

**KENTUCKY-AMERICAN WATER COMPANY**  
**CASE NO. 2023-00248**  
**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

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**Witness: John Magner**

1. Provide a copy of any detailed alternative analysis prepared for this project.

**Response:**

In considering various alternatives and in selecting the recommended project, KAW developed cost estimates for those alternatives. Those estimates are provided in Attachment 1.<sup>1</sup> Depictions of the various alternative main alignments were provided in Exhibit 3 to the direct testimony of John Magner.

In addition to developing cost estimates, KAW performed hydraulic analyses. A memo prepared by KAW summarizing the results of the hydraulic analyses is provided in Attachment 2. This memo was developed at an early stage in KAW's alternative analysis process. At the time that the hydraulic modeling was performed, KAW was developing a final list of feasible alternatives for more detailed consideration. After performing the hydraulic modeling, KAW refined the list of alternatives for more detailed consideration to the list of alternatives described in this response and the direct testimony of John Magner. Alignment, cost, and project considerations shown in the memo were later refined after additional evaluation by KAW prior to selecting the preferred alternative. Alternatives deemed not be feasible based on initial evaluation (such as alternatives involving the acquisition of existing mains) were not evaluated further by KAW.

Alternatives were evaluated based on the criteria described in Attachment 2. The hydraulic modeling results for the final list of evaluated alternatives are summarized below.

- Construct a main along the bypass north of Paris (selected alternative): Up to approximately 1,000 gallons per minute ("gpm") of additional capacity above existing demand can be provided to the Millersburg system and flushing velocities can be delivered.
- Construct a main through downtown Paris: Up to approximately 1,000 gpm of additional capacity above existing demand can be provided to the Millersburg system and flushing velocities can be delivered.
- Construct a main through rural areas south of Paris: Up to approximately 500 gpm of additional capacity above existing demand can be provided to the Millersburg system. Additional improvements, such as a booster station, would be required to

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<sup>1</sup> The preliminary cost estimate for the "Main North of Paris Along Bypass Road" alternative, which was the selected alternative, differs slightly from the estimated cost provided in the Application and associated direct testimony for the proposed project. After performing preliminary alternatives analysis, KAW developed a more detailed cost estimate for the proposed project, which is the estimate provided in the Application. The estimate provided in the Application is the current estimated cost of the project.

deliver flushing velocities. This alternative also reduces pressures in KAW's system in the Winchester Road area of Lexington, KY.

- Construct a main from North Middletown: Up to approximately 500 gpm of additional capacity above existing demand can be provided to the Millersburg system. Delivering flushing velocities may not be possible.

Constructing a main along the bypass north of Paris was selected due to its competitive cost, hydraulic performance, ability to be installed primarily within state right-of-way, and avoidance of disturbing recently installed pavement and other infrastructure in downtown Paris where significant roadway improvements have recently been completed.

When compared to the alternative of constructing a main through downtown Paris, the selected alternative is also anticipated to reduce future maintenance costs. Maintenance of a main in downtown Paris would be more expensive due to likely more significant requirements for traffic control and right-of-way restoration when compared to a main primarily installed in grassed portions of right-of-way outside of the limits of paving.

Conceptual Cost Opinion					
Alt: <b>Main North of Paris Along Bypass Road</b>					
Date: November 2022					
No.	Item	Unit	Quantity	Unit Price	Total Cost
1	Mobilization/Demobilization, MOT, Staking, ESC	LS	1	\$ 460,000	\$ 460,000
2	Main Installation - Urban	LF	9,000	\$ 230	\$ 2,070,000
3	Main Installation - Rural	LF	53,000	\$ 110	\$ 5,830,000
4	Main Installation - Bore	LF	700	\$ 750	\$ 525,000
5	Main Installation - River/Stream Crossing	LF	1,000	\$ 650	\$ 650,000
6	Main Installation - Railroad Crossing	LF	75	\$ 1,500	\$ 112,500
<b>Construction Subtotal</b>					<b>\$ 9,647,500</b>
Engineering, Easements, Legal, Permitting, Overhead, Etc. (30%)					<b>\$ 2,894,250</b>
<b>Project Total</b>					<b>\$ 12,541,750</b>

Conceptual Cost Opinion					
Alt: <b>Main Through Downtown Paris</b>					
Date: November 2022					
No.	Item	Unit	Quantity	Unit Price	Total Cost
1	Mobilization/Demobilization, MOT, Staking, ESC	LS	1	\$ 450,000	\$ 450,000
2	Main Installation - Urban	LF	14,500	\$ 265	\$ 3,842,500
3	Main Installation - Rural	LF	40,000	\$ 110	\$ 4,400,000
4	Main Installation - Bore	LF	800	\$ 750	\$ 600,000
5	Main Installation - River/Stream Crossing	LF	500	\$ 650	\$ 325,000
6	Main Installation - Railroad Crossing	LF	0	\$ 1,500	\$ -
<b>Construction Subtotal</b>					<b>\$ 9,617,500</b>
Engineering, Easements, Legal, Permitting, Overhead, Etc. (30%)					<b>\$ 2,885,250</b>
<b>Project Total</b>					<b>\$ 12,502,750</b>

Conceptual Cost Opinion					
Alt: <b>Cross Country Main South of Paris</b>					
Date: November 2022					
No.	Item	Unit	Quantity	Unit Price	Total Cost
1	Mobilization/Demobilization, MOT, Staking, ESC	LS	1	\$ 410,000	\$ 410,000
2	Main Installation - Urban	LF	2400	\$ 230	\$ 552,000
3	Main Installation - Rural	LF	58,000	\$ 110	\$ 6,380,000
4	Main Installation - Bore	LF	325	\$ 750	\$ 243,750
5	Main Installation - River/Stream Crossing	LF	500	\$ 650	\$ 325,000
6	Main Installation - Railroad Crossing	LF	525	\$ 1,500	\$ 787,500
<b>Construction Subtotal</b>					<b>\$ 8,698,250</b>
Engineering, Easements, Legal, Permitting, Overhead, Etc. (35%)					<b>\$ 3,044,400</b>
<b>Project Total</b>					<b>\$ 11,742,650</b>

Conceptual Cost Opinion					
Alt: <b>Supply Water from North Middletown</b>					
Date: November 2022					
No.	Item	Unit	Quantity	Unit Price	Total Cost
1	Mobilization/Demobilization, MOT, Staking, ESC	LS	1	\$ 960,000	\$ 960,000
3	Main Installation - Urban	LF	5,050	\$ 230	\$ 1,161,500
4	Main Installation - Rural	LF	149,500	\$ 110	\$ 16,445,000
5	Main Installation - Bore	LF	625	\$ 750	\$ 468,750
6	Main Installation - River/Stream Crossing	LF	1,070	\$ 650	\$ 695,500
7	Main Installation - Railroad Crossing	LF	300	\$ 1,500	\$ 450,000
<b>Construction Subtotal</b>					<b>\$ 20,180,750</b>
Engineering, Easements, Legal, Permitting, Overhead, Etc. (30%)					\$ 6,054,225
<b>Project Total</b>					<b>\$ 26,234,975</b>



November 21, 2022

Mr. John Magner  
2300 Richmond Road  
Lexington, Kentucky

Dear Mr. Magner,

Re: Hydraulic Analysis for Millersburg Connection Alternatives  
Task Order Number: N/A

I have completed hydraulic analysis for the water main extension required for the Millersburg Connection water service project. The analysis focused on investigating the following:

- Maintain a minimum pressure of 30 psi to all customers served by the proposed extensions under average summer demand conditions.
- Maintain 2.5 feet per second (fps) flushing velocity through existing infrastructure and new mains while maintaining 20 psi residual pressure.
- Determine fireflow of 250 - 1,000 GPM can be met with a 20 psi residual pressure

A 24-hour extended period simulation using Kentucky American Water's (KAW) calibrated skeletonized model was conducted consisting of about 10,000 pipes. The demands introduced into the model were representative of the known average summer demand day experienced on June 2014.

Alternatives considered in this analysis for connecting the Millersburg system to the Kentucky American Water Central Division system in order to supply for the design criteria above. Results are summarized below each alternative listed in the following section.

Assumptions: No additional demand was integrated into the model for this analysis. No capacity is provided from Paris Water or other suppliers other than KAW. Minimum allowable pressure at Millersburg point of entry site is 65 psi. No additional demand to be placed on constructed/acquired main.

To determine the customer demand, the number of lots (customers) in the existing area were counted. The demand was then determined using the following formula:

400 gpd \* (# of customers)

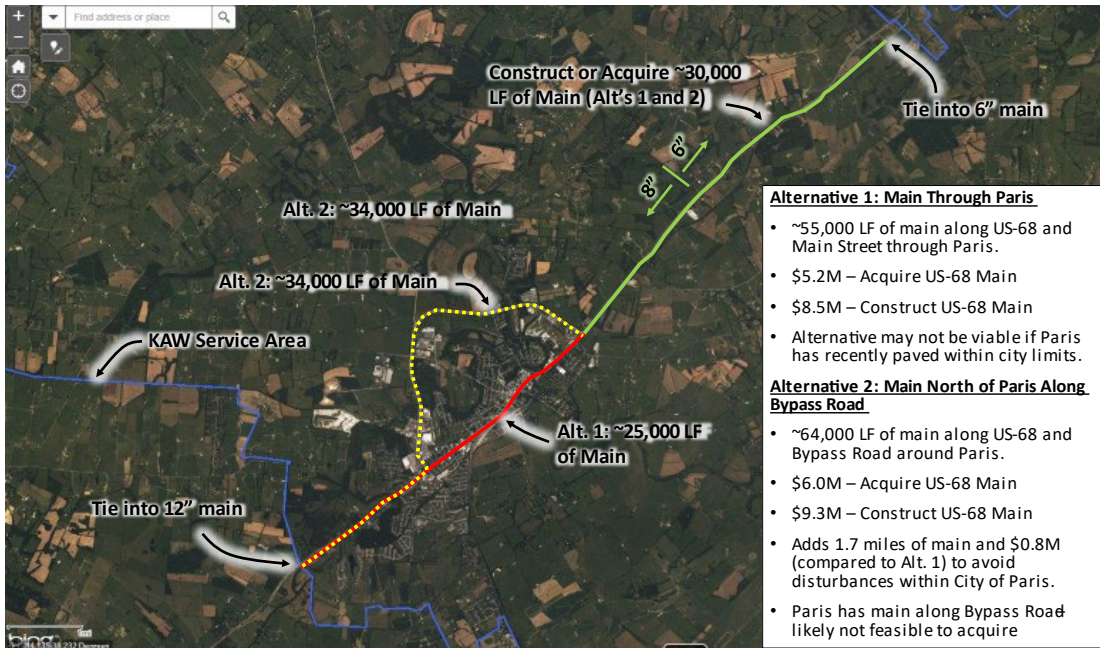
Since demand was already allocated for the development in the area, only an additional demand encompassing the new lots was added.

To determine the flushing demand, the required velocity (2.5 fps) was multiplied by the diameter of the main to be flushed.

Fireflows were determined by inputting a demand of 250 - 1,000 gallons per minute into the simulation.

**Alternatives Considered:**

- **Alternative 1** – Construct and/or acquire ~55,000 LF of main along US-68 and Main St through Paris. Tie into 12” main on US-68 Paris Pike.
- **Alternative 2** – Construct and/or acquire ~64,000 LF of main along US-68 and Bypass Rd around Paris. Tie into 12” main on US-68 Paris Pike.





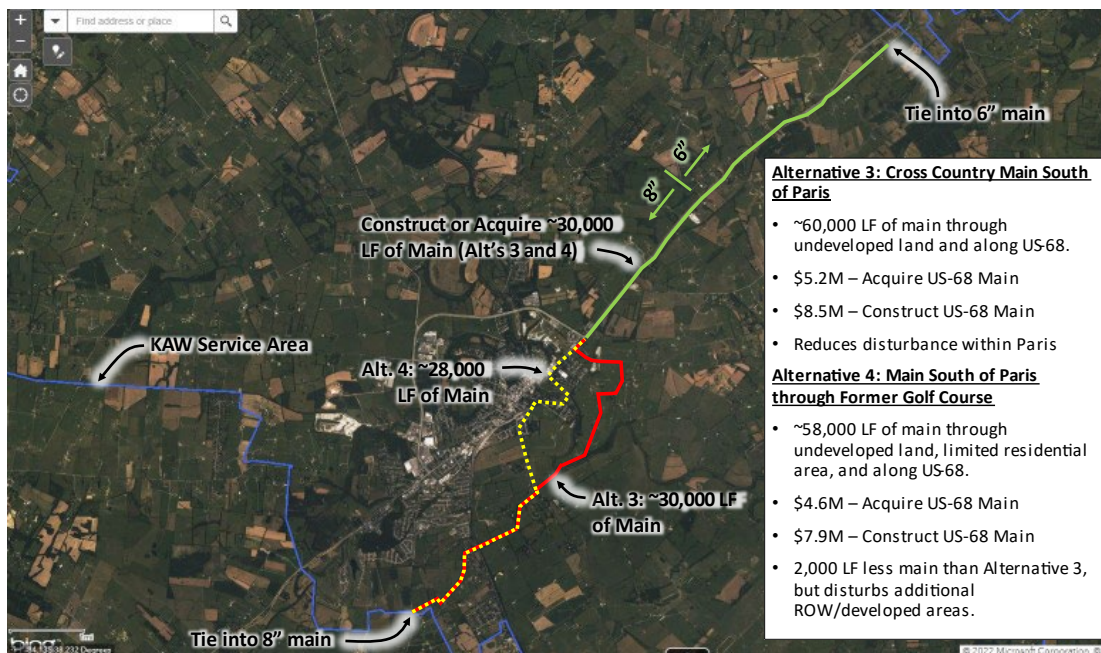
### **Alternative 1 Results:**

- Acquisition of 8" and/or 6" main on US-68 limits the viability of any constructed main, regardless of size. In order to deliver 220 GPM flushing velocity for 6" pipe, 250-500 GPM fire flow or additional capacity up to 500 GPM, minimum of 12" diameter main is required for entire proposed length of connection (~55,000 LF). To deliver fire flow or additional capacity up to 1000 GPM, minimum of 16" diameter main is required for entire proposed length of connection.
- Necessary flow for flushing velocity in 12" pipe (900 GPM) can be delivered if entire 55,000 LF of connection is installed as 12" pipe.
- Necessary flow for flushing velocity in 16" pipe (1,600 GPM) cannot be delivered if entire 55,000 LF of connection is installed as 16" pipe. To accommodate this or future potential demand, additional booster equipment or capacity will be required.
- Flushing velocity for either size can be delivered if a combination of 12" and 16" pipe is installed over the connection length.

### **Alternative 2 Results:**

- Acquisition of 8" and/or 6" main on US-68 limits the viability of any constructed main, regardless of size. In order to deliver 220 GPM flushing velocity for 6" pipe, 250-500 GPM fire flow or additional capacity up to 500 GPM, minimum of 12" diameter main is required for entire proposed length of connection (~64,000 LF). To deliver fire flow or additional capacity up to 1000 GPM, minimum of 16" diameter main is required for entire proposed length of connection.
- Necessary flow for flushing velocity in 12" pipe (900 GPM) cannot be delivered if entire 64,000 LF of connection is installed as 12" pipe. To accommodate this or future potential demand, additional booster equipment or capacity will be required.
- Necessary flow for flushing velocity in 16" pipe (1,600 GPM) cannot be delivered if entire 64,000 LF of connection is installed as 16" pipe. To accommodate this or future potential demand, additional booster equipment or capacity will be required.
- Flushing velocity for either size can be delivered if a combination of 12" and 16" pipe is installed over the connection length.

- **Alternative 3** – Construct and/or acquire ~60,000 LF of main through undeveloped land and along US-68. Tie into 8” main on Bethlehem Rd.
- **Alternative 4** – Construct and/or acquire ~58,000 LF of main through undeveloped land, limited residential area, and along US-68. Tie into 8” main on Bethlehem Rd.







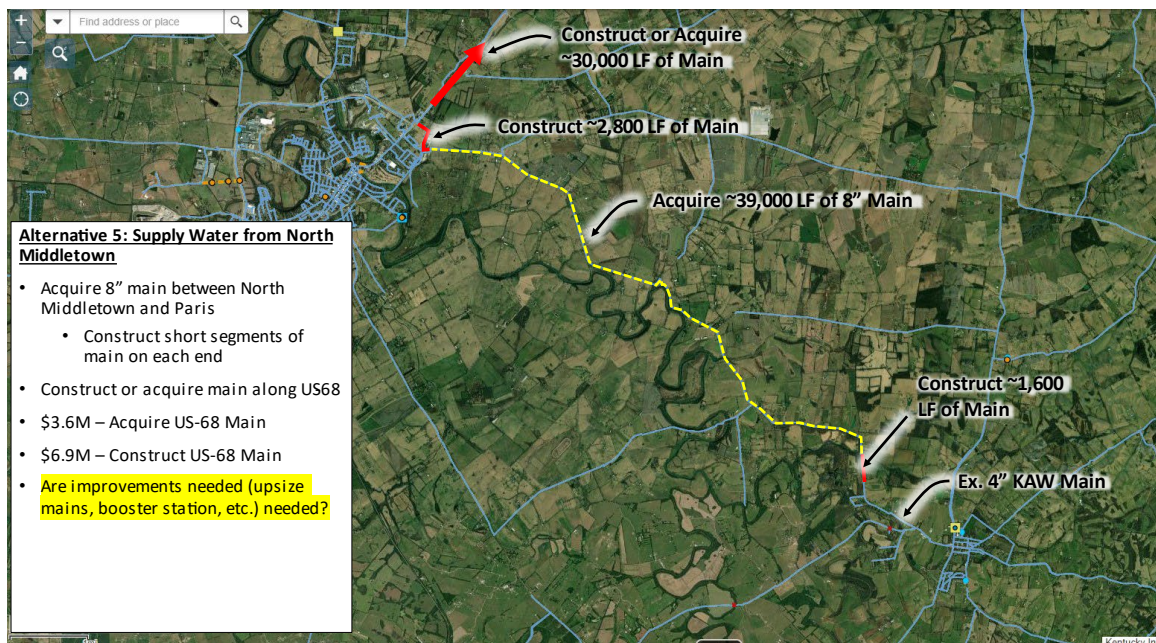
### **Alternative 3 Results:**

- Acquisition of 8" and/or 6" main on US-68 limits the viability of any constructed main, regardless of size. In order to deliver 220 GPM flushing velocity for 6" pipe, 250 GPM fire flow or additional capacity up to 250 GPM, minimum of 12" diameter main is required for entire proposed length of connection (~60,000 LF). To deliver fire flow or additional capacity up to 500 GPM, minimum of 16" diameter main is required for entire proposed length of connection. Additional demand at this connection point has a relatively large negative effect on pressures in the Winchester Rd area.
- Necessary flow for flushing velocity in either 12" or 16" pipe cannot be delivered in this scenario. To accommodate this or future potential demand, additional booster equipment or capacity will be required.

### **Alternative 4 Results:**

- Acquisition of 8" and/or 6" main on US-68 limits the viability of any constructed main, regardless of size. In order to deliver 220 GPM flushing velocity for 6" pipe, 250 GPM fire flow or additional capacity up to 250 GPM, minimum of 12" diameter main is required for entire proposed length of connection (~58,000 LF). To deliver fire flow or additional capacity up to 500 GPM, minimum of 16" diameter main is required for entire proposed length of connection. Additional demand at this connection point has a relatively large negative effect on pressures in the Winchester Rd area.
- Necessary flow for flushing velocity in either 12" or 16" pipe cannot be delivered in this scenario. To accommodate this or future potential demand, additional booster equipment or capacity will be required.

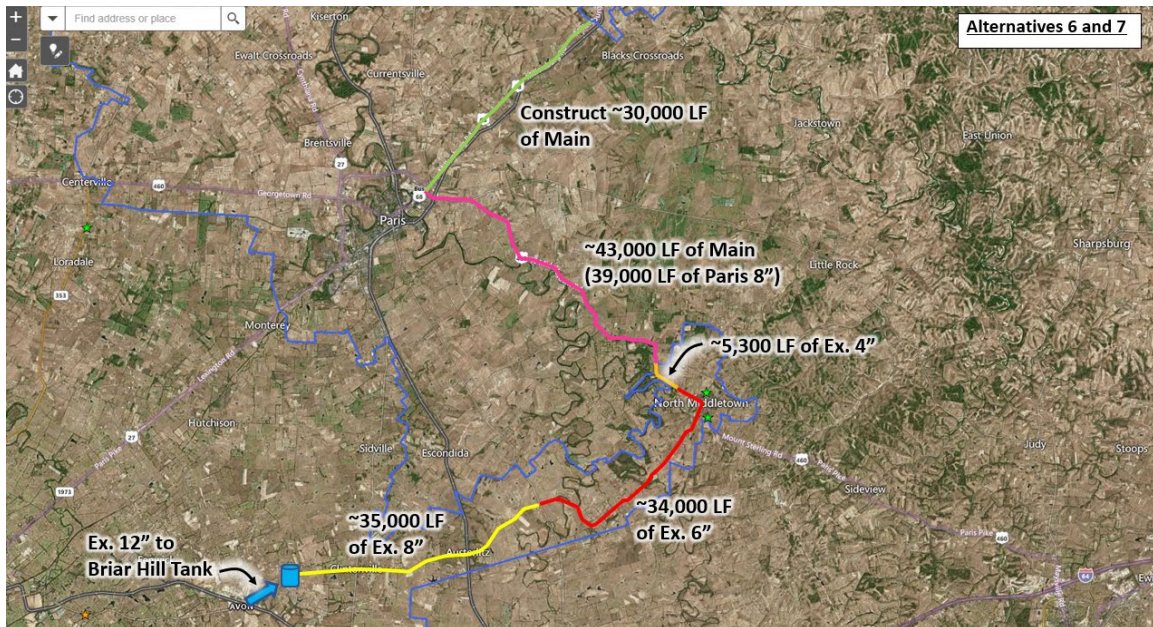
- **Alternative 5** – Acquire 8” main between North Middletown and Paris, construct short segments of main on each end, construct or acquire main along US-68.



### Alternative 5 Results:

- All variations on alternative 5 are unable to provide even minimum requirements examined by this analysis. Any connection between the North Middletown area and the Millersburg will require major upgrades to water mains between the Briar Hill tank and North Middletown, including existing distribution water mains in North Middletown.

- **Alternative 6** – Upsize 34,000 LF of ex. 6", construct 43,000 LF of main between N. Middletown and Paris (size TBD), and construct 30,000 LF of main between Paris and Millersburg (size TBD). Consider if a booster station would be beneficial. Potentially somewhere near Briar Hill.
- **Alternative 7** – Upsize 34,000 LF of ex. 6", construct 43,000 LF of main between N. Middletown and Paris (size TBD), construct 30,000 LF of main between Paris and Millersburg (size TBD), upsize the 35,000 LF of 8" east of Avon as well. Consider if a booster station would be beneficial. Potentially somewhere near Briar Hill.
- **Alternative 8** – Construct 55-65,000 LF of Main from KAW 12" west of Paris to Millersburg (size TBD), construct 43,000 LF of main from Paris to North Middletown (size TBD), Upsize 5,300 LF of 4" main northwest of N. Middletown (size TBD)



#### **Alternative 6 Results:**

- Upsizing 34,000 LF of ex. 6" and smaller mains on Thatchers Mill Rd and in North Middletown with a minimum of 12" diameter ductile iron pipe enables the system to deliver existing demand.
- In order to deliver 220 GPM flushing velocity for 6" pipe, 250-500 GPM fire flow or additional capacity up to 500 GPM, minimum of 12" diameter main is required for entire length of connection between N. Middletown and Paris (~43,000 LF) and between Paris and Millersburg (~30,000 LF).
- Necessary flow for flushing velocity in 12" pipe (900 GPM) cannot be delivered in this scenario. 16" pipe is not a viable option due to capacity limits of existing 8" pipe east of Avon.
- To accommodate flushing velocity or future potential demand, additional booster equipment or capacity will be required. Additional booster station downstream of Briar Hill Tank was not initially effective in simulations for overcoming head loss for flushing capacity, but warrants further analysis.

#### **Alternative 7 Results:**

- Upsizing 34,000 LF of ex. 6" and smaller mains on Thatchers Mill Rd and in North Middletown, and 35,000 LF of 8" east of Avon with a minimum of 12" diameter ductile iron pipe enables the system to deliver existing demand, 220 GPM flushing velocity, 500 GPM fire flow, or additional capacity up to 500 GPM.
- Required flow for flushing velocity in 12" diameter pipe (900 GPM) is unavailable in this scenario.
- Necessary flow for flushing velocity in 16" pipe (~1,600 GPM) can be delivered if entire length of connection and upsized main is upsized to 16" main.
- To assist flushing velocity or future potential demand, additional booster equipment or capacity will be required. Additional booster station downstream of Briar Hill Tank was not initially effective in simulations for overcoming head loss for flushing capacity, but warrants further analysis.



### Alternative 8 Results:

- Constructing 65,000 LF of Main from KAW 12" west of Paris to Millersburg, constructing 43,000 LF of main from Paris to North Middletown, and upsizing 5,300 LF of 4" main northwest of North Middletown, all with a minimum of 12" diameter ductile iron pipe, enables the system to deliver existing demand, 220 GPM flushing velocity for 6" pipe, 500 GPM fire flow, or additional capacity up to 500 GPM. Required flow for flushing velocity in 12" diameter pipe (900 GPM) is unavailable in this scenario.
- If 65,000 LF of Main from KAW 12" west of Paris to Millersburg is instead installed as 16" diameter main, available fire flow in Millersburg is increased to 1,000 GPM, flushing velocity for 12" main (900 GPM) is available in Millersburg, and flushing velocity for 16" main (1,600 GPM) is available.
- Additional upsizing of 8" and 6" main between Briar Hill and North Middletown would further improve capacity and pressure in the area.

If you have any questions regarding the hydraulic analysis conducted, please contact me at 859-268-6368.

Sincerely,

Tyler Wells, PE  
Project Engineer  
Kentucky American Water

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**Witness: John Magner**

2. Regarding the alternative of constructing a main through downtown Paris, provide the estimated capital costs, estimated operating and maintenance costs, and estimated useful life.

**Response:**

The estimated capital costs of alternatives evaluated by KAW are provided below. Itemized conceptual cost opinions developed during preliminary alternatives analyses are attached to the response to PSC DR 1-1.

- Constructing a main through downtown Paris: \$12,502,750<sup>1</sup>
- Constructing a main south of Paris: \$11,742,650
- Constructing a main from North Middletown: \$26,234,975

The operating and maintenance costs associated with these alternatives would be proportional to the volume of water supplied through the main. In 2022, KAW purchased approximately 76.3 million gallons of water from Paris Water Works to supply the Millersburg system. Assuming this same volume and a variable incremental production cost of approximately \$0.60 per 1,000 gallons for KAW to supply water, the annual operating and maintenance cost would be approximately \$46,000.

The estimated useful life of the main would be 80 years, which is the estimated useful life of ductile iron pipe.

The estimated useful life and operating and maintenance costs of the evaluated alternatives, including the proposed alternative, are largely the same. The proposed alternative of constructing a main along the bypass north of Paris was selected for the reasons noted below.

- It provides as much or greater hydraulic capacity when compared to the other alternatives.
- It allows for the proposed main to be constructed primarily in state right-of-way, which reduces costs associated with acquiring easements, minimizes the risk for

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<sup>1</sup> The preliminary cost estimate for the “Main North of Paris Along Bypass Road” alternative, which is the selected alternative, differs slightly from the estimated cost provided in the Application and associated direct testimony for the proposed project. After performing preliminary alternatives analysis, KAW developed a more detailed cost estimate for the proposed project, which is the estimate provided in the Application. The estimate provided in the Application is the current estimated cost of the project.

project delays associated with property negotiations, and minimizes disturbance to citizens' private property.

- It avoids disturbing recently installed pavement and other infrastructure in downtown Paris, where significant roadway improvements have recently been constructed.
- It is anticipated to have lower long-term maintenance costs when compared to installing a main through downtown Paris, as maintenance in downtown Paris would likely require greater traffic control measures and pavement restoration. Maintaining a main in downtown Paris would also increase disturbance to citizens of Paris.
- Its estimated capital construction is similar to or less than the other alternatives.
- It is not anticipated to have significant adverse impacts to other areas of KAW's system.

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**Witness: John Magner**

3. Regarding the alternative of constructing a main south of Paris, provide the estimated capital costs, estimated operating and maintenance costs, and estimated useful life.

**Response:**

Please refer to the response to PSC DR 1-2.



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**Witness: John Magner**

4. Regarding the alternative of main from North Middletown provide the estimated capital costs estimated operating and maintenance cost and estimated useful life.

**Response:**

Please refer to the response to PSC DR 1-2.

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**Witness: John Magner**

5. State whether Kentucky-American will complete the work using its own employees or whether contractors will be retained to complete the project.

**Response:**

KAW will utilize contractors to construct the project. Bids will be solicited as described in the response to PSC DR 1-10.

**KENTUCKY-AMERICAN WATER COMPANY  
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**Witness: John Magner**

6. State whether Kentucky-American has considered any alternative materials for the project.

**Response:**

KAW's standard material for critical water mains is ductile iron pipe due to its durability, longevity, and lower lifecycle cost when compared to other materials. Polyvinyl chloride (PVC) pipe, which is another material commonly used for water mains, is slightly less expensive than ductile iron pipe. C900 PVC has an estimated cost of approximately \$50 per linear foot of 12" pipe compared to an estimated cost of approximately \$55 per linear foot for ductile iron pipe. However, the estimated useful life of PVC pipe is only 55 years compared to 80 years for ductile iron pipe, which would result in a higher life cycle cost for the proposed transmission main if it were constructed using PVC pipe.

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**Witness: John Magner**

7. State the expected useful life of the main once completed.

**Response:**

The expected useful life of the proposed main is 80 years, which is the expected useful life of ductile iron pipe.

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**Witness: John Magner**

8. State whether Kentucky-American inquired whether Paris Water Works could provide a higher volume of work, and if so, what was the response.

**Response:**

As discussed later in this response, Paris Water Works has not indicated an interest in supplying additional water to KAW. In addition to concerns regarding the volume of water that can be supplied, KAW has concerns regarding the quality of water being supplied by Paris Water Works. As described in the Application and Direct Testimony of John Magner, the United States Environmental Protection Agency (“EPA”) has established maximum contaminant levels (“MCL”) for both total trihalomethanes (“TTHM”) and total haloacetic acids (“HAA5”) as part of the Stage 1 and Stage 2 Disinfection Byproduct Rules (“DBPR”), which were established to reduce drinking water exposure to disinfection byproducts (“DBP”).

KAW performs monthly sampling of the water supplied to the Millersburg system by Paris Water Works. KAW has repeatedly measured TTHM and HAA5 levels above the regulatory MCLs established by the EPA. Data regarding sampling of the water supplied by Paris Water Works is provided in Attachment 1 to this response and summarized below.

- From June 2018 through August 2023, TTHM and/or HAA5 levels in the water supplied by Paris Water Works have exceeded the regulatory MCLs in 31 out of 51 months.
- From June 2018 through August 2023, HAA5 levels in the water supplied by Paris Water Works exceeded the regulatory MCL 30 times.
- From June 2018 through August 2023, TTHM levels in the water supplied by Paris Water Works exceeded the regulatory MCL 9 times.
- From June 2018 through August 2023, the average HAA5 level in the water supplied by Paris Water Works exceeded the regulatory MCL.
- HAA5 levels in the water supplied by Paris Water Works have exceeded the regulatory MCL by as much as approximately 100%.
- TTHM levels in the water supplied by Paris Water Works have exceeded the regulatory MCL by as much as approximately 47%.
- TTHM and/or HAA5 levels in the water supplied by Paris Water Works have exceeded the regulatory MCLs in each of the three most recent samplings conducted in June, July, and August of 2023.

KAW has notified Paris Water Works each time the sampling indicates their supplied water violates the DBP MCLs established in the DBPR. Letters KAW has sent to Paris Water Works are provided in Attachment 2 to this response. Despite receiving notifications from

KAW since June 2018 regarding elevated TTHM and HAA5 levels in their supplied water, Paris Water works has continued to supply water that does not meet regulatory MCLs to KAW's Millersburg system.

The water purchase agreement between Paris Water Works and KAW, which is provided as Attachment 3 to this response, states that "Paris shall furnish potable water to KAW at the point of delivery hereinafter specified which shall meet all applicable state, federal and/or other regulatory standards." By supplying water that does not meet the DBPR MCL's established by the EPA, Paris Water works has repeatedly violated the agreement.

KAW also has concerns regarding the reliability of water service being supplied to Millersburg by Paris Water Works. The direct testimony of John Magner described two recent instances in July and December 2022 where KAW had to issue precautionary boil advisories to customers in Millersburg due to service-related issues in the Paris Water Works system. Since the filing of that direct testimony, KAW had to issue another precautionary boil advisory in July 2023 to Millersburg customers due to an interruption in the supply from Paris Water Works. KAW operations personnel were informed on July 28 that the Paris water treatment facility had lost power from approximately 3:00 PM on July 27 through approximately 7:00 AM on July 28. Due to this loss of water, Paris issued a boil water advisory to all its water customers on July 28. The boiled water advisory lasted from approximately 8:00 AM on July 28 through 3:00 PM on July 29, or approximately 33 hours.

Representatives from KAW have attended several meetings with representatives from Paris regarding regional water supply solutions and the proposed project. These meetings have included those noted below.

- September 6, 2022: KAW was invited to attend a meeting to discuss regional water supply solutions to support economic development within the region. In addition to KAW, attendees included government officials and water utility and economic development representatives from entities including Bourbon County, Nicholas County, Paris, and the Bluegrass Area Development District.
- February 29, 2023: A representative of KAW met with the Paris City Manager and provided overview information regarding KAW's proposed project. Paris inquired about an emergency connection to KAW's proposed main.
- August 14, 2023: Following KAW's filing of its Application in this case, a representative of KAW met with the Paris City Manager. This meeting was requested by Paris, as shown in the email provided in Attachment 4 to this response, to discuss the project prior to Paris making a "decision on whether to issue a request to intervene on the proposed line."

During these meetings, Paris did not indicate that they would be willing and/or able to provide additional water to KAW's Millersburg system. Paris did express interest in making a connection to KAW's proposed main to purchase water from KAW.

On August 8, 2023, The City Manager of Paris sent an email, provided as Attachment 4 to this response, to an employee of KAW. Attached to the email, and also provided as Attachment 5 to this response, was a draft agreement prepared by Paris for an emergency connection to KAW's proposed transmission main. Paragraph 5 of this draft agreement still limits the amount of water that KAW has the right to purchase from Paris to a daily average of 200,000 gallons per calendar month, which is the same limit under the current water purchase agreement between KAW and Paris.

Finally, KAW routinely receives requests from Paris to reduce flow rate into Millersburg when Paris receives pressure complaints, which limits KAW's ability to meet increased demand conditions.

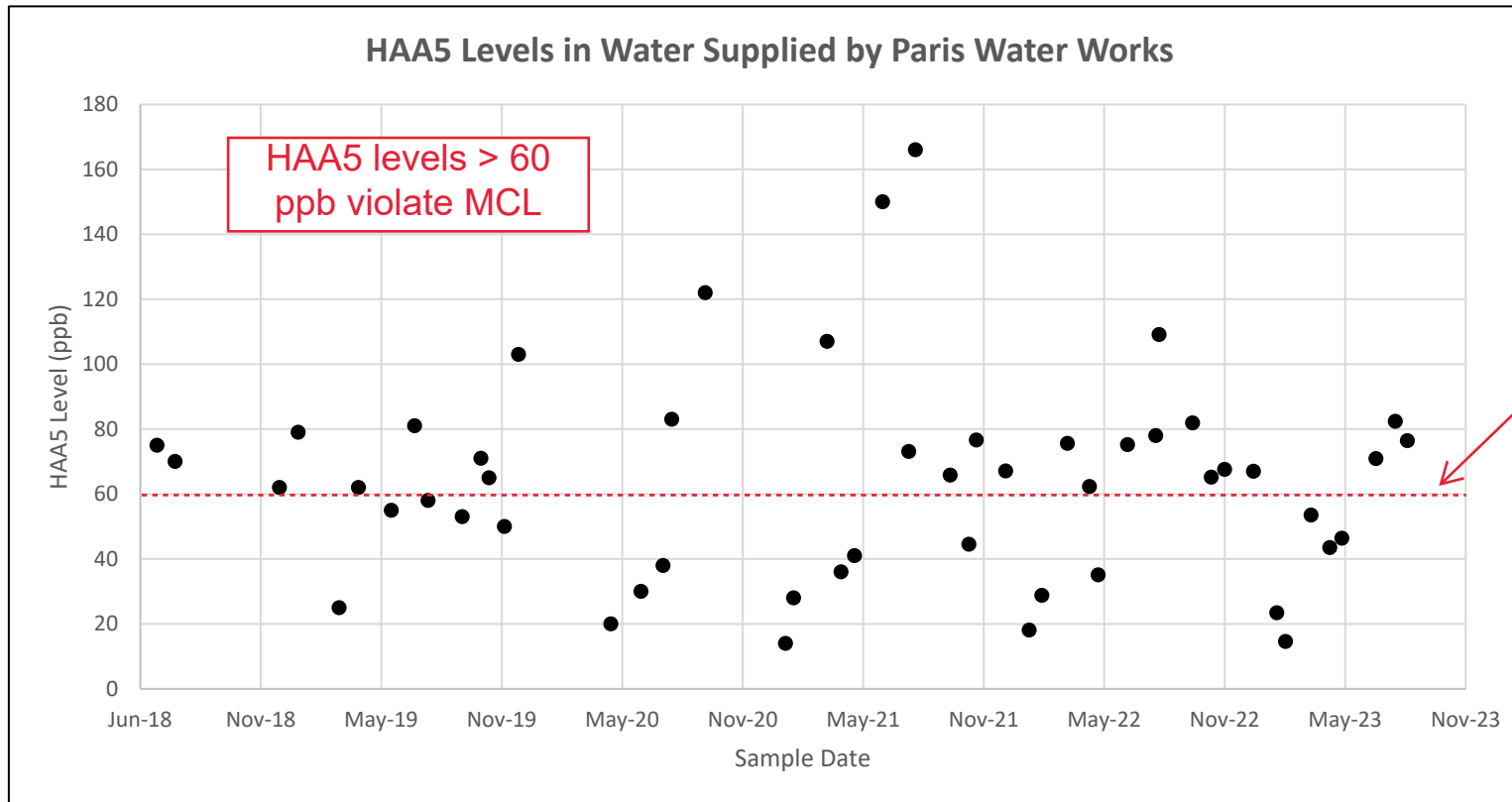
**Values exceeding regulatory maximum contaminant levels**

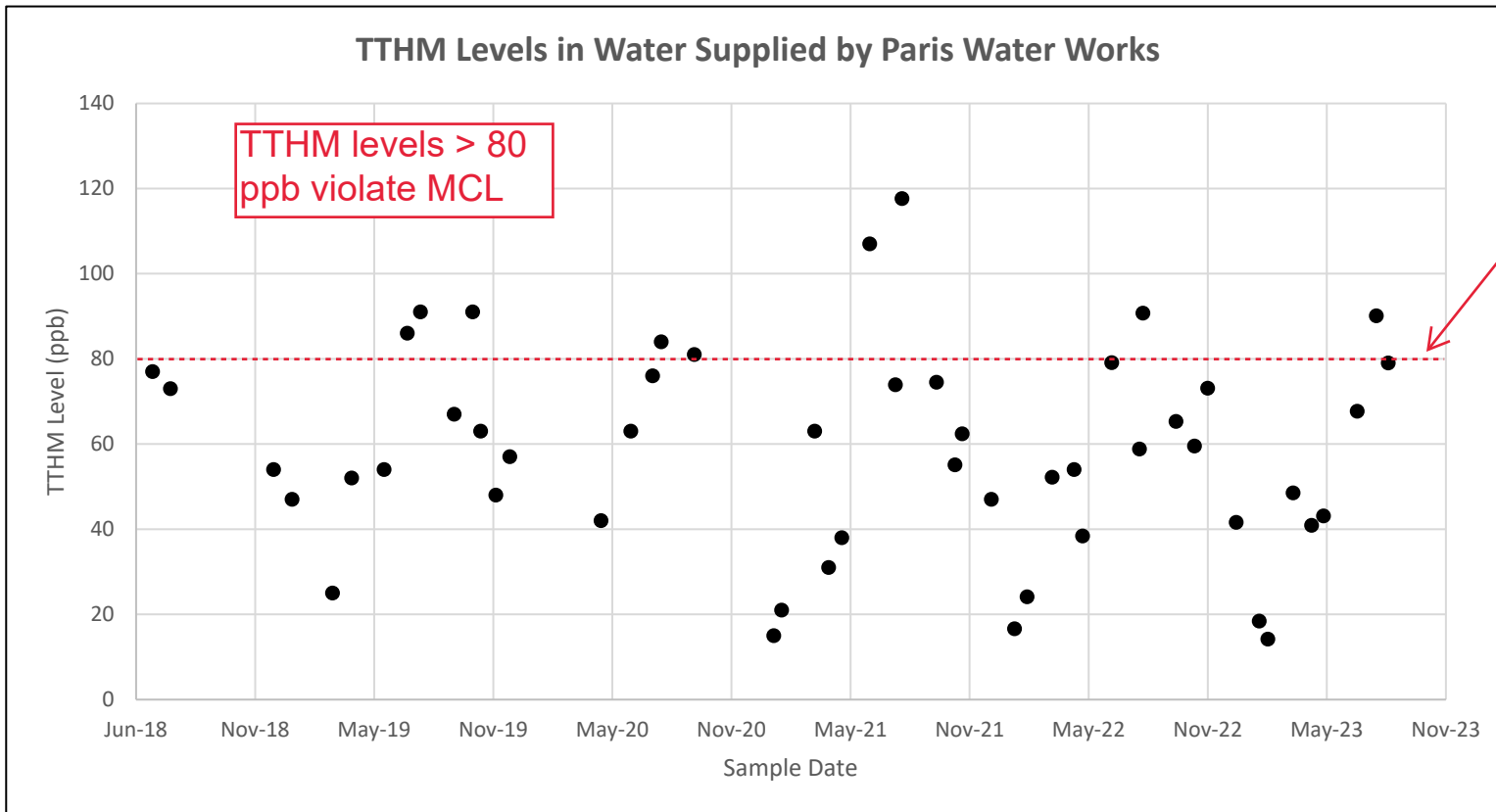
<b>KAW Sampling Results of Water Supplied to Millersburg by Paris Water Works</b>		
<b>Date</b>	<b>TTHM Level (ppb)</b>	<b>HAA5 Level (ppb)</b>
	<b>MCL = 80 ppb</b>	<b>MCL = 60 ppb</b>
6/26/2018	77	75
7/23/2018	73	70
12/26/2018	54	62
1/23/2019	47	79
3/25/2019	25	25
4/23/2019	52	62
6/11/2019	54	55
7/16/2019	86	81
8/5/2019	91	58
9/25/2019	67	53
10/23/2019	91	71
11/4/2019	63	65
11/27/2019	48	50
12/18/2019	57	103
5/4/2020	42	20
6/18/2020	63	30
7/21/2020	76	38
8/3/2020	84	83
9/22/2020	81	122
1/20/2021	15	14
2/1/2021	21	28
3/23/2021	63	107
4/13/2021	31	36
5/3/2021	38	41
6/14/2021	107	150
7/23/2021	73.9	73.1
8/2/2021	117.6	166
9/23/2021	74.5	65.8
10/21/2021	55.1	44.5
11/1/2021	62.4	76.6
12/15/2021	47	67.1
1/19/2022	16.6	18.1
2/7/2022	24.1	28.8
3/17/2022	52.2	75.6
4/19/2022	54	62.3
5/2/2022	38.4	35.1
6/15/2022	79.1	75.2
7/27/2022	58.8	78
8/1/2022	90.7	109.1
9/20/2022	65.3	81.9
10/18/2022	59.5	65.2



**Values exceeding regulatory maximum contaminant levels**

<b>KAW Sampling Results of Water Supplied to Millersburg by Paris Water Works</b>		
<b>Date</b>	<b>TTHM Level (ppb)</b>	<b>HAA5 Level (ppb)</b>
	<b>MCL = 80 ppb</b>	<b>MCL = 60 ppb</b>
11/7/2022	73.1	<b>67.6</b>
12/20/2022	41.6	<b>67</b>
1/24/2023	18.4	23.4
2/6/2023	14.2	14.6
3/16/2023	48.5	53.5
4/13/2023	40.9	43.5
5/1/2023	43.1	46.4
6/21/2023	67.7	<b>70.9</b>
7/20/2023	<b>90.1</b>	<b>82.4</b>
8/7/2023	79	<b>76.4</b>







August 1, 2018

Mr. Chad Smart  
City of Paris  
525 High Street  
Paris, KY 40361

Mr. Smart,

Kentucky American Water wishes to express our concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Compliance and process monitoring conducted at your master meter feeding water to our Millersburg district reveals elevated TTHM and HAA5 results, the most recent being above the MCL (80 ppb for TTHM and 60 ppb for HAA5). Values within our Millersburg district have also been elevated, with some above the MCL. Samples collected during recent process sampling periods had the following results:

7-23-18 – Paris Master Meter: TTHM = 73 ppb, HAA5 = 70 ppb  
6-26-18 – Paris Master Meter: TTHM = 77 ppb, HAA5 = 75 ppb

Given the values from the completed compliance-monitoring period, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

We would be happy to assist your utility in the evaluation of operational changes to ensure the regulatory compliance of the water provided to Kentucky American Water's Millersburg district. Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the matter, especially if you anticipate continued issues providing water that meets state and federal water quality requirements.

Please give me a call if you have any questions. Office: 859-268-6317.

Sincerely,

Dorothy Rader  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results – 2 pages  
cc: Sarah Gaddis – DOW Compliance & Technical Assistance Branch Manager  
Wes Byrd – DOW Environmental Inspector



January 29, 2019

Mr. Chad Smart  
City of Paris  
525 High Street  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district continues to reveal elevated TTHM and HAA5 results, the most recent values being above the MCL for HAA5 and continuing to trend upward. Values within our Millersburg district have also been elevated, with some above the MCL. Samples collected at the master meter in December and January had the following results:

1-23-19 – Paris Master Meter: TTHM = 47 ppb, HAA5 = 79 ppb  
12-26-18 – Paris Master Meter: TTHM = 54 ppb, HAA5 = 62 ppb

Given the values from the completed compliance-monitoring period, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

We would be happy to assist your utility in the evaluation of operational changes to ensure the regulatory compliance of the water provided to Kentucky American Water's Millersburg district. Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the matter, especially if you anticipate continued issues providing water that meets state and federal water quality requirements.

Please give me a call if you have any questions. Office: 859-268-6317.

Sincerely,

Dorothy Rader  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results – 1 page  
cc: Sarah Gaddis – DOW Compliance & Technical Assistance Branch Manager  
Wes Byrd – DOW Environmental Inspector



May 3, 2019

Mr. Chad Smart  
City of Paris  
525 High Street  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district continues to reveal elevated TTHM and HAA5 results. Although the values dipped in March, the most recent values are back above the MCL for HAA5. Values within our Millersburg district have also been elevated, with some above the MCL. Samples collected at the master meter in March and April had the following results:

4-23-19 – Paris Master Meter: TTHM = 52 ppb, HAA5 = 62 ppb  
3-25-19 – Paris Master Meter: TTHM = 25 ppb, HAA5 = 25 ppb

Given the values from the completed compliance-monitoring period, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

We would be happy to assist your utility in the evaluation of operational changes to ensure the regulatory compliance of the water provided to Kentucky American Water's Millersburg district. Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the matter, especially if you anticipate continued issues providing water that meets state and federal water quality requirements.

Please give me a call if you have any questions. Office: 859-268-6317.

Sincerely,

Dorothy Rader  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results – 2 pages



July 23, 2019

Mr. Chad Smart  
City of Paris  
525 High Street  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district continues to reveal elevated TTHM and HAA5 results. Although the values dropped below MCL over the last couple months, the most recent values have increased and are back above the MCL for both TTHMs and HAA5s. Samples collected at the master meter in June and July had the following results:

7-16-19 – Paris Master Meter: TTHM = 86 ppb, HAA5 = 81 ppb  
6-11-19 – Paris Master Meter: TTHM = 54 ppb, HAA5 = 55 ppb

Given the values from the completed compliance-monitoring period, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

We would be happy to assist your utility in the evaluation of operational changes to ensure the regulatory compliance of the water provided to Kentucky American Water's Millersburg district. Perhaps it is possible for our systems to perform a coordinated flushing to move water throughout the systems from end to end. Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the matter, especially if you anticipate continued issues providing water that meets state and federal water quality requirements.

Please give me a call if you have any questions. Office: 859-268-6317.

Sincerely,

Dorothy Rader  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results – 2 pages



October 30, 2019

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district continues to reveal elevated TTHM and HAA5 results that are above the MCL for TTHMs. The values have been at or above the MCL of 80 ppb for TTHMs and 60 ppb for HAA5 at the master meter for the three of the last four months. Samples collected recently at the master meter had the following results:

10-23-19 – Paris Master Meter: TTHM = 91 ppb, HAA5 = 71 ppb  
09-25-19 – Paris Master Meter: TTHM = 67 ppb, HAA5 = 53 ppb  
08-05-19 – Paris Master Meter: TTHM = 91 ppb, HAA5 = 58 ppb  
07-16-19 – Paris Master Meter: TTHM = 86 ppb, HAA5 = 81 ppb

Given the values from the completed compliance-monitoring period, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

We would be happy to assist your utility in the evaluation of operational changes to ensure the regulatory compliance of the water provided to Kentucky American Water's Millersburg district. Perhaps it is possible for our systems to perform a coordinated flushing to move water throughout the systems from end to end. Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the matter, especially if you anticipate continued issues providing water that meets state and federal water quality requirements.

Please give me a call if you have any questions. Office: 859-268-6317.

Sincerely,

Dorothy Rader  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results, Sept & Oct – 2 pages  
Cc: Wes Byrd – DOW Environmental Inspector  
Joe Ullasz – DOW Compliance Assistance





December 30, 2019

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district continues to reveal elevated TTHM and HAA5 results that are above the MCL. Samples collected recently at the master meter had the following results:

12-18-19 – Paris Master Meter: TTHM = 57 ppb, HAA5 = 103 ppb  
11-27-19 – Paris Master Meter: TTHM = 48 ppb, HAA5 = 50 ppb  
11-04-19 – Paris Master Meter: TTHM = 63 ppb, HAA5 = 65 ppb  
10-23-19 – Paris Master Meter: TTHM = 91 ppb, HAA5 = 71 ppb

Given the values from the completed compliance-monitoring period, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Thank you for meeting with us recently to discuss operational changes to ensure the regulatory compliance of the water provided to Kentucky American Water's Millersburg district. In the next few rounds of testing, we will coordinate with you to collect split samples for verification. Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns.

Please give me a call if you have any questions. Office: 859-268-6317.

Sincerely,

Dorothy Rader  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results, Nov & Dec – 3 pages  
Cc: Gabe Tanner – DOW Compliance Assistance



July 31, 2020

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has once again reveal elevated TTHM results that are at the MCL. Although the values have been well below MCL over the last several months, the most recent values have increased sharply and are at the MCL for TTHMs. Samples collected in the last couple months at the master meter had the following results:

7-21-20 – Paris Master Meter: TTHM = 76 ppb, HAA5 = 38 ppb  
6-18-20 – Paris Master Meter: TTHM = 63 ppb, HAA5 = 30 ppb  
5-4-20 – Paris Master Meter: TTHM = 42 ppb, HAA5 = 20 ppb

Given the values from the completed compliance-monitoring period, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Thank you for meeting with us recently to discuss operational changes to ensure the regulatory compliance of the water provided to Kentucky American Water's Millersburg district. Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns.

Please give me a call if you have any questions. Office: 859-268-6317.

Sincerely,

Dorothy Rader  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results, July 2020  
Cc: Gabe Tanner – DOW Compliance Assistance



October 8, 2020

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has once again revealed elevated TTHM and HAA5 results that are above the MCL of 80/60 ppb respectively. Samples collected in the last couple months at the master meter had the following results:

9-22-20 – Paris Master Meter: TTHM = 81 ppb, HAA5 = 122 ppb  
8-3-20 – Paris Master Meter: TTHM = 84 ppb, HAA5 = 83 ppb  
7-21-20 – Paris Master Meter: TTHM = 76 ppb, HAA5 = 38 ppb

Given the values from the completed compliance-monitoring period, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Thank you for meeting with us recently to discuss operational changes to ensure the regulatory compliance of the water provided to Kentucky American Water's Millersburg district. Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns.

Please give me a call if you have any questions. Office: 859-268-6317.

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results, August & September 2020  
Cc: Gabe Tanner – DOW Compliance Assistance



April 13, 2021

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated HAA5 results that are above the MCL of 60 ppb. Samples collected this year at the master meter had the following results:

01-20-2021 – Paris Master Meter: TTHM = 15 ppb, HAA5 = 14 ppb  
02-01-2021 – Paris Master Meter: TTHM = 21 ppb, HAA5 = 28 ppb  
**03-23-2021 – Paris Master Meter: TTHM = 63 ppb, HAA5 = 107 ppb**

Given the values from the latest sampling in March, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns.

Please give me a call if you have any questions. Office: 859-268-6317.

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results, January, February, and March 2021  
Cc: Gabe Tanner – DOW Compliance Assistance



June 28, 2021

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated TTHM and HAA5 results that are above the MCLs of 80 ppb and 60 ppb, respectively. Samples collected this year at the master meter had the following results:

Date	TTHM (ppb)	HAA5 (ppb)
01/20/2021	15	14
<b>02/01/2021</b>	21	28
<b>03/23/2021</b>	<b>63</b>	<b>107</b>
<b>04/13/2021</b>	31	36
<b>05/03/2021</b>	38	41
<b>06/14/2021</b>	<b>107</b>	<b>150</b>

Given the values from the latest sampling, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns.

Please give me a call if you have any questions. Office: 859-268-6317.

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results June 2021  
Cc: Gabe Tanner – DOW Compliance Assistance



July 29, 2021

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated TTHM and HAA5 results that are above 80% the MCL of 80 ppb for TTHM and above the MCL of 60 ppb for HAA5. Samples collected this year at the master meter had the following results:

Date	TTHM (ppb)	HAA5 (ppb)
	MCL = 80 ppb	MCL = 60 ppb
01/20/2021	15	14
<b>02/01/2021</b>	21	28
<b>03/23/2021</b>	<b>63</b>	<b>107</b>
<b>04/13/2021</b>	31	36
<b>05/03/2021</b>	38	41
<b>06/14/2021</b>	<b>107</b>	<b>150</b>
<b>07/23/2021</b>	<b>73.9</b>	<b>73.1</b>

Given the values from the latest sampling, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns.

Please give me a call if you have any questions. Office: 859-268-6317.

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results July 2021



**KENTUCKY**  
**AMERICAN WATER**  
Cc: Gabe Tanner – DOW Compliance Assistance





August 12, 2021

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated TTHM and HAA5 results that are above 80% the MCL of 80 ppb for TTHM and above the MCL of 60 ppb for HAA5. Samples collected this year at the master meter had the following results:

Date	TTHM (ppb)	HAA5 (ppb)
	MCL = 80 ppb	MCL = 60 ppb
01/20/2021	15	14
<b>02/01/2021</b>	21	28
<b>03/23/2021</b>	<b>63</b>	<b>107</b>
<b>04/13/2021</b>	31	36
<b>05/03/2021</b>	38	41
<b>06/14/2021</b>	<b>107</b>	<b>150</b>
<b>07/23/2021</b>	<b>73.9</b>	<b>73.1</b>
<b>08/02/2021</b>	<b>117.6</b>	<b>166</b>

Given the values from the latest sampling, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results August 2021  
Cc: Gabe Tanner – DOW Compliance Assistance





October 11, 2021

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated TTHM and HAA5 results that are above 80% the MCL of 80 ppb for TTHM and above the MCL of 60 ppb for HAA5. Samples collected this year at the master meter had the following results:

Date	TTHM (ppb)	HAA5 (ppb)
	MCL = 80 ppb	MCL = 60 ppb
01/20/2021	15	14
<b>02/01/2021</b>	21	28
<b>03/23/2021</b>	<b>63</b>	<b>107</b>
<b>04/13/2021</b>	31	36
<b>05/03/2021</b>	38	41
<b>06/14/2021</b>	<b>107</b>	<b>150</b>
<b>07/23/2021</b>	<b>73.9</b>	<b>73.1</b>
<b>08/02/2021</b>	<b>117.6</b>	<b>166</b>
<b>09/23/2021</b>	<b>74.5</b>	<b>65.8</b>

Given the values from the latest sampling, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results September 2021  
Cc: Gabe Tanner – DOW Compliance Assistance



November 08, 2021

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated TTHM and HAA5 results that are above the MCL of 60 ppb for HAA5. Samples collected this year at the master meter had the following results:

Date	TTHM (ppb)	HAA5 (ppb)
	MCL = 80 ppb	MCL = 60 ppb
01/20/2021	15	14
<b>02/01/2021</b>	21	28
<b>03/23/2021</b>	<b>63</b>	<b>107</b>
<b>04/13/2021</b>	31	36
<b>05/03/2021</b>	38	41
<b>06/14/2021</b>	<b>107</b>	<b>150</b>
<b>07/23/2021</b>	<b>73.9</b>	<b>73.1</b>
<b>08/02/2021</b>	<b>117.6</b>	<b>166</b>
<b>09/23/2021</b>	<b>74.5</b>	<b>65.8</b>
<b>10/21/2021</b>	<b>55.1</b>	<b>44.5</b>
<b>11/01/2021</b>	<b>62.4</b>	<b>76.6</b>

Given the values from the latest sampling, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results November 2021  
Cc: Gabe Tanner – DOW Compliance Assistance



January 13, 2022

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated TTHM and HAA5 results that are above the MCL of 60 ppb for HAA5. Samples collected this year at the master meter had the following results:

Date	TTHM (ppb)	HAA5 (ppb)
	MCL = 80 ppb	MCL = 60 ppb
01/20/2021	15	14
02/01/2021	21	28
03/23/2021	63	107
04/13/2021	31	36
05/03/2021	38	41
06/14/2021	107	150
07/23/2021	73.9	73.1
08/02/2021	117.6	166
09/23/2021	74.5	65.8
10/21/2021	55.1	44.5
11/01/2021	62.4	76.6
12/15/2021	47.0	67.1

Given the values from the latest sampling, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results December 2021  
Cc: Gabe Tanner – DOW Compliance Assistance



March 29, 2022

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated total trihalomethanes (TTHM) and/or total haloacetic acids (HAA5) results. Samples collected this year at the master meter had the following results:

Date	TTHM (ppb)	HAA5 (ppb)
	MCL = 80 ppb	MCL = 60 ppb
01/19/2022	16.6	18.1
02/07/2022	24.1	28.8
03/17/2022	52.2	75.6

Given the values from the latest sampling, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results March 2022  
cc: Gabe Tanner, DOW Compliance Assistance



April 29, 2022

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated total trihalomethanes (TTHM) and/or total haloacetic acids (HAA5) results. Samples collected this year at the master meter had the following results:

Date	TTHM (ppb)	HAA5 (ppb)
	MCL = 80 ppb	MCL = 60 ppb
01/19/2022	16.6	18.1
02/07/2022	24.1	28.8
03/17/2022	52.2	75.6
04/19/2022	54.0	62.3

Given the values from the latest sampling, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results April 2022  
cc: Gabe Tanner, DOW Compliance Assistance



June 30, 2022

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated total trihalomethanes (TTHM) and/or total haloacetic acids (HAA5) results. Samples collected this year at the master meter had the following results:

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02/07/2022	24.1	28.8
03/17/2022	52.2	75.6
04/19/2022	54.0	62.3
05/02/2022	38.4	35.1
06/15/2022	79.1	75.2

Given the values from the latest sampling, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results June 2022  
cc: Gabe Tanner, DOW Compliance Assistance



August 4, 2022

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated total trihalomethanes (TTHM) and/or total haloacetic acids (HAA5) results. Samples collected this year at the master meter had the following results:

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02/07/2022	24.1	28.8
03/17/2022	52.2	75.6
04/19/2022	54.0	62.3
05/02/2022	38.4	35.1
06/15/2022	79.1	75.2
7/27/2022	58.8	78.0

Given the values from the latest sampling, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results July 2022  
cc: Gabe Tanner, DOW Compliance Assistance



September 12, 2022

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated total trihalomethanes (TTHM) and/or total haloacetic acids (HAA5) results. Samples collected this year at the master meter had the following results:

Date	TTHM (ppb)	HAA5 (ppb)
	MCL = 80 ppb	MCL = 60 ppb
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02/07/2022	24.1	28.8
03/17/2022	52.2	75.6
04/19/2022	54.0	62.3
05/02/2022	38.4	35.1
06/15/2022	79.1	75.2
7/27/2022	58.8	78.0
8/1/2022	90.7	109.1

Given the values from the latest sampling, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: master meter lab results August 2022  
cc: Gabe Tanner, DOW Compliance Assistance





October 3, 2022

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated total trihalomethanes (TTHM) and/or total haloacetic acids (HAA5) results. Samples collected this year at the master meter had the following results:

Date	TTHM (ppb)	HAA5 (ppb)
	MCL = 80 ppb	MCL = 60 ppb
01/19/2022	16.6	18.1
02/07/2022	24.1	28.8
03/17/2022	52.2	75.6
04/19/2022	54.0	62.3
05/02/2022	38.4	35.1
06/15/2022	79.1	75.2
7/27/2022	58.8	78.0
8/1/2022	90.7	109.1
9/20/2022	65.3	81.9

Given the values from the latest sampling, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: Master Meter lab results September 2022  
cc: Gabe Tanner, DOW Compliance Assistance



October 25, 2022

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated total trihalomethanes (TTHM) and/or total haloacetic acids (HAA5) results. Samples collected this year at the master meter had the following results:

Date	TTHM (ppb)	HAA5 (ppb)
	MCL = 80 ppb	MCL = 60 ppb
01/19/2022	16.6	18.1
02/07/2022	24.1	28.8
03/17/2022	52.2	75.6
04/19/2022	54.0	62.3
05/02/2022	38.4	35.1
06/15/2022	79.1	75.2
7/27/2022	58.8	78.0
8/1/2022	90.7	109.1
9/20/2022	65.3	81.9
10/18/2022	59.5	65.2

Given the values from the latest sampling, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: Master Meter lab results October 2022  
cc: Gabe Tanner, DOW Compliance Assistance



November 15, 2022

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated total trihalomethanes (TTHM) and/or total haloacetic acids (HAA5) results. Samples collected this year at the master meter had the following results:

Date	TTHM (ppb)	HAA5 (ppb)
	MCL = 80 ppb	MCL = 60 ppb
01/19/2022	16.6	18.1
02/07/2022	24.1	28.8
03/17/2022	52.2	75.6
04/19/2022	54.0	62.3
05/02/2022	38.4	35.1
06/15/2022	79.1	75.2
7/27/2022	58.8	78.0
8/1/2022	90.7	109.1
9/20/2022	65.3	81.9
10/18/2022	59.5	65.2
11/07/2022	73.1	67.6

Given the values from the latest sampling, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: Master Meter lab results November 2022  
cc: Gabe Tanner, DOW Compliance Assistance



January 3, 2023

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated total trihalomethanes (TTHM) and/or total haloacetic acids (HAA5) results. Samples collected this year at the master meter had the following results:

Date	TTHM (ppb)	HAA5 (ppb)
	MCL = 80 ppb	MCL = 60 ppb
01/19/2022	16.6	18.1
02/07/2022	24.1	28.8
03/17/2022	52.2	75.6
04/19/2022	54.0	62.3
05/02/2022	38.4	35.1
06/15/2022	79.1	75.2
7/27/2022	58.8	78.0
8/1/2022	90.7	109.1
9/20/2022	65.3	81.9
10/18/2022	59.5	65.2
11/07/2022	73.1	67.6
12/20/2022	41.6	67.0

Given the values from the latest sampling, Kentucky American Water is very concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss the any additional concerns

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: Master Meter lab results December 2022  
cc: Gabe Tanner, DOW Compliance Assistance



April 3, 2023

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated (equal to or over 80% of the MCL) total trihalomethanes (TTHM) and/or total haloacetic acids (HAA5) results. Samples collected this year at the master meter (MM) had the following results:

Date	TTHM (ppb)	HAA5 (ppb)
	MCL = 80 ppb	MCL = 60 ppb
01/24/2023	18.4	23.4
02/06/2023	14.2	14.6
03/16/2023	48.5	53.5

Given the values from the latest sampling, Kentucky American Water is concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss.

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: Master Meter lab results January, February & March 2023  
cc: Gabe Tanner, DOW Compliance Assistance



June 30, 2023

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated (equal to or over 80% of the MCL) total trihalomethanes (TTHM) and/or total haloacetic acids (HAA5) results. Samples collected this year at the master meter (MM) had the following results:

Date	TTHM (ppb)	HAA5 (ppb)
	MCL = 80 ppb	MCL = 60 ppb
01/24/2023	18.4	23.4
02/06/2023	14.2	14.6
03/16/2023	48.5	53.5
04/13/2023	40.9	43.5
05/01/2023	43.1	46.4
06/21/2023	67.7	70.9

Given the values from the latest sampling, Kentucky American Water is concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss.

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: Master Meter lab results April, May & June 2023  
cc: Gabe Tanner, DOW Compliance Assistance



August 11, 2023

Mr. Chad Smart  
City of Paris  
525 High Street, Suite 108  
Paris, KY 40361

RE: Water Quality at Paris Master Meter

Mr. Smart,

Kentucky American Water wishes to convey our continued concerns regarding the safety of the water provided by City of Paris to our Millersburg district.

Process monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated (equal to or over 80% of the MCL) total trihalomethanes (TTHM) and/or total haloacetic acids (HAA5) results. Samples collected this year at the master meter (MM) had the following results:

Date	TTHM (ppb)	HAA5 (ppb)
	MCL = 80 ppb (80% = 64 ppb)	MCL = 60 ppb (80% = 48 ppb)
<b>Paris MM</b>		
01/24/2023	18.4	23.4
02/06/2023	14.2	14.6
03/16/2023	48.5	<b>53.5</b>
04/13/2023	40.9	43.5
05/01/2023	43.1	46.4
06/21/2023	<b>67.7</b>	<b>70.9</b>
7/20/2023	<b>90.1</b>	<b>82.4</b>
8/7/2023	<b>79.0</b>	<b>76.4</b>

Notes: **Above MCL in bold, Above 80% of MCL**

Given the values from the latest sampling, Kentucky American Water is concerned that if no changes are made to the water treatment process at the facility that supplies water to this system, it will not be possible for our system to remain in compliance with the Stage II Disinfection By-Product Rule.

Feel free to contact Dottie Johnson (at 859-537-0744) or myself at the number listed below to discuss.

Sincerely,

Bob Money  
Manager, Water Quality & Environmental Compliance  
Kentucky American Water

Enclosure: Master Meter lab results July and August 2023  
cc: Gabe Tanner, DOW Compliance Assistance

## WATER PURCHASE AGREEMENT

THIS AGREEMENT is made and entered into this the 29<sup>th</sup> day of July, 2014, by and between KENTUCKY-AMERICAN WATER COMPANY, a Kentucky corporation with offices at 2300 Richmond Road, Lexington, Kentucky 40502 (“KAW”) and the CITY OF PARIS, 525 High Street, Paris, Kentucky 40361 (“Paris”).

### W I T N E S S E T H:

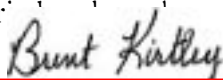
WHEREAS, KAW desires to purchase a supply of potable water from Paris in order to adequately fulfill KAW’s obligations to: KAW’s customers in the City of Millersburg; the Harrison County Water Association; and the Nicholas County Water District, and has requested Paris to provide that supply of potable water;

WHEREAS Paris owns and operates a water supply treatment, transmission and distribution system capable of meeting the potable water requirements of its own customers, the estimated number of KAW’s customers in the City of Millersburg, and KAW’s obligations to the Harrison County Water Association and the Nicholas County Water District; and

WHEREAS Paris desires to sell KAW potable water per the terms of this Agreement for use by KAW as described above.

NOW, THEREFORE, the parties hereto do hereby agree as follows:

1. From and after the 10<sup>th</sup> day of August 2014, KAW shall have the right to purchase from Paris, and Paris shall be obligated to sell to KAW, an amount of potable water not to exceed a daily average of 200,000 gallons per calendar month to meet reasonable requirements of the following KAW customers: (a) water customers in the City of Millersburg; (b) Harrison County Water Association; and (c) Nicholas County Water District. Paris acknowledges

<b>KENTUCKY PUBLIC SERVICE COMMISSION</b>
<b>JEFF R. DEROUEN EXECUTIVE DIRECTOR</b>
TARIFF BRANCH 
EFFECTIVE <b>9/5/2014</b> PURSUANT TO 807 KAR 5:011 SECTION 9 (1)



that it is capable of supplying KAW with an amount of potable water necessary to meet those requirements. Paris shall furnish potable water to KAW at the point of delivery hereinafter specified which shall meet all applicable state, federal and/or other regulatory standards.

2. Delivery of the water purchased by KAW and sold by Paris shall be delivered at a point along Millersburg Road (U.S. 68) approximately 845 feet south of the intersection of Millersburg Road and Old U.S. Highway 68, which is approximately 1.31 miles south of the City of Millersburg at a reasonably constant pressure under normal operating conditions. Paris shall not be responsible for the quality of water purchased by KAW past this point of actual delivery.

3. KAW agrees to install at its own expense at the point of delivery all necessary metering equipment and related required devices for the City to properly measure the quantity of water delivered to KAW. As of the date identified in Paragraph 1 above, ownership in the metering equipment shall be transferred to Paris at no cost to Paris and Paris shall operate and maintain at its own expense the metering equipment. A meter registering not more than two percent above or below the actual flow shall be deemed to be accurate. KAW shall have access to meter for monitoring volumes of water purchased. KAW agrees to construct at its own expense approximately 780 feet of 6-inch diameter line to connect Paris' existing distribution system to the distribution system serving customers in the City of Millersburg.

4. KAW shall pay for the quantity of water purchased by it and sold by Paris at the initial rate of \$2.25 per 1,000 gallons under the first 18 months of this Agreement and thereafter as may change from time to time and as set forth by Paris city ordinance and accepted by the Public Service Commission. Paris shall read the meter on or about the 20<sup>th</sup> day of each month and provide an invoice to KAW on or about the 1<sup>st</sup> day of the following month. KAW shall pay

<b>KENTUCKY PUBLIC SERVICE COMMISSION</b>
<b>JEFF R. DEROUEN EXECUTIVE DIRECTOR</b>
TARIFF BRANCH
<i>Brent Kirtley</i>
EFFECTIVE <b>9/5/2014</b>
PURSUANT TO 807 KAR 5:011 SECTION 9 (1)

for the quantity of water purchased no later than the 15<sup>th</sup> day of the month. Payment may be made by check or by the transfer of electronic funds

5. KAW agrees to continue with the ongoing leak detection services and surveys project for the entire water transmission and distribution system of Paris until that project is complete at no cost to Paris. Paris shall be responsible for costs in repairing municipal facilities associated with line loss.

6. In the event any type of water curtailment practice, procedure, regulation or law is utilized by Paris or is imposed upon Paris, KAW agrees to abide by all recommendations of Paris and to use reasonable efforts to restrict use by customers in the City of Millersburg in a fashion similar to that which is utilized by Paris or imposed on Paris. Paris may only reduce the amount of water available for purchase by KAW in the same ratio or proportion as such is reduced to other Paris customers.

7. Paris shall operate and maintain its water supply system in accordance with all applicable laws, rules and regulations and will take such action as necessary to furnish KAW with the quantity of water set forth in this Agreement. Temporary or partial failures to deliver water shall be remedied with all possible dispatch.

8. In the event all or any part of the waterworks plant and facilities of Paris which are used in meeting its obligations under this Agreement are acquired by a municipal corporation or any other entity, then and in that event Paris shall be relieved of all of its obligations hereunder and, in such event, this Agreement shall be binding upon the municipality or any other entity making such acquisition.

9. This Agreement shall terminate when: (1) the connection between the northeast portion of KAW's distribution system and the southwest portion of Paris' distribution system is

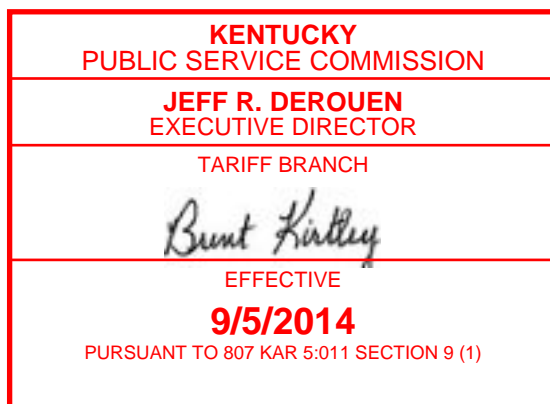
<b>KENTUCKY PUBLIC SERVICE COMMISSION</b>
<b>JEFF R. DEROUEN EXECUTIVE DIRECTOR</b>
TARIFF BRANCH <i>Brent Kirtley</i>
EFFECTIVE <b>9/5/2014</b> PURSUANT TO 807 KAR 5:011 SECTION 9 (1)

complete and operating sufficiently such that the requirements of KAW's customers in the City of Millersburg can be met by using that connection in conjunction with the connection described in Paragraph 3 above; and (2) a binding contract between KAW and Paris has been executed and all necessary approvals have been obtained, regulatory or otherwise, the contract having the dual purposes of: (a) providing an emergency interconnection between KAW's distribution system and Paris' distribution system so that KAW can sell water to Paris in the event of a Paris emergency; and (b) KAW's use of Paris' transmission and distribution system so that potable water can be provided to KAW's customers in the City of Millersburg without the need for KAW to purchase water from Paris.

10. The Parties agree to file jointly a copy of this executed contract with the Public Service Commission of Kentucky.


11. This agreement constitutes the entire agreement of the parties and all prior conversations and writings are merged herein.

12. This Agreement shall be construed according to the laws of the Commonwealth of Kentucky.

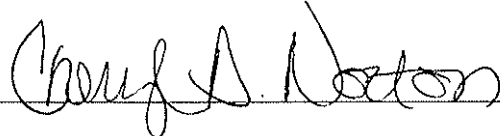


This Agreement has been executed by the parties hereto, by their appropriate authorized representatives, on this the 4<sup>th</sup> day of August, 2014.

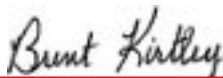
CITY OF PARIS, KENTUCKY

BY:   
\_\_\_\_\_  
Mayor, City of Paris

KENTUCKY-AMERICAN WATER COMPANY

BY:   
\_\_\_\_\_

010311.149023/4242734.6

<b>KENTUCKY PUBLIC SERVICE COMMISSION</b>
<b>JEFF R. DEROUEN EXECUTIVE DIRECTOR</b>
TARIFF BRANCH 
EFFECTIVE <b>9/5/2014</b> PURSUANT TO 807 KAR 5:011 SECTION 9 (1)

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**From:** Jamie Miller <[REDACTED]>  
**Sent:** Tuesday, August 8, 2023 10:31 AM  
**To:** Justin Lane <[Justin.Lane@amwater.com](mailto:Justin.Lane@amwater.com)>  
**Cc:** Todd Osterloh <[REDACTED]>; Chad Smart <[REDACTED]>; Michael Mynear <[REDACTED]>; Kevin Mayhorn <[REDACTED]>; BBeauman <[REDACTED]>  
**Subject:** KAW/Paris Emergency Connect/Transmission Line Discussion  
**Importance:** High

**EXTERNAL EMAIL:** The Actual Sender of this email is [REDACTED] "Think before you click!".

Justin,

Last time we had a meeting we discussed getting some language together to address a future possible connection that is operated on an as needed basis.

See the attached *draft* language. There are still some items we would like to further discuss as it relates to the possible connection location, etc.

We also want to be sure the transmission line being proposed is just for transmission purposes.

Are you available Friday for a meeting to discuss and make sure are on the same page before we make our decision on whether to issue a request to intervene on the proposed line?

Thank you,

Jamie Miller  
City Manager



**City of Paris**  
525 High Street  
Paris, KY 40361  
859-987-2110  
[REDACTED]

Visit us online at [www.paris.ky.gov](http://www.paris.ky.gov) and on Facebook.

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## WATER PURCHASE AGREEMENT

THIS AGREEMENT is made and entered into this the \_\_\_ day of \_\_\_\_\_, 2023, by and between KENTUCKY-AMERICAN WATER COMPANY, a Kentucky corporation with offices at 2300 Richmond Road, Lexington, Kentucky 40502 (“KAW”) and the CITY OF PARIS, 525 High Street, Paris, Kentucky 40361 (“Paris”).

### WITNESSETH:

WHEREAS, KAW and the City of Paris executed a Water Purchase Agreement on August 4, 2014, whereby the City agreed to sell potable water of not more than 200,000 gallons per calendar month to KAW;

WHEREAS, KAW and the City of Paris signed a non-binding Letter of Intent dated August 12, 2014, in anticipation of an Interconnection and Wheeling Agreement that would enable Paris to purchase water from KAW if necessary and enable KAW to add water to Paris’s water system to provide service to KAW’s Millersburg customers;

WHEREAS, the City of Paris desires to interconnect its water distribution system with KAW’s distribution system so that the City of Paris can receive potable water from KAW if the need emergency circumstances require an additional source for Paris;

WHEREAS, KAW can benefit from interconnection with the City of Paris water distribution system because such interconnection would provide additional source of supply to KAW customers in Millersburg, Harrison County, and Nicholas County;

WHEREAS, KAW and the City of Paris seek to maintain their mutually beneficial relationship as it relates to their water distribution systems;

WHEREAS, KAW and the City of Paris seek to modify their contractual relation through the execution and approval of this Water Purchase Agreement;

NOW, THEREFORE, the parties hereto do hereby agree as follows:

1. The City of Paris shall complete, at its own cost, all construction necessary for the completion of an interconnection between Paris's existing water transmission and distribution infrastructure on the southern side of the City and KAW's existing water transmission and distribution infrastructure along Paris Pike (U.S. 27 and U.S. 68).

2. KAW agrees to install at its own expense at the point of delivery all necessary metering equipment and related required devices for KAW to properly measure the quantity of water delivered to Paris. KAW shall operate and maintain at its own expense the metering equipment. Paris shall have access to meter for monitoring volumes of water purchased.

3. Upon completion of the interconnection described in paragraph 1 above, the City of Paris shall have the right to purchase from KAWC potable water on an as-needed, emergency basis to meet demand of its customers, including wholesale customers.

4. Delivery of the water purchased by Paris and sold by KAW shall be delivered at a point along Paris Pike (U.S. 27 and U.S. 68) approximately \_\_\_\_\_ at a reasonably constant pressure under normal operating conditions. KAW shall not be responsible for the quality of water purchased by the City past this point of actual delivery while in Paris's water system.

5. KAW shall continue to have the right to purchase from Paris, and Paris shall be obligated to sell to KAW, an amount of potable water not to exceed a daily average of 200,000 gallons per calendar month to meet reasonable requirements of the following KAW customers: (a) water customers in the City of Millersburg; (b) Harrison County Water Association; and (c) Nicholas County Water District. Paris hereby acknowledges that it is capable of supplying KAW



with an amount of potable water necessary to meet those requirements. Paris shall furnish potable water to KAW at the point of delivery hereinafter specified which shall meet all applicable state, federal and/or other regulatory standards.

6. Delivery of the water purchased by KAW and sold by Paris shall continue to be delivered at a point along Millersburg Road (U.S. 68) approximately 845 feet south of the intersection of Millersburg Road and Old U.S. Highway 68, which is approximately 1.31 miles south of the City of Millersburg at a reasonably constant pressure under normal operating conditions. Paris shall not be responsible for the quality of water purchased by KAW past this point of actual delivery.

7. If either KAW or Paris purchases potable water from the other entity, the purchasing entity shall pay the KAW's rate for "Municipal and All Other Public Authority" as amended and approved by the Public Service Commission. The selling entity shall read the meter on or about the 20<sup>th</sup> day of each month and provide an invoice to the purchasing entity on or about the 1<sup>st</sup> day of the following month. The purchasing entity shall pay for the quantity of water purchased no later than the 15<sup>th</sup> day of the month. Payment may be made by check or by the transfer of electronic funds.

8. In addition to the volumetric rate for purchase, Paris shall pay KAWC the Reconnection Charge in KAWC's tariff when it requests turn on for emergency service.

9. In the event any type of water curtailment practice, procedure, regulation or law is utilized by or is imposed upon either Party, the other Party agrees to abide by all recommendations of the Party and to use reasonable efforts to restrict use by the other Party's customers in the in a fashion similar to that which is utilized by or imposed on the Party. The Party may only reduce

the amount of water available for purchase by the other Party in the same ratio or proportion as such is reduced to the Party's customers.

10. Each Party shall operate and maintain its water supply system in accordance with all applicable laws, rules and regulations and will take such action as necessary to furnish the other Party with the quantity of water set forth in this Agreement. Temporary or partial failures to deliver water shall be remedied with all possible dispatch.

11. In the event all or any part of the waterworks plant and facilities of one Party that are used in meeting its obligations under this Agreement are acquired by a municipal corporation or any other entity, then and in that event the Party shall be relieved of all of its obligations hereunder and, in such event, this Agreement shall be binding upon the municipality or any other entity making such acquisition.

12. Neither Party shall provide service to a customer at a location receiving service from the other Party as of the date of the Water Purchase Agreement without written consent of the other Party.

13. This Agreement shall terminate on June 30, 2033, unless renewed per the terms of this paragraph. This agreement shall automatically renew for a one-year period on June 30, 2033, and on the June 30 of subsequent years unless either party gives written notice at least 90 days prior to the automatic renewal date of their intent not to renew this agreement.

14. The Parties agree to file jointly a copy of this executed contract with the Public Service Commission of Kentucky.

15. This agreement constitutes the entire agreement of the parties and all prior conversations and writings are merged herein.

16. This Agreement shall be construed according to the laws of the Commonwealth of Kentucky.

This Agreement has been executed by the parties hereto, by their appropriate authorized representatives, on this the \_\_\_ day of \_\_\_\_\_, 2023.

CITY OF PARIS, KENTUCKY

BY: \_\_\_\_\_  
Mayor, City of Paris

KENTUCKY-AMERICAN WATER COMPANY

BY: \_\_\_\_\_

**KENTUCKY-AMERICAN WATER COMPANY**  
**CASE NO. 2023-00248**  
**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

---

**Witness: Jeffrey Newcomb**

9. State whether Kentucky-American anticipates a need for a rate increase, now or in the future, as a result of this project.

**Response:**

The decision to file Kentucky-American's most recent application for an adjustment of rates in Case No. 2023-00191 was not the result of an anticipated need for a rate increase as a result of this project or any other individual project. Kentucky-American is, however, seeking timely recovery of, and an opportunity to earn a fair level of return on, the resulting investment from this project as a component of rate base and the overall revenue requirement within the Company's current application for an adjustment of rates in Case No. 2023-00191.

**KENTUCKY-AMERICAN WATER COMPANY**  
**CASE NO. 2023-00248**  
**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

---

**Witness: John Magner**

10. State how Kentucky-American intends to solicit bids.

**Response:**

Competitive bids will be solicited from pre-qualified contractors which meet insurance, safety, performance, and experience qualifications. Due to the scope of this project, KAW anticipates significant interest from regional contractors that undertake large pipeline projects.

**KENTUCKY-AMERICAN WATER COMPANY  
CASE NO. 2023-00248  
COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

---

**Witness: John Magner**

11. State what criteria Kentucky-American will use to select a bid.

**Response:**

KAW intends to award the project to the lowest responsive bidder from a group of pre-qualified contractors as described in the response to PSC DR 1-10.

**KENTUCKY-AMERICAN WATER COMPANY**  
**CASE NO. 2023-00248**  
**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

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**Witness: John Magner**

12. State whether Kentucky-American has communicated with Judy Water Association, Sharpsburg, Nicholas County Water District, Harrison County Water Association, and any other wholesale water purchasers concerning possible future growth and what the responses were. Describe those communications in detail, provide dates of those communications and copies of any written documentation of those communications.

**Response:**

On September 6, 2022, KAW was invited to attend a meeting to discuss regional water supply solutions to support economic development within the region. Attendees at this meeting included government officials and water utility and economic development representatives from entities including Bourbon County, Nicholas County, Paris, and the Bluegrass Development District. During this meeting, attendees recognized the need for additional water supply in the region.

In additional meetings, KAW has met with representatives of Harrison County Water District ("HCWD") and Nicholas County Water District ("NCWD") regarding the proposed project. During discussions, NCWD provided an estimated future need for over 60 million gallons ("MG") of water per year and HCWD indicated a need for 14 MG per year. Representatives from KAW have had informal discussions with representatives from the other noted utilities in the past regarding additional water being supplied by KAW, but definitive volumes were not provided. When performing the hydraulic analysis to evaluate the size of the proposed main, KAW's design consultant assumed future demands as described in Exhibit 2 to the direct testimony of John Magner.

KAW has been contacted regarding providing water to supply numerous potential new developments in the Bourbon/Nicholas County Region. These developments have included those noted below.

- A new industrial park projected to bring 200-300 jobs to the region, as noted in numerous letters of support provided in Exhibit 5 to the direct testimony of John Magner. KAW assisted in preparing a Kentucky Product Development Initiative grant application for the industrial park.
- A new meat processing facility located just north of Millersburg anticipated to become operational in 2023. Representatives from KAW have met with the developer on multiple occasions.
- Thirteen residential properties in Millersburg to be developed by one entity.

Additionally, the City of Millersburg executed a contract with the NCWD in which the City of Millersburg supplies NCWD with up to 1,500,000 gallons per month of water. This agreement is attached to this response. Per the terms of the contract, KAW, which acquired the City of Millersburg water system, must meet the requirements of the contract. From January through July 2023, NCWD only purchased an average of approximately 36,000 gallons per month from KAW. If NCWD were to begin purchasing up to 1,500,000 gallons per month, this would significantly reduce the available supply to KAW's retail customers in Millersburg.



UNITED STATES DEPARTMENT OF AGRICULTURE  
RURAL DEVELOPMENT

**WATER PURCHASE CONTRACT**

This contract for the sale and purchase of water is entered into as of the 12<sup>th</sup> day of MAY, 1999 between the City of Millersburg P.O. Box 265, Millersburg, KY 40348, hereinafter referred to as the "Seller" and the Nicholas County Water District, 1639 Old Paris Road, Carlisle, KY 40311, hereinafter referred to as the "Purchaser",

WITNESSETH:

Whereas, the Purchaser is organized and established under the provisions of KRS Chapter 74 of the Code of Kentucky Revised Statutes, for the purpose of constructing and operating a water supply distribution system serving water users within the area described in plans now on file in the office of the Purchaser and to accomplish this purpose, the Purchaser will require a supply of treated water, and

Whereas, the Seller owns and operates a water supply distribution system with a capacity currently capable of serving the present customers of the Seller's system and the established number of water users to be served by the said Purchaser as shown in the plans of the system now on file in the office of the Purchaser, and

Whereas, by Resolution No. \_\_\_\_\_ enacted on the 12<sup>th</sup> day of May, 1999, by the Seller, the sale of water to the Purchaser in accordance with the provisions of the said Resolution \_\_\_\_\_ was approved, and the execution of this contract carrying out the said water purchase contract \_\_\_\_\_ by the Chairman \_\_\_\_\_, and attested by the Secretary, was duly authorized and

Whereas, by action of the Board of Commissioners of the Purchaser, enacted on the 12<sup>th</sup> day of May, 1999, the purchase of water from the Seller in accordance with the terms set forth in the said water purchase contract was approved, and the execution of this contract by the Nicholas County Water District, and attested by the Secretary was duly authorized:

Now, therefore, in consideration of the foregoing and the mutual agreements hereinafter set forth,

A. The Seller Agrees:

1. (Quality and Quantity) To furnish the Purchaser at the point of delivery hereinafter specified, during the term of this contract or any renewal or extension thereof, potable water meeting applicable purity standards of the Kentucky Department of Natural Resources - Division of Water in as such quality as may be required by the Purchaser not to exceed 1,500,000 gallons per month.

2. (Point of Delivery and Pressure) That water will be furnished at a reasonably constant pressure calculated at minimum of 50 PSI from an existing 6-inch main supply at a point located on US Route 68 at the eastern City Limits of Millersburg \_\_\_\_\_. If a greater pressure than that normally available at the point of delivery is required by the Purchaser, the cost of providing such greater pressure shall be borne by the Purchaser. Emergency failures of pressure or supply due to main supply line breaks, power failure, flood, fire and use of water to fight fire, earthquake or other catastrophe shall excuse the Seller from this provision for such reasonable period of time as may be necessary to restore service.

3. (Metering Equipment) To furnish, install, operate, and maintain at its own expense at point of delivery, the necessary metering equipment, including a meter house or pit, and required devices of standard type for properly measuring the quantity of water delivered to the Purchaser and to calibrate such metering equipment whenever requested by the Purchaser but not more frequently than once every twelve (12)

months. A meter registering not more than two percent (2%) above or below the test result shall be deemed to be accurate.

SEE PARAGRAPH 4.B.2 BELOW

The previous readings of any meter disclosed by test to be inaccurate shall be corrected for the (6) six months previous to such test in accordance with the percentage of inaccuracy found by such test. If any meter fails to register for any period, the amount of water furnished during such period shall be deemed to be the amount of water delivered in the corresponding period immediately prior to the failure, unless Seller and Purchaser shall agree upon a different amount. The metering equipment shall be read on

Last day of the month. An appropriate official of the Purchaser at all reasonable times shall have access to the matter for the purpose of verifying its readings.

4. (Billing Procedure) To furnish the Purchaser at the above address not later than the 10<sup>th</sup> day of each month, with an itemized statement of the amount furnished the Purchaser during the preceding month.

B. The Purchaser Agrees:

1. (Rates and Payment Date) To pay the Seller, not later than the 20<sup>th</sup> day of each month, for water delivered in accordance with the following schedule of rates:

A. \$ NA for the first \_\_\_\_\_ gallons, which amount shall also be the minimum rate per month.

B. \$ NA cents per 1,000 gallons for water in excess of \_\_\_\_\_ gallons but less than \_\_\_\_\_ gallons.

C. \$ \_\_\_\_\_ cents per 1,000 gallons for water in excess of \_\_\_\_\_ gallons.

D. \$ 2.25 cents per 1,000 gallons for all water purchased.

2. (Connection fee) to pay as an agreed cost, a connection fee to connect to Seller's system with the system of the purchaser, the sum of -0- dollars which shall cover any and all costs of the Seller for installation of the metering equipment and installation will be provided by the Purchaser (with approval) of the Seller. Upon completion of installation start up, calibration and one year warranty, the facility shall become the property of the Seller.

C. It is further mutually agreed between the Seller and the Purchaser as follows:

1. (Terms of Contract) That this contract shall extend for a term of 40 (forty) years from the date of the delivery of any water as shown by the first bill submitted by the Seller to the Purchaser and thereafter may be renewed or extended for such term or terms, as may be agreed upon by the Seller and Purchaser.

2. (Delivery of Water) That 30 (thirty) days prior to the estimated date of completion of construction of the Purchaser's water supply distribution system, the Purchaser will notify the Seller in writing the date for the initial delivery of water.

3. (Water for Testing) When requested by the Purchaser the Seller will make available to the contractor at the point of delivery, or other point reasonably close thereto, water sufficient for testing, flushing, and trench filling the system of the Purchaser during construction.

Irrespective of whether the metering equipment has been installed at the time, at a flat charge of \$2.25/ 1,000 gallons which will be paid by the contractor or, on his failure to pay, by the Purchaser.

4. (Failure to Deliver) That the Seller will, at all times, operate and maintain its system in an efficient manner and will take such action as may be necessary to furnish the Purchaser with quantities of the water required by the Purchaser. Temporary or partial failures to deliver water shall be remedied with all possible dispatch. In the event of an extended shortage of water, or the supply of water available to the Seller is otherwise diminished over an extended period of time, the supply of water to Purchaser's

consumers shall be reduced or diminished in the same ratio or proportion as the supply to Seller's consumers is reduced or diminished.

5. (Modification of Contract) That the provisions of this contract pertaining to the scheduled of rates to be paid by the Purchaser for water delivered are subject to modification at the end of every 3 (three) year period. Any increase or decrease in rates shall be based on a demonstrable increase in the costs of performance hereunder, but such costs shall not include increased capitalization of the Seller's system. Other provisions of this contract may be modified or altered by mutual agreement.

6. (Regulatory Agencies) That this contract is subject to such rules, regulations, or laws as may be applicable to similar agreements in this State and the Seller and Purchaser will collaborate in obtaining such permits, certificates, or the like, as may be required to comply therewith.

7. (Miscellaneous) That the construction of the water supply distribution system by the Purchaser is being financed by a loan made or insured by, and/or grant from, the United States of America acting through Rural Development of the United States Department of Agriculture, and the provisions hereof pertaining to the undertakings of the Purchaser are conditioned upon the approval, in writing of the State Director of Rural Development.

8. (Successor to the Purchaser) That in the event of any occurrence rendering the Purchaser incapable of performing under this contract, any successor of the Purchaser, whether the result of legal process, assignment, or otherwise, shall succeed to the rights of the Purchaser hereunder.

In witness whereof, the parties hereto, acting under authority of their respective governing bodies, have caused this contract to be duly executed in 3 (three) counterparts, each of which shall constitute an original.

Seller:

Sam Chanslor  
City of Millersburg  
Mayor Sam Chanslor

Attest:

Carolyn R. SEARS  
Carolyn R. Sears City Clerk

Purchaser

Nicholas County Water District,

BY: Steve Kisker  
Chairman

Attest:

Sam Reynolds  
Sam Reynolds, Secretary, Treasurer

This contract is approved on behalf of Rural Development this the 19 day of November 2003.

BY: William G. Brown  
Title: Program Director

FOR City of Millersburg, Kentucky  
Name of Municipality

P.S.C. KY. NO. 1

Original SHEET NO. 1

CANCELLING P.S.C. KY. NO. \_\_\_\_\_

\_\_\_\_\_ SHEET NO. \_\_\_\_\_

City of Millersburg  
(Name of Municipal Utility)

RATES AND CHARGES

Wholesale Rate:

Nicholas County Water District:

Old Rate	\$1.65 per 1,000 gallons
New Rate	\$2.25 per 1,000 gallons

DATE OF ISSUE July 7, 2003  
Month / Date / Year

DATE EFFECTIVE August 6, 2003  
Month / Date / Year

ISSUED BY Sam Chandler  
(Signature of Officer)

TITLE Mayor

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION  
IN CASE NO. \_\_\_\_\_ DATED \_\_\_\_\_

PUBLIC SERVICE COMMISSION  
OF KENTUCKY  
EFFECTIVE

AUG 6 2003

PURSUANT TO 307 KAR 5:011  
SECTION 9(1)

BY Charles E. R...  
EXECUTIVE DIRECTOR

**KENTUCKY-AMERICAN WATER COMPANY**  
**CASE NO. 2023-00248**  
**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

---

**Witness: John Magner**

13. Considering that Kentucky-American already provides wholesale water service to both Judy Water Association and Harrison County Water Association, state whether Kentucky-American approached either Judy Water Association or Harrison County Water Association about the potential to wheel water through their systems and replace any existing lines. If so, please describe those communications in detail, provide dates of communications and copies of any written documentation of those communications.

**Response:**

No, KAW has not approached either Judy Water Association or Harrison County Water Association about the potential for wheeling water through their systems as KAW does not believe this is a reasonable solution for providing water to Millersburg.

Based on mapping of Judy Water Association's system provided on the Kentucky Infrastructure Authority WRIS portal, there is approximately 12.5 miles of main between KAW's existing connection to Judy Water Association near North Middletown and Judy Water Association's nearest main to Millersburg. This main ranges in size from 4" to 6". Given that KAW's proposed main ranges in size from 12" to 16", KAW would likely need to upsize the 12.5 miles of main in Judy Water Association's system to provide adequate hydraulic capacity to wheel water to Millersburg. This length is similar to the length of KAW's proposed main and additional upsizing of KAW's system that supplies Judy Water Association would also likely be needed. Based on this, wheeling water through Judy Water Association would likely be more expensive than constructing KAW's proposed main.

Harrison County Water Association has a connection to KAW's Millersburg system, as well as a connection to KAW's greater Central Division approximately halfway between Georgetown and Cynthiana. While it is not apparent how many miles of hydraulically connected main existing between these two connections based on the Kentucky Infrastructure Authority WRIS portal mapping, the straight-line distance between the connections is approximately 14 miles and the length of main between the connections would be significantly greater. Based on Harrison County Water Association's 2021 Annual Report filed with the Public Service Commission, mains within the system range in size from 3" to 10", with only 1.6 miles of 10" main. Based on this information, KAW would likely need to upsize any main between the two connections to KAW's systems. The length of main that would need to be replaced would exceed the length of KAW's proposed main, therefore wheeling water through Harrison County Water Association would likely be more expensive than constructing KAW's proposed main.

Additionally, if KAW were to wheel water through these systems to supply Millersburg, the water supplied by KAW would be mixed with water produced by other utilities, thereby preventing KAW from being able to the quality of the water supplied to customers in Millersburg. Water quality deficiencies occurring in the other systems could affect the water supplied to Millersburg. For example, Judy Water Association received Notices of Violation (“NOV”) related to elevated disinfection byproducts in 2023, 2006, the 1990s, and an NOV in 2013 for Coliform Bacteria. Harrison County Water association received NOVs in 2016 related to Revised Total Coliform Rule and in 2015 they received an NOV related to chlorine residual. They received an NOV for asbestos monitoring in 2014, and several others from 2013 through 1999 mostly related to Coliform.

Given the current water quality challenges facing the Millersburg system that result from water being supplied by others (Paris), KAW seeks to provide water produced and treated by KAW to its customers in Millersburg. For discussion of those water quality challenges, see KAW’s Application, John Magner’s Direct Testimony, and KAW’s response to PSC 1-8.

**KENTUCKY-AMERICAN WATER COMPANY**  
**CASE NO. 2023-00248**  
**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

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**Witness: John Magner**

14. State which months over the last three years in which Kentucky-American purchased more than the contractually permitted average daily volume from Paris Water Works and state how much was purchased above the contracted amount.

**Response:**

Based on purchased water data from monthly operating reports for the Millersburg system, KAW purchased more than the average daily volume that Paris Water Works is contractually obligated to provide in the months listed below.

- December 2021 KAW purchased an average of approximately 208,000 gallons per day (gpd), which is 8,000 gpd above the contractual daily volume.
- February 2022: KAW purchased an average of approximately 234,000 gpd, which is 34,000 gpd above the contractual daily volume.
- April 2022: KAW purchased an average of approximately 218,000 gpd, which is 18,000 gpd above the contractual daily volume.
- June 2022: KAW purchased an average of approximately 225,000 gpd, which is 25,000 gpd above the contractual daily volume.
- October 2022: KAW purchased an average of approximately 223,000 gpd, which is 23,000 gpd above the contractual daily volume.
- November 2022: KAW purchased an average of approximately 225,000 gpd, which is 25,000 gpd above the contractual daily volume.
- December 2022: KAW purchased an average of approximately 236,000 gpd, which is 36,000 gpd above the contractual daily volume.
- January 2023: KAW purchased an average of approximately 259,000 gpd, which is 59,000 gpd above the contractual daily volume.

**KENTUCKY-AMERICAN WATER COMPANY  
CASE NO. 2023-00248  
COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

---

**Witness: John Magner**

15. Provide the increased volume of water that will be in the proposed transmission main.

**Response:**

Presuming the transmission main will be constructed of 31,000 linear feet of 12" ductile iron pipe and 33,000 linear feet of 16" ductile iron pipe, the volume within the main will be approximately 570,000 gallons.



**KENTUCKY-AMERICAN WATER COMPANY**  
**CASE NO. 2023-00248**  
**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

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**Witness: John Magner**

16. State the estimated amount of time it will take to turn over the volume of water in the proposed main based on existing demands.

**Response:**

Please see KAW's responses to PSC DR 1-17 and 1-18. Based on this usage, it will take approximately 76 hours to turn over the anticipated volume of 570,000 gallons in the proposed main. As discussed in the hydraulic analyses prepared by KAW's design consultant, which is provided in Exhibit 2 to the direct testimony of John Magner, future flows through the main are expected to increase, which will reduce the time it takes to turn over the water in the main.

**KENTUCKY-AMERICAN WATER COMPANY**  
**CASE NO. 2023-00248**  
**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

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**Witness: John Magner**

17. Provide the current average day, peak day, and peak hour demands in Millersburg.

**Response:**

The current average day, peak day, and peak hour demands for the Millersburg system are estimated to be 180,000 gallons per day; 263,520 gallons per day; and 26,700 gallons per hour, respectively.

**KENTUCKY-AMERICAN WATER COMPANY**  
**CASE NO. 2023-00248**  
**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

---

**Witness: John Magner**

18. State how the current average day, peak day, and peak hour demands in Millersburg were determined.

**Response:**

The current average day demand for the Millersburg system was estimated by dividing the total water purchased from Paris Water Works from January 2022 through July 2023 by the number of days in this time period. Based on monthly operating report data for KAW's Millersburg system, KAW purchased a total of 103,639,870 gallons of water from Paris Water Works during the indicated time period, which includes 577 days. This results in an average daily usage of approximately 180,000 gallons per day or approximately 125 gallons per minute ("gpm").

KAW utilizes a pump station located just south of Millersburg to supply the Millersburg system. The current peak day demand was determined by identifying the maximum average discharge out of the Millersburg pump station within a given calendar day. Based on discharge data for the pump station from January 2022 through July 2023, the maximum average discharge rate within a given calendar day was approximately 183 gpm, which is equivalent to approximately 263,520 gallons per day.

The current peak hour demand for the Millersburg system was determined by identifying the maximum average discharge out of the KAW's Millersburg pump station within a given hour. Based on discharge data for the pump station from January 2022 through July 2023, the peak average discharge rate within a given hour, excluding during the June 22, 2022 fire in downtown Millersburg, was approximately 445 gpm or approximately 26,700 gallons per hour. The peak average hourly discharge rate during the fire was approximately 570 gpm.

**KENTUCKY-AMERICAN WATER COMPANY**  
**CASE NO. 2023-00248**  
**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

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**Witness: John Magner**

19. Explain how Kentucky-American determined the velocity of flow required for the hydraulic analysis.

**Response:**

The required velocity of flow was determined based on velocities needed to flush the main. The "Recommended Standards for Water Works" 2012 Edition, commonly referred to as the Ten State Standards, recommends velocities of 2.5 feet per second for flushing. Based on this recommendation, the proposed main was evaluated for its ability to deliver a minimum flushing velocity of 2.5 feet per second under future conditions.

**KENTUCKY-AMERICAN WATER COMPANY**  
**CASE NO. 2023-00248**  
**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

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**Witness: John Magner**

20. State whether Kentucky-American has prepared a water quality analysis based on the aging of the water to be supplied to Millersburg. If so, provide the water quality analysis, if not, state why not.

**Response:**

KAW has not prepared a detailed water age analysis for the proposed project because KAW recognizes the potential for increased water age under existing demand conditions and has means to address that increased water age. Currently, KAW treats water supplied by Paris Water Works using granular activated carbon filters due to concerns with elevated levels of disinfection byproducts. KAW then rechlorinates the water prior to distributing it to the Millersburg system. The filters and rechlorination system will remain operational after the proposed main is constructed should they be needed.

The proposed main was sized to balance capacity and water quality under both existing demand and anticipated future demand conditions. The proposed main has an expected useful life of approximately 80 years, so it would not be prudent to size the main based on only existing demands. Sizing the main solely based on existing demand would introduce the risk of incurring significant expenses associated with upsizing the main at a later date to meet increased demands.

As discussed in Exhibit 2 to the direct testimony of John Magner, demand in the area served by the proposed main is expected to increase, which will improve water age.

**KENTUCKY-AMERICAN WATER COMPANY  
CASE NO. 2023-00248  
COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

---

**Witness: John Magner**

21. Considering a recent fire, state whether Kentucky-American has prepared a fire protection analysis for Millersburg. If so, provide the analysis, if not, state why.

**Response:**

As described in Exhibit 2 to the direct Testimony of John Magner, KAW's design consultant, Stantec Consulting Services Inc. ("Stantec"), did account for fire flow when performing hydraulic analyses for the proposed main. The flow rate considered in their analyses included 500 gpm of fire protection in addition to the future peak demand of the area served by the proposed main. Stantec's analyses indicated that the proposed main can deliver adequate velocities and head under this flow condition.

**KENTUCKY-AMERICAN WATER COMPANY**  
**CASE NO. 2023-00248**  
**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

---

**Witness: John Magner**

22. Explain why Kentucky-American is proposing to utilize right-of-way rather than acquiring private easements.

**Response:**

KAW is proposing to construct the project within right-of-way to reduce costs associated with acquiring easements, minimize the risk for project delays associated with property negotiations, and to minimize disturbance to citizens' private property.

KAW met with representatives from the Kentucky Transportation Cabinet ("KYTC"), including the Design Section Supervisor and Utilities Section Supervisor, to discuss design requirements and planned KYTC projects along the project alignment. KAWC is coordinating design efforts with KYTC where their proposed projects overlap with KAW's proposed project.

**KENTUCKY-AMERICAN WATER COMPANY  
CASE NO. 2023-00248  
COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION**

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**Witness: John Magner**

23. State whether Kentucky-American has received the right-of-way permits necessary for the installation.

**Response:**

KAW has not yet received right-of-way permits for the construction of the project. KAW's design consultant is preparing design drawings to be submitted with the right-of-way permit applications. Once the drawings are complete, permit applications will be submitted. The project will be constructed in accordance with the right-of-way permits.

KAW did attend an in-person meeting with representatives from the Kentucky Transportation Cabinet on June 12, 2023 to discuss the scope of the project, design considerations, and the right-of-way permit application process. Please also see the response to PSC DR 1-22.