**

- A. The wastewater customers of Lake Harmony are not served by systems acquired through 1329 filings.
- B. Please refer to response DAY-I-2.
- C. The revenues from Rate Zone 4, along with the revenues from Rate Zones 1, 2, 3, 5, 6, 7, 8, 9, 10, 11 and 14, support the costs of the Company's Wastewater Base Operation. The revenue requirements for the Wastewater Base Operations include the costs to serve customers in these rate zones and are allocated to customers classes using the functional cost allocation methodology of cost allocation as described in the text "Financing and Charges for Wastewater Systems," Manual of Practice No. 27, published by the Water Environment Federation. This method is recognized for allocating the cost of providing wastewater service to customer classifications in proportion to the classifications' use of the commodity, facilities, and services.

**EXHIBIT 2 OF 6 - DISCOVERY**

It is generally accepted as a sound method for allocating the cost of wastewater service. All costs, including costs from prior acquisitions, are allocated by class and used to determine the proposed fixed rate and volumetric charges.

D. Please refer to response DAY-I-2.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Christopher E. Manning

Renee T. Marquis

Date: 7/22/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET I INTERROGATORIES**

---

**DAY-I-4** Do residential wastewater customers in Lake Harmony / Kidder Township who consume 1,000 gallons of water monthly have the same expense allocation burden of 1329-related filings as homeowners who consumes 5,000 gallons of water monthly?

**RESPONSE**

Please refer to the Company's response to DAY-I-2 noting the Lake Harmony system is not being calculated on a stand-alone basis and is included in the "Wastewater Base" cost of service which also includes systems acquired through Section 1329 not requiring separate cost of service studies. Absent stand-alone cost of service studies for Lake Harmony and each Section 1329 acquisition included in the "Wastewater Base" cost of service, the Company cannot provide an analysis as described.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Christopher E. Manning  
Renee T. Marquis  
Date: 7/22/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET I INTERROGATORIES**

---

**DAY-I-5** What is the monthly dollar amount that an unmetered wastewater customer in Lake Harmony / Kidder Township is paying for Aqua PA's previous acquisition of the Lake Harmony wastewater system? Enumerate the dollar amount by residential, commercial, and industrial customers.

**RESPONSE**

The Company is unable to provide this information as Lake Harmony's rates are not based on a standalone cost of service study. Lake Harmony is included in the "Wastewater Base" cost of service study.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Christopher E. Manning  
Renee T. Marquis  
Date: 7/22/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET I INTERROGATORIES**

---

**DAY-I-6** Respective to customer classes listed in LH 1-5, and other classes not identified, will the monthly billing amount charged by Aqua PA for the Lake Harmony system acquisition change over time? -- If so, specify how, supplying all data tables in support of response.

**RESPONSE**

Yes, as the Company files base rate cases, the monthly billing amounts charged to Lake Harmony customers are subject to change. Please refer to Docket Nos. R-2021-3027385 and R-2021-3027386 for the Company's last approved change to base rates for customers in Lake Harmony. The Company cannot project future rate changes that will be approved by the PAPUC.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Constance Heppenstall  
Christopher E. Manning  
Date: 7/22/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET I INTERROGATORIES**

---

**DAY-I-7**      What fact-based data and/or alternative methodologies informs the unmetered wastewater rates charged to residential, commercial, industrial, and other classes of customers in Lake Harmony / Kidder Township? Supply methodologies and data tables in support of response.

**RESPONSE**

Please refer to the Company's response to DAY-I-1. Please also refer to the proposed Tariff-Sewer-PA P.U.C. No. 4 filed as part of this proceeding for the proposed rates and Exhibit 5-B, Part I and Part II for the supporting methodologies and data.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Christopher E. Manning  
Renee T. Marquis  
Date: 7/22/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET I INTERROGATORIES**

---

**DAY-I-8** Were the costs of Aqua PA's acquisition of the Lake Harmony system allocated to other customers across the Aqua PA system? Explain rationale.

**RESPONSE**

Yes, as mentioned in the response to DAY-I-5, Lake Harmony's rates are not based on a standalone cost of service study. The Lake Harmony system is included in the "Wastewater Base" cost of service with numerous other wastewater systems. All of the costs for the systems included in the "Wastewater Base" cost of service are included in the calculation used to derive a revenue requirement upon which rates are set.

The Wastewater Base has a portion of its revenue requirement and costs being allocated out to Water Base Operations via the Act 11 Allocation. Please refer to the Schedule Act 11 of Exhibit 1-A in the Company's filing for the amount of Wastewater Base Revenue Requirement being allocated to the Water Base Operation.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Christopher E. Manning

Date: 7/22/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET I INTERROGATORIES**

---

**DAY-I-9** Y/N – Did aqua PA issued an announcement via ‘Business Wire’ on 20 July 2022 titled, “Aqua Pennsylvania Donates \$365,000 to The Philadelphia Zoo’s Water is Life Exhibit,” to recognize Aqua PA and the Zoo sharing the common goal of protecting and conserving water.

**RESPONSE**

Yes.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Constance E. Heppenstall  
 Christopher E. Manning  
 Date: 7/22/2024

**AQUA PENNSYLVANIA, INC. &  
 AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET I INTERROGATORIES**

**DAY-I-10** Y/N – For Rate Zone 4, Aqua PA proposes wastewater rates for the following scenarios, assuming homeowners with a 5/8 meter:

Scenario 1	Scenario 2
<b>Metered</b> wastewater service, where the homeowner consumes 1,000 gallons of water monthly	<b>Unmetered</b> wastewater service, where the homeowner consumes 1,000 gallons of water monthly
Monthly billing of \$97.06  (\$86.12 fixed + \$12.46 volumetric)	Monthly billing of \$134.33  (flat rate)

**RESPONSE**

No. The Company designs rates that include a volumetric portion for systems that have access to and utilize metered public water from a municipality or a private utility regulated by the PUC. These rates are included in proposed Tariff-Sewer-PA P.U.C. No. 4 filed as part of this proceeding.

Scenario 1 lists a correct proposed base charge of \$86.12 for a residential customer in Rate Zone 4 with a 5/8-inch meter but lists an incorrect volumetric charge of \$12.46. The proposed volumetric charge for a metered residential customer in Rate Zone 4 is \$12.6810 per thousand gallons per the proposed tariff. A metered residential customer using a 5/8-inch meter and 1,000 gallons per month, as described in Scenario 1, results in a proposed monthly bill of \$98.80.

Scenario 2 lists an incorrect proposed unmetered charge of \$134.33 for an unmetered residential customer in Rate Zone 4. The proposed unmetered charge for a residential customer in Rate Zone 4 is \$135.20 per the proposed tariff. Because usage is unmetered, the Company does not know the usage of the customer.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Constance E. Heppenstall  
Christopher E. Manning  
Date: 7/22/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET I INTERROGATORIES**

---

**DAY-I-11** Y/N – On an annualized basis, the difference in billing amount for the wastewater service scenarios outlined in questions LH1-10 is \$447.24

**RESPONSE**

No. The annualized difference in billing amounts between the two scenarios as described in question DAY-I-10 is \$436.80.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: William C. Packer  
Date: 7/22/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET I INTERROGATORIES**

---

**DAY-I-12** Over the past several years, Aqua PA has modernized its financial management system. Please provide deployment progress to date, total cost of deployment, and the key benefits of this financial system upgrade.

**RESPONSE**

Aqua PA fully implemented the financial accounting and reporting software ("SAP") on 12/31/2021 and began using SAP with the 2022 calendar year. The cost of the SAP implementation software for Aqua PA was approximately \$24 million.

SAP is one of the predominantly utilized enterprise reporting platforms ("ERP") in the world and by many utilities in the U.S. Aqua Pennsylvania, Inc.'s prior ERP, Lawson(Infor), was first installed/used in 1996 and upgraded multiple times over the course of 25 years. The Lawson system reached its product end of life and was no longer being supported as a software developer/owner.

Benefits include, but are not limited to the following:

- Fully supported ERP by software developer
- Modernized software capabilities and modules utilized by the business such as (Enterprise Asset Management and Treasury)
- Integration with the Company's fixed asset and other financial subledger systems to facilitate efficient financial reporting.
- Future ability to replace the Company's 25-year-old customer information and billing system.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Todd M. Duerr

Date: 7/22/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET I INTERROGATORIES**

---

**DAY-I-13** What is the cost for purchase and installation of a water meter.

**RESPONSE**

Meter and installation cost can vary considerably due to factors such as installation location and plumbing configuration (i.e., indoor vs outdoor, fire rating required, confined space entry, etc.) A typical residential 5/8-inch meter installation costs approximately \$222.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Todd M. Duerr  
Date: 7/26/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET I INTERROGATORIES**

---

**DAY-II-1** Refer to Aqua reply to OCA-III-4, materials supplied via zip file, specifically the document titled, "ACO Billing Basics," page 2, 'Meter Reading Basics' which explains meter reading approaches in use by Aqua.

Provide a breakdown of how many residential customers are metered via Manual Read (MR), Radio Frequency (RF), and Meter Wand (MW) as follows:

- a. Across the entire Aqua System
- b. Within Rate Zone 4

**RESPONSE**

- a. Please see the below table for count of residential Aqua Water customers meter reading methods:

Read Type	Count
Manually Read (MR)	1,674
Wand (MW)	4
Radio Frequency (RF)	424,898

- b. Please see the below table for residential Aqua Wastewater customers in Rate Zone 4 that are billed on a metered basis. These customers are where Aqua owns the water and wastewater systems:

Read Type	Count
Manually Read (MR)	-
Wand (MW)	-
Radio Frequency (RF)	541

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Renee T. Marquis  
Christopher E. Manning  
Date: 7/22/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET I INTERROGATORIES**

---

**DAY-II-2** Refer to Aqua reply to OCA II-5: "Please refer to page 272 of the Order from Aqua's last base rate case at Dockets No. R-2021-3027385 and R-2021-3027386 where the Commission states that "There is no question that volumetric billing is preferable to flat-rate billing, as it provides better price signals and promotes conservation, as well as resulting in a more equitable distribution of the variable costs of wastewater service."

Y/N – The Order Aqua references in its reply to OCA II-5 was the outcome of formal complaints initiated by Lake Harmony homeowners.

**RESPONSE**

The Company cannot confirm or deny that the statement noted was the outcome of formal complaints initiated by Lake Harmony homeowners.

The Company can confirm the following:

- There were concerns and testimony from wastewater customers in the Lake Harmony system regarding flat wastewater rates as voiced at public input hearings.
- The statement in question was in reference to how unmetered residential wastewater rates were to be determined for customers billed based on flat rate.
- The Company's rate design, which included unmetered residential wastewater rates, utilized the standard industry practice of basing the flat rate on a system-wide average usage per month plus a customer charge in situations where metered water information was unavailable.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Christopher E. Manning

Date: 7/22/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET I INTERROGATORIES**

---

**DAY-II-3** Refer to Aqua reply to OCA-IX-18, stating that Aqua calculates its proposed, unmetered residential wastewater rates by using a systemwide average of 3,870 gallons of water consumed monthly.

Using same systemwide averages, what does Aqua estimate as the residential gallons of water consumed daily?

**RESPONSE**

For the purposes of the filing, the Company calculated a systemwide average residential gallons of water consumed monthly. Using the systemwide residential average monthly gallon usage as the basis, please refer to the table below for the Company's estimated average residential gallons of water consumed daily.

<b>Systemwide Average Residential Monthly Usage (Gallons)</b>	<b>3,870</b>
<b>Days in Year</b>	<b>365</b>
<b>Average # of Days per Month (365 Days/12 Months)</b>	<b>30.42</b>
<b>Estimated Systemwide Average Residential Daily Usage (Gallons) (3,870 gallons/30.42 days)</b>	<b>127.23</b>

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Christopher E. Manning  
Renee T. Marquis  
Date: 8/01/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET III INTERROGATORIES**

---

**DAY-III-1** Please provide the number of wastewater accounts serviced by Aqua PA in Lake Harmony / Kidder Township -- broken out by residential, commercial, and industrial customers.

**RESPONSE**

	Customer Count
Residential	1,023
Commercial	6
Industrial	0

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Christopher E. Manning

Renee T. Marquis

Date: 8/05/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET III INTERROGATORIES**

---

**DAY-III-2** Referring to the number of residential accounts provided in response to LH 3-1:

- A) Please provide the total number and percent of residential accounts that have a billing address other than the zip code for Lake Harmony / Kidder Township.
- B) Please provide data on how the percent calculated in LH 3-2-A compares with Aqua's systemwide average of residential customer billing addresses being different than service addresses.

**RESPONSE**

- A) There were 215 residential accounts, or approximately 22% of the active residential accounts, in zip code 18624 that had a billing address outside of the 18624 zip code.
- B) The company does not track this information for reporting purposes; however it is noted that in addition to the service address, there is a mailing address field in which customer service representatives can manually enter an address at a customer's request. The mailing address field may or may not be the same as the service address. There are 19,345 Aqua PA wastewater accounts that have a mailing addresses that has been manually entered.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Todd M. Duerr

Date: 8/1/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET III INTERROGATORIES**

---

**DAY-III-3** What has been the total wastewater treatment capacity of the Lake Harmony wastewater treatment plant for 2019, 2020, 2021, 2022, 2023, and the first 6 months of 2024?

**RESPONSE**

The Kidder Split Rock (aka "Lake Harmony") wastewater treatment plant (WWTP) capacity is 400,000 gallons per day. This is the same for the time frame requested.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Todd M. Duerr  
Date: 8/1/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET III INTERROGATORIES**

---

**DAY-III-4** What has been the total volume of wastewater treated by the Lake Harmony wastewater treatment plant for 2019, 2020, 2021, 2022, 2023, and first 6 months of 2024? For each year, please provide the wastewater volume treated by month.

**RESPONSE**

Please see the below table:

Days	Month	Average Daily Flow	Total Volume
31	Jan-24	285,400	8,847,400
28	Feb-24	171,100	4,790,800
31	Mar-24	243,600	7,551,600
30	Apr-24	236,100	7,083,000
31	May-24	203,400	6,305,400
30	Jun-24	158,800	4,764,000
31	Jan-23	352,500	10,927,500
28	Feb-23	158,100	4,426,800
31	Mar-23	163,800	5,077,800
30	Apr-23	150,800	4,524,000
31	May-23	195,200	6,051,200
30	Jun-23	130,500	3,915,000
31	Jul-23	287,700	8,918,700
31	Aug-23	223,800	6,937,800
30	Sep-23	148,600	4,458,000
31	Oct-23	154,300	4,783,300
30	Nov-23	139,900	4,197,000
31	Dec-23	295,400	9,157,400
31	Jan-22	165,400	5,127,400

**EXHIBIT 2 OF 6 - DISCOVERY**

Days	Month	Average Daily Flow	Total Volume
28	Feb-22	291,500	8,162,000
31	Mar-22	259,000	8,029,000
30	Apr-22	355,800	10,674,000
31	May-22	243,500	7,548,500
30	Jun-22	224,300	6,729,000
31	Jul-22	182,800	5,666,800
31	Aug-22	197,600	6,125,600
30	Sep-22	143,900	4,317,000
31	Oct-22	148,400	4,600,400
30	Nov-22	214,000	6,420,000
31	Dec-22	308,100	9,551,100
31	Jan-21	283,800	8,797,800
28	Feb-21	208,000	5,824,000
31	Mar-21	483,500	14,988,500
30	Apr-21	292,300	8,769,000
31	May-21	288,900	8,955,900
30	Jun-21	244,900	7,347,000
31	Jul-21	317,900	9,854,900
31	Aug-21	445,400	13,807,400
30	Sep-21	501,800	15,054,000
31	Oct-21	228,400	7,080,400
30	Nov-21	348,200	10,446,000
31	Dec-21	198,300	6,147,300
31	Jan-20	215,000	6,665,000
28	Feb-20	276,000	7,728,000
31	Mar-20	142,000	4,402,000
30	Apr-20	215,000	6,450,000
31	May-20	183,000	5,673,000
30	Jun-20	251,000	7,530,000
31	Jul-20	276,000	8,556,000
31	Aug-20	257,000	7,967,000
30	Sep-20	184,000	5,520,000
31	Oct-20	163,000	5,053,000
30	Nov-20	200,000	6,000,000
31	Dec-20	310,000	9,610,000
31	Jan-19	366,100	11,349,100
28	Feb-19	357,800	10,018,400
31	Mar-19	289,500	8,974,500
30	Apr-19	349,400	10,482,000

**EXHIBIT 2 OF 6 - DISCOVERY**

Days	Month	Average Daily Flow	Total Volume
31	May-19	292,200	9,058,200
30	Jun-19	249,300	7,479,000
31	Jul-19	220,800	6,844,800
31	Aug-19	164,300	5,093,300
30	Sep-19	109,100	3,273,000
31	Oct-19	103,300	3,202,300
30	Nov-19	204,900	6,147,000
31	Dec-19	194,000	6,014,000

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Constance E. Heppenstall

Christopher E. Manning

Date: 8/01/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET III INTERROGATORIES**

---

**DAY-III-5** Across the Aqua system, please provide the average of all residential monthly wastewater rate tariffs being proposed for 5/8-inch metered service:

- A) Base charge?
- B) Volumetric charges?

**RESPONSE**

- A) The average proposed residential base charge across all rate zones is \$57.97.
- B) The average proposed volumetric charge across all rate zones is \$1.1431 per 1000 gallons.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Constance E. Heppenstall  
Christopher E. Manning  
Date: 8/01/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET III INTERROGATORIES**

---

**DAY-III-6** Across the Aqua system, please provide the lowest, residential monthly wastewater rate tariff being proposed for 5/8-inch metered service:

- A) Base charge?
- B) Volumetric charges?

**RESPONSE**

- A) The lowest base charge is \$47.64 which includes Rate Zone 1, 1A, 7, 9, 10, 12 and 14.
- B) The lowest proposed volumetric charge is \$0.2727 per 1000 gallons which is in Rate Zone 6, which has a higher monthly base charge of \$58.86.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Constance E. Heppenstall  
Christopher E. Manning  
Date: 8/01/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET III INTERROGATORIES**

---

**DAY-III-7** Referring to Manning response to LH I-2 (re-referenced by Aqua as 'DAY I-2') ...  
"It is important to note that consolidation, including systems acquired through 1329 filings, has allowed customers in Rate Zone 4 to experience rate decrease and minimal rate increases under the proposed new rates."

- A) Please provide the amount of increase in monthly wastewater rates in Rate Zone 4 -- in dollars and percentages -- resulting from Aqua's 2021 base rate case, and the base rate case prior.
- B) In Rate Zone 4, explain why the metered wastewater rates (with fact-based water consumption data) went down -- while the flat unmetered rates (without fact-based water consumption data) went up?

**RESPONSE**

- A) The Company's 2021 base rate case resulted in the customer charge for Rate Zone 4 increasing from \$62.00 to \$86.12 per month, or an increase of \$14.12 or 38.9% and the volumetric charge increasing from \$0.95 to \$1.2681 per 1000 gallons, or an increase of \$0.3181 or 33.5%. The flat rate charge increased from \$100.00 to \$133.35, or an increase of \$33.35 or 33.4%. In the prior case, Rate Zone 4 rates only included flat rates. In this prior case, the flat rate for Lake Harmony residents resulted in an increase from \$62.50 to \$100, or an increase of \$37.50 or 60.0%. The flat rate for Beech Mountain Lakes (also in Rate Zone 4 at the time) was increased from \$53.37 to \$80.00 per month, or \$26.63 or 49.9%.
- B) In Rate Zone 4, the metered base wastewater rates remained the same with no increase or decrease. The monthly bill was decreased due to the reset of the current DSIC charge to 0.0%. The flat unmetered rates increased minimally because the flat rate was based on a larger assumed volumetric use of 3,870 gallons per month.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Constance E. Heppenstall  
Christopher E. Manning  
Date: 8/01/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET III INTERROGATORIES**

---

**DAY-III-8** Referring to Heppenstall/Manning response to LH 1-10 (re-referenced by Aqua as 'DAY I-10') ... "the proposed volumetric charge for a metered residential customer in Rate Zone 4 is \$12.6810 per thousand gallons per the proposed tariff."

What would be the volumetric charge for a homeowner (5/8 meter), who consumes 750 gallons per month?

**RESPONSE**

Based on the tariff, the volumetric charge would be \$12.681 X .750 or \$9.51.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Renee T. Marquis  
Christopher E. Manning  
Date: 8/01/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET III INTERROGATORIES**

---

**DAY-III-9** Referring to Marquis response to LH I-2 (re-referenced by Aqua as 'DAY I-2') ...  
"The Company cannot confirm or deny that the statement noted was the outcome of formal complaints initiated by Lake Harmony homeowners."

A) Y/N – In Aqua’s 2021 base rate case, the Pennsylvania Attorney General’s Office of Consumer Advocate (OCA) recommended a water metering pilot program for Lake Harmony homeowners?

B) Y/N – In Aqua’s 2021 base rate case, the Pennsylvania PUC issued an Order stating the following:

*"The flat charge should be reasonable and appropriate, and sufficient to cover the intended costs. The challenge is the development of a reasonable flat-rate charge. In this regard, we cannot ignore the disparity in the rates charged to metered and unmetered customers in certain divisions where Aqua serves both types of customers, as illustrated by the OCA. For these reasons, we agree with the ALJ's recommendation that directs Aqua to study and report the results in the next base rate proceeding, in order to determine whether different methods of calculating a flat rate would be more reasonable for some systems rather than applying a system-wide average to each system. Accordingly, Aqua Exception No. 10 [objecting to the study and report] is denied."*

**RESPONSE**

A) Yes.

B) Yes.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Constance E. Heppenstall  
Christopher E. Manning  
Date: 8/01/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET III INTERROGATORIES**

---

**DAY-III-10** Referring to Happenstall/Manning response to LH I-10 (re-referenced by Aqua as 'DAY I-10') ... "The proposed unmetered charge for a residential customer in Rate Zone 4 is \$135.20 per the proposed tariff. Because usage is unmetered, the Company does not know the usage of the customer."

Y/N – During the Aqua's 2021 base rate, the Pennsylvania Attorney General's Office of Consumer Advocate (OCA) recommended a pilot water meter program for Lake Harmony homeowners that would have provided insights into customer usage data, to which Aqua objected?

**RESPONSE**

This assertion is true. During the Company's 2021 base rate case, the OCA recommended a pilot water meter program for Lake Harmony unmetered customers. This recommendation was objected to by the Company and was rejected by the Commission on page 275 in its Opinion and Order dated May 12, 2022 in Docket No. R-2021-3027386. See below for the language from the Commission's order:

"Based upon our review of the record evidence, we agree with the recommendation of the ALJ that the OCA's proposal be rejected, as it is not clear that the cost of the OCA's proposed pilot will achieve overall benefits to Aqua's customers that will outweigh the costs. The OCA does not explain: (1) Aqua's authority to place a meter on a person's water line; (2) how higher-usage customers could be "incentivized" to opt-in in the future; nor (3) why wastewater cost of service should be increased to cover the cost of installing, maintaining, and reading water meters for wastewater service. As such, we find no basis to reverse the ALJ's recommendation. Accordingly, OCA Exception No. 14 and Mr. Osinski's Exceptions are denied."

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Christopher E. Manning  
Date: 8/01/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET III INTERROGATORIES**

---

**DAY-III-11** Referring to Manning response to LH II-3 (re-referenced by Aqua as 'DAY II-3') ... that the Company's systemwide, daily average for water consumption is 127.23 gallons:

Y/N – Surpassing 1,000 gallons of wastewater treated monthly would be, on average, 8 days' worth of water consumption?

**RESPONSE**

Yes, a customer using 127.23 gallons daily would surpass 1,000 gallons in total in approximately 8 days.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Greg Herbert  
Date: 8/12/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET IV INTERROGATORIES**

---

**DAY-IV-1** Referring to Herbert reply to OCA XIII-16,

“The Company’s rate design as filed utilized the standard industry practice of basing the flat rate on a system-wide average usage per month plus a customer charge in situations where metered water information was unavailable. In order to move toward the Company’s goal of single tariff pricing, utilizing a system-wide average usage is reasonable to calculate a flat rate. Flat rates calculated using individual rate zone monthly averages would result in flat rate customers being further away from rate consolidation or single tariff pricing. For example, a flat rate customer in rate zone with a lower monthly usage than the monthly usage in the Main division would experience a greater increase than a metered customer of the same rate zone should they be consolidated to the Main division water or wastewater rates in future rate proceedings.”

- A) Being that Aqua does not collect water consumption data from Lake Harmony homeowners, what is the relevance and efficacy of comparing individual zone averages versus a systemwide average to calculate a flat unmetered rate that is more reasonable to a system where there is a significant mix of types of housing?
- B) Did Aqua study any additional or different methods other than the one method in its reply to OCA XIII-16?

**RESPONSE**

- A) It is more relevant to use systemwide averages to calculate flat unmetered rates for the sake of moving toward the Company’s goal of single tariff pricing. Where under a consolidated water or wastewater base rate, all flat rate customers will be charged the same rate for the same service provided regardless of the premise’s location in the Company’s service areas scattered throughout the Commonwealth.
- B) The Company maintains the method used for determining flat rates has been an acceptable practice for the Company and other water/wastewater utilities in past rate cases.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Renee T. Marquis

Christopher E. Manning

Date: 8/12/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET IV INTERROGATORIES**

---

**DAY-IV-2** Referring to Manning/Marquis response to Day I-3-C,

“The revenues from Rate Zone 4, along with the revenues from Rate Zones 1, 2, 3, 5, 6, 7, 8, 9, 10, 11 and 14, support the costs of the Company’s Wastewater Base Operation. The revenue requirements for the Wastewater Base Operations include the costs to serve customers in these rate zones and are allocated to customers classes using the functional cost allocation methodology of cost allocation as described in the text “Financing and Charges for Wastewater Systems,” Manual of Practice No. 27, published by the Water Environment Federation. This method is recognized for allocating the cost of providing wastewater service to customer classifications in proportion to the classifications’ use of the commodity, facilities, and services. It is generally accepted as a sound method for allocating the cost of wastewater service All costs, including costs from prior acquisitions, are allocated by class and used to determine the proposed fixed rate and volumetric charges.”

- A) Explain how Aqua is equitably applying this method, inclusive of commodity use, for homeowners in Lake Harmony who are unmetered, with no data on commodity use?
- B) In Rate Zone 4, will unmetered homeowners in Lake Harmony who consume 1,000 gallons of water at the proposed rate of \$135.20 monthly be assuming a higher proportion of said cost allocations than metered customers at \$98.90 monthly?

**RESPONSE**

- A) Please refer to the Company’s response to DAY-I-1. When allocating costs, the Company assumes an average usage for unmetered customers throughout the system.
- B) As the Company continues to note, the Lake Harmony system is not being calculated on a stand-alone basis and is included in the “Wastewater Base Operations” cost of service. Absent the ability to meter an unmetered customer, the Company cannot perform the requested analysis.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Todd Duerr  
Date: 8/12/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET IV INTERROGATORIES**

---

**DAY-IV-3** Referring to Duerr response to Day II-1, showing that Aqua uses RF technology to meter 100% of its wastewater customers in Rate Zone 4 where Aqua owns the water and wastewater system.  
What research has the Company performed into utilities across the United States that use RF technology or advanced metering infrastructure (AMI) to meter homes with private wells?

**RESPONSE**

As clarification, Aqua uses RF technology to read water meters in Rate Zone 4 where they exist.

Aqua has not performed research into utilities across the United States that use RF technology or advanced metering infrastructure (AMI) to meter homes with private wells. Water meter reading technology for meters on private wells will be functionally similar to water meters on a public water system. That said, there are inherent complications with metering private wells as compared to standard residential water supply, for example, approved rate structure, ownership, initial installation responsibility and cost, access for repair and replacement, shut-off procedure for delinquency or non-compliance, etc.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Todd Duerr  
Date: 8/12/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**JOHN DAY**

**SET IV INTERROGATORIES**

- 
- DAY-IV-4** Regarding the topic of Infiltration and Inflow (I&I) with the Lake Harmony system ...
- A) Given the present system condition, what is the estimated percentage of I&I -- and how does that compare to Aqua's systemwide average or systems of similar condition?
  - B) What work projects has Aqua completed, or will be performed over the next three years, to mitigate I&I?
  - C) For any I&I projects completed, is Aqua able to quantify a corresponding reduction of I&I?

**RESPONSE**

- A. Infiltration & Inflow (I&I) percentage cannot be directly measured / calculated as it varies by event. The annual PADEP Chapter 94 Wasteload Management Report compares annual average monthly flow to the average of the three-highest consecutive month flows as a means of assessing wet weather impacts. Based on that analysis, the treatment plant is not in a hydraulic overload nor projected to be in the next five-years. The following table shows those values for the past 5-years and the values are similar to other systems in similar condition. The permitted capacity of the WWTP 400,000 gallons per day.

	2019	2020	2021	2022	2023
Avg Annual Flow (MGD)	0.2253	0.2222	0.3201	0.2279	0.2001
Max 3-Mo Avg Flow (MGD)	0.3050	0.2597	0.4217	0.3021	0.2915
Max:Avg ratio	1.35	1.17	1.32	1.33	1.46

**EXHIBIT 2 OF 6 - DISCOVERY**

- B. The collection system in general can be classified to be in good to fair condition. There were no Sanitary Sewer Overflows in 2023. Manholes are regularly inspected by WWTP personnel for damage and grit is removed from manholes on an as-needed basis. Sewer lines are also pressure cleaned on an as needed basis to eliminate line blockages.

Work completed within the past three (3) years:

2023 – Phase 2 (Final) was completed. All manholes in Lake Harmony have been rehabilitated. Approximately 3,500 LF of 8-inch gravity sewer truss pipe that was in poor condition associated with the manholes was replaced with PVC pipe.

2022 – None.

2021 – One hundred eight (108) manholes were rehabilitated within the collection system.

Aqua continues to seek out sources of extraneous flow to reduce system susceptibility to wet weather induced flow. There are no major projects proposed for the next five (5) years.

- C. Correlation between projects and I&I reduction are not directly measurable. Collection system projects both are targeted at reducing I&I and extending the life of collection system assets.

**EXHIBIT 2 OF 6 - DISCOVERY**

**PA Attorney General's  
Office of Consumer Advocate**

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Gregory R. Herbert

Date: 06/18/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**OFFICE OF CONSUMER ADVOCATE**

**SET II INTERROGATORIES**

---

**OCA-II-5** Reference Statement No. 10, page 14, lines 21-23. Please identify all Commission orders and provide a copy of all documents relied upon to support Mr. Herbert's claim that the preference is to charge a metered rate when water reads are available.

**RESPONSE**

Please refer to page 272 of the Order from Aqua's last base rate case at Dockets No. R-2021-3027385 and R-2021-3027386 where the Commission states that "There is no question that volumetric billing is preferable to flat-rate billing, as it provides better price signals and promotes conservation, as well as resulting in a more equitable distribution of the variable costs of wastewater service among ratepayers".

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Gregory R. Herbert

Date: 07/10/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**OFFICE OF CONSUMER ADVOCATE**

**SET IX INTERROGATORIES**

---

**OCA-IX-18** Has Aqua reflected any reductions in revenue for declining customer usage for any customer accounts for which water utility service is not based on usage? If so, please identify, quantify and explain the impact on 2022, HTY 2023, FTY 2024, and the FPFTY 2025 revenue.

**RESPONSE**

No, it has not. However, in the prior case, the unmetered rates were calculated by using an average monthly residential consumption of 4,000 gallons. In the current case, the Company calculated the proposed unmetered rates by using an average monthly residential consumption of 3,870 gallons, as the average usage has declined from the prior case.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Todd M. Duerr

Date: 7/18/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**OFFICE OF CONSUMER ADVOCATE**

**SET X INTERROGATORIES**

---

**OCA-X-11** For each of the Company's water supply and distribution systems:

- a. Do all customers have a separate service line? If not, please explain.
- b. Do all customers have a separate curb stop/shut-off valve? If not, please explain.
- c. Do all customers have a separate water meter? If not, please explain.

**RESPONSE**

- a. No, not all Aqua water customers have a separate service line. It is common when Aqua purchases water systems where two or more customers are served by a single service line which branches into separate meters near the building. Aqua does not permit new customer connections to be served by a shared service line.
- b. No, not all Aqua water customers have a separate curb stop/shut off valve. It is common when Aqua purchases water systems that multiple customers are served by a single service line with a shared curb stop/shut off valve. Aqua does not permit new customer connections to be served by a shared service line and requires each new customer to have an individual curb stop/shut off valve.
- c. No, some Aqua customers in the Belle Aire Acres (aka "James Black water system"), Rhodes Terrace, Warden Place and Hamilton (aka "Saylorsburg") do not have a water meter. These customers are billed an unmetered rate for water service for one of the following reasons:
  1. they are a customer of a recent acquisition and meters have not yet been installed.
  2. they are in an area with seasonal water service due to shallow customer owned infrastructure.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Renee T. Marquis  
Christopher E. Manning  
Date: 7/24/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**OFFICE OF CONSUMER ADVOCATE**

**SET XI INTERROGATORIES**

---

**OCA-XI-13** Refer to Aqua Statement 2 at 9:12-15.

- a. Please provide a table identifying, for the approximately 4,500 customers switching from unmetered to metered wastewater billing, the number of customers in each division of each rate zone switching from unmetered to metered billing. Divisions and rate zones wherein no customers are switching to metered billing need not be included in the table.
- b. Please provide a table identifying, for the remaining (approximately 4,900) customers receiving unmetered wastewater billing, of the number of unmetered customers in each division of each rate zone. Divisions and rate zones wherein no customers receive unmetered billing need not be included in the table.

**RESPONSE**

- A. Please see the table below for the approximate number of customers switching from unmetered to metered wastewater billing.

	<b>Number of Customers</b>
Rate Zone 1A	71
Rate Zone 2	411
Rate Zone 3	1020
Rate Zone 5	21
Rate Zone 13	3026
<b>Total Customers</b>	<b>4549</b>

**EXHIBIT 2 OF 6 - DISCOVERY**

B. Please see the table below for the approximate number of customers remaining unmetered wastewater customers.

	<b>Number of Customers</b>
Rate Zone 1	7
Rate Zone 1A	32
Rate Zone 2	766
Rate Zone 3	23
Rate Zone 4	2097
Rate Zone 5	2
Rate Zone 6	4
Rate Zone 7	489
Rate Zone 8	42
Rate Zone 10	221
Rate Zone 12	140
Rate Zone 13	982
Rate Zone 14	1
<b>Total Customers</b>	<b>4806</b>

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Renee T. Marquis  
Christopher E. Manning  
Date: 7/24/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**OFFICE OF CONSUMER ADVOCATE**

**SET XI INTERROGATORIES**

---

**OCA-XI-14** Refer to Aqua Statement 2 at 9:12-15. For the remaining unmetered wastewater customers, please explain – for each division of each rate zone – why the customers within that division are not switching from unmetered to metered billing.

**RESPONSE**

Aqua PA bills on actual meter readings for systems that have access to and utilize metered public water from a municipality or a private utility regulated by the PUC. The customers that are not switching to metered billing are either unmetered customers or obtain their water from privately-owned water wells and metered water information is not available for these customers.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Gregory R. Herbert

Date: 7/30/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**OFFICE OF CONSUMER ADVOCATE**

**SET XIII INTERROGATORIES**

---

**OCA-XIII-16** Refer to page 273 of the Commission Order entered in Aqua’s previous general rate increase request at Docket Numbers R-2021-3027385 and R-2021-3027386. Provide the study and report ordered by the Commission regarding “whether different methods of calculating a flat rate would be more reasonable for some systems rather than applying a system-wide average to each system.” Please provide all supplemental documents, reports, supplements, workpapers in native format, or other information which supports Aqua’s study and report.

**RESPONSE**

Please refer to the OCA-XIII-16 - Attachment for the review of average usage by class and Rate Zone.

The Company’s rate design as filed utilized the standard industry practice of basing the flat rate on a system-wide average usage per month plus a customer charge in situations where metered water information was unavailable. In order to move toward the Company’s goal of single tariff pricing, utilizing a system-wide average usage is reasonable to calculate a flat rate. Flat rates calculated using individual rate zone monthly averages would result in flat rate customers being further away from rate consolidation or single tariff pricing. For example, a flat rate customer in rate zone with a lower monthly usage than the monthly usage in the Main division would experience a greater increase than a metered customer of the same rate zone should they be consolidated to the Main division water or wastewater rates in future rate proceedings.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Renee T. Marquis  
Date: 7/23/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**OFFICE OF CONSUMER ADVOCATE**

**SET XVII INTERROGATORIES**

---

**OCA-XVII-10** Please identify Aqua's plans with respect to obtaining metered water usage data for currently unmetered wastewater customers, including customers in Rate Zone 4, Little Washington Service Territory, Honeycroft Village, Londonderry Township, Chester County.

**RESPONSE**

For wastewater customers, Aqua PA bills on actual meter readings for systems that have access to and utilize metered public water from a municipality or a private utility regulated by the PUC. The Company does not have plans at this time to install company-owned water meters on privately-owned water wells for systems that are currently unmetered.

**EXHIBIT 2 OF 6 - DISCOVERY**

**SCH USA, LLC**

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Todd Duerr

Date: 08/12/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**SCH USA, LLC**

**SET I INTERROGATORIES**

---

**SCH-I-5** What is the treatment capacity, on an EDU capacity basis, that can be treated at Aqua's treatment facilities in Kidder Township today?

**RESPONSE**

The current hydraulic design capacity of the Lake Harmony WWTP is 0.4 million gallons per day. On a design EDU basis that is 1,600 EDUs.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: Christopher E. Manning  
Date: 08/12/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**SCH USA, LLC**

**SET I INTERROGATORIES**

---

**SCH-I-7** Identify the total EDUs Aqua presently charges SCH USA each month. Provide a breakdown for each associated account.

**RESPONSE**

Please refer to the table below for a breakout of the EDU's that Aqua charges SCH USA.

<b>SCH USA Accounts</b>	<b>EDUs</b>
Willowbrook	128
Galleria and Water Park	145
Lodge (Remaining Uses)	53
Laundromat	4
<b>Total SCH USA EDU's</b>	<b>330</b>

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: William C. Packer  
Christopher E. Manning  
Date: 08/12/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**SCH USA, LLC**

**SET I INTERROGATORIES**

---

**SCH-I-8** State the basis, broken down by associated account, for the amount of EDUs charged to SCH USA identified in No. 7 above.

**RESPONSE**

At the time of the Kidder Township acquisition by the Company at Docket No. A-2012-2298067, the assigned number of EDUs from Kidder Township's billing system for SCH USA's premises were transferred to Aqua Pennsylvania for billing purposes. These EDUs were approved as part of the Company's compliance tariff filing at the aforementioned docket.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: William C. Packer  
Rence T. Marquis  
Christopher E. Manning  
Date: 08/12/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**SCH USA, LLC**

**SET I INTERROGATORIES**

---

**SCH-I-9** If the basis provided for No. 8 includes any document outside of Aqua's existing wastewater tariff, produce such documents.

**RESPONSE**

Please refer to the Company's compliance tariff, attached as SCH-I-9 Attachment 1, which was filed at Docket No. A-2012-2298067 as part of the Company's Kidder Township acquisition. The EDUs for the premises which SCH USA currently own are listed out on Page 6 of the attachment. SCH USA has replaced Vacation Charters as the owner of Willowbrook at Lake Harmony, The Galleria and the Water Park, and Remaining Uses (Lodge). SCH USA currently also owns a Laundromat, which is not specifically broken out in the compliance tariff and that is billed at 4 EDU's as mentioned in the Company's response to SCH-I-7.

The EDUs that are stipulated in the Company's Compliance tariff were taken from the Settlement Agreement entered into between the Township of Kidder and Vacation Charters Ltd., Split Rock Country Club, Inc., and Summit Management & Utilities, Inc. As reflected in the Compliance Tariff, Willowbrook at Lake Harmony would be billed 128 EDUs; the Galleria and the Water Park would be billed 145 EDUs; remaining uses (Lodge) would be billed 53 EDUs. SCH USA did not acquire all the assets previously owned by Vacation Charters Ltd., Split Rock Country Club, Inc., and Summit Management & Utilities, Inc. set forth in the settlement agreement. SCH only acquired the assets related to 330 EDUs. The remaining 110 EDUs that were transferred to Aqua PA are billed to another customer.

Please refer to SCH-I-9 Attachment 2 for a copy of this agreement.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: William C. Packer  
Rence T. Marquis  
Christopher E. Manning  
Date: 08/12/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**SCH USA, LLC**

**SET I INTERROGATORIES**

---

**SCH-I-13** Please confirm that Aqua's current Commission approved tariff and/or its proposed tariff at these dockets defines "Equivalent Dwelling Unit or 'EDU'" in Aqua's "Tariff Sewer-PA P.U.C. No. 3, Original Page 25," as: Equivalent Dwelling Unit or "EDU": "The EDU is a measure based upon the estimated average daily wastewater flow for the type of business, as calculated by the Pennsylvania Department of Environmental Protection regulation at 25 Pa. Code § 73.17 divided by the typical estimated average daily wastewater flow from a current single-family unit. In the Company's sole discretion, the Company may assign more than one (1) EDU for a residential Property."

**RESPONSE**

Confirmed for the existing tariff. Refer to Tariff Sewer-PA P.U.C. No. 4, as filed in this proceeding, for the proposed Equivalent Dwelling Unit or EDU definition.

**EXHIBIT 2 OF 6 - DISCOVERY**

Witness: William C. Packer  
Renee T. Marquis  
Christopher E. Manning  
Date: 08/12/2024

**AQUA PENNSYLVANIA, INC. &  
AQUA PENNSYLVANIA WASTEWATER, INC.**

**DOCKET NO. R-2024-3047822 & R-2024-3047824**

**SCH USA, LLC**

**SET I INTERROGATORIES**

---

**SCH-I-14** If SCH USA, through the current EDU rate imposed by Aqua, assigns more EDUs and/or gallons of treatment capacity than actual usage each month, do you agree that Aqua' charges to SCH USA are subsidizing other rate payers in Rate Zone 4?

**RESPONSE**

No, the Company does not agree. The Company is charging SCH USA the Commission approved tariff rate.

## EXHIBIT 3 OF 6 - WHITEPAPER

### 1 **An Improper Application of Standard Industry Practice:** 2 **Lake Harmony, Pennsylvania & Flat Unmetered Wastewater Rates**

3

4 Whitepaper by John Day, 481 Moseywood Road, Lake Harmony, PA. August 2024

5 .....

6

7 Standard industry practices are vital for ensuring efficiency, safety, and quality across  
8 various sectors. They are crafted from a collective body of experience and knowledge,  
9 providing a reliable blueprint for operations. Such is the rationale used by Aqua PA to  
10 charge a flat, unmetered rate to Lake Harmony homeowners based on the Company's  
11 system wide average for homeowner water consumption, or 3,870 gallons per month.

12

13 Standard industry practices are designed for typical scenarios within more controlled  
14 environments. When applied to non-standard situations, their inflexibility can lead to  
15 inaccuracies and outright failures. Standard practices can lack the contextual sensitivity  
16 required to address specific needs and challenges of non-standard situations. Rigid  
17 adherence to standard practices can stifle innovation and adaptation.

18

19 The root problem with Aqua PA's use of its standard industry practice with Lake Harmony  
20 homeowners lies in its use of a statistical average to drive the outcome (flat unmetered  
21 rates) for an outlier situation. In statistics and data analysis, averages are commonly used  
22 to summarize data sets and provide insights into general trends. However, relying solely  
23 on averages can be misleading, especially when dealing with outliers. The lack of  
24 homeowner water consumption data in Lake Harmony only exacerbates the issue, as

## EXHIBIT 3 OF 6 - WHITEPAPER

25 there is no fact-based data available to provide a glimpse into actual consumption  
26 patterns.

27

28 In the absence of actual water consumption data, proxy data can offer insights into  
29 behavioral patterns. Reaching out to Kidder Township provided valuable insights,  
30 specifically this data point: over 50% of Kidder Township homeowners served by Aqua,  
31 have their property tax invoice mailed to a physical address other than Lake Harmony.<sup>1</sup>  
32 Additionally, the data showed that 35% of homes in Lake Harmony are permitted for short-  
33 term rental – 65% are not. This data underscore the mixed-use nature of the Lake  
34 Harmony community and its varied utilization of wastewater services. It also points to the  
35 presence of an outlier in the Aqua system – e.g. How many municipalities across the  
36 Aqua system have 50% of their homeowner property tax invoices sent to an address  
37 outside of that municipality? How many municipalities across the Aqua system have 35%  
38 of the homes permitted for short-term rentals?

39

### 40 **Single Tariff Pricing at any Cost**

41

42 The case of unmetered wastewater rates in Lake Harmony highlights a significant outlier  
43 issue, and the critical need for a context-sensitive approach to assessing wastewater  
44 rates for these homeowners.

45

---

<sup>1</sup> Kidder Township, PA - contact: Susanne Brooks, Township Manager.

## EXHIBIT 3 OF 6 - WHITEPAPER

46 Aqua argues that using systemwide averages to calculate flat unmetered rates is more  
47 relevant because it aligns with the company's goal of implementing single tariff pricing –  
48 the approach would ensure that all flat-rate customers pay the same rate for the same  
49 service, regardless of their location within the company's service areas across the state.<sup>2</sup>

50

51 Aqua's argument for using systemwide averages and a uniform rate structure across all  
52 service areas is unnecessarily rigid, and fails to address the issue of a mixed-use  
53 community for several reasons:

54 First, it overlooks the significant differences in water usage between communities, such  
55 as Lake Harmony, where many homes are used seasonally or infrequently. Applying a  
56 one-size-fits-all rate based on systemwide averages results in unfairly high charges for  
57 residents who consume far less water than the average, imposing an undue financial  
58 burden.

59 Second, Aqua's approach disregards the principle that utility rates should reflect the  
60 actual cost of providing service to specific customers. By not accounting for local usage  
61 variations, Aqua's method forces some customers to subsidize others, which contradicts  
62 the requirement for fair and reasonable rates.

63 Finally, Aqua's emphasis on moving toward single tariff pricing and consolidation should  
64 not override the need for rates that accurately reflect the unique characteristics of each  
65 community. The law mandates that utility rates must be non-discriminatory, and Aqua's

---

<sup>2</sup> Aqua reply to Day IV-1.

## EXHIBIT 3 OF 6 - WHITEPAPER

66 approach risks unfairly penalizing communities like Lake Harmony, where usage patterns  
67 differ significantly from the norm.

68 In short, Aqua's reply fails to ensure that rates are fair, cost-reflective, and non-  
69 discriminatory, which are essential principles in utility ratemaking.

### 70 **Pennsylvania Utility Ratemaking**

71 Utility ratemaking is governed by Pennsylvania law, not a standard industry practice.  
72 Ratemaking is governed by the principle of “just and reasonable rates” (66 Pa. C.S. §  
73 1301). This principle ensures that rates are fair to both the utility and its customers. In the  
74 case of Lake Harmony, standard unmetered wastewater rates may not accurately reflect  
75 the actual usage and costs incurred by the predominantly absentee homeowners.  
76 Pennsylvania utility law mandates that utilities provide adequate, efficient, safe, and  
77 reasonable service (66 Pa. C.S. § 1501). This law requires utilities to adapt their services  
78 to meet the unique needs of different communities. Pennsylvania consumer protection  
79 laws ensure fair treatment and safeguard consumer interests (73 P.S. §§ 201-1 to 201-  
80 9.3).

81  
82 The Pennsylvania Public Utility Commission (PUC) has a history of rulings that reject the  
83 application of standard industry practices to non-standard situations, emphasizing the  
84 need for context-sensitive approaches. Some examples include:

85

## EXHIBIT 3 OF 6 - WHITEPAPER

- 86       • *Net Metering Rules (2008)*: The PUC’s expansion of eligible capacity for non-  
87       residential net metered systems was a response to specific needs, avoiding the  
88       pitfalls of a one-size-fits-all approach.<sup>3</sup>  
89
- 90       • *Paper Billing Fees (2014)*: The PUC issued a Proposed Rulemaking Order to  
91       prohibit utilities from charging customers a fee for receiving paper bills.<sup>4</sup> This  
92       decision was based on the recognition that a significant portion of the population,  
93       particularly older adults and those without reliable internet access, would be  
94       unfairly burdened by such fees. The PUC’s ruling took into account the specific  
95       needs and capabilities of these customers, rather than applying a standard  
96       industry practice of promoting electronic billing universally. The PUC’s decision to  
97       prohibit utilities from charging paper billing fees to protect older adults and those  
98       without reliable internet access underscores the necessity of considering  
99       consumer needs and capabilities. Similarly, the unique billing situation in Lake  
100      Harmony necessitates a tailored approach that reflects the actual usage and  
101      presence of homeowners.  
102
- 103      • *Natural Gas Meter Relocation (2014)*: The PUC required Columbia Gas to cover  
104      the costs of relocating natural gas meters when part of broader infrastructure  
105      projects, preventing unfair financial burdens on customers. The PUC’s intervention  
106      in Columbia Gas, where it ruled that costs should not be unfairly shifted to

---

<sup>3</sup> Docket No. L-00050174, Pennsylvania Public Utility Commission

<sup>4</sup> Docket No. L-2014-2411278, Pennsylvania Public Utility Commission

## EXHIBIT 3 OF 6 - WHITEPAPER

107 customers, illustrates the importance of ensuring rate fairness based on specific  
108 circumstances<sup>5</sup>

109

- 110 • *PECO Energy's Time-of-Use Rates (2018)*: PECO Energy proposed a time-of-use  
111 rate structure for its residential electric customers.<sup>6</sup> The PUC approved the plan  
112 but emphasized modifications to ensure fairness and practicality for customers  
113 with different usage patterns, rather than applying a uniform standard rate  
114 structure. PECO Energy's time-of-use rates were modified to reflect diverse  
115 residential usage patterns, ensuring fairness and practicality. Applying this  
116 principle to Lake Harmony, the PUC should consider the unique usage patterns of  
117 absentee homeowners and adjust the wastewater rate structure accordingly. A  
118 standard unmetered rate fails to account for the lower actual usage by these part-  
119 time residents, potentially leading to unreasonable charges.

120

121 Taken together, these examples underscore the Commission's commitment to context-  
122 sensitive regulation, ensuring that utility services are provided fairly and reasonably, even  
123 when it means deviating from standard industry practices. This approach helps address  
124 the specific needs and circumstances of different customer groups and utility services  
125 across Pennsylvania, rather than rigidly applying standard industry norms across all  
126 situations.

127

---

<sup>5</sup> Docket No. L-2009-2107155, Pennsylvania Public Utility Commission

<sup>6</sup> Docket No. M-00051865, Pennsylvania Public Utility Commission

## EXHIBIT 3 OF 6 - WHITEPAPER

128 Judicial rulings have emphasized the importance of regulatory flexibility in standard  
129 industry practices.<sup>7</sup> The Pennsylvania Supreme Court's rulings in cases like *Elite*  
130 *Industries, Inc. v. Pa. Public Utility Commission* affirmed the Commission's discretion to  
131 adapt regulations to better serve public needs. Another significant case, *City of Lancaster*  
132 *v. Pennsylvania Public Utility Commission*, upheld the Commission's decision, reinforcing  
133 the agency's authority to interpret and modify its regulations in ways that address specific  
134 local conditions and serve the public interest.<sup>8</sup> More recently, the Commonwealth Court  
135 of Pennsylvania addressed the Commission's decision regarding the recovery of certain  
136 costs through rates, finding that the Commission needed to consider specific context and  
137 circumstances rather than adhering strictly to standard practices.<sup>9</sup> These court cases  
138 underscore the principle that regulatory decisions must be adapted to the conditions of  
139 certain cases to ensure fairness and appropriateness.

140

### 141 **Opportunities for Innovation**

142

143 Strict adherence to standard industry practices can hinder innovation and adaptation.  
144 Aqua frequently cites the barriers to obtaining water consumption data from homes with  
145 privately-owned wells. The challenge at hand presents opportunities to explore both  
146 traditional and alternative approaches.

147

---

<sup>7</sup> *Elite Industries, Inc. v. Pa PUC*, 832 A.2d 428 (2003)

<sup>8</sup> *City of Lancaster, et al. v. Pa PUC*, 214 A.3d 144 (2019)

<sup>9</sup> *Cicero v. Pa PUC*, 2023 WL 5302323 (2023)

## EXHIBIT 3 OF 6 - WHITEPAPER

148 → ***Innovation through Technology Approaches***

149

150 RF Meter Reading – Aqua uses RF radio technology to read the water meters of most of  
151 its customers, including small towns and communities where manual meter reading would  
152 be impractical due to the large distances between properties. Such reading would be  
153 enabled by the installation of a water meter for those with private wells..The industry  
154 should have examples of utilities using RF metering for wastewater services in areas with  
155 private wells. Aqua might benefit from engaging other municipalities to learn more about  
156 such implementations; the Company has never undertaken this exercise.<sup>10</sup>

157

158 Given Pennsylvania’s rural nature, RF metering deployment where water is supplied by  
159 private wells is an innovation worthy of consideration, for the benefit of existing unmetered  
160 wastewater customers across the Aqua system, and for potential market expansion by  
161 Aqua.

162

163 Customer-Submitted Readings – There are examples of utilities that have incorporated  
164 customer-submitted meter readings into their billing practices. The practices adopted by  
165 these utilities reflect a broader trend toward incorporating customer-submitted data to  
166 improve billing accuracy. While neither utility’s approach is specifically designed to impact  
167 wastewater rates directly, both benefit from obtaining accurate water consumption data.

168

---

<sup>10</sup> Aqua reply to Day IV-3

## EXHIBIT 3 OF 6 - WHITEPAPER

169 Advanced Metering Infrastructure (AMI) – Implementing AMI systems, which use smart  
170 meters and two-way communication networks, can provide real-time water usage data.  
171 This technology can be particularly useful in areas with private wells, offering accurate  
172 and timely data for billing.

173

174 In summary, Aqua uses RF radio technology to read water meters in areas where manual  
175 reading is impractical, benefiting those with private wells. Utilities have used RF metering  
176 for wastewater services. Implementing RF metering in rural Pennsylvania could benefit  
177 unmetered wastewater customers and expand Aqua's market. There are examples of  
178 utilities that use customer-submitted meter readings to improve billing accuracy.  
179 Advanced Metering Infrastructure (AMI) with smart meters and two-way communication  
180 networks can offer real-time water usage data, enhancing billing accuracy.

181

182 → ***Innovation through Representative Metering***

183

184 Using a representative sample of water meters to determine rates for a larger community  
185 is a forward-thinking approach that offers both cost savings and a fact-based method for  
186 water billing. It promotes equity, encourages conservation, and ensures that water bills  
187 are fair and reflective of actual usage. This method offers significant cost savings and  
188 ensures a more accurate reflection of actual water usage.

189

190 Implementing a representative sample of water meters introduces a data-driven  
191 methodology to water billing. A community would need to identify a representative sample

## EXHIBIT 3 OF 6 - WHITEPAPER

192 of households that reflects the diversity of water usage patterns. This sample should  
193 consider factors such as household size, property type, and geographic distribution.  
194 Advanced statistical methods can ensure that the sample is truly representative, providing  
195 reliable data for rate-setting purposes.

196

197 Once the sample is established, meters can be installed and monitored over a defined  
198 period. The data collected can be used to model water usage for the entire community.  
199 Regular updates and recalibrations of the sample may be necessary to account for  
200 changes in population, usage patterns, or other variables.

201

202 → ***Innovation through Ratemaking Approaches***

203

204 The flat, unmetered wastewater rates in Lake Harmony are predicated upon a commodity  
205 (water) that isn't measured. This won't change unless either Aqua PA deviates from its  
206 standard industry practice or the Commission orders the commodity to be measured via  
207 metering. Consequently, the status quo leaves complainant homeowners in Lake  
208 Harmony twisting in the wind. This status quo bias benefits the utility but is detrimental to  
209 the homeowners and could be seen as neglecting the utility's responsibility to ensure fair  
210 billing practices. Regulatory inaction is perceived as a failure to protect consumers'  
211 interests and enforce fair billing practices.

212

213 A way out of this conundrum would be to stop formulating a wastewater rate based on a  
214 commodity (water) that is not being measured. Instead, a ratemaking methodology for

## EXHIBIT 3 OF 6 - WHITEPAPER

215 Lake Harmony might be based on what can be measured: Aqua PA's existing wastewater  
216 rates. Simply put, use wastewater rates as the 'commodity' to instantiate rates for the  
217 unmetered.

218

219 Below are two options worthy of consideration for the unmetered in Lake Harmony, and  
220 possibly other unmetered customers across the Aqua system. With both options, the  
221 wastewater rates for Lake Harmony would be adjusted after every base rate case  
222 respective to the method utilized.

223

224 Lowest Wastewater Rate Tariff in the Aqua System – This would be representative of the  
225 outlier nature of the Lake Harmony community's highly mixed-use and would maintain the  
226 burden of proof on Aqua PA to obtain facts to justify higher rates.

227

228 Systemwide Average of Wastewater Rate Tariffs – This would be more representative of  
229 Aqua PA's wastewater rate structure, aligned with the company's goal of achieving a  
230 single tariff, and more likely to assist the company in achieving its revenue objectives  
231 (operating expenses plus shareholder returns).

232

233 These suggested approaches for reforming the unmetered wastewater rates in Lake  
234 Harmony offer a more equitable and legally compliant framework, adhering to  
235 Pennsylvania utility law and the established principles of utility ratemaking. These options  
236 ensure that rates are just and reasonable, as required by the Pennsylvania Public Utility  
237 Code. By moving to a measurable basis for wastewater rates, the proposals eliminate the

## EXHIBIT 3 OF 6 - WHITEPAPER

238 specious nature of the current flat rates. The proposed changes proactively address  
239 potential regulatory interventions by the Pennsylvania PUC, aligning with the  
240 Commission's mandate to protect consumer interests and enforce fair billing practices.

241

242 Implementing a system based on measurable rates (either the lowest wastewater rates  
243 in the Aqua system or the systemwide average) protects consumers from overcharges  
244 and ensures that all customers are treated equitably, addressing regulatory concerns  
245 about the current unmetered system. By using measurable wastewater rates as the basis  
246 for billing, these ratemaking options ensure that charges more accurately reflect the  
247 actual cost of services provided to each customer. This principle is fundamental to fair  
248 and equitable ratemaking. The option to adopt the lowest wastewater rates in the Aqua  
249 system ensures that Aqua PA must justify any higher rates with factual evidence. This  
250 protects customers from being unfairly charged and promotes transparency. The option  
251 to use the systemwide average of wastewater rates aligns Lake Harmony's rates with the  
252 broader structure of Aqua PA's rates, promoting consistency and fairness across the  
253 system.

254

255 Although the direct link between water usage and wastewater rates is less clear, moving  
256 towards an unmetered rate structure based on measurable factors still promotes better  
257 resource management and efficiency. Neither ratemaking option necessitates the costs  
258 associated with meter installation and reading.

259

## EXHIBIT 3 OF 6 - WHITEPAPER

260 In summary, using existing wastewater rates as the ‘commodity’ to instantiate rates for  
261 the unmetered simplifies the ratemaking process. It provides a clear and understandable  
262 methodology for both the utility and the customers, reducing confusion and potential  
263 disputes. These changes address the current ethical concerns and provide a transparent  
264 and rational basis for setting wastewater rates, benefiting both the homeowners and the  
265 utility in the long run.

266

### 267 **Ethical & Legal Implications**

268

269 In the 2021 base rate case, the Pennsylvania PUC issued an order over Aqua PA’s  
270 objection to perform a study. The order emphasized the need for reasonable and  
271 appropriate flat-rate charges, highlighting the disparity between rates charged to metered  
272 and unmetered customers. The PUC directed Aqua PA to study and report on whether  
273 different methods of calculating flat rates would be more reasonable for some systems  
274 rather than applying a system-wide average. This directive aims to ensure that flat-rate  
275 charges are fair and equitable.

276

277 Fairness and Equity – The ethical principle of fairness is fundamental in utility billing.  
278 Overcharging unmetered wastewater customers to meet revenue targets places an  
279 undue financial burden on a specific group, violating the principle that customers should  
280 pay for services in proportion to their usage. The PUC's order to study and report on flat-  
281 rate calculations underscores this concern, as it aims to address the inequities between

## EXHIBIT 3 OF 6 - WHITEPAPER

282 metered and unmetered rates. Ensuring that unmetered customers are not unfairly  
283 overcharged is crucial to maintaining equitable billing practices.

284

285 Transparency and Trust – Transparency is essential for fostering trust between utility  
286 providers and customers. Aqua PA's alleged overcharging practices undermine this trust,  
287 as customers expect clear, accurate billing that reflects their actual usage. The PUC's  
288 directive for Aqua PA to study and report on rate calculations emphasizes the need for  
289 transparency in developing fair rates. By complying with this order, Aqua PA can  
290 demonstrate its commitment to transparent practices, thereby rebuilding customer trust.

291

292 Corporate Responsibility – As a major utility provider, Aqua PA has a corporate  
293 responsibility to uphold ethical business practices, including ensuring fair and equitable  
294 billing and avoiding unjust profits. The PUC's intervention highlights the importance of  
295 corporate responsibility in addressing customer concerns and ensuring fair treatment.  
296 Aqua PA's reluctance to adopt metered billing due to cost concerns does not absolve it  
297 of this responsibility. Ethical corporate behavior requires Aqua PA to seek equitable  
298 solutions, even if they are financially challenging.

299

300

301

302 **Conclusion**

303

## EXHIBIT 3 OF 6 - WHITEPAPER

304 Applying standard industry practices in non-standard situations can lead to inefficiencies,  
305 unfair outcomes, and violations of statutory mandates. Pennsylvania's principles of utility  
306 rate-making, utilities law, and consumer law all underscore the necessity of adapting  
307 standard practices to fit specific contexts. By doing so, utilities can ensure fair, efficient,  
308 and reasonable service that aligns with both regulatory requirements and consumer  
309 needs.

310

311 Unmetered wastewater rates in Lake Harmony, Pennsylvania, a highly mixed-use  
312 community where a significant portion of homeowners may be absentee, is an example  
313 of a non-standard situation that requires a context-sensitive approach. The ethical and  
314 legal implications of Aqua PA overcharging unmetered wastewater customers in Lake  
315 Harmony for the same level of water consumption are profound. Ethically, such practices  
316 undermine fairness, transparency, and corporate responsibility, damaging customer trust  
317 and the company's reputation.

318

319 The Commission's 2022 directive for Aqua PA to study and report on flat-rate calculations  
320 was a critical step toward ensuring fair and equitable billing. While the costs of meter  
321 installation are a valid concern, Aqua PA and the PUC must prioritize ethical practices,  
322 transparent billing, and regulatory compliance. Anything short of a fundamental change  
323 in practice and direction would be willingly and knowingly charging unjust and  
324 unreasonable wastewater rates to dozens, possibly hundreds, of homeowners in Lake  
325 Harmony.

**EXHIBIT 4 OF 5 - WASTEWATER PLANT PERFORMANCE**

Data Source: Aqua PA Reply to Day III-4

Kidder Split Rock Wastewater Plant -- Gallons Flow Volume 2019-2024												Data Source: Aqua PA, 2 August 2024	
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOT
2024	8,847,400	4,790,800	7,551,600	7,083,000	6,305,400	4,764,000							
2023	10,927,500	4,426,800	5,077,800	4,524,000	6,051,200	3,915,000	8,918,700	6,937,800	4,458,000	4,783,300	4,197,000	9,157,400	73,376,523
2022	5,127,400	8,162,000	8,029,000	10,674,000	7,548,500	6,729,000	5,666,800	6,125,600	4,317,000	4,600,400	6,420,000	9,551,100	82,952,822
2021	8,797,800	5,824,000	14,988,500	8,769,000	8,955,900	7,347,000	9,854,900	13,807,400	15,054,000	7,080,400	10,446,000	6,147,300	117,074,221
2020	6,665,000	7,728,000	4,402,000	6,450,000	5,673,000	7,530,000	8,556,000	7,967,000	5,520,000	5,053,000	6,000,000	9,610,000	81,156,020
2019	11,349,100	10,018,400	8,974,500	10,482,000	9,058,200	7,479,000	6,844,800	5,093,300	3,273,000	3,202,300	6,147,000	6,014,000	87,937,619
<b>Monthly 5-Yr Avg</b>	8,573,360	7,231,840	8,294,360	8,179,800	7,457,360	6,600,000	7,968,240	7,986,220	6,524,400	4,943,880	6,642,000	8,095,960	<b>7,374,785</b>
	31	28	31	30	31	30	31	31	30	31	30	31	
Daily Flow 5-Yr Avg	276,560	258,280	267,560	272,660	240,560	220,000	257,040	257,620	217,480	159,480	221,400	261,160	

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11

An indicator of the mixed-use nature of the Lake Harmony community is data collection from the Kidder Split Rock wastewater treatment plant, as supplied by Aqua PA.<sup>1</sup> On the demand side, Aqua’s residential customer base for wastewater service in Lake Harmony increased by about 5% between 2021 and 2023, from 960 to 1,023 customers respectively.<sup>2</sup> Data on occupancy rates at Split Rock Resort and local timeshares during the period 2019 to 2023 likely exist, but are unknown to me.

Graph 1 shows the total volume of wastewater treated by year for the period 2019 to 2023. I note the substantial surge that occurred in 2021, which has since abated. The total volume of wastewater treated at the Kidder Split Rock wastewater plant declined by 16.5% between 2019 (pre-pandemic) and 2023 (post-pandemic). During the post-pandemic years 2022 and

<sup>1</sup> Aqua reply to Day III-4  
<sup>2</sup> Aqua reply to Day III-1.. Data from 2021 supplied by Aqua to Day during 2021 base rate case.

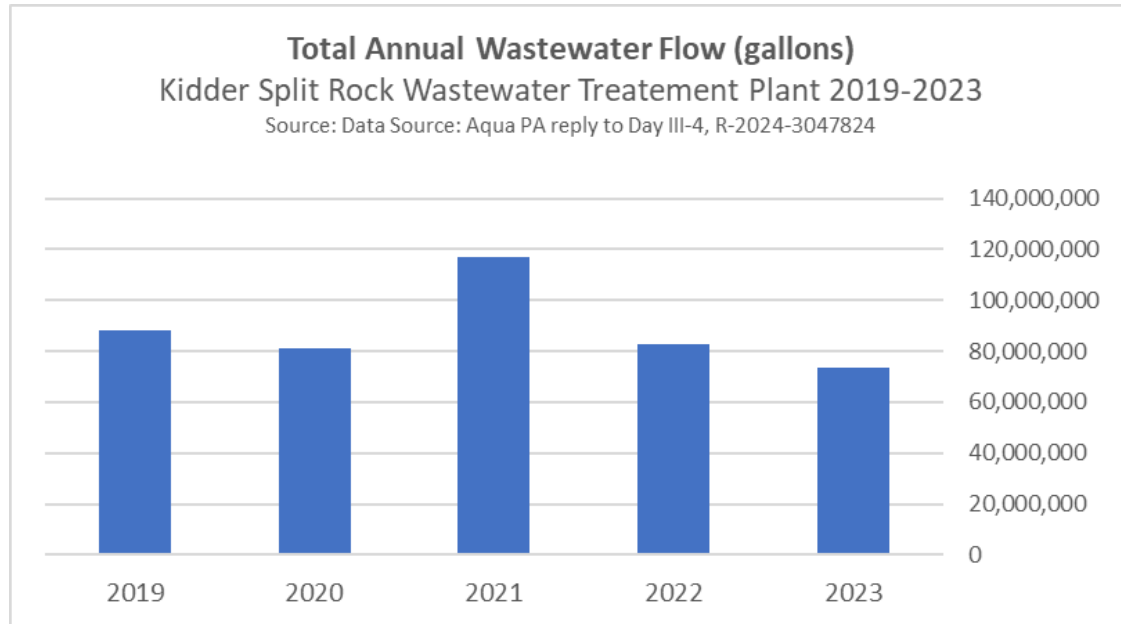
## EXHIBIT 4 OF 5 - WASTEWATER PLANT PERFORMANCE

Data Source: Aqua PA Reply to Day III-4

12 2023, wastewater treatment volume declined by 11.6%. Absent individualized water consumption data, I am unable to  
13 pinpoint the reason for this anomalous increase in 2021 wastewater flows, but monthly data reveals 3 months of average  
14 daily flow volume that exceeded daily plant capacity. Five other months in 2021 saw flow rates that were higher than their  
15 respective monthly counts in 2020 and 2022. Aqua reports weather incidents accounting for the 2021 volume.<sup>3</sup> Anecdotal  
16 media reporting suggests another contributing factor: homeowners domiciled in the Poconos at a higher frequency during  
17 the COVID period to socially distance and isolate from more densely populated areas.<sup>4</sup>

18

Graph 1



19

<sup>3</sup> Aqua reply to Day IV-4.

<sup>4</sup> "Pennsylvania should close its border.' Readers react to New Yorkers seeking refuge in Poconos vacation homes," *The Morning Call*, 2020. "Check out Pocono Record and Tri-County Independent's coverage of the local housing market," *Pocono Record*, 18 October 2022.

## EXHIBIT 4 OF 5 - WASTEWATER PLANT PERFORMANCE

Data Source: Aqua PA Reply to Day III-4

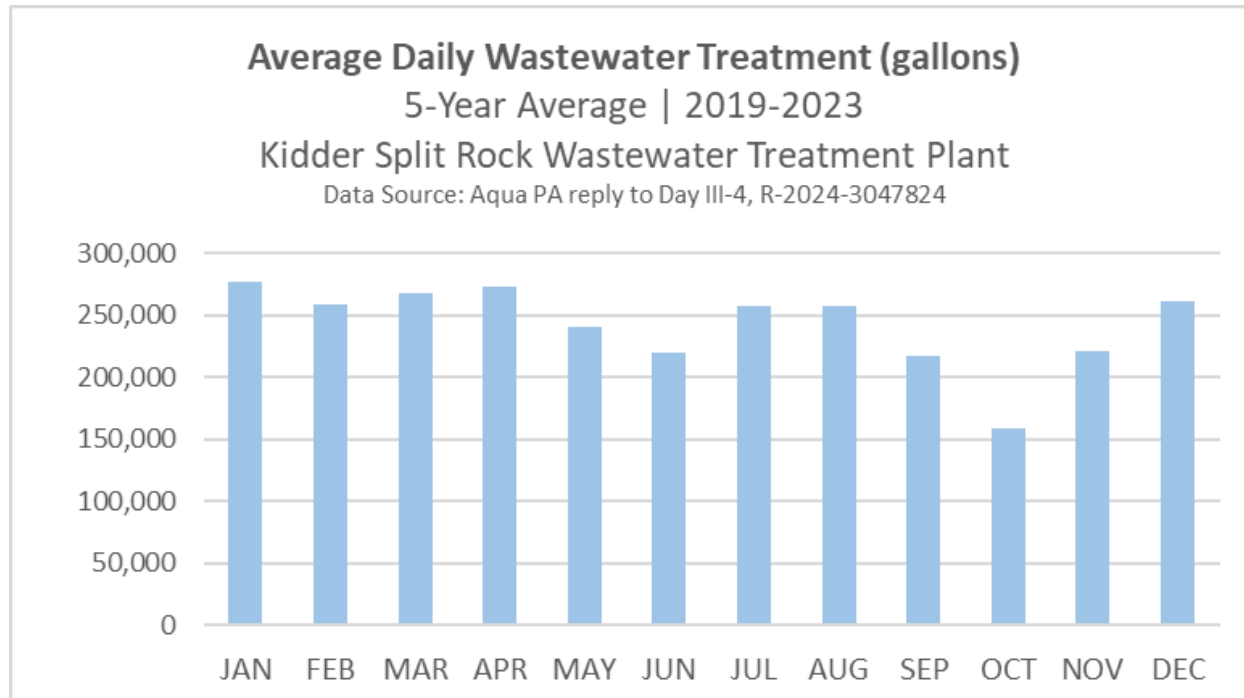
20

21 Wastewater treatment ebbs and flows, as shown in Graph 2, which trends the average daily consumption by month over  
22 the five-year period from 2019 to 2023. Treatment flows correspond with higher use periods associated with the region's  
23 winter and summer activities..

24

Graph 2

25



26

27

28

**EXHIBIT 4 OF 5 - WASTEWATER PLANT PERFORMANCE**

Data Source: Aqua PA Reply to Day III-4

29 The total capacity of the Lake Harmony wastewater treatment plant is 400,000 gallons per day.<sup>5</sup> The table below shows  
 30 daily average flow as a percent of the plant’s 400,000 gallon capacity.

31

Kidder Split Rock Wastewater Plant - Daily Flow as Percent of Daily Plant Capacity (400,000 gals)												Data Source: Aqua PA, 2 August 2024	
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual Avg
2024	71%	43%	61%	59%	51%	40%							
2023	88%	40%	41%	38%	49%	33%	72%	56%	37%	39%	35%	74%	50%
2022	41%	73%	65%	89%	61%	56%	46%	49%	36%	37%	54%	77%	57%
2021	71%	52%	121%	73%	72%	61%	79%	111%	125%	57%	87%	50%	80%
2020	54%	69%	36%	54%	46%	63%	69%	64%	46%	41%	50%	78%	56%
2019	92%	89%	72%	87%	73%	62%	55%	41%	27%	26%	51%	49%	60%
5-yr Monthly Avg	69%	65%	67%	68%	60%	55%	64%	64%	54%	40%	55%	65%	61%

32

33

34 Graph 3 shows the 5-year average for daily flow as a percent of total capacity. During the 60 months of measurement, the  
 35 plant had three months – May, August and September 2021 – where average daily flow exceeded average daily capacity<sup>6</sup>.

36 Graph 4 shows the frequency with which average daily flows achieve different levels of plant treatment capacity.

37

38

39

40

41

42

43

44

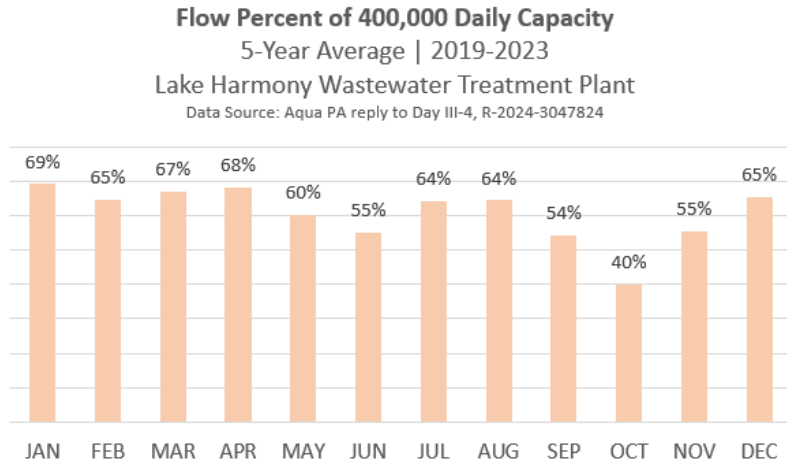
<sup>5</sup> Aqua reply to Day III-3.

<sup>6</sup> See Day Exhibit 4

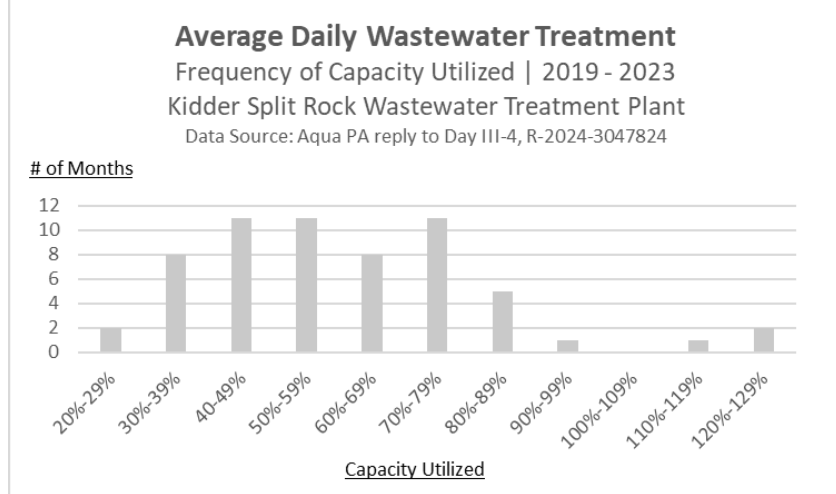
**EXHIBIT 4 OF 5 - WASTEWATER PLANT PERFORMANCE**

Data Source: Aqua PA Reply to Day III-4

Graph 3



Graph 4



45  
 46  
 47

Raw Count of Monthly Capacity Utilization

## EXHIBIT 4 OF 5 - WASTEWATER PLANT PERFORMANCE

Data Source: Aqua PA Reply to Day III-4

Avg Daily Capacity Utilized	20%-29%	30%-39%	40-49%	50%-59%	60%-69%	70%-79%	80%-89%	90%-99%	100%-109%	110%-119%	120%-129%	
# Months in 2023	0	5	3	1	0	2	1	0	0	0	0	12
# Months in 2022	0	2	3	2	2	2	1	0	0	0	0	12
# Months in 2021	0	0	0	3	1	4	1	0	0	1	2	12
# Months in 2020	0	1	3	3	4	1	0	0	0	0	0	12
# Months in 2019	2	0	2	2	1	2	2	1	0	0	0	12
<b>TOTAL</b>	<b>2</b>	<b>8</b>	<b>11</b>	<b>11</b>	<b>8</b>	<b>11</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>60</b>
<i>Distribution</i>	<b>32</b>				<b>25</b>				<b>3</b>			
	<b>53%</b>				<b>42%</b>				<b>5%</b>			



48

**EXHIBIT 5 OF 6 - PHILLIPS METER READ**

Mr. James Phillips - 65 Lake Drive, Lake Harmony, PA

**Fore a period of 22 months: Total of 30,600 gallons of water consumed**

**Average consumption per month: 1,391 gallons**

Installed: 3 June 2022	Reading: 30 June 2024
	

1,391 gallons is **36%** of Aqua PA's monthly systemwide average of 3,870, for which the Phillips family is paying \$134 per month.

## EXHIBIT 6 OF 6 - Electricity Consumption Data

### Day Household - 481 Moseywood Rd, Lake Harmony, PA

1 In 2021, Aqua PA objected to a water metering pilot that could have provided insights into local residential water  
2 consumption. Since we lacked data from metered water, I used electricity consumption data from PP&L's customer portal  
3 to generate the chart below, demonstrating our home usage.

4

### Daily Electricity Consumption | 9 Aug '22 -- 8 Aug '24

481 Moseywood Rd, Lake Harmony, PA - John Day

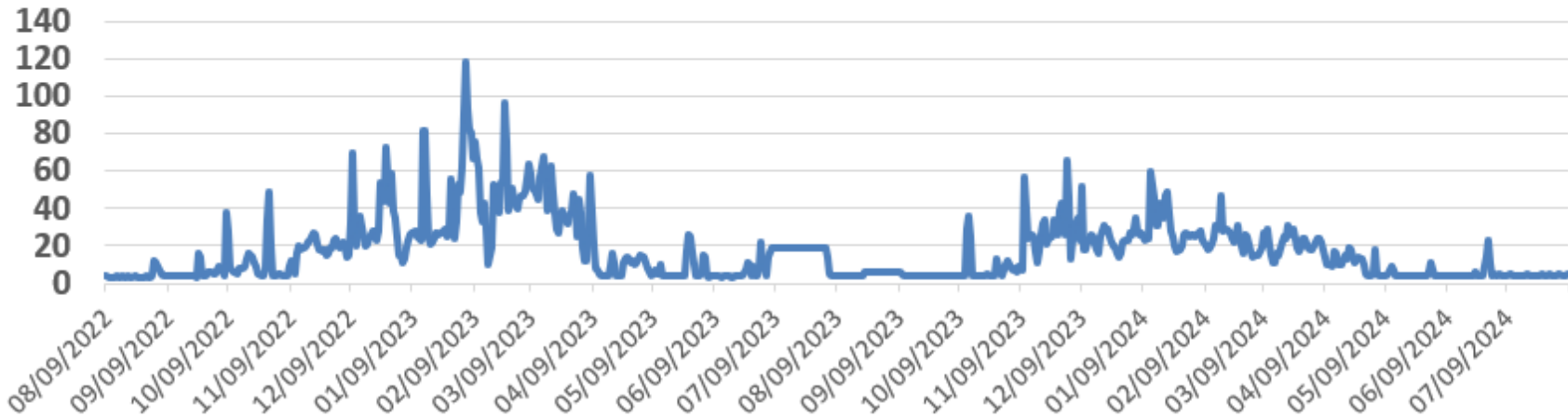
(note: all electric heating, winter thermostat set at 50-degrees when absent)

Source: Pennsylvania Power & Light Customer Portal

Household Daily Average for 731 days  
**17 kWh**

Carbon County, PA Daily Avg: 46 kWh

**kWh**



5

6

7

**EXHIBIT 6 OF 6 - Electricity Consumption Data**  
**Day Household - 481 Moseywood Rd, Lake Harmony, PA**

8 The average monthly consumption of electricity for Carbon County, PA is 1,377 kWh<sup>1</sup> - that averages to 45.9 kWh per  
9 day.

10

11 Our electricity consumption is 37% of the average daily consumption for electricity in Carbon County, PA. This number  
12 may be inflated due to our home's heating and cooking being entirely electric, whereas many homes in the county use  
13 natural gas or propane for these purposes. When our home is not in use during winter months, the temperature  
14 thermostat is set to 50-degrees.

---

<sup>1</sup> EnergySage - Cost of Electricity in Pennsylvania, updated August 1, 2024.

August 8, 2024

From:  
Randal Blough  
101 Brookside Ln  
Gettysburg PA 17325  
240-405-0204

To:  
Pennsylvania Public Utility Commission

To whom it may concern,

Aqua Pennsylvania is intent on asking the PA Public Utilities Commission for a rate increase. If granted, this would be Aqua's 4<sup>th</sup> rate increase in the past 15 years and 3<sup>rd</sup> in the past 10 years. For The Links at Gettysburg residents they project that the average water and sewer bill would increase approximately 24%. This proposed rate increase is onerous and unjustifiable in my view and should be wholly rejected by the PUC.

My own family's monthly bills for a 3-adult household are already **triple** Aqua's purported rate! I would be happy to have the example rate they quote, but that rate is farcical compared to my actual bill. I've tried to have Aqua explain the discrepancy in cost for comparable services in other areas, but my attempts so far have been met with: "That's just what the rates are". I'd be happy to provide as much evidential billing history to the commission as available. I can also provide evidence of water and sewer rates from the borough of Waynesboro PA that are much closer to the rates Aqua claims.

Per Aqua's own website (see the text below or [Improvements & Investing: https://www.aquawater.com/about/states-we-serve/pennsylvania/improvements-and-investing.php](https://www.aquawater.com/about/states-we-serve/pennsylvania/improvements-and-investing.php)) they give no specifics or accounting of how current revenue is spent in Pennsylvania, nor any articulation of efforts to minimize costs for themselves or customers. Yet they ask for a 4<sup>th</sup> rate increase with scant justification beyond speculative future need. I don't doubt that if given more money they will spend it on something somewhere eventually, but that's neither reasonable, fair nor judicious at a time when homeowners are already squeezed at every turn.

Aqua have demonstrated no specific need beyond forward looking speculation, nor justified any rate increase at all, much less an egregious 24%! That far outstrips inflation and any other cost justifications, especially given that there have already been 3 increases in 10 years. If Aqua are so mismanaged that they somehow require a 24% increase to meet actual cost obligations after 135 years of experience, there should be an investigation of the causes and a plan to rectify that situation for an already overburdened public. We don't need Aqua to "lead the way" in soaking their customers, we only need them to provide quality water at a feasible, reasonable price. Please do reject Aqua's requested rate increase.

Sincerely,

Randal Blough

## **Aqua's public explanation:**

### **Improvements & Investing**

At Aqua Pennsylvania, providing quality water and wastewater service are our highest priorities – and we've been providing these services for more than 135 years. We strive every day to listen to our customers and invest in the safest, most up-to-date technology, infrastructure improvements and enhancements that benefit our customers and their daily lives.

### **Improvements We've Made**

In 2016, the Environmental Protection Agency (EPA) updated its health advisory concerning levels of biochemical contaminants called perfluorochemicals (PFAS) within drinking water. Since then, Aqua has invested millions of dollars into our Pennsylvania communities to ensure that our methods to combat PFAS outperform all federal and state guidelines and that our water remains safe for our consumers. In addition, we regularly perform upgrades to our infrastructure and technology to lead the way in clean water distribution.

Examples include:

- Filter installations, upgrades, and other water quality improvements to remove more than 4,000 known PFAS and improve water quality
- Complete engineering evaluations of the Neshaminy water treatment plant
- Continuous evaluation of alternative treatment options, including ion exchange resins and other advanced technologies
- Wastewater system repairs and replacements to help prevent sewage backups into your home
- Wastewater facility and treatment upgrades to prevent overflows, protect local waterways, and meet regulatory requirements

To the Honorable Chiodo and Arnold

I wanted to forward the letter of objection that I sent via USPS in May along with proof of the insane increases in the cost of sewer services since Aqua has taken over. I also copied our senators and my state representative. I was at a public hearing when New garden township were assured that there would be little to no increase in cost to us and that Aqua would improve our infrastructure, which was why the township allowed the sale. They have not improved anything and have created huge increases in our bills. As a single mother I am struggling to understand why we sold to them so cheaply for the PUC to then allow them to increase our rates well above inflation. My costs have tripled and my water usage has not!

I have still not had a response to my letter and was furious to take time off work to attend the public hearing at the new garden township building last Thursday, to then be turned away due to over capacity of the building.

The PUC is meant to be in place to protect residents against price gouging and monopolies and is currently failing its job and the people of Pennsylvania. I will be joining the call on the 14th and hope that my voice is heard. I would also like this to be forwarded to the states attorney office to investigate this matter.

Pennsylvania Public Utility Commission P.O. Box 3265 Harrisburg, PA 17105-3265

Subject: Objection to Aqua's Requested Rate Increase

To Whom It May Concern,

I am writing to formally object to the proposed rate increase by Aqua, which I understand is currently under review by the Pennsylvania Public Utility Commission. As a customer of Aqua, I have experienced significant rate hikes since the company took over the water and wastewater services in my area. The cost of these services has more than tripled, placing a substantial financial burden on my household and many others in the community.



The rate increases implemented by Aqua over the past few years have far outpaced inflation and wage growth, making it increasingly difficult for residents to afford basic water services. Additionally, there has been no corresponding improvement in service quality to justify these exorbitant price hikes. Many of us have noticed no significant enhancements in infrastructure or customer service that would warrant such dramatic increases in our bills.

Water is an essential resource, and access to it should remain affordable for all residents. Aqua's continued pattern of steep rate hikes without clear and substantial benefits to its customers is concerning and unsustainable. I urge the Pennsylvania Public Utility Commission to thoroughly review Aqua's financial records, operational efficiencies, and the justifications provided for this latest rate increase request.

I believe that approving this rate increase would only exacerbate the financial strain on customers and could potentially lead to public health and safety issues as people struggle to pay for their water and wastewater services. Therefore, I strongly recommend that the Commission deny Aqua's rate increase request.

Thank you for considering my objection. I hope the Commission will act in the best interest of the public and ensure that water services remain affordable for all Pennsylvanians.

Sincerely,

Very best regards, Rebecca Rebecca Wright , Ph.D. Tel: 610 268 3027 Cell: 484 905 1958  
Fax: 610 268 3027

<https://www.shoresummerrentals.com/listing/8498.html>

VRBO 2162065

[rwright1974@yahoo.com](mailto:rwright1974@yahoo.com)

----- Forwarded Message -----

**From:** Rebecca <[rwright1974@yahoo.com](mailto:rwright1974@yahoo.com)>

**To:** Rebecca Wright <[rebecca.wright@celerion.com](mailto:rebecca.wright@celerion.com)>

**Sent:** Wednesday, May 29, 2024 at 11:47:14 AM EDT

**Subject:**

Regards, Rebecca

Sent from my iPhone

Rebecca Wright

Director of business development

484 905-1958

Sent 12/30/22

\$326.94

Paid

Sent 10/13/22

\$359.39

Paid

Sent on 06/30/22

\$173.59

Paid

Sent on 04/07/22

\$158.42

Paid

Sent on 01/05/22

\$143.25

Sent on 04/04/24

\$347.02

Paid

Sent on 01/05/24

\$462.28

Paid



∨ 2023

\$1,154.26

**3 payments**

Total amount paid

WRIGHT EX

3

**2 payments**

Total amount paid

^ 2023

\$1,154.26

**3 payments**

Total amount paid

Sent on 09/23/23

\$347.02

Paid

Sent 06/27/23

\$438.49

Paid

Anthony Rock  
Newtown Square, PA 19073

August 13, 2024

Pennsylvania Public Utility Commission  
400 North Street  
Keystone Bldg.  
Harrisburg, PA 17120

PA PUC:

### Summary

I write to strongly encourage you to reject Aqua Pennsylvania, Inc. (“Aqua”)’s proposed rate increases. Two years after increasing monthly water bills by 12% and monthly sewer bills by 59%, Aqua now proposes to increase the combined water and sewer costs by approximately 9.32%. That increase includes a 65% increase in non-consumptive water fees. Aqua already charges a substantial amount of money for its services, including fees to address operational maintenance. It does not adequately justify its proposed rate increases, instead making vague references to the projects its fees support. At a time when Aqua’s parent company is increasing dividend payments for its shareholders and providing very generous compensation to its executives, Aqua fails to explain why it must increase fees to its customers. Accordingly, you should reject the proposal because it fails to justify its rate increases.

### Aqua Proposes to Increase Monthly Water/Sewer Bill by 9.32%.

In undated letters to its customers, Aqua noted its proposed rate increases; it provided one letter related to water services and another letter related to sewer services.<sup>1</sup> The letters did not go into detail about the exact rate increases. Those letters did note, however, that residential customers using 3,870 gallons per month would see a decrease in a typical sewer/wastewater bill from \$114.66 to \$113.83 per month and an increase in a typical water bill with a 5/8-inch meter from \$78.21 to \$97.01 per month. This is an increase in a combined monthly bill from \$192.87 to \$210.84, or a 9.32% increase in the typical monthly water/sewer bill.

### Aqua Already Charges Expensive Non-Consumption Fees of \$80+ in Water/Sewer Bills.

Aqua already charges a significant amount of money to its customers each month for fees unrelated to water and sewer consumption. For example, each month, Aqua charges both a “Customer Charge Water” and a “Customer Charge Sewer.” Aqua’s billing statements explain these charges:

**Customer Charge:** This charge covers the cost of having water service available, including operations, maintenance, meter reading, and other necessary services that are not covered under the consumption charge. It is billed whether or not you use any water.<sup>2</sup>

---

<sup>1</sup> Source: Letters from Aqua to Retail Customers, received week of May 23, 2024.

<sup>2</sup> Source: Monthly Bill from Aqua to Retail Customer for April 2024.

As of 2024, in its “Zone 3,” Aqua is charging \$86.88 per month for water and sewer, regardless of whether the customer uses any water. Specifically, it charges \$20.51 per month for water and \$66.37 per month for sewer.<sup>3</sup> This very substantial sum for a single-family residence should, per its description, be used by Aqua for operations and maintenance—including the very sort of maintenance Aqua describes in its proposed rate increase.

#### Aqua Already Utilizes Distribution System Improvement Charge.

The “Customer Charge” is not the only fee Aqua charges above and beyond consumption/usage. Aqua also charges a Distribution System Improvement Charge (DSIC). This fee, permitted by PUC, is specifically for such matters as replacing aging distribution system items. Aqua charges a 3.58% DSIC fee for water and a 0.73% DSIC fee for sewer. Aqua, in proposing rate increases, does not articulate why the existing DSIC fees, in addition to the non-consumption monthly charges it imposes, are insufficient to fund the projects it describes.

#### Aqua Proposes 65% Increase in Non-Consumption Water Fees

As noted, in its “Zone 3,” Aqua charges a \$20.51 per month “Customer Charge.” Its proposed Schedule of Rates appears to increase this monthly non-consumption charge to \$33.90—an increase of 65.3%.<sup>4</sup> Aqua in no way explains why the monthly water fees should increase by such an astronomical amount.

#### Staggering of Water and Sewer Increases

Two years ago, Aqua drastically increased the price of its sewer fees to customers—an average of 59% for monthly costs. Specifically, the average monthly sewer/wastewater bill for a residential customer using 4,000 gallons per month increased from \$55.51 to \$88.18, a monthly increase of \$32.67, according to an Aqua spokesperson.<sup>5</sup> Meanwhile, Aqua imposed a more modest increase in water fees to customers—a 12% increase.<sup>6</sup> Two years later, Aqua now proposes minimal changes to sewer/wastewater costs but drastic increases to water fees. There may well be innocent explanations for why Aqua is staggering its increases; however, the result is that massive sewer/wastewater fee increases in 2022 are followed by a proposed drastic increase in water fees in 2024.

#### Aqua does not describe its proposed improvements with sufficient detail to determine that those improvements justify its substantial proposed rate increases.

Aqua points to no financial distress and identifies no projects—existing or proposed—that cannot already be funded by existing fees and costs. Indeed, while its exact financial situation is unclear, its parent company’s 2023 annual report indicates that dividends have increased during the past three years.<sup>7</sup> Moreover, public records indicate that its executives are amply

---

<sup>3</sup> Source: Monthly Bill from Aqua to Retail Customer for April 2024.

<sup>4</sup> Aqua Pennsylvania, Inc. Original Tariff Water – PA P.U.C. No. 4, available at <https://www.aquawater.com/tariff-water-pa-puc-no.-4-effective-2024.07.22-filed-on-may-23-2024.pdf>. The tariff document for Sewer is available at <https://www.aquawater.com/tariff-sewer-pa-puc-no.-4-effective-2024.07.22-filed-on-may-23-2024.pdf>.

<sup>5</sup> “Aqua Pa. details its steep rate increase and hits sewer users the hardest,” Philadelphia Inquirer, available at <https://www.inquirer.com/business/aqua-pennsylvania-rates-water-wastewater-20220525.html>.

<sup>6</sup> “Aqua Pa. details its steep rate increase and hits sewer users the hardest,” Philadelphia Inquirer, available at <https://www.inquirer.com/business/aqua-pennsylvania-rates-water-wastewater-20220525.html>.

<sup>7</sup> Essential Utilities 2023 Annual Report, available at <https://www.essential.co/static-files/a9444148-6fa4-469b-a10a-84bf3fe2fd6d>.

compensated. In Fiscal Year 2022, for example, its parent company CEO had an annual compensation of more than \$4.5 million, allocated between salary and equity. Four other executive vice presidents were compensated by more than \$1 million that year, for a combined compensation exceeding \$10 million for its top five earners.<sup>8</sup> None of this information should suggest that shareholder dividends or generous executive compensation are themselves inappropriate. Rather, these pieces of information should be viewed as data points when assessing the current financial health of Aqua. The readily available information suggests that Aqua is in a strong financial position and does not need to increase costs to its customers. Aqua has not provided specific details about how its current—and quite healthy—financial situation requires higher charges from its customers.

### Conclusion

Aqua is a corporation that already charges its customers very substantial fees regardless of their water/sewer use. It does not justify its proposed rate increases nor does it explain why the current charges and fees would not be sufficient for any proposed upgrades. Aqua's parent company is providing extremely generous compensation to its executives, with its top five executives receiving total annual compensation in 2022 of more than \$10 million. Because Aqua fails to justify its proposed rate increases, its proposals should be rejected in full. PUC should keep Aqua's rates the same or consider reducing them to provide relief to its customers.

Very Respectfully,

A handwritten signature in black ink, appearing to read "Anthony Rock". The signature is fluid and cursive, with the first name "Anthony" written in a larger, more prominent script than the last name "Rock".

Anthony Rock

---

<sup>8</sup> Executive Utilities Inc., Compensation by Company, available at <https://www1.salary.com/AQUA-AMERICA-INC-Executive-Salaries.html>.