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

Witness: John Magner, Counsel

1. Refer to Kentucky-American's response to Commission Staff's First Request for Information, Item 1. Provide and explain the reasons why Kentucky-American chose the Main North of Paris along Bypass Road route over alternatives that would require fewer capital costs, specifically the Main through Downtown Paris and Cross Country Main South of Paris routes.

Response:

Attachment 1 to this response provides a comparison of the conceptual cost estimates for the alternatives evaluated by KAW. These cost estimates were also provided in KAW's response to PSC DR 1-1.

The Association for the Advancement of Cost Engineering ("AACE") has published guidance regarding construction cost estimating in their "AACE International Recommended Practice No. 56R-08: Cost Estimate Classification System – As Applied in Engineering, Procurement, and Construction for the Building and General Construction Industries" guidance document. This guidance is provided in Attachment 2. The cost estimates provided in Attachment 1 are best classified as a Class 4 estimate under the AACE guidance, as the estimates were developed at a level appropriate for concept evaluation/alternative analysis when engineering was between 1% and 15% complete.

As noted in the AACE guidance, typical ranges for Class 4 cost estimates "are -10% to -20% on the low side, and +20% to +30% on the high side." The table in Attachment 1 shows that the estimated capital costs of the Main Through Downtown Paris and Cross County Main South of Paris alternatives are within 0.3% and 6.4% of the estimated capital cost of the Main North of Paris Along Bypass Road alternative, respectively. The differences in the cost estimates are within the range of a Class 4 cost estimate, therefore it cannot be definitively determined if the actual final capital cost of one of these three alternatives would be greater or less than the final capital cost of the other alternatives.

KAW's estimates show that these three alternatives are very close in cost. In CPCN cases, when considering the cost of various alternatives, an applicant must show an absence of wasteful duplication and "wasteful duplication" has been interpreted to mean not only a physical multiplicity of facilities, but also an avoidance of "excessive investment in relation to productivity or efficiency." In considering the efficiency of a proposed project, the Commission is not restricted to making a close comparison of the rates that would result from various options.² In other words, although cost is a factor, it is not the only factor to

¹ Kentucky Utilities Co. v. Public Service Commission, 252 S.W.2d 885, 890 (Ky. 1952).

² South Central Rural Telephone v Public Service Commission, 453 S.W.2d 257, 259 (Ky. 1970).

be considered. As long as the project is reasonable and feasible, it meets that standard set forth in 278.020(1).³ Here, where the estimated cost of the alternative is so close, KAW believes the Commission should strongly consider other reasons described below largely unrelated to cost that make the proposed alternative vastly superior to the other alternatives.

Reasons for the selection of constructing a Main North of Paris along Bypass Road, in addition to the similar or lower estimated capital cost when compared to the other alternatives, are provided in KAW's response to PSC DR 1-2 and discussed below.

The Main North of Paris along Bypass Road alternative 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 (private easement acquisition can be a lengthy and costly process and can seriously jeopardize project execution), minimizes the risk for 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.
- It is not anticipated to have significant adverse impacts to other areas of KAW's system.

The Main through Downtown Paris alternative was not selected because this alternative could cause significant disruption in downtown Paris. Constructing a main in downtown Paris would disturb recently constructed roadway improvements, disrupt traffic through downtown, and could result in negative economic impact to local businesses due to disruption to the operations of these businesses. There is risk that the capital cost could be higher than initially estimated depending on the nature of required roadway restoration requirements given the recent roadway improvements. Additionally, long-term maintenance costs for a main through downtown Paris would likely be higher than for the proposed alternative due to greater traffic control and pavement restoration. Maintaining a main in downtown Paris would also increase disturbance to the citizens of Paris.

The Cross County Main South of Paris alternative was not selected because the existing 8" KAW main that would supply the proposed main does not have sufficient hydraulic capacity to adequately meet the estimated future demand of the area to be served by the

³ Kentucky Utilities Co. v. Public Service Commission, 390 S.W.2d 168, 172-173 (Ky. 1965).

proposed main. This alternative would also likely require significant private easement acquisition which can escalate costs significantly and jeopardize overall project execution. Certainly, when possible, using existing state right-of-way rather than burdening private citizens with easement acquisition (if they even cooperate in that acquisition process) is greatly preferred.

Alternative	Preliminary Cost Estimate ²		Preliminary Cost Estimate as % of "Main North of Paris Along Bypass Road" Cost Estimate		
Main North of Paris Along Bypass Road ¹	\$	12,541,750	100.0%		
Main Through Downtown Paris	\$	12,502,750	99.7%		
Cross Country Main South of Paris	\$	11,742,650	93.6%		
Supply Water from North Middletown	\$	26,234,975	209.2%		

¹ The "Main North of Paris Along Bypass Road" is the proposed alternative.

² Preliminary cost estimates were discussed and provided previosuly in KAW's response to PSC DR 1-1.



COST ESTIMATE CLASSIFICATION SYSTEM – AS APPLIED IN ENGINEERING, PROCUREMENT, AND CONSTRUCTION FOR THE BUILDING AND GENERAL CONSTRUCTION

CONSTRUCTION INDUSTRIES



INTERNATIONAL





AACE International Recommended Practice No. 56R-08

COST ESTIMATE CLASSIFICATION SYSTEM – AS APPLIED IN ENGINEERING, PROCUREMENT, AND CONSTRUCTION FOR THE BUILDING AND GENERAL CONSTRUCTION INDUSTRIES

TCM Framework: 7.3 – Cost Estimating and Budgeting

Rev. August 7, 2020

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AACE® International Recommended Practice No. 56R-08

COST ESTIMATE CLASSIFICATION SYSTEM – AS APPLIED IN ENGINEERING, PROCUREMENT, AND CONSTRUCTION FOR THE BUILDING AND GENERAL CONSTRUCTION INDUSTRIES



TCM Framework: 7.3 – Cost Estimating and Budgeting

August 7, 2020

1. PURPOSE

As a recommended practice of AACE International, the *Cost Estimate Classification System* provides guidelines for applying the general principles of estimate classification to project cost estimates (i.e., cost estimates that are used to evaluate, approve, and/or fund projects). The *Cost Estimate Classification System* maps the phases and stages of project cost estimating together with a generic project scope definition maturity and quality matrix, which can be applied across a wide variety of industries and scope content.

This recommended practice provides guidelines for applying the principles of estimate classification specifically to project estimates for engineering, procurement, and construction (EPC) work for the building and general construction industries. It supplements the generic cost estimate classification RP 17R-97 [1] by providing:

- A section that further defines classification concepts as they apply to the building and general construction industries.
- A chart that maps the extent and maturity of estimate input information (project definition deliverables) against the class of estimate.

As with the generic RP, the intent of this document is to improve communications among all the stakeholders involved with preparing, evaluating, and using project cost estimates specifically for the building and general construction industries.

The overall purpose of this recommended practice is to provide the building and general construction industry with a project definition deliverable maturity matrix that is not provided in 17R-97. It also provides an approximate

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representation of the relationship of specific design input data and design deliverable maturity to the estimate accuracy and methodology used to produce the cost estimate. The estimate accuracy range is driven by many other variables and risks, so the maturity and quality of the scope definition available at the time of the estimate is not the sole determinate of accuracy; risk analysis is required for that purpose.

This document is intended to provide a guideline, not a standard. It is understood that each enterprise may have its own project and estimating processes, terminology, and may classify estimates in other ways. This guideline provides a generic and generally acceptable classification system for the building and general construction industries that can be used as a basis to compare against. This recommended practice should allow each user to better assess, define, and communicate their own processes and standards in the light of generally-accepted cost engineering practice.

2. INTRODUCTION

For the purposes of this document, the term *general construction* is assumed to include both new construction as well as renovation construction projects. It is intended to be used for building (vertical) construction, as well as site/civil projects. It is intended to cover projects which are repetitive and repeatable. Examples for buildings include: residential construction, commercial buildings, hotels, resorts, offices, retail, etc. This also includes site/civil projects. Examples for site/civil projects include: site development, utility infrastructure, telecommunications, water pipelines, sanitary sewer pipelines, storm water and water resources projects. The common thread among these industries for the purpose of estimate classification is their reliance on project definition documents (basis of design) and schematic drawings as primary scope defining documents. These documents are key deliverables in determining the degree of project definition, and thus the extent and maturity of estimate input information.

Estimates for buildings center on functional space requirements, structural requirements, site requirements, architectural elements, sustainability, and supporting mechanical, electrical, plumbing, and life-safety systems.

This RP specifically does not address cost estimate classification in process industries, environmental remediation, transportation (horizontal) infrastructure, dams, reservoir, tunnel, processes such as assembly and manufacturing, "soft asset" production such as software development, and similar industries. This RP does not cover "one-of-a-kind" type project, like concert halls, sports stadium, research building, health facilities, science laboratories and hi-tech manufacturing. Future cost estimate classification recommended practices may be defined for these specific industries.

The owner, agency, or contractor may require individual cost estimates at each of these estimate classifications or phases. The owner, agency or contractor may provide specific input on the project data or design deliverable requirements.

This guideline reflects generally-accepted cost engineering practices. This recommended practice was based upon the practices of a wide range of companies in the building and general construction industries from around the world, as well as published references and standards. Company and public standards were solicited and reviewed and the practices were found to have significant commonalities.

This RP applies to a variety of project delivery methods such as traditional design-bid-build (DBB), design-build (DB), construction management for fee (CM-fee), construction management at risk (CM-at risk), and private-public partnerships (PPP) contracting methods.

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3. COST ESTIMATE CLASSIFICATION MATRIX FOR THE BUILDING AND GENERAL CONSTRUCTION INDUSTRIES

A purpose of cost estimate classification is to align the estimating process with project stage-gate scope development and decision-making processes.

Table 1 provides a summary of the characteristics of the five estimate classes. The maturity level of project definition is the sole determining (i.e., primary) characteristic of class. In Table 1, the maturity is roughly indicated by a percentage of complete definition; however, it is the maturity of the defining deliverables that is the determinant, not the percent. The specific deliverables, and their maturity or status are provided in Table 3. The other characteristics are secondary and are generally correlated with the maturity level of project definition deliverables, as discussed in the generic RP [1]. Again, the characteristics are typical but may vary depending on the circumstances.

	Primary Characteristic	Secondary Characteristic						
ESTIMATE CLASS	MATURITY LEVEL OF PROJECT DEFINITION DELIVERABLES Expressed as % of complete definition	END USAGE Typical purpose of estimate	METHODOLOGY Typical estimating method	EXPECTED ACCURACY RANGE Typical variation in low and high ranges at an 80% confidence interval				
Class 5	0% to 2%	Functional area, or concept screening	SF or m ² factoring, parametric models, judgment, or analogy	L: -20% to -30% H: +30% to +50%				
Class 4	1% to 15%	or Schematic design or concept study	Parametric models, assembly driven models	L: -10% to -20% H: +20% to +30%				
Class 3	10% to 40%	Design development, budget authorization, feasibility	Semi-detailed unit costs with assembly level line items	L: -5% to -15% H: +10% to +20%				
Class 2	30% to 75%	Control or bid/tender, semi-detailed	Detailed unit cost with forced detailed take-off	L: -5% to -10% H: +5% to +15%				
Class 1	65% to 100%	Check estimate or pre bid/tender, change order	Detailed unit cost with detailed take-off	L: -3% to -5% H: +3% to +10%				

Table 1 – Cost Estimate Classification Matrix for Building and General Construction Industries

This matrix and guideline outline an estimate classification system that is specific to the building and general construction industries. Refer to Recommended Practice 17R-97 [1] for a general matrix that is non-industry specific, or to other cost estimate classification RPs for guidelines that will provide more detailed information for application in other specific industries. These will provide additional information, particularly the *Estimate Input Checklist and Maturity Matrix* which determines the class in those industries. See Professional Guidance Document 01, *Guide to Cost Estimate Classification* [18]

Table 1 illustrates typical ranges of accuracy ranges that are associated with the building and general construction industries. The +/- value represents typical percentage variation at an 80% confidence interval of actual costs from the cost estimate after application of appropriate contingency (typically to achieve a 50% probability of project overrun versus underrun) for given scope. Depending on the technical and project deliverables (and other variables) and risks associated with each estimate, the accuracy range for any particular estimate is expected to fall within the ranges identified. However, this does not preclude a specific actual project result from falling outside of the indicated range of ranges identified in Table 1. In fact, research indicates that for weak project systems and complex or otherwise risky projects, the high ranges may be two to three times the high range indicated in Table 1. [20]

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In addition to the degree of project definition, estimate accuracy is also driven by other systemic risks such as:

- Level of familiarity with technology.
- Unique/remote nature of project locations and conditions and the availability of reference data for those.
- Complexity of the project and its execution.
- Quality of reference cost estimating data.
- Quality of assumptions used in preparing the estimate.
- Experience and skill level of the estimator.
- Estimating techniques employed.
- Time and level of effort budgeted to prepare the estimate.
- Market and pricing conditions.
- Currency exchange.
- Regulatory, community, landowner, and political risks.
- Third parties, including utility owners.
- Political risks and bias.

Systemic risks such as these are often the primary driver of accuracy, especially during the early stages of project definition. As project definition progresses, project-specific risks (e.g. risk events and conditions) become more prevalent (or better known) and also drive the accuracy range.

Another concern in estimates is potential organizational pressure for a predetermined value that may result in a biased estimate. The goal should be to have an unbiased and objective estimate both for the base cost and for contingency. The stated estimate ranges are dependent on this premise and a realistic view of the project. Failure to appropriately address systemic risks (e.g. technical complexity) during the risk analysis process, impacts the resulting probability distribution of the estimate costs, and therefore the interpretation of estimate accuracy.

Figure 1 illustrates the general relationship trend between estimate accuracy and the estimate classes (corresponding with the maturity level of project definition). Depending upon the technical complexity of the project, the availability of appropriate cost reference information, the degree of project definition, and the inclusion of appropriate contingency determination, a typical Class 5 estimate for a building and general construction industry project may have an accuracy range as broad as -30% to +50%, or as narrow as -20% to +30%. However, note that this is dependent upon the contingency included in the estimate appropriately quantifying the uncertainty and risks associated with the cost estimate. Refer to Table 1 for the accuracy ranges conceptually illustrated in Figure 1. [21]

Figure 1 also illustrates that the estimating accuracy ranges overlap the estimate classes. There are cases where a Class 5 estimate for a particular project may be as accurate as a Class 3 estimate for a different project. For example, similar accuracy ranges may occur if the Class 5 estimate of one project that is based on a repeat project with good cost history and data and, whereas the Class 3 estimate for another is for a project involving new technology. It is for this reason that Table 1 provides ranges of accuracy range values. This allows consideration of the specific circumstances inherent in a project and an industry sector to provide realistic estimate class accuracy range percentages. While a target range may be expected for a particular estimate, the accuracy range should always be determined through risk analysis of the specific project and should never be pre-determined. AACE has recommended practices that address contingency determination and risk analysis methods. [22]

If contingency has been addressed appropriately approximately 80% of projects should fall within the ranges shown in Figure 1. However, this does not preclude a specific actual project result from falling inside or outside of the indicated range of ranges identified in Table 1. As previously mentioned, research indicates that for weak project systems, and/or complex or otherwise risky projects, the high ranges may be two to three times the high range indicated in Table 1.

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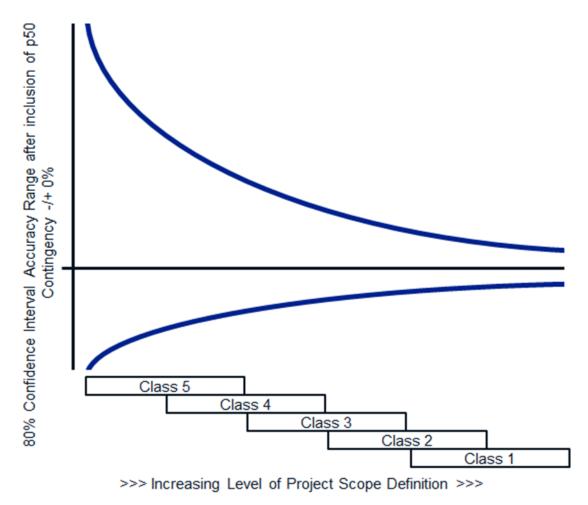


Figure 1 – Illustration of the Variability in Accuracy Ranges for Building and General Construction Industry Estimates

4. DETERMINATION OF THE COST ESTIMATE CLASS

For a given project, the determination of the estimate class is based upon the maturity level of project definition based on the status of specific key planning and design deliverables. The percent design completion may be correlated with the status, but the percentage should not be used as the class determinate. While the determination of the status (and hence the estimate class) is somewhat subjective, having standards for the design input data, completeness and quality of the design deliverables will serve to make the determination more objective.

5. CHARACTERISTICS OF THE ESTIMATE CLASSES

The following tables (2a through 2e) provide detailed descriptions of the five estimate classifications as applied in the building and general construction industries. They are presented in the order of least-defined estimates to the

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most-defined estimates. These descriptions include brief discussions of each of the estimate characteristics that define an estimate class.

For each table, the following information is provided:

- **Description:** A short description of the class of estimate, including a brief listing of the expected estimate inputs based on the maturity level of project definition deliverables.
- Maturity Level of Project Definition Deliverables (Primary Characteristic): Describes a particularly key
 deliverable and a typical target status in stage-gate decision processes, plus an indication of approximate
 percent of full definition of project and technical deliverables. Typically, but not always, maturity level
 correlates with the percent of engineering and design complete.
- End Usage (Secondary Characteristic): A short discussion of the possible end usage of this class of estimate.
- **Estimating Methodology (Secondary Characteristic):** A listing of the possible estimating methods that may be employed to develop an estimate of this class.
- Expected Accuracy Range (Secondary Characteristic): Typical variation in low and high ranges after the application of contingency (determined at a 50% level of confidence). Typically, this represents about 80% confidence that the actual cost will fall within the bounds of the low and high ranges if contingency appropriately forecasts uncertainty and risks.
- Alternate Estimate Names, Terms, Expressions, Synonyms: This section provides other commonly used names that an estimate of this class might be known by. These alternate names are not endorsed by this recommended practice. The user is cautioned that an alternative name may not always be correlated with the class of estimate as identified in Tables 2a-2e.

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CLASS 5 ESTIMATE

Description:

Class 5 estimates are generally prepared based on very limited information, and subsequently have wide accuracy ranges. As such, some companies and organizations have elected to determine that due to the inherent inaccuracies, such estimates cannot be classified in a conventional and systemic manner. Class 5 estimates, due to the requirements of end use, may be prepared within a very limited amount of time and with little effort expended—sometimes requiring less than an hour to prepare. Often, little more than proposed building type, location, functional space building requirements (SF or m2), and number of stories are known at the time of estimate preparation.

Maturity Level of Project Definition Deliverables:

Key deliverable and target status: Total building area and number of stories agreed upon by stakeholders. 0% to 2% of full project definition.

End Usage:

Class 5 estimates are prepared for any number of strategic business planning purposes, such as but not limited to market studies, assessment of initial viability, evaluation of alternate schemes, project screening, project location studies, evaluation of resource needs and budgeting, long-range capital planning, etc.

Estimating Methodology:

Class 5 estimates generally use stochastic estimating methods such as area factors and other parametric and modeling techniques. For example, historical unit prices or functional use unit prices driven.

Expected Accuracy Range:

Typical accuracy ranges for Class 5 estimates are -20% to -30% on the low side, and +30% to +50% on the high side, depending on the construction complexity of the project, appropriate reference information and other risks (after inclusion of an appropriate contingency determination). Ranges could exceed those shown if there are unusual risks.

Alternate Estimate Names, Terms, Expressions, Synonyms:

Block schematic estimate, functional area-based estimate or scoping study estimate, concept design, ratio, rough order of magnitude, idea study, concept screening estimate, prospect estimate, rule-of-thumb.

Table 2a - Class 5 Estimate

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CLASS 4 ESTIMATE

Description:

Class 4 estimates are generally prepared based on limited information and subsequently have fairly wide accuracy ranges. They are typically used for project screening, determination of feasibility, concept evaluation, and preliminary budget approval. Typically, engineering is from 1% to 15% complete, and would comprise at a minimum the following: preliminary room layouts, new proposed site plan, existing site plan, markups of existing drawings for demolition and utilities, design criteria report or technical memorandum by division of work.

Maturity Level of Project Definition Deliverables:

Key deliverable and target status: Functional space requirements have been fully indentified. 1% to 15% of full project definition.

End Usage:

Class 4 estimates are prepared for a number of purposes, such as but not limited to, detailed strategic planning, business development, project screening at more developed stages, alternative scheme analysis, confirmation of economic and/or technical feasibility, and preliminary budget approval or approval to proceed to next stage.

Estimating Methodology:

Class 4 estimates generally use stochastic estimating methods such as parametric models, and assembly driven models. For example, functional space unit price or model driven.

Expected Accuracy Range:

Typical accuracy ranges for Class 4 estimates are -10% to -20% on the low side, and +20% to +30% on the high side, depending on the construction complexity of the project, appropriate reference information and other risks (after inclusion of an appropriate contingency determination). Ranges could exceed those shown if there are unusual risks.

Alternate Estimate Names, Terms, Expressions, Synonyms:

Schematic design estimate or pre-feasibility estimate, feasibility, screening, top-down, feasibility, authorization, factored, pre-study, concept study.

Table 2b - Class 4 Estimate

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CLASS 3 ESTIMATE

Description:

Class 3 estimates are generally prepared to form the basis for budget authorization, appropriation, and/or funding. As such, they typically form the initial control estimate against which all actual costs and resources will be monitored. Typically, engineering is from 10% to 40% complete, and would comprise at a minimum completed design information for the following: defined site civil information such as site plan, existing site conditions, demolition drawings, utility plan, site electrical plans, room layouts, mechanical system layouts, plumbing layouts, and one-line electrical diagram.

Maturity Level of Project Definition Deliverables:

Key deliverable and target status: building code or standards requirements; exterior closure description; and finishes descriptions and requirements, are all defined. 10% to 40% of full project definition.

End Usage:

Class 3 estimates are typically prepared to support full project funding requests, and become the first of the project phase "control estimates" against which all actual costs and resources will be monitored for variations to the budget. They are used as the project budget until replaced by more detailed estimates. In many owner organizations, a Class 3 estimate is often the last estimate required and could very well form the only basis for cost/schedule control.

Estimating Methodology:

Class 3 estimates generally involve more deterministic estimating methods than stochastic methods. They usually involve a high degree of unit cost line items, although these may be at an assembly level of detail rather than individual components. Factoring and other stochastic methods may be used to estimate less-significant areas of the project. For example, assembly driven, with some detailed items and engineering/design assumptions and specifications if known.

Expected Accuracy Range:

Typical accuracy ranges for Class 3 estimates are -5% to -15% on the low side, and +10% to +20% on the high side, depending on the construction complexity of the project, appropriate reference information and other risks (after inclusion of an appropriate contingency determination). Ranges could exceed those shown if there are unusual risks.

Alternate Estimate Names, Terms, Expressions, Synonyms:

Budget, scope, sanction, semi-detailed, authorization, preliminary control, concept study, development, basic engineering phase estimate, target estimate.

Table 2c - Class 3 Estimate

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CLASS 2 ESTIMATE

Description:

Class 2 estimates are generally prepared to form a detailed contractor control baseline (and update the owner control baseline) against which all project work is monitored in terms of cost and progress control. For contractors, this class of estimate is often used as the bid estimate to establish contract value. Typically, engineering is from 30% to 70% complete, and would comprise at minimum completed design information. All drawings, plan views, elevation drawings and section drawings are complete; except detailed design schedules, architectural details and control diagrams, which may still be in draft form.

Maturity Level of Project Definition Deliverables:

Key deliverable and target status: draft specifications, building systems, and soils and hydrology report are defined. 30% to 75% of full project definition.

End Usage:

Class 2 estimates are typically prepared as the detailed contractor control baseline (and update the owner control baseline) against which all actual costs and resources will now be monitored for variations to the budget, and form a part of the change management program.

Estimating Methodology:

Class 2 estimates generally involve a high degree of deterministic estimating methods. Class 2 estimates are prepared in great detail, and often involve tens of thousands of unit cost line items. For those areas of the project still undefined, an assumed level of detail takeoff (forced detail) may be developed to use as line items in the estimate instead of relying on factoring methods. For example: assembly and detail items, with draft specifications across most divisions of work; limited engineering/design assumptions; detailed labor, material, equipment, subcontractor and other costs; or some quotations.

Expected Accuracy Range:

Typical accuracy ranges for Class 2 estimates are -5% to -10% on the low side, and +5% to +15% on the high side, depending on the construction complexity of the project, appropriate reference information and other risks (after inclusion of an appropriate contingency determination). Ranges could exceed those shown if there are unusual risks.

Alternate Estimate Names, Terms, Expressions, Synonyms:
Design development estimate, detailed estimate, control, forced detail, execution phase, master control, engineering.

Table 2d - Class 2 Estimate

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CLASS 1 ESTIMATE

Description:

Class 1 estimates are generally prepared for discrete parts or sections of the total project rather than generating this level of detail for the entire project. The parts of the project estimated at this level of detail will typically be used by subcontractors for bids, or by owners for check estimates. The updated estimate is often referred to as the current control estimate and becomes the new baseline for cost/schedule control of the project. Class 1 estimates may be prepared for parts of the project to comprise a fair price estimate or bid check estimate to compare against a contractor's bid estimate, or to evaluate/dispute claims. Typically, engineering is from 70% to 100% complete, and would comprise virtually all engineering and design documentation of the project, and complete project execution and commissioning plans.

Maturity Level of Project Definition Deliverables:

Key deliverable and target status: all deliverables in the maturity matrix complete. 65% to 100% of full project definition.

End Usage:

Generally, owners and designers use Class 1 estimates to support their change management process. They may be used to evaluate bid checking, to support vendor/contractor negotiations, or for claim evaluations and dispute resolution.

Construction contractors may prepare Class 1 estimates to support their bidding and to act as their final control baseline against which all actual costs and resources will now be monitored for variations to their bid. During construction, Class 1 estimates may be prepared to support change management.

Table 2e – Class 1 Estimate

Estimating Methodology:

Class 1 estimates generally involve the highest degree of deterministic estimating methods, and require a great amount of effort. Class 1 estimates are prepared in great detail, and thus are usually performed on only the most important or critical areas of the project. All items in the estimate are usually unit cost line items based on actual design quantities. For example, detailed bottoms up estimate, with detailed labor, materials, equipment, subcontractor and other costs, with specific quotations, based upon detailed drawings and specifications. This would be a unit price estimate driven by crews and productivity.

Expected Accuracy Range:

Typical accuracy ranges for Class 1 estimates are -3% to -5% on the low side, and +3% to +10% on the high side, depending on the construction complexity of the project, appropriate reference information and other risks (after inclusion of an appropriate contingency determination). Ranges could exceed those shown if there are unusual risks.

Alternate Estimate Names, Terms, Expressions, Synonyms:

Construction document estimate, pre-tender estimate, preconstruction estimate, or project control estimate, full detail estimate, release, fall-out, tender, firm price, bottoms-up, final, detailed control, forced detail, execution phase, master control, control, control estimate, fair price, bid/tender definitive, change order estimate (if in construction phase).

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6. ESTIMATE INPUT CHECKLIST AND MATURITY MATRIX

Table 3 maps the extent and maturity of estimate input information (deliverables) against the five estimate classification levels. This is a checklist of basic deliverables found in common practice in the building and general construction industries. The maturity level is an approximation of the completion status of the deliverable. The degree of completion is indicated by the following descriptors:

General Project Data:

- **Not Required (NR):** May not be required for all estimates of the specified class, but specific project estimates may require at least preliminary development.
- **Preliminary (P)**: Project definition has begun and progressed to at least an intermediate level of completion. Review and approvals for its status has occurred.
- **Defined (D)**: Project definition is advanced, and reviews have been conducted. Development may be near completion with the exception of final approvals.

Technical Deliverables:

- **Not Required (NR)**: Deliverable may not be required for all estimates of the specified class, but specific project estimates may require at least preliminary development.
- **Started (S):** Work on the deliverable has begun. Development is typically limited to sketches, rough outlines, or similar levels of early completion.
- **Preliminary (P):** Work on the deliverable is advanced. Interim, cross-functional reviews have usually been conducted. Development may be near completion except for final reviews and approvals.
- **Complete (C):** The deliverable has been reviewed and approved as appropriate.

MATURITY LEVEL OF PROJECT DEFINITION DELIVERABLES	ESTIMATE CLASSIFICATION					
	CLASS 5	CLASS 4	CLASS 3	CLASS 2	CLASS 1	
	0% to 2%	1% to 15%	10% to 40%	30% to 75%	65% to 100%	
GENERAL PROJECT DATA:						
A. SCOPE:						
Project Scope of Work Description	Р	Р	D	D	D	
Site Infrastructure (Access, Construction Power, Camp etc.)	NR	Р	D	D	D	
B. CAPACITY:						
Functional Space - SF or m2	Р	Р	D	D	D	
Electrical Power Requirements (when not the primary capacity driver)	NR	Р	D	D	D	
Mechanical Systems	NR	Р	D	D	D	
C. PROJECT LOCATION:						

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	ESTIMATE CLASSIFICATION					
MATURITY LEVEL OF PROJECT DEFINITION DELIVERABLES	CLASS 5	CLASS 4	CLASS 3	CLASS 2	CLASS 1	
	0% to 2%	1% to 15%	10% to 40%	30% to 75%	65% to 100%	
Building and/or Other Project Elements	Р	Р	D	D	D	
D. REQUIREMENTS:						
Anti-Terrorism Force Protection	Р	D	D	D	D	
No. of Building Floors	Р	P/D	D	D	D	
Security System	NR/P	P	D	D	D	
LEED Certification Level	NR/P	P/D	D	D	D	
Codes and/or Standards	NR	P	D	D	D	
Communication Systems	NR	Р	D	D	D	
Exterior Closure Description	NR	Р	D	D	D	
Finishes Descriptions	NR	Р	D	D	D	
Fire Protection and Life Safety	NR	Р	D	D	D	
Environmental Monitoring	NR	NR	Р	P	D	
E. TECHNOLOGY SELECTION:						
N/A						
F. STRATEGY:						
Contracting / Sourcing	NR	Р	D	D	D	
Escalation	NR	Р	D	D	D	
G. PLANNING:						
Logistics Plan	Р	Р	P	D	D	
Integrated Project Plan ¹	NR	Р	D	D	D	
Project Code of Accounts	NR	Р	D	D	D	
Project Master Schedule	NR	P	D	D	D	
Regulatory Approval & Permitting	NR	P	D	D	D	
Risk Register	NR	P	D	D	D	
Stakeholder Consultation / Engagement / Management Plan	NR	Р	D	D	D	
Work Breakdown Structure	NR	Р	D	D	D	
Startup and Commissioning Plan	NR	Р	P/D	D	D	
Storm Water Management Plan	NR	Р	P/D	D	D	
H. STUDIES						
Environmental Impact / Sustainability Assessment	NR	P	D	D	D	
Environmental / Existing Conditions	NR	Р	D	D	D	
Soils and Hydrology	NR	Р	D	D	D	

¹ The integrated project plan (IPP), project execution plan (PEP), project management plan (PMP), or more broadly the project plan, is a high-level management guide to the means, methods and tools that will be used by the team to manage the project. The term integration emphasizes a project life cycle view (the term execution implying post-sanction) and the need for alignment. The IPP covers all functions (or phases) including engineering, procurement, contracting strategy, fabrication, construction, commissioning and startup within the scope of work. However, it also includes stakeholder management, safety, quality, project controls, risk, information, communication and other supporting functions. In respect to estimate classification, to be rated as *defined*, the IPP must cover all the relevant phases/functions in an integrated manner aligned with the project charter (i.e., objectives and strategies); anything less is *preliminary*. The overall IPP cannot be rated as *defined* unless all individual elements are defined and integrated.

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	ESTIMATE CLASSIFICATION						
MATURITY LEVEL OF PROJECT DEFINITION DELIVERABLES	CLASS 5	CLASS 4	CLASS 3	CLASS 2	CLASS 1		
	0% to 2%	1% to 15%	10% to 40%	30% to 75%	65% to 100%		
TECHNICAL DELIVERABLES:							
Site Plan	S	Р	С	С	С		
Design Specifications	NR	S/P	С	С	С		
Electrical One-Line Drawings	NR	S/P	С	С	С		
General Equipment Arrangement Drawings	NR	S/P	С	С	С		
Plot Plans / Facility Layouts	NR	S/P	С	С	С		
Room Classification Datasheet	NR	S/P	С	С	С		
Room Layout Drawings	NR	S/P	С	С	С		
Construction Permits	NR	S/P	P/C	С	С		
Building Plan Views, Sections and Elevations	NR	S/P	P	С	С		
Civil / Site / Structural / Architectural Discipline Drawings	NR	S/P	Р	С	С		
Codes and Standards Drawings	NR	S/P	Р	С	С		
Demolition Plan and Drawings	NR	S/P	Р	С	С		
Erosion Control Plan and Drawings	NR	S/P	Р	С	С		
Exterior Elevations	NR	S/P	Р	С	С		
Finish Schedule	NR	S/P	Р	С	С		
Fire Protection and Life Safety Drawings and Details	NR	S/P	Р	С	С		
Furniture Plans, Schedules and Drawings	NR	S/P	Р	С	С		
Interior Section Views	NR	S/P	P	С	C		
Landscaping Drawings	NR	S/P	P	C	C		
Plumbing Drawings	NR	S/P	P	С	С		
Roof Plan, Drawings and Details	NR	S/P	P	C	C		
Storm Water Drawings	NR	S/P	P	C	C		
Window Schedules	NR	S/P	P	P/C	C		
Door Schedules	NR	S/P	P	P	C		
Restroom Schedules	NR	S/P	P	P	С		
Signage Drawings and Schedules	NR	S/P	P	P	С		
Partition or Wall Types	NR	S/P	S/P	c .	C		
Electrical Schedules	NR	NR/S	P	P/C	С		
Equipment Datasheets	NR	NR/S	P	P/C	C		
Equipment Lists: Electrical	NR	NR/S	P	P/C	C		
Equipment Lists: Process / Utility / Mechanical	NR	NR/S	P	P/C	С		
Instrument and Control Schedules	NR	NR/S	Р	P/C	С		
Instrument Datasheets	NR	NR/S	P	P/C	С		
Piping Schedules	NR	NR/S	P	P/C	C		
Piping Discipline Drawings	NR	NR/S	S/P	C	C		
Spare Parts Listings	NR	NR	9/P	P/C	С		
Electrical Discipline Drawings	NR	NR NR	S/P	P/C	С		
Facility Emergency Communication Plan	NR NR	NR NR	S/P	P/C	С		
and Drawings	AID.	ND	C/D				
HVAC Drawings	NR	NR	S/P	P/C	С		

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MATURITY LEVEL OF PROJECT DEFINITION DELIVERABLES	ESTIMATE CLASSIFICATION					
	CLASS 5	CLASS 4	CLASS 3	CLASS 2	CLASS 1	
	0% to 2%	1% to 15%	10% to 40%	30% to 75%	65% to 100%	
Information Systems / Telecommunication Drawings	NR	NR	S/P	P/C	С	
Instrumentation / Control System Discipline Drawings	NR	NR	S/P	P/C	С	
Mechanical Discipline Drawings	NR	NR	S/P	P/C	С	
Room Discipline Drawings	NR	NR	S/P	P/C	С	
Interior Lighting Plan and Drawings	NR	NR	S/P	Р	С	
Lighting Control Diagram	NR	NR	S/P	Р	С	
Lighting Schedules	NR	NR	S/P	Р	С	
Lightning Protection Drawings	NR	NR	S/P	Р	С	
Mechanical / HVAC Schedules	NR	NR	S/P	Р	С	
Motor Control Diagram	NR	NR	S/P	Р	С	
Plumbing Details	NR	NR	S/P	Р	С	
Security Plan and Drawings	NR	NR	S/P	Р	С	
Instrument List	NR	NR	S	P/C	С	
Building Envelope / Moisture Protection / Flashing Details	NR	NR	S	Р	С	
Interior Elevations	NR	NR	S	Р	С	

Table 3 – Estimate Input Checklist and Maturity Matrix (Primary Classification Determinate)

7. BASIS OF ESTIMATE DOCUMENTATION

The basis of estimate (BOE) typically accompanies the cost estimate. The basis of estimate is a document that describes how an estimate is prepared and defines the information used in support of development. A basis document commonly includes, but is not limited to, a description of the scope included, methodologies used, references and defining deliverables used, assumptions and exclusions made, clarifications, adjustments, and some indication of the level of uncertainty.

The BOE is, in some ways, just as important as the estimate since it documents the scope and assumptions; and provides a level of confidence to the estimate. The estimate is incomplete without a well-documented basis of estimate. See AACE Recommended Practice 34R-05 *Basis of Estimate* [19] for more information.

8. PROJECT DEFINITION RATING SYSTEM

An additional step in documenting the maturity level of project definition is to develop a project definition rating system. This is another tool for measuring the completeness of project scope definition. Such a system typically provides a checklist of scope definition elements and a scoring rubric to measure maturity or completeness for each element. A better project definition rating score is typically associated with a better probability of achieving project success.

Such a tool should be used in conjunction with the AACE estimate classification system; it does not replace estimate classification. A key difference is that a project definition rating measures overall maturity across a broad set of project definition elements, but it usually does not ensure completeness of the key project definition

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deliverables required to meet a specific class of estimate. For example, a good project definition rating may sometimes be achieved by progressing on additional project definition deliverables, but without achieving signoff or completion of a key deliverable.

AACE estimate classification is based on ensuring that key project deliverables have been completed or met the required level of maturity. If a key deliverable that is indicated as needing to be complete for Class 3 (as an example) has not actually been completed, then the estimate cannot be regarded as Class 3 regardless of the maturity or progress on other project definition elements.

An example of a project definition rating system is the *Project Definition Rating Index* developed by the Construction Industry Institute. It has developed several indices for specific industries, such as IR113-2 [15] for the process industry and IR115-2 [16] for the building industry. Similar systems have been developed by the US Department of Energy [17].

9. CLASSIFICATION FOR LONG-TERM PLANNING AND ASSET LIFE CYCLE COST ESTIMATES

As stated in the Purpose section, classification maps the phases and stages of project cost estimating. Typically, in a phase-gate project system, scope definition and capital cost estimating activities flow from framing a business opportunity through to a capital investment decision and eventual project completion in a more-or-less steady, short-term (e.g., several years) project life-cycle process.

Cost estimates are also prepared to support long-range (e.g., perhaps several decades) capital budgeting and/or asset life cycle planning. Asset life cycle estimates are also prepared to support net present value (e.g., estimates for initial capital project, sustaining capital, and decommissioning projects), value engineering and other cost or economic studies. These estimates are necessary to address sustainability as well. Typically, these long-range estimates are based on minimal scope definition as defined for *Class 5*. However, these asset life cycle "conceptual" estimates are prepared so far in advance that it is virtually assured that the scope will change from even the minimal level of definition assumed at the time of the estimate. Therefore, the expected estimate accuracy values reported in Table 1 (percent that actual cost will be over or under the estimate including contingency) are not meaningful because the Table 1 accuracy values explicitly *exclude scope change*. For long-term estimates, one of the following two classification approaches is recommended:

- If the long-range estimate is to be updated or maintained periodically in a controlled, documented life
 cycle process that addresses scope and technology changes in estimates over time (e.g., nuclear or other
 licensing may require that future decommissioning estimates be periodically updated), the estimate is
 rated as Class 5 and the Table 1 accuracy ranges are assumed to apply for the specific scope included in
 the estimate at the time of estimate preparation. Scope changes are explicitly excluded from the accuracy
 range.
- If the long-range estimate is performed as part of a process or analysis where scope and technology change is not expected to be addressed in routine estimate updates over time, the estimate is rated as Unclassified or as Class 10 (if a class designation is required to meet organizational procedures), and the Table 1 accuracy ranges cannot be assumed to apply. The term Class 10 is specifically used to distinguish these long-range estimates from the relatively short time-frame Class 5 through Class 1 capital cost estimates identified in Table 1 and this RP; and to indicate the order-of-magnitude difference in potential expected estimate accuracy due to the infrequent updates for scope and technology. Unclassified (or Class 10) estimates are not associated with indicated expected accuracy ranges.

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In all cases, a *Basis of Estimate* should be documented so that the estimate is clearly understood by those reviewing and/or relying on them later. Also, the estimating methods and other characteristics of Class 5 estimates generally apply. In other words, an *Unclassified* or *Class 10* designation must not be used as an excuse for unprofessional estimating practice.

REFERENCES

- 1. AACE International, Recommended Practice 17R-97, *Cost Estimate Classification System*, AACE International, Morgantown, WV, (latest revision).
- 2. American Institute of Architects (AIA), *Integrated Project Delivery: A Guide, Version 1*, American Institute of Architects (AIA), Washington, DC, 2007.
- 3. Marr, Kenneth F., Sr., *Standards for Construction Cost Estimators*, 1977 AACE Transactions, AACE International, Morgantown, WV, 1977.
- 4. U.S. General Services Administration (GSA), *Project Planning Guide*, U.S. General Services Administration, Washington, DC, 2005
- 5. Construction Management Association of America (CMAA), *CM Standards of Practice: Cost Management*, CMAA, McLean, VA, 2009
- 6. ASTM, Standard E1804-07 Standard Practice for Performing and Reporting Cost Analysis During the Design Phase of a Project, ASTM International, West Conshohocken, PA, 2006, DOI: 10.1520/E1804-07, www.astm.org.
- Construction Industry Institute (CII), Project Definition Rating Index Workshop, CII, Austin, TX, September 20, 2004
- 8. ASTM, Standard 2516-06, Standard Classification for Cost Estimate Classification System, ASTM International, West Conshohocken, PA, 2006, DOI: 10.1520/E2516-06, www.astm.org.
- 9. AACE International, Recommended Practice 10S-90, *Cost Engineering Terminology*, AACE International, Morgantown, WV, (latest revision).
- 10. H. L. Stephenson, Ed., Total Cost Management Framework: An Integrated Approach to Portfolio, Program and Project Management, 2nd ed., Morgantown, WV: AACE International, Latest revision.
- 11. American Society of Professional Estimators (ASPE), *Standard Estimating Practice, Levels of Estimate*, section 2, 7th edition, July 11, 2008.
- 12. The American Institute of Architects (AIA), E202-2008 Building Information Modeling Protocol Exhibit, 2008.
- 13. Construction Specifications Institute (CSI), Uniformat 2010 and Masterformat 2010, Alexandria VA, 2010.
- 14. AACE International BIM Committee in Association with the BuildingSmart Alliance, *Quantification (Take-off)*Process and Standards for BIM: BIM Standards for Cost Estimating, DRAFT V3 March 14, 2008.
- 15. Construction Industry Institute (CII), PDRI: Project Definition Rating Index Industrial Projects, Version 3.2 (113-2), Austin, TX, December 1, 2009.
- 16. Construction Industry Institute (CII), PDRI: Project Definition Rating Index Building Projects, Version 3.2 (115-2), Austin, TX, December 1, 2009.
- 17. U.S. Department of Energy (DOE), *Project Definition Rating Index Guide for Traditional Nuclear and Non-Nuclear Construction Projects*, DOE G 413.3-12, July 22, 2010.
- 18. AACE International, Professional Guidance Document PGD 01, *Guide to Cost Estimate Classification*, AACE International, Morgantown, WV (latest revision).
- 19. AACE International, Recommended Practice 34R-05, *Basis of Estimate*, AACE International, Morgantown, WV, (latest revision).
- 20. J. K. Hollmann, Project Risk Quantification, Sugarland, TX: Probabilistic Publishing, 2016.
- 21. AACE International Recommended Practice No. 104R-19, Understanding Estimate Accuracy, Morgantown, WV: AACE International, Latest revision.
- 22. AACE International, Professional Guidance Document (PGD) 02, Guide to Quantitative Risk Analysis, Morgantown, WV: AACE International, Latest revision.

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23. AACE International, Recommended Practice 40R-08, *Contingency Estimating - General Principles*, AACE International, Morgantown, WV (latest revision).

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APPENDIX: UNDERSTANDING ESTIMATE CLASS AND COST ESTIMATE ACCURACY

Despite the verbiage included in the RP, often, there are still misunderstandings that the class of estimate, as defined in the RP above, defines an expected accuracy range for each estimate class. This is incorrect. The RP clearly states that "while a target range may be expected for a particular estimate, the accuracy range should always be determined through risk analysis of the specific project and should never be predetermined." Table 1 and Figure 1 in the RP are intended to illustrate only the general relationship between estimate accuracy and the level of project definition. For the building and general construction industries, typical estimate ranges described in RP 56R-08 above are shown as a range of ranges:

- Class 5 Estimate:
 - High range typically ranges from +30% to +50%
 - Low range typically ranges from -20% to -50%
- Class 4 Estimate:
 - High range typically ranges from +20% to +30%
 - Low range typically ranges from -10% to -20%
- Class 3 Estimate:
 - High range typically ranges from +10% to +20%
 - Low range typically ranges from -5% to -15%
- Class 2 Estimate:
 - High range typically ranges from +5% to +15%
 - Low range typically ranges from -5% to -10%
- Class 1 Estimate:
 - High range typically ranges from +3% to +10%
 - Low range typically ranges from -3% to -5%

As indicated in the RP, these +/- percentage members associated with an estimate class are intended as rough indicators of the accuracy relationship. They are merely a useful simplification given the reality that every individual estimate will be associated with a unique probability distribution correlated with its specific level of uncertainty. As indicated in the RP, estimate accuracy should be determined through a risk analysis for each estimate.

It should also be noted that there is no indication in the RP of contingency determination being based on the class of estimate. AACE has recommended practices that address contingency determination and risk analysis methods (for example RP 40R-08, *Contingency Estimating – General Principles* [23]). Furthermore, the level of contingency required for an estimate is not the same as the upper limits of estimate accuracy (as determined by a risk analysis).

The results of the estimating process are often conveyed as a single value of cost or time. However, since estimates are predications of an uncertain future, it is recommended that all estimate results should be presented as a probabilistic distribution of possible outcomes in consideration of risk.

Every estimate is a prediction of the expected final cost or duration of a proposed project or effort (for a given scope of work). By its nature, an estimate involves assumptions and uncertainties. Performing the work is also subject to risk conditions and events that are often difficult to identify and quantify. Therefore, every estimate presented as a single value of cost or duration will likely deviate from the final outcome (i.e., statistical error). In simple terms, this means that every point estimate value will likely prove to be wrong. Optimally, the estimator will analyze the uncertainty and risks and produce a probabilistic estimate that provides decision makers with the probabilities of over-running or under-running any particular cost or duration value. Given this probabilistic nature of an estimate, an estimate should not be regarded as a single point cost or duration. Instead, an estimate actually

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reflects a range of potential outcomes, with each value within this range associated with a probability of occurrence.

Individual estimates should always have their accuracy ranges determined by a quantitative risk analysis study that results in an estimate probability distribution. The estimate probability distribution is typically skewed. Research shows the skew is typically to the right (positive skewness with a longer tail to the right side of the distribution) for large and complex projects. In part, this is because the impact of risk is often unbounded on the high side.

High side skewness implies that there is potential for the high range of the estimate to exceed the median value of the probability distribution by a higher absolute value than the difference between the low range of the estimate and the median value of the distribution.

Figure A1 shows a positively skewed distribution for a sample cost estimate risk analysis that has a point base estimate (the value before adding contingency) of \$89.5. In this example, a contingency of \$4.5 (approximately 5%) is required to achieve a 50% probability of underrun, which increases the final estimate value after consideration of risk to \$93. Note that this example is intended to describe the concepts but not to recommend specific confidence levels for funding contingency or management reserves of particular projects; that depends on the stakeholder risk attitude and tolerance.

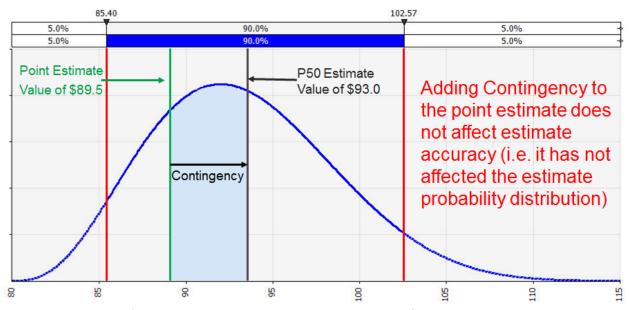


Figure – A1: Example of an Estimate Probability Distribution at a 90% Confidence Interval

Note that adding contingency to the base point estimate does not affect estimate accuracy in absolute terms as it has not affected the estimate probability distribution (i.e., high and low values are the same). Adding contingency simply increases the probability of underrunning the final estimate value and decreases the probability of overrunning the final estimate value. In this example, the estimate range with a 90% confidence interval remains between approximately \$85 and \$103 regardless of the contingency value.

As indicated in the RP, expected estimate accuracy tends to improve (i.e., the range of probable values narrows) as the level of project scope definition improves. In terms of the AACE International estimate classifications, increasing levels of project definition are associated with moving from Class 5 estimates (lowest level of scope definition) to Class 1 estimates (highest level of scope definition), as shown in Figure 1 of the RP. Keeping in mind

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that accuracy is an expression of an estimate's predicted closeness to the final actual value; anything included in that final actual cost, be it the result of general uncertainty, risk conditions and events, price escalation, currency or anything else within the project scope, is something that estimate accuracy measures must communicate in some manner. With that in mind, it should be clear why standard accuracy range values are not applicable to individual estimates.

The level of project definition reflected in the estimate is a key risk driver and hence is at the heart of estimate classification, but it is not the only driver of estimate risk and uncertainty. Given all the potential sources of risk and uncertainty that will vary for each specific estimate, it is simply not possible to define a range of estimate accuracy solely based on the level of project definition or class of estimate.

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

Witness: John Magner

2. State whether there are any other alternatives to improve the quality of the water being provided by Paris, and if so, explain why those alternatives were not chosen over the selected project. Provide the expected capital costs and incremental operation and maintenance costs of any such alternative.

Response:

KAW does not have the ability to control the quality of water being supplied by Paris, but KAW has already implemented and operates measures to address current water quality issues associated with the water supplied by Paris.

As discussed in KAW's response to PSC DR 1-8, the water supplied by Paris to KAW's Millersburg system routinely violates regulatory maximum contaminant levels ("MCL") for disinfection byproducts ("DBP"), including both total trihalomethanes ("TTHM") and total haloacetic acids ("HAA5"), established as part of the United States Environmental Protection Agency's State 1 and Stage 2 Disinfection Byproduct Rules ("DBPR"). Results of KAW's monthly sampling of the water supplied by Paris regarding DBP MCL violations are 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 exceeded the regulatory MCLs in each of the samplings conducted in June, July, and August of 2023.

Due to the elevated DBP levels in the water supplied by Paris that violate the regulatory MCLs, KAW implemented a granular activated carbon system to filter the water. After the

water is filtered, KAW then must utilize a chlorine feed system to rechlorinate the water prior to distributing it to the Millersburg system.

If additional issues related to the quality of the water supplied by Paris were to arise in the future, KAW could have to implement additional measures to address these issues. It is unknown if additional issues or what type of issues will occur in the future, however, so KAW cannot estimate the costs for potential future treatment measures.

Addressing issues with the quality of water supplied by Paris does not mitigate issues related to the volume, rate, and reliability of water supplied by Paris. As discussed in KAW's response to City of Paris DR 1-14, the available flow from Paris is not capable of adequately supplying the Millersburg system during periods of increased demand and KAW routinely receives requests from Paris to reduce the flow rate into Millersburg when Paris receives complaints of low pressures from its customers. As discussed in Exhibit 2 to the direct testimony of John Magner, KAW expects significant future growth and increased demand in Millersburg and the surrounding area. The current supply of a daily average of 200,000 gallons per calendar month that KAW has the right to purchase from Paris, however, is not adequate to support the anticipated growth.

Additionally, Millersburg has inadequate fire protection. KAW is unable to certify hydrants in Millersburg and a June 2022 fire in Millersburg destroyed historic buildings in the downtown area, including the post office and multiple apartments, because the flow available in Millersburg's hydrants was not sufficient to adequately contain the fire.

The supply from Paris is also unreliable and results in service interruptions to KAW's customers in Millersburg. KAW has recently had to issue precautionary boil advisories to Millersburg customers in the months noted below:

- June 2022 due to a fire that could not be adequality contained due to the limited supply from Paris.
- July 2022 due to a main break within Paris's water distribution system.
- December 2022 due to water supply shortages related to winter weather.
- July 2023 due to Paris issuing a boil water advisory issued to all its customers as a result of a power outage at Paris's water treatment facility.

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

Witness: John Magner

3. Identify all communications held between the representatives of the city of Paris and Kentucky-American in the last five years. Indicate the date of the communications, the type of communications, the individuals involved, and the nature of the communications.

Response:

KAW has performed a due diligence search for all communications responsive to this request. As a result of that search, please see KAW's response to PSC 1-8 and the attached which are all the communications KAW has been able to locate between representatives of the city of Paris and KAW.

From: Bob Money

To:

RE: Water Quality at Paris Master Meter

Subject: Date:

Thursday, August 17, 2023 11:40:00 AM

Attachments: <u>image001.png</u>

Thanks for sharing the results. I hope the weather starts to cool down soon for all of us.

Thanks,

Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



kentuckyamwater.com

From: Chad Smart

Sent: Thursday, August 17, 2023 10:28 AM

To: Bob Money <Bob.Money@amwater.com>;

Dorothy J Johnson

<Dorothy.Johnson@amwater.com>

Subject: RE: Water Quality at Paris Master Meter

EXTERNAL EMAIL: The Actual Sender of this email is csmart@paris.ky.gov "Think before you click!".

Bob,

As expected we were elevated in our TTHM's at the Millersburg site as well as our other sample sites. We maintained compliancy across the board but as expected for this time year they were high. TTHM's .0796

HHA's .047 (better than I anticipated across the all sites)

See attached lab results for reference

Chad Smart

Superintendent

From: Bob Money < Bob.Money@amwater.com>

Sent: Friday, August 11, 2023 9:29 PM

To: Chad Smart Michael Mynear

Cc: Gabe Tanner (Dorothy J Johnson

<Dorothy.Johnson@amwater.com>

Subject: RE: Water Quality at Paris Master Meter

Importance: High

Chad and Michael:

Kentucky American Water wishes to convey our concerns regarding the safety of the water provided by City of Paris to our Millersburg district. Monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated THM and or HAA results.

Please see the attached letter. This notification is sent in accordance with our American Water Environmental Practice.

Thanks, Bob

Robert D. Money, PG
Manager, Water Quality and Environmental Compliance
Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



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From: Bob Money

To:

Subject: Re: Water Quality at Paris Master Meter

Date: Monday, August 14, 2023 10:17:43 AM

Attachments: <u>image001.png</u>

Thank you.

Thanks,

Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com

From: Chad Smart

Sent: Monday, August 14, 2023 9:25:47 AM

To: Bob Money <Bob.Money@amwater.com>; Michael Mynear

Cc: Dorothy J Johnson

<Dorothy.Johnson@amwater.com>

Subject: RE: Water Quality at Paris Master Meter

EXTERNAL EMAIL: The Actual Sender of this email is csmart@paris.ky.gov "Think before you click!".

Bob,

I've attached our most recent process control results and though they're within the MCL for a non compliance site I can say they're not where we would like for them to be (we have not received our compliance results as of this email).

Gabe and I have been in discussion on how we can improve the reduction of DBP's and have come to the conclusion that moving a couple of our feed points will help us achieve this. We are in the process of getting this started.

We are also working on the reconnection of a couple of creek crossings that will improve system hydraulics and ultimately water quality that impacts the 68 corridor.

I will be in touch as we get closer to finalizing these projects. I am hoping once they're complete we can do some split sampling at that meter as well as our area compliance site.

Chad Smart

Superintendent

From: Bob Money <Bob.Money@amwater.com>

Sent: Friday, August 11, 2023 9:29 PM

To: Chad Smart Michael Mynear

Cc: Gabe Tanner (Dorothy J Johnson

<Dorothy.Johnson@amwater.com>

Subject: RE: Water Quality at Paris Master Meter

Importance: High

Chad and Michael:

Kentucky American Water wishes to convey our concerns regarding the safety of the water provided by City of Paris to our Millersburg district. Monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated THM and or HAA results.

Please see the attached letter. This notification is sent in accordance with our American Water Environmental Practice.

Thanks, Bob

Robert D. Money, PG
Manager, Water Quality and Environmental Compliance
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From: Bob Money

To:

Subject:RE: Water Quality at Paris Master MeterDate:Friday, August 11, 2023 9:29:00 PMAttachments:2023-8-11 Paris elevated DBP letter.pdf

image001.png

Importance: High

Chad and Michael:

Kentucky American Water wishes to convey our concerns regarding the safety of the water provided by City of Paris to our Millersburg district. Monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated THM and or HAA results.

Please see the attached letter. This notification is sent in accordance with our American Water Environmental Practice.

Thanks, Bob

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Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



kentuckyamwater.com

From: Bob Money
To:
Cc:
Subject: Re: Millersburg

Date: Tuesday, August 8, 2023 4:07:34 PM

Thanks.

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water

Direct: <u>859-268-6317</u> | Mobile: <u>859-797-7374</u> | <u>bob.money@amwater.com</u>

From: Chad Smart

Sent: Tuesday, August 8, 2023 3:20:03 PM
To: Bob Money <Bob.Money@amwater.com>
Cc: Michael Mynear

Subject: RE: Millersburg

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you click!".

Bob,

We actually lowered it some earlier today, we were pushing upper 2 ppm. I've copied Michael on this, he will be your go to on distribution related issues. I will reach out to Michael and see if they're aware of any issues on that end.

Chad Smart

Superintendent

From: Bob Money <Bob.Money@amwater.com>

Sent: Tuesday, August 8, 2023 3:10 PM **To:** Chad Smart

Subject: Millersburg

Chad,

We are seeing very low total chlorine levels in Millersburg today. Have there been any treatment changes?

Thanks, Bob Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com

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From: Bob Money
To: Chad Smart

Subject: Millersburg

Date: Tuesday, August 8, 2023 3:10:17 PM

Chad,

We are seeing very low total chlorine levels in Millersburg today. Have there been any treatment changes?

Thanks,

Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water

Direct: <u>859-268-6317</u> | Mobile: <u>859-797-7374</u> | <u>bob.money@amwater.com</u>

From: Bob Money

To:

Subject: RE: Communications

Date: Saturday, July 29, 2023 3:16:00 PM

Attachments: <u>image001.png</u>

Thanks

Thanks,

Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



kentuckyamwater.com

From: Chad Smart

Sent: Saturday, July 29, 2023 3:13 PM

To: Bob Money <Bob.Money@amwater.com>

Cc: Dorothy W Rader < Dorothy.Rader@amwater.com>; Michael Mynear

Subject: Re: Communications

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you click!".

Bob,

BWA has been lifted

Get Outlook for iOS

From: Chad Smart <

Sent: Saturday, July 29, 2023 11:39:14 AM **To:** Bob Money < <u>Bob.Money@amwater.com</u>>

Cc: Dorothy W Rader < <u>Dorothy.Rader@amwater.com</u>>; Michael Mynear <

Subject: Re: Communications

Read at 3. At this point they look good

Get <u>Outlook for iOS</u>

From: Bob Money < <u>Bob.Money@amwater.com</u>>

Sent: Saturday, July 29, 2023 11:36:52 AM

Cc: Dorothy W Rader < <u>Dorothy.Rader@amwater.com</u>>; Michael Mynear <

Subject: Re: Communications

Are you all reading at 18 or 24 hours?

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water

Direct: <u>859-268-6317</u> Mobile: <u>859-797-7374</u> | <u>bob.money@amwater.com</u>

From: Chad

Sent: Friday, July 28, 2023 3:54:27 PM

To: Bob Money < <u>Bob.Money@amwater.com</u>>

Cc: Dorothy W Rader < <u>Dorothy.Rader@amwater.com</u>>; Michael Mynear

Subject: RE: Communications

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you click!".

Bac T's went in incubator at 3pm. Once we're in the clear I'll let you know.

Chad Smart

Superintendent

From: Bob Money < <u>Bob.Money@amwater.com</u>>

Sent: Friday, July 28, 2023 9:58 AM

To: Chad Smart

Cc: Dorothy W Rader < <u>Dorothy.Rader@amwater.com</u>>; Michael Mynear

Subject: RE: Communications

Thanks Chad.

Thanks,

Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

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Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



From: Chad Smart

Sent: Friday, July 28, 2023 9:55 AM

To: Bob Money <Bob. Money@amwater.com>

Cc: Dorothy W Rader < Dorothy.Rader@amwater.com >; Michael Mynear

Subject: RE: Communications

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Bob,

Michael called in the BWA earlier, we are on line and functioning as usual. I will let you know once we have pulled the bac t's and the time they go in the incubator with an estimated time the BWA should be lifted.

Chad Smart Superintendent

From: Bob Money < Bob. Money @amwater.com>

Sent: Friday, July 28, 2023 9:25 AM

To: Chad Smart

Cc: Dorothy W Rader < Dorothy.Rader@amwater.com>

Subject: Communications

Importance: High

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Dorothy Radar (dorothy.radar@amwater.com)

Michael Maggard (michael.maggard@amwater.com)

Justin Sensabaugh (justin.sensabaugh@amwater.com)

Thanks,

Bob

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From: Bob Money

To:
Cc: Dorothy W Rader;

Subject: Re: Communications

Date: Saturday, July 29, 2023 11:36:53 AM

Attachments: <u>image001.png</u>

Are you all reading at 18 or 24 hours?

Thanks,

Bob

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Manager, Water Quality and Environmental Compliance

Kentucky American Water

Direct: <u>859-268-6317</u> | Mobile: <u>859-797-7374</u> | <u>bob.money@amwater.com</u>

From: Chad Smart

Sent: Friday, July 28, 2023 3:54:27 PM

To: Bob Money <Bob.Money@amwater.com>

Cc: Dorothy W Rader < Dorothy.Rader@amwater.com>; Michael Mynear

Subject: RE: Communications

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Bac T's went in incubator at 3pm. Once we're in the clear I'll let you know.

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Superintendent

From: Bob Money <Bob.Money@amwater.com>

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Cc: Dorothy W Rader < Dorothy.Rader@amwater.com>; Michael Mynear

Subject: RE: Communications

Thanks Chad.

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Cc: Dorothy W Rader < Dorothy.Rader@amwater.com >; Michael Mynear

Subject: RE: Communications

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Bob,

Michael called in the BWA earlier, we are on line and functioning as usual. I will let you know once we have pulled the bac t's and the time they go in the incubator with an estimated time the BWA should be lifted.

Chad Smart

Superintendent

From: Bob Money < Bob Money@amwater.com>

Sent: Friday, July 28, 2023 9:25 AM

To: Chad Smart

Cc: Dorothy W Rader < Dorothy Rader@amwater.com>

Subject: Communications

Importance: High

Chad,

I hope things are settling down for you folks this morning. It looked like a pretty rough night. It is my understanding there may be some system issues in Paris. I want to request that you let me know as soon as possible on matters that could affect our Millersburg system. We in turn have to let others know. We should be notified immediately as part of any BWA you issue so we can make proper arrangements. Thanks for your consideration and let me know if we can be of assistance.

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Justin Sensabaugh (justin.sensabaugh@amwater.com)

Thanks, Bob

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From: Bob Money

To:

Dorothy W Rader;

Cc: Subject:

RE: Communications

Date:

Friday, July 28, 2023 4:01:00 PM

Attachments: <u>image001.png</u>

Thank you! Fingers crossed

Thanks,

Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

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kentuckyamwater.com

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Cc: Dorothy W Rader < Dorothy.Rader@amwater.com>; Michael Mynear

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Chad Smart

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From: Bob Money < <u>Bob.Money@amwater.com</u>>

Sent: Friday, July 28, 2023 9:25 AM

To: Chad Smart

Cc: Dorothy W Rader < <u>Dorothy.Rader@amwater.com</u>>

Subject: Communications

Importance: High

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From: <u>Bob Money</u>

To:

Subject:

RE: Communications

Date:

Friday, July 28, 2023 9:57:00 AM

Attachments: <u>image001.png</u>

Thanks Chad.

Thanks,

Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



kentuckyamwater.com

From: Chad Smart

Sent: Friday, July 28, 2023 9:55 AM

To: Bob Money <Bob.Money@amwater.com>

Cc: Dorothy W Rader < Dorothy.Rader@amwater.com>; Michael Mynear

Subject: RE: Communications

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Bob,

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Chad Smart

Superintendent

From: Bob Money < <u>Bob.Money@amwater.com</u>>

Sent: Friday, July 28, 2023 9:25 AM

To: Chad Smart

Cc: Dorothy W Rader < <u>Dorothy.Rader@amwater.com</u>>

Subject: Communications

Importance: High

Chad,

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Justin Sensabaugh (justin.sensabaugh@amwater.com)

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From: Bob Money
To: Chad Smart

To: Chad Smart
Cc: Dorothy W Rader
Subject: RE: Communications

Date: Friday, July 28, 2023 9:42:00 AM

Attachments: <u>image001.png</u>

BTW If you need some help with running BWA samples we may be able to assist. Please let us know as soon as you sample so we can sample.

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

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kentuckyamwater.com

From: Bob Money

Sent: Friday, July 28, 2023 9:25 AM

To: Chad Smart

Cc: Dorothy W Rader < Dorothy. Rader@amwater.com>

Subject: Communications

Importance: High

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Thanks,

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Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



 From:
 Bob Money

 To:
 Chad Smart (

 Cc:
 Dorothy W Rader

 Subject:
 Communications

Date: Friday, July 28, 2023 9:24:00 AM

Attachments: <u>image001.png</u>
Importance: High

Chad,

I hope things are settling down for you folks this morning. It looked like a pretty rough night. It is my understanding there may be some system issues in Paris. I want to request that you let me know as soon as possible on matters that could affect our Millersburg system. We in turn have to let others know. We should be notified immediately as part of any BWA you issue so we can make proper arrangements. Thanks for your consideration and let me know if we can be of assistance.

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Robert D. Money, PG
Manager, Water Quality and Environmental Compliance
Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502
Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



kentuckyamwater.com

 From:
 Bob Money

 To:
 Chad Smart (

 Cc:
 Gabe Tanner

Gabe Tanner

Dorothy J Johnson

Subject:RE: Water Quality at Paris Master MeterDate:Friday, June 30, 2023 1:15:00 PMAttachments:2023-6-30 Paris elevated DBP letter.pdf

image001.png

Importance: High

Chad:

Kentucky American Water wishes to convey our concerns regarding the safety of the water provided by City of Paris to our Millersburg district. Monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated THM and or HAA results.

Please see the attached letter. This notification is sent in accordance with our American Water Environmental Practice.

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



 From:
 Bob Money

 To:
 Chad Smart (

 Cc:
 Gabe Tanner

Dorothy J Johnson

Date: Monday, April 3, 2023 3:03:00 PM **Attachments:** image001.png

2023-4-3 Paris elevated DBP letter.pdf

Water Quality at Paris Master Meter

Importance: High

Chad/Pat:

Subject:

Kentucky American Water wishes to convey our concerns regarding the safety of the water provided by City of Paris to our Millersburg district. Monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated THM and or HAA results.

Please see the attached letter. This notification is sent in accordance with our American Water Environmental Practice.

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



 From:
 Bob Money

 To:
 Chad Smart

 Subject:
 CCR Data

Date: Tuesday, March 28, 2023 8:54:00 AM

Attachments: <u>image001.png</u>

Importance: High

Chad,

Just checking to see if you could send over the CCR data today so we can get info to our consecutives before the end of the week.

Thanks,

Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



kentuckyamwater.com

From: Bob Money
To: Chad Smart

Subject: Millersburg

Date: Monday, March 27, 2023 8:50:00 AM

Attachments: <u>image001.png</u>

Importance: High

Chad,

We noticed free CL2 is down to 0.83 this morning. Are you in process of switching back to chloramines by chance?

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



kentuckyamwater.com

From: Bob Money
To: Chad Smart (
Cc: Gabe Tanner)

Dorothy J Johnson

Subject: Water Quality at Paris Master Meter

Date: Tuesday, January 3, 2023 1:51:00 PM

Attachments: 2023-1-3 Paris elevated DBP letter w-attachment.pdf

image001.png

Chad/Pat:

Kentucky American Water wishes to convey our concerns regarding the safety of the water provided by City of Paris to our Millersburg district. Monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated THM and or HAA results.

Please see the attached letter. This notification is sent in accordance with our American Water Environmental Practice.

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



 From:
 Bob Money

 To:
 Chad Smart (

 Cc:
 Gabe Tanner

Dorothy J Johnson

Subject:Water Quality at Paris Master MeterDate:Tuesday, November 15, 2022 3:42:00 PMAttachments:2022-11-15 Paris elevated DBP letter.pdf

image001.png

Importance: High

Chad/Pat:

Kentucky American Water wishes to convey our concerns regarding the safety of the water provided by City of Paris to our Millersburg district. Monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated THM and or HAA results.

Please see the attached letter. This notification is sent in accordance with our American Water Environmental Practice.

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



kentuckyamwater.com

 From:
 Bob Money

 To:
 Chad Smart (

 Cc:
 Gabe Tanner

Gabe Tanner

Dorothy J Johnson

Subject: RE: Water Quality at Paris Master Meter

Date: Tuesday, October 25, 2022 9:40:41 AM

Attachments: <u>image001.png</u>

2022-10-25 Paris elevated DBP letter.pdf

Importance: High

Chad/Pat:

Kentucky American Water wishes to convey our concerns regarding the safety of the water provided by City of Paris to our Millersburg district. Monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated THM and or HAA results.

Please see the attached letter. This notification is sent in accordance with our American Water Environmental Practice.

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



kentuckyamwater.com

From: Subject: Date:

Attachments:

Dorothy J Johnson

Water Quality at Paris Master Meter Monday, October 3, 2022 9:16:35 AM 2022-10-03 Paris elevated DBP letter.pdf

image001.png

Chad/Pat:

Kentucky American Water wishes to convey our concerns regarding the safety of the water provided by City of Paris to our Millersburg district. Monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated THM and or HAA results.

Please see the attached letter. This notification is sent in accordance with our American Water **Environmental Practice.**

Thanks, Bob

Robert D. Money, PG Manager, Water Quality and Environmental Compliance Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502 Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com







Workorder ID: Paris MM M3 DBP 3 Workorder #: 602124

Analytical Results

PROCESS ONLY

Sample #: 60212401 **Date Collected:** 09/20/22 11:52 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 09/21/22 11:56
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported	to the State	^ = P	rovisionally	accredited	All Times i	n Eastern	Time		MC	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			09/21/22 21:	39 GLB				
THM OEL	ND	mg/L	0.0005	1			09/21/22 21:	39 GLB				
Bromodichloromethane	0.0081	mg/L	0.0005	1			09/21/22 21:	39 GLB				
Bromoform	ND	mg/L	0.0005	1			09/21/22 21:	39 GLB				
Chloroform	0.0566	mg/L	0.0005	1			09/21/22 21:	39 GLB				
Dibromochloromethane	0.0006	mg/L	0.0005	1			09/21/22 21:	39 GLB				
Total Trihalomethanes	0.0653	mg/L	0.0005	1			09/21/22 21:	39 GLB	AL			0.08
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Acid	0.0051	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:	43 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:	43 FAH				
*Dichloroacetic Acid	0.0423	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:	43 FAH				
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:	43 FAH				
*Monochloroacetic Acid	0.0018	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:	43 FAH				
*Trichloroacetic Acid	0.0379	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:	43 FAH				
Total Haloacetic Acids	0.0819	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:	43 FAH	М			0.06
Field Chlorine Residua	1.85	mg/L					09/20/22 11:	52 FLD				





Workorder ID: Paris MM M1 DBP 3 Workorder #: 605033

Analytical Results

PROCESS ONLY

Sample #: 60503301 **Date Collected:** 10/18/22 10:55 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 10/19/22 11:21
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported t	o the State	^ = P	rovisionally	accredited	All Times in	Easter	n Time		МС	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			10/19/22 22:4	9 GLB				
THM OEL	ND	mg/L	0.0005	1			10/19/22 22:4	9 GLB				
Bromodichloromethane	0.0102	mg/L	0.0005	1			10/19/22 22:4	9 GLB				
Bromoform	ND	mg/L	0.0005	1			10/19/22 22:4	9 GLB				
Chloroform	0.0484	mg/L	0.0005	1			10/19/22 22:4	9 GLB				
Dibromochloromethane	0.0009	mg/L	0.0005	1			10/19/22 22:4	9 GLB				
Total Trihalomethanes	0.0595	mg/L	0.0005	1			10/19/22 22:4	9 GLB				0.08
EPA 552.3 - HALOA	CETIC ACIDS ((HAAs)										
Bromochloroacetic Acid	0.0043	mg/L	0.0010	1	10/21/22 15	5:06 FAH	10/22/22 05:4	3 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	10/21/22 15	5:06 FAH	10/22/22 05:4	3 FAH				
*Dichloroacetic Acid	0.0293	mg/L	0.0010	1	10/21/22 15	5:06 FAH	10/22/22 05:4	3 FAH				
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	10/21/22 15	5:06 FAH	10/22/22 05:4	3 FAH				
*Monochloroacetic Acid	0.0029	mg/L	0.0010	1	10/21/22 15	5:06 FAH	10/22/22 05:4	3 FAH				
*Trichloroacetic Acid	0.0330	mg/L	0.0010	1	10/21/22 15	5:06 FAH	10/22/22 05:4	3 FAH				
Total Haloacetic Acids	0.0652	mg/L	0.0010	1	10/21/22 15	5:06 FAH	10/22/22 05:4	3 FAH	М			0.06
Field Chlorine Residual	2.17	mg/L					10/18/22 10:5	5 FLD				





Workorder ID: Paris MM M3 DBP 5 Workorder #: 622529

Analytical Results

PROCESS ONLY

Sample #: 62252901 **Date Collected:** 03/16/23 11:18 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 03/17/23 11:46
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited Parameter	Underlined = F Result	Reported t	o the State		rovisionally a	ccredited	All Times in	Easterr	Time		МС	L
Parameter		Unit	DI									
	OMETHANES (KL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHALO	JULI ITIANES (THMs)										
THM LRAA	ND	mg/L	0.0005	1			03/17/23 20:1	6 GLB				
THM OEL	ND	mg/L	0.0005	1			03/17/23 20:1	6 GLB				
*Bromodichloromethan	e 0.0054	mg/L	0.0005	1			03/17/23 20:1	6 GLB				
*Bromoform	ND	mg/L	0.0005	1			03/17/23 20:1	6 GLB				
*Chloroform	0.0430	mg/L	0.0005	1			03/17/23 20:1	6 GLB				
*Dibromochloromethan	e ND	mg/L	0.0005	1			03/17/23 20:1	6 GLB				
*Total Trihalomethanes	0.0485	mg/L	0.0005	1			03/17/23 20:1	6 GLB				0.08
EPA 552.3 - HALOA	CETIC ACIDS (I	HAAs)										
Bromochloroacetic Acid	0.0024	mg/L	0.0010	1	03/23/23 17:	05 FAH	03/24/23 11:1	7 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	03/23/23 17:	05 FAH	03/24/23 11:1	7 FAH				
*Dichloroacetic Acid	0.0225	mg/L	0.0010	1	03/23/23 17:	05 FAH	03/24/23 11:1	7 FAH				
*Monobromoacetic Acid	l ND	mg/L	0.0010	1	03/23/23 17:	05 FAH	03/24/23 11:1	7 FAH				
*Monochloroacetic Acid	0.0016	mg/L	0.0010	1	03/23/23 17:	05 FAH	03/24/23 11:1	7 FAH				
*Trichloroacetic Acid	0.0294	mg/L	0.0010	1	03/23/23 17:	05 FAH	03/24/23 11:1	7 FAH				
Total Haloacetic Acids	0.0535	mg/L	0.0010	1	03/23/23 17:	05 FAH	03/24/23 11:1	7 FAH	AL			0.06
Field Chlorine Residual	2.23	mg/L					03/16/23 11:1	8 FLD				





Workorder ID: Paris MM M2 DBP 4 Workorder #: 618778

Analytical Results

PROCESS ONLY

Sample #: 61877801 **Date Collected**: 02/06/23 10:50 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 02/07/23 14:30
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported t	o the State	^ = P	rovisionally	accredited	All Times i	n Eastern	Time		MC	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	LOMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			02/07/23 16:	26 GLB				
THM OEL	ND	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Bromodichlorometha	ne 0.0028	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Bromoform	ND	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Chloroform	0.0113	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Dibromochlorometha	ne ND	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Total Trihalomethane	s 0.0142	mg/L	0.0005	1			02/07/23 16:	26 GLB				80.0
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Ac	id 0.0016	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Dichloroacetic Acid	0.0084	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Monobromoacetic Ac	id ND	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Monochloroacetic Ac	id ND	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Trichloroacetic Acid	0.0063	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
Total Haloacetic Acids	0.0146	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				0.06
Field Chlorine Residua	al 2.31	mg/L					02/06/23 10:	50 FLD				





Workorder ID: Paris MM M1 DBP 4 Workorder #: 614907

Analytical Results

PROCESS ONLY

Sample #: 61490701 **Date Collected**: 01/24/23 12:28 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 01/25/23 11:47
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported t	o the State	^ = P	rovisionally	accredited	All Times in	Easterr	Time		MC	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHALO	OMETHANES ((THMs)										
THM LRAA	ND	mg/L	0.0005	1			01/26/23 11:5	6 GLB				
THM OEL	ND	mg/L	0.0005	1			01/26/23 11:5	6 GLB				
*Bromodichloromethan	e 0.0028	mg/L	0.0005	1			01/26/23 11:5	6 GLB				
*Bromoform	ND	mg/L	0.0005	1			01/26/23 11:5	6 GLB				
*Chloroform	0.0156	mg/L	0.0005	1			01/26/23 11:5	6 GLB				
*Dibromochloromethan	e ND	mg/L	0.0005	1			01/26/23 11:5	6 GLB				
*Total Trihalomethanes	0.0184	mg/L	0.0005	1			01/26/23 11:5	6 GLB				0.08
EPA 552.3 - HALOA	CETIC ACIDS ((HAAs)										
Bromochloroacetic Acid	0.0014	mg/L	0.0010	1	01/27/23 16	6:52 FAH	01/28/23 03:1	1 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	01/27/23 16	6:52 FAH	01/28/23 03:1	1 FAH				
*Dichloroacetic Acid	0.0123	mg/L	0.0010	1	01/27/23 16	6:52 FAH	01/28/23 03:1	1 FAH				
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	01/27/23 16	6:52 FAH	01/28/23 03:1	1 FAH				
*Monochloroacetic Acid	I ND	mg/L	0.0010	1	01/27/23 16	6:52 FAH	01/28/23 03:1	1 FAH				
*Trichloroacetic Acid	0.0111	mg/L	0.0010	1	01/27/23 16	6:52 FAH	01/28/23 03:1	1 FAH				
Total Haloacetic Acids	0.0234	mg/L	0.0010	1	01/27/23 16	6:52 FAH	01/28/23 03:1	1 FAH				0.06
Field Chlorine Residual	1.67	mg/L					01/24/23 12:2	8 FLD				





Workorder ID: Paris MM M2 DBP 3 Workorder #: 607795

Analytical Results

PROCESS ONLY

Sample #: 60779501 **Date Collected:** 11/07/22 11:19 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 11/08/22 12:22
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported t	o the State	^ = P	rovisionally	accredited	All Times in	Easter	n Time		МС	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			11/08/22 21:5	1 GLB				
THM OEL	ND	mg/L	0.0005	1			11/08/22 21:5	1 GLB				
Bromodichloromethane	0.0118	mg/L	0.0005	1			11/08/22 21:5	1 GLB				
Bromoform	ND	mg/L	0.0005	1			11/08/22 21:5	1 GLB				
Chloroform	0.0604	mg/L	0.0005	1			11/08/22 21:5	1 GLB				
Dibromochloromethane	0.0010	mg/L	0.0005	1			11/08/22 21:5	1 GLB				
Total Trihalomethanes	0.0731	mg/L	0.0005	1			11/08/22 21:5	1 GLB	AL			0.08
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Acid	d 0.0044	mg/L	0.0010	1	11/09/22 17	7:41 FAH	11/10/22 07:10	0 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	11/09/22 17	7:41 FAH	11/10/22 07:10	0 FAH				
*Dichloroacetic Acid	0.0314	mg/L	0.0010	1	11/09/22 17	7:41 FAH	11/10/22 07:10	0 FAH				
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	11/09/22 17	7:41 FAH	11/10/22 07:10	0 FAH				
*Monochloroacetic Acid	0.0023	mg/L	0.0010	1	11/09/22 17	7:41 FAH	11/10/22 07:10	0 FAH				
*Trichloroacetic Acid	0.0339	mg/L	0.0010	1	11/09/22 17	7:41 FAH	11/10/22 07:10	0 FAH				
Total Haloacetic Acids	0.0676	mg/L	0.0010	1	11/09/22 17	7:41 FAH	11/10/22 07:10	0 FAH	М			0.06
Field Chlorine Residua	2.04	mg/L					11/07/22 11:19	9 FLD				





Workorder ID: Paris MM M1 DBP 3 Workorder #: 605033

Analytical Results

PROCESS ONLY

Sample #: 60503301 **Date Collected:** 10/18/22 10:55 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 10/19/22 11:21
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported t	o the State	^ = P	rovisionally	accredited	All Times in	Easterr	Time		МС	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			10/19/22 22:49	GLB				
THM OEL	ND	mg/L	0.0005	1			10/19/22 22:49	GLB				
Bromodichloromethane	0.0102	mg/L	0.0005	1			10/19/22 22:49	GLB				
Bromoform	ND	mg/L	0.0005	1			10/19/22 22:49	GLB				
Chloroform	0.0484	mg/L	0.0005	1			10/19/22 22:49	GLB				
Dibromochloromethane	0.0009	mg/L	0.0005	1			10/19/22 22:49	GLB				
Total Trihalomethanes	0.0595	mg/L	0.0005	1			10/19/22 22:49	GLB				0.08
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Acid	0.0043	mg/L	0.0010	1	10/21/22 1	5:06 FAH	10/22/22 05:43	3 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	10/21/22 15	5:06 FAH	10/22/22 05:43	3 FAH				
*Dichloroacetic Acid	0.0293	mg/L	0.0010	1	10/21/22 15	5:06 FAH	10/22/22 05:43	3 FAH				
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	10/21/22 15	5:06 FAH	10/22/22 05:43	3 FAH				
*Monochloroacetic Acid	0.0029	mg/L	0.0010	1	10/21/22 1	5:06 FAH	10/22/22 05:43	3 FAH				
*Trichloroacetic Acid	0.0330	mg/L	0.0010	1	10/21/22 15	5:06 FAH	10/22/22 05:43	B FAH				
Total Haloacetic Acids	0.0652	mg/L	0.0010	1	10/21/22 15	5:06 FAH	10/22/22 05:43	3 FAH	М			0.06
Field Chlorine Residua	2.17	mg/L					10/18/22 10:55	FLD				





Workorder ID: Paris MM M3 DBP 3 Workorder #: 602124

Analytical Results

PROCESS ONLY

Sample #: 60212401 **Date Collected:** 09/20/22 11:52 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 09/21/22 11:56
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported t	to the State	^ = P	rovisionally	accredited	All Times in	Easteri	n Time		MC	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHALO	DMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			09/21/22 21:39	GLB				
THM OEL	ND	mg/L	0.0005	1			09/21/22 21:39	GLB				
Bromodichloromethane	0.0081	mg/L	0.0005	1			09/21/22 21:39	GLB				
Bromoform	ND	mg/L	0.0005	1			09/21/22 21:39	GLB				
Chloroform	0.0566	mg/L	0.0005	1			09/21/22 21:39	GLB				
Dibromochloromethane	0.0006	mg/L	0.0005	1			09/21/22 21:39	GLB				
Total Trihalomethanes	0.0653	mg/L	0.0005	1			09/21/22 21:39	GLB	AL			0.08
EPA 552.3 - HALOA	ETIC ACIDS	(HAAs)										
Bromochloroacetic Acid	0.0051	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:43	3 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:43	3 FAH				
*Dichloroacetic Acid	0.0423	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:43	B FAH				
*Monobromoacetic Acid	l ND	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:43	3 FAH				
*Monochloroacetic Acid	0.0018	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:43	FAH				
*Trichloroacetic Acid	0.0379	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:43	FAH				
Total Haloacetic Acids	0.0819	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:43	3 FAH	М			0.06
Field Chlorine Residual	1.85	mg/L					09/20/22 11:52	2 FLD				





Workorder ID: Paris MM M3 DBP 4 Workorder #: 611718

Analytical Results

PROCESS ONLY

Sample #: 61171801 **Date Collected:** 12/20/22 11:36 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 12/21/22 11:09
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported t	o the State	^ = P	rovisionally	accredited	All Times in	Easterr	n Time		МС	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES ((THMs)										
THM LRAA	ND	mg/L	0.0005	1			12/21/22 19:3	5 GLB				
THM OEL	ND	mg/L	0.0005	1			12/21/22 19:3	5 GLB				
*Bromodichloromethan	e 0.0033	mg/L	0.0005	1			12/21/22 19:3	5 GLB				
*Bromoform	ND	mg/L	0.0005	1			12/21/22 19:3	5 GLB				
*Chloroform	0.0382	mg/L	0.0005	1			12/21/22 19:3	5 GLB				
*Dibromochloromethan	e ND	mg/L	0.0005	1			12/21/22 19:3	5 GLB				
*Total Trihalomethanes	0.0416	mg/L	0.0005	1			12/21/22 19:3	5 GLB				80.0
EPA 552.3 - HALOA	CETIC ACIDS (HAAs)										
Bromochloroacetic Acid	0.0019	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	4 LMW				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	4 LMW				
*Dichloroacetic Acid	0.0336	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	4 LMW				
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	4 LMW				
*Monochloroacetic Acid	0.0021	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	4 LMW				
*Trichloroacetic Acid	0.0312	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	4 LMW				
Total Haloacetic Acids	0.0670	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	4 LMW	М			0.06
Field Chlorine Residual	2.39	mg/L					12/20/22 11:3	6 FLD				





Workorder ID: Paris MM M1 DBP 5 Workorder #: 627154

Analytical Results

PROCESS ONLY

Sample #: 62715401 **Date Collected**: 04/13/23 10:43 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 04/14/23 11:59
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported t	o the State	^ = P	rovisionally	accredited	All Times i	n Eastern	Time		MC	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			04/14/23 20:	55 GLB				
THM OEL	ND	mg/L	0.0005	1			04/14/23 20:	55 GLB				
*Bromodichlorometha	ne 0.0040	mg/L	0.0005	1			04/14/23 20:	55 GLB				
*Bromoform	ND	mg/L	0.0005	1			04/14/23 20:	55 GLB				
*Chloroform	0.0368	mg/L	0.0005	1			04/14/23 20:	55 GLB				
*Dibromochlorometha	ne ND	mg/L	0.0005	1			04/14/23 20:	55 GLB				
*Total Trihalomethane	s 0.0409	mg/L	0.0005	1			04/14/23 20:	55 GLB				0.08
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Ac	id 0.0022	mg/L	0.0010	1	04/19/23 16	6:45 LMW	04/20/23 06:	46 LMW				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	04/19/23 16	6:45 LMW	04/20/23 06:	46 LMW				
*Dichloroacetic Acid	0.0219	mg/L	0.0010	1	04/19/23 16	6:45 LMW	04/20/23 06:	46 LMW				
*Monobromoacetic Ac	id ND	mg/L	0.0010	1	04/19/23 16	6:45 LMW	04/20/23 06:	46 LMW				
*Monochloroacetic Ac	id 0.0015	mg/L	0.0010	1	04/19/23 16	6:45 LMW	04/20/23 06:	46 LMW				
*Trichloroacetic Acid	0.0201	mg/L	0.0010	1	04/19/23 16	6:45 LMW	04/20/23 06:	46 LMW				
Total Haloacetic Acids	0.0435	mg/L	0.0010	1	04/19/23 16	6:45 LMW	04/20/23 06:	46 LMW				0.06
Field Chlorine Residua	al 2.39	mg/L					04/13/23 10:	43 FLD				





Workorder ID: Paris MM M2 DBP 5 Workorder #: 631029

Analytical Results

PROCESS ONLY

Sample #: 63102901 **Date Collected:** 05/01/23 09:32 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 05/02/23 11:35
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported to	o the State	^ = P	rovisionally	accredited	All Times in	n Easterr	n Time		MC	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			05/02/23 15:	19 GLB				
THM OEL	ND	mg/L	0.0005	1			05/02/23 15:	19 GLB				
*Bromodichloromethar	ne 0.0054	mg/L	0.0005	1			05/02/23 15:	19 GLB				
*Bromoform	ND	mg/L	0.0005	1			05/02/23 15:	19 GLB				
*Chloroform	0.0376	mg/L	0.0005	1			05/02/23 15:	19 GLB				
*Dibromochloromethai	ne ND	mg/L	0.0005	1			05/02/23 15:	19 GLB				
*Total Trihalomethane	s 0.0431	mg/L	0.0005	1			05/02/23 15:	19 GLB				0.08
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Aci	d 0.0024	mg/L	0.0010	1	05/04/23 17	:00 FAH	05/05/23 01:	28 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	05/04/23 17	:00 FAH	05/05/23 01:	28 FAH				
*Dichloroacetic Acid	0.0263	mg/L	0.0010	1	05/04/23 17	:00 FAH	05/05/23 01:	28 FAH				
*Monobromoacetic Ac	id ND	mg/L	0.0010	1	05/04/23 17	:00 FAH	05/05/23 01:	28 FAH				
*Monochloroacetic Aci	d 0.0030	mg/L	0.0010	1	05/04/23 17	:00 FAH	05/05/23 01:	28 FAH				
*Trichloroacetic Acid	0.0170	mg/L	0.0010	1	05/04/23 17	:00 FAH	05/05/23 01:	28 FAH				
Total Haloacetic Acids	0.0464	mg/L	0.0010	1	05/04/23 17	:00 FAH	05/05/23 01:	28 FAH				0.06
Field Chlorine Residua	al 1.45	mg/L					05/01/23 09:	32 FLD				



American Water 1115 South Illinois Street Belleville, IL 62220-3102 Phone (618) 235-3600 Fax (618) 235-6349



Workorder ID: Paris MM M3 DBP 6 Workorder #: 635948

Analytical Results

PROCESS ONLY

Sample #: 63594801 **Date Collected**: 06/21/23 12:02 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 06/22/23 13:07
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined = F	Reported t	o the State	^ = P	rovisionally	accredited	All Times in	n Easter	n Time		MC	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES (THMs)										
THM LRAA	ND	mg/L	0.0005	1			06/22/23 19:3	34 GLB				
THM OEL	ND	mg/L	0.0005	1			06/22/23 19:3	34 GLB				
*Bromodichloromethan	e 0.0078	mg/L	0.0005	1			06/22/23 19:3	34 GLB				
*Bromoform	ND	mg/L	0.0005	1			06/22/23 19:3	34 GLB				
*Chloroform	0.0593	mg/L	0.0005	1			06/22/23 19:3	34 GLB				
*Dibromochloromethan	e 0.0005	mg/L	0.0005	1			06/22/23 19:3	34 GLB				
*Total Trihalomethanes	0.0677	mg/L	0.0005	1			06/22/23 19:3	34 GLB	AL			80.0
EPA 552.3 - HALOA	CETIC ACIDS (HAAs)										
Bromochloroacetic Acid	0.0032	mg/L	0.0010	1	06/23/23 17	:30 DEK	06/26/23 23:5	6 DEK				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	06/23/23 17	:30 DEK	06/26/23 23:5	6 DEK				
*Dichloroacetic Acid	0.0329	mg/L	0.0010	1	06/23/23 17	:30 DEK	06/26/23 23:5	6 DEK				
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	06/23/23 17	:30 DEK	06/26/23 23:5	6 DEK				
*Monochloroacetic Acid	0.0031	mg/L	0.0010	1	06/23/23 17	:30 DEK	06/26/23 23:5	6 DEK				
*Trichloroacetic Acid	0.0350	mg/L	0.0010	1	06/23/23 17	:30 DEK	06/26/23 23:5	6 DEK				
*Total Haloacetic Acids	0.0709	mg/L	0.0010	1	06/23/23 17	:30 DEK	06/26/23 23:5	6 DEK	М			0.06
Field Chlorine Residua	1.26	mg/L					06/21/23 12:0	2 FLD				



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Workorder ID: Paris MM M1 DBP 6 Workorder #: 641474

Analytical Results

PROCESS ONLY

Sample #: 64147401 **Date Collected**: 07/20/23 12:07 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 07/21/23 12:57
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined = I	Reported t	to the State	^ = P	rovisionally	accredited	All Times in	Eastern	Time		MC	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES (THMs)										
THM LRAA	ND	mg/L	0.0005	1			07/21/23 21:51	JMB1				
THM OEL	ND	mg/L	0.0005	1			07/21/23 21:51	JMB1				
*Bromodichloromethan	e 0.0073	mg/L	0.0005	1			07/21/23 21:51	JMB1				
*Bromoform	ND	mg/L	0.0005	1			07/21/23 21:51	JMB1				
*Chloroform	0.0828	mg/L	0.0005	1			07/21/23 21:51	JMB1				
*Dibromochloromethan	ie ND	mg/L	0.0005	1			07/21/23 21:51	JMB1				
*Total Trihalomethanes	0.0901	mg/L	0.0005	1			07/21/23 21:51	JMB1	М			80.0
EPA 552.3 - HALOA	CETIC ACIDS (HAAs)										
Bromochloroacetic Acid	d 0.0036	mg/L	0.0010	1	07/24/23 16	:30 DEK	07/25/23 23:42	DEK				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	07/24/23 16	:30 DEK	07/25/23 23:42	DEK				
*Dichloroacetic Acid	0.0384	mg/L	0.0010	1	07/24/23 16	:30 DEK	07/25/23 23:42	DEK				
*Monobromoacetic Aci	d ND	mg/L	0.0010	1	07/24/23 16	:30 DEK	07/25/23 23:42	DEK				
*Monochloroacetic Acid	d 0.0026	mg/L	0.0010	1	07/24/23 16	:30 DEK	07/25/23 23:42	DEK				
*Trichloroacetic Acid	0.0414	mg/L	0.0010	1	07/24/23 16	:30 DEK	07/25/23 23:42	DEK				
*Total Haloacetic Acids	0.0824	mg/L	0.0010	1	07/24/23 16	:30 DEK	07/25/23 23:42	DEK	М			0.06
Field Chlorine Residua	1.34	mg/L					07/20/23 12:07	FLD				



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Workorder ID: Paris MM M2 DBP 6 Workorder #: 671593

Analytical Results

PROCESS ONLY

Sample #: 67159301 **Date Collected**: 08/07/23 10:35 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 08/08/23 13:06
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported to	o the State	^ = Provisionally accredited All Times in Eastern Tim		Time	MC		ı			
		•			_					C	,	
Parameter	Result		RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	/	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			08/08/23 17:	33 GLB				
THM OEL	ND	mg/L	0.0005	1			08/08/23 17:	33 GLB				
*Bromodichloromethan	e 0.0090	mg/L	0.0005	1			08/08/23 17:	33 GLB				
*Bromoform	ND	mg/L	0.0005	1			08/08/23 17:	33 GLB				
*Chloroform	0.0695	mg/L	0.0005	1			08/08/23 17:	33 GLB				
*Dibromochloromethan	e 0.0005	mg/L	0.0005	1			08/08/23 17:	33 GLB				
*Total Trihalomethanes	0.0790	mg/L	0.0005	1			08/08/23 17:	33 GLB	AL			0.08
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Acid	d 0.0039	mg/L	0.0010	1	08/09/23 16	6:30 LMW	08/10/23 09:	35 LMW				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	08/09/23 16	6:30 LMW	08/10/23 09:	35 LMW				
*Dichloroacetic Acid	0.0374	mg/L	0.0010	1	08/09/23 16	6:30 LMW	08/10/23 09:	35 LMW				
*Monobromoacetic Aci	d ND	mg/L	0.0010	1	08/09/23 16	6:30 LMW	08/10/23 09:	35 LMW				
*Monochloroacetic Acid	d 0.0028	mg/L	0.0010	1	08/09/23 16	6:30 LMW	08/10/23 09:	35 LMW				
*Trichloroacetic Acid	0.0362	mg/L	0.0010	1	08/09/23 16	6:30 LMW	08/10/23 09:	35 LMW				
*Total Haloacetic Acids	0.0764	mg/L	0.0010	1	08/09/23 16	6:30 LMW	08/10/23 09:	35 LMW	М			0.06
Field Chlorine Residua	0.98	mg/L					08/07/23 10:	35 FLD				

From:
To:
Bob Money;

Cc: Dorothy J Johnson

Subject: RE: Water Quality at Paris Master Meter

Date: Thursday, August 17, 2023 10:30:37 AM

Attachments: <u>image001.png</u>

1008800 20230817-1010-52.pdf

EXTERNAL EMAIL: The Actual Sender of this email is csmart@paris.ky.gov "Think before you click!".

Bob,

As expected we were elevated in our TTHM's at the Millersburg site as well as our other sample sites. We maintained compliancy across the board but as expected for this time year they were high. TTHM's .0796

HHA's .047 (better than I anticipated across the all sites)

See attached lab results for reference

Chad Smart

Superintendent

From: Bob Money <Bob.Money@amwater.com>

Sent: Friday, August 11, 2023 9:29 PM

To: Chad Smart Michael Mynear

Cc: Gabe Tanner (<gabriel.tanner@ky.gov>; Dorothy J Johnson

<Dorothy.Johnson@amwater.com>

Subject: RE: Water Quality at Paris Master Meter

Importance: High

Chad and Michael:

Kentucky American Water wishes to convey our concerns regarding the safety of the water provided by City of Paris to our Millersburg district. Monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated THM and or HAA results.

Please see the attached letter. This notification is sent in accordance with our American Water Environmental Practice.

Thanks,

Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



kentuckyamwater.com

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LIBORICORY CONSULTING

Certificate of Analysis

Paris Water Works Mr. Chad Smart 525 Project Stage II (HAA-TTHM)

Entered By Lynn Ellis Date Reported 8/17/2023 Date Received 7/26/2023

Date Approved 8/17/2023

Test	Method	Result	Units	MRL	Date	Initials	Qualifier
1008800-01	213	7.00					
Monochloroacetic Acid (MCAA)	EPA 552.2	0.014	mg/L	0.001	8/10/2023	KM	
Monobromoacetic Acid (MBAA)	EPA 552.2	< 0.001	mg/L	0.001	8/10/2023	KM	
Dichloroacetic Acid (DCAA)	EPA 552.2	0.018	mg/L	0.001	8/10/2023	KM	
Trichloroacetic Acid (TCAA)	EPA 552.2	0.015	mg/L	0.001	8/10/2023	KM	
Dibromoacetic Acid (DBAA)	EPA 552.2	< 0.001	mg/L	0.001	8/10/2023	KM	
Total Haloacetic Acids	EPA 552.2	0.047	mg/L	0.001	8/10/2023	KM	
Chloroform	EPA 524.2	0.0688	mg/L	0.0005	8/4/2023	AE	
Bromodichloromethane	EPA 524.2	0.0100	mg/L	0.0005	8/4/2023	AE	
Chlorodibromomethane	EPA 524.2	0.0008	mg/L	0.0005	8/4/2023	AE	
Bromoform	EPA 524.2	< 0.0005	mg/L	0.0005	8/4/2023	AE	
Total Trihalomethanes	EPA 524.2	0.0796	mg/L	0.0005	8/4/2023	AE	
1008800-02	214					- 35	
Monochloroacetic Acid (MCAA)	EPA 552.2	0.009	mg/L	0.001	8/10/2023	KM	
Monobromoacetic Acid (MBAA)	EPA 552.2	< 0.001	mg/L	0.001	8/10/2023	KM	
Dichloroacetic Acid (DCAA)	EPA 552.2	0.004	mg/L	0.001	8/10/2023	KM	
Trichloroacetic Acid (TCAA)	EPA 552.2	0.009	mg/L	0.001	8/10/2023	KM	
Dibromoacetic Acid (DBAA)	EPA 552.2	< 0.001	mg/L	0.001	8/10/2023	KM	
Total Haloacetic Acids	EPA 552.2	0.022	mg/L	0.001	8/10/2023	KM	
Chloroform	EPA 524.2	0.0682	mg/L	0.0005	8/4/2023	AE	
Bromodichloromethane	EPA 524.2	0.0094	mg/L	0.0005	8/4/2023	AE	
Chlorodibromomethane	EPA 524.2	0.0006	mg/L	0.0005	8/4/2023	AE	
Bromoform	TOA SOAD	< 0.0005	mg/L	0.0005	8/4/2023	AE	
Division	EPA 524.2	<0.0003		0.0002	0/ 1/2022		
Total Trihalomethanes	EPA 524.2 EPA 524.2	0.0782	mg/L	0.0005	8/4/2023	AE	
			2 · C				
Total Trihalomethanes	EPA 524.2		2 · C				

Lab No:

EC:



Certificate of Analysis

Paris Water Works Mr. Chad Smart Project Stage II (HAA-TTHM)

Entered By Lynn Ellis

Date Reported 8/17/2023 Date Received 7/26/2023

Date Approved 8/17/2023

Test	Method	Result	Units	MRL	Date	Initials	Qualifiers
1008800-03	192						
Dichloroacetic Acid (DCAA)	EPA 552.2	0.016	mg/L	0.001	8/10/2023	KM	
Trichloroacetic Acid (TCAA)	EPA 552.2	0.015	mg/L	0.001	8/10/2023	KM	
Dibromoacetic Acid (DBAA)	EPA 552.2	< 0.001	mg/L	0.001	8/10/2023	KM	
Total Haloacetic Acids	EPA 552.2	0.045	mg/L	0.001	8/10/2023	KM	
Chloroform	EPA 524.2	0.0672	mg/L	0.0005	8/4/2023	AE	
Bromodichloromethane	EPA 524.2	0.0090	mg/L	0.0005	8/4/2023	AE	
Chlorodibromomethane	EPA 524.2	0.0006	mg/L	0.0005	8/4/2023	AE	
Bromoform	EPA 524.2	< 0.0005	mg/L	0.0005	8/4/2023	AE	
Total Trihalomethanes	EPA 524.2	0.0768	mg/L	0.0005	8/4/2023	AE	
1008800-04	136						
Monochloroacetic Acid (MCAA)	EPA 552.2	0.011	mg/L	0.001	8/10/2023	KM	
Monobromoacetic Acid (MBAA)	EPA 552.2	< 0.001	mg/L	0.001	8/10/2023	KM	
Dichloroacetic Acid (DCAA)	EPA 552.2	0.011	mg/L	0.001	8/10/2023	KM	
Trichloroacetic Acid (TCAA)	EPA 552.2	0.011	mg/L	0.001	8/10/2023	KM	
Dibromoacetic Acid (DBAA)	EPA 552.2	< 0.001	mg/L	0.001	8/10/2023	KM	
Total Haloacetic Acids	EPA 552.2	0.032	mg/L	0.001	8/10/2023	КМ	
Chloroform	EPA 524.2	0.0656	mg/L	0.0005	8/4/2023	AE	
Bromodichloromethane	EPA 524.2	0.0093	mg/L	0.0005	8/4/2023	AE	
Chlorodibromomethane	EPA 524.2	0.0007	mg/L	0.0005	8/4/2023	AE	
Bromoform	EPA 524.2	< 0.0005	mg/L	0.0005	8/4/2023	AE	
Total Trihalomethanes	EPA 524.2	0.0756	mg/L	0.0005	8/4/2023	AE	





Certificate of Analysis

Paris Water Works Mr. Chad Smart

Wir. Chad Shart

Project Stage II (HAA-TTHM)

Entered By Lynn Ellis

Date Reported 8/17/2023

Date Received 7/26/2023

Date Approved 8/17/2023

Test Method Result Units MRL Date Initials Qualifiers

AE = Analysis performed by Alloway Environmental, KY Cert #90018

Approved By

Ray Fouser, P.E.





1008800-

Client/Comp	oany Ordering Test:			Location/	Address:		Other	Sample	Relate	ed Remai	ks:			
City of Pa	ris Water Treatme	nt Plant		525 High Street Paris, KY 40361										
iampler (Si	gnature): Cohen	Swin	2	PWS ID# KY0090343		PO#		Sam	ple De	scription				
FES Lab#	Collect Date	ion Time (24hr)			ner Sample ID / Description osites indicate start time and end time)		Grals/ Comp	Matrix	Pecs.	Cont.	ValJWgt	Analyses Required		
	7-26-23	0650	PLANT T	TAP ADI			yel	JW	AC	ug	Hog	NAA		
01	7-26-23	0815	Millergi	burg Road	21	3	quel	لمال	AC	an	409	HAA		
02	7-26-23	0850	Clay K	ser Road	21	4	gral	Jw	AC	44	400	(+AA		
03	7-26-23	1015	Speur A	1:11 Road	19	2	qual	du	AC	an	400	HAA		
04	7-24-23	0915	Fire Dept	- # Z	13	6	gral	du	AC	ag	4 04	HAR		
	7-26-23	0650	PLANT	TAP AC	1		mal	dw	ST	ah	Hame	TTHM X2		
01	7-26-23	0815	millershur	9 Road	21	3	well	dw	ST	ah	40 ml	TTHMXZ		
02	7-24-23	0850	Clay Ki	ser Road	2	14	and	نسل	57	96	Hoal	TTHM XZ		
03	7-26-23	1015	Spens M	1111 Read	-1	92	grat	dus	ST	46	Home	TTHM XZ		
04	7-26-23	0915	Fire Dept	#2	1	36	grad	dus	ST	96	40	TTHM XZ		
clinquished By:	Cobin Sum		Received By.	frig # 2		7-26-		Tima (24 br		Contain	er Tempe	ons: Viced OAmbient		
elinquished By:	refres#2		Received By:	2018		7 26.	1	Time (24 hr 11: 2		pH's ch		eptable? Yes No Preservative added?		
elinquished By:	and Bo		Received For L	GM		7. 4. L	1	1555	,	Method	of Deliver			
ATRIX COL v - drinking w v - storm water	ater oil - oil	water gw- grou s-solid o - other		surface water	NA SA	SERVATION - Nitric Acid (I - Sulfuric Acid - Ammonium (HNO ₃) (H ₂ SO ₄)	HA - H	lydrochl odium H	hiosulfete (oric Acid () ydroxide (?	HCI) NaOFI)	ZA – Zinc Acetale (Zn(O ₂ CCH ₃) ₂ AA - Ascorbic Acid (C ₄ H ₈ O ₆) PA – Phosphoric Acid (H ₃ PO ₄) CS – Copper Sulfate (CuSO ₃)		



Certificate of Analysis

Paris Water Works Mr. Chad Smart Project Special (TTHM-HAA)

Entered By Lynn Ellis
Date Reported 8/7/2023
Date Received 7/26/2023
Date Approved 8/7/2023

Test	Method	Result	Units	MRL	Date	Initials	Qualifiers
1008799-01	A01 - Plant Ta	p	7/26/23 06:	50			
Monochloroacetic Acid (MCAA)	EPA 552.2	0.001	mg/L	0.001	8/2/2023	KM	
Monobromoacetic Acid (MBAA)	EPA 552.2	0.005	mg/L	0.001	8/2/2023	KM	
Dichloroacetic Acid (DCAA)	EPA 552.2	0.020	mg/L	0.001	8/2/2023	KM	
Trichloroacetic Acid (TCAA)	EPA 552.2	0.017	mg/L	0.001	8/2/2023	KM	
Dibromoacetic Acid (DBAA)	EPA 552.2	<0.001	mg/L	0.001	8/2/2023	KM	
Total Haloacetic Acids	EPA 552.2	0.044	mg/L	0.001	8/2/2023	KM	
Chloroform	EPA 524.2	0.0612	mg/L	0.0005	8/4/2023	CT	
Bromodichloromethane	EPA 524.2	0.0094	mg/L	0.0005	8/4/2023	CT	
Chlorodibromomethane	EPA 524.2	0.0008	mg/L	0.0005	8/4/2023	CT	
Bromoform	EPA 524.2	< 0.0005	mg/L	0.0005	8/4/2023	CT	
Total Trihalomethanes	EPA 524.2	0.0714	mg/L	0.0005	8/4/2023	CT	

AE = Analysis performed by Alloway Environmental, KY Cert #90018

Approved By

Ray Fouser, P.E.

Lab No:





SIL	ADED AREA FOR LAB	USE ONLY	C	HAIN OF C	UST	ODY RE	COR	D				
	any Ordering Test: is Water Treatme	nt Plant		Location/A	Address		Other	Sample	Relate	ed Remar	ks:	
Sampler (Sig	gnature): Coher	Swin	7	PWS ID# KY0090343		PO#		Sam	ple De	scription		
FES Lab#	Collect Date	ion Time (24hr)		mer Sample ID /			Grab/ Comp	Matrix	Pres.	Cont.	Vol./Wgt.	Analyses Required
	7-26-23	0650	PLANT T	AP ADI			yearl	dw	AL	ug	Haz	NAA
	7-26-23	0815	Millers	burg Road	71	3	grab	du	AC	ag	409	HAA
	7-26-23	0850	Clay K	ser Road	2	14	grati	dw	AC	an	400	IFAA
	7-26-23	1015	Spens 1	1:11 Road	10	12	mel	dus	AC	ay	4 5	HAA
	7-24-23	0915	Fire Dept	- # Z	-(36	anal	du	AC	ay	400	HAR
	7-26-23	0650	PIANT	TAF AL	1		grat	du	ST	9.6	Hami	TTHM X2
	7-26-23	0815	Millershon	Road	2	13	mal	dw	ST	ab	4eml	TTHMXZ
	1-26-23	0850	Clay Ki	ser Road	2	14	and	du	57	ab	4cmL	TTHM XZ
	7-26-23	1015	Speans M	111 Rend	-1	92	and	dw	ST	ab	HOME	TTHM XZ
	7-26-23	0915	Fire Dept	# 2	1	36	grali	dw	ST	qb	40 ML	TTHM X Z
Relinquished By:	when Som	7	Received By:	try # 2		Date 7 - 3-6 - 7	7	ime (24 br)	1	Contain	er Temper	ns: Viced OAmbient rature: 4.561811
Relinquished By:	refres HZ		Received By:	2018		7.24-2		ime (24 hr)		pH's ch		eptable? Yes No Preservative added?
Relinquished By.	COP6		Received For La	CM		Tell L7	7	ime (24 hr) 1555			of Deliver	y: 1 UPS/Fed Ex 1 Other
MATRIX COD dw - dritking wa sw - storm water	iter oil – oil sl – sludge	s - solid o - other	II – Ie	urface water achate	NA SA AC	ESERVATION (- Nitric Acid (H) - Sulfuric Acid (I - Ammonium Cl	NO3) H2SO4) aloride	HA-H SH-So X-No	ydrochlo dium Hy ne	hiosulfate (oric Acid (l ydroxide (N	HCI) NaOFI)	ZA – Zinc Acetate (Zn(O ₂ CCH ₃) ₂) AA - Ascorbic Acid (C ₆ H ₈ O ₆) PA – Phosphoric Acid (H ₂ PO ₄) CS – Copper Sulfate (CuSO ₄)
CONTAINER C	CODES:: gb-g	lass bottle pb-	plastic bottle p	ba-plastic bag ag-	amber gli	iss bottle ap-	amber pla	stic bottle				

From:

To:

Bob Money;

Dorothy J Johnson

Subject: RE: Water Quality at Paris Master Meter
Date: Monday, August 14, 2023 9:28:58 AM

Attachments: image001.png 30 Plant tap.pdf

EXTERNAL EMAIL: The Actual Sender of this email is csmart@paris.ky.gov "Think before you click!".

Bob,

I've attached our most recent process control results and though they're within the MCL for a non compliance site I can say they're not where we would like for them to be (we have not received our compliance results as of this email).

Gabe and I have been in discussion on how we can improve the reduction of DBP's and have come to the conclusion that moving a couple of our feed points will help us achieve this. We are in the process of getting this started.

We are also working on the reconnection of a couple of creek crossings that will improve system hydraulics and ultimately water quality that impacts the 68 corridor.

I will be in touch as we get closer to finalizing these projects. I am hoping once they're complete we can do some split sampling at that meter as well as our area compliance site.

Chad Smart

Superintendent

From: Bob Money <Bob. Money@amwater.com>

Sent: Friday, August 11, 2023 9:29 PM

To:

Cc: Dorothy J Johnson

<Dorothy.Johnson@amwater.com>

Subject: RE: Water Quality at Paris Master Meter

Importance: High

Chad and Michael:

Kentucky American Water wishes to convey our concerns regarding the safety of the water provided by City of Paris to our Millersburg district. Monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated THM and or HAA results.

Please see the attached letter. This notification is sent in accordance with our American Water Environmental Practice.

Thanks,

Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



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 From:
 Bob Money

 Cc:
 RE: Millersburg

Date: Tuesday, August 8, 2023 3:20:10 PM

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you click!".

Bob,

We actually lowered it some earlier today, we were pushing upper 2 ppm. I've copied Michael on this, he will be your go to on distribution related issues. I will reach out to Michael and see if they're aware of any issues on that end.

Chad Smart

Superintendent

From: Bob Money <Bob.Money@amwater.com>

Sent: Tuesday, August 8, 2023 3:10 PM **To:** Chad Smart

Subject: Millersburg

Chad,

We are seeing very low total chlorine levels in Millersburg today. Have there been any treatment changes?

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water

Direct: 859-268-6317 Mobile: 859-797-7374 | bob.money@amwater.com

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electronic copies of the original message.

From:
To:
Bob Money

Cc: <u>Dorothy W Rader;</u>
Subject: Re: Communications

Date: Saturday, July 29, 2023 3:13:11 PM

Attachments: <u>image001.png</u>

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you click!".

Bob.

BWA has been lifted

Get Outlook for iOS

From: Chad Smart

Sent: Saturday, July 29, 2023 11:39:14 AM **To:** Bob Money <Bob.Money@amwater.com>

Cc: Dorothy W Rader < Dorothy.Rader@amwater.com>; Michael Mynear

Subject: Re: Communications

Read at 3. At this point they look good

Get Outlook for iOS

From: Bob Money <Bob.Money@amwater.com>

Sent: Saturday, July 29, 2023 11:36:52 AM

To: Chad Smart

Cc: Dorothy W Rader < Dorothy. Rader@amwater.com>; Michael Mynear

Subject: Re: Communications

Are you all reading at 18 or 24 hours?

Thanks,

Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water

Direct: <u>859-268-6317</u> | Mobile: <u>859-797-7374</u> | <u>bob.money@amwater.com</u>

From: Chad Smart

Sent: Friday, July 28, 2023 3:54:27 PM

To: Bob Money <Bob.Money@amwater.com>

Cc: Dorothy W Rader < Dorothy.Rader@amwater.com>; Michael Mynear

Subject: RE: Communications

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you click!".

Bac T's went in incubator at 3pm. Once we're in the clear I'll let you know.

Chad Smart

Superintendent

From: Bob Money <Bob.Money@amwater.com>

Sent: Friday, July 28, 2023 9:58 AM

To: Chad Smart

Cc: Dorothy W Rader < Dorothy.Rader@amwater.com>; Michael Mynear

Subject: RE: Communications

Thanks Chad.

Thanks,

Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502 Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



From: Chad Smart

Sent: Friday, July 28, 2023 9:55 AM

To: Bob Money <<u>Bob.Money@amwater.com</u>>

Cc: Dorothy W Rader < <u>Dorothy.Rader@amwater.com</u>>; Michael Mynear

Subject: RE: Communications

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Bob,

Michael called in the BWA earlier, we are on line and functioning as usual. I will let you know once we have pulled the bac t's and the time they go in the incubator with an estimated time the BWA should be lifted.

Chad Smart

Superintendent

From: Bob Money <<u>Bob.Money@amwater.com</u>>

Sent: Friday, July 28, 2023 9:25 AM

To: Chad Smart

Cc: Dorothy W Rader < <u>Dorothy.Rader@amwater.com</u>>

Subject: Communications

Importance: High

Chad,

I hope things are settling down for you folks this morning. It looked like a pretty rough night. It is my understanding there may be some system issues in Paris. I want to request that you let me know as soon as possible on matters that could affect our Millersburg system. We in turn have to let others know. We should be notified immediately as part of any BWA you issue so we can make proper arrangements. Thanks for your consideration and let me know if we can be of assistance.

These are the folks that should be notified:

Bob Money (bob.money@amwater.com)
Dorothy Radar (dorothy.radar@amwater.com)
Michael Maggard (michael.maggard@amwater.com)
Justin Sensabaugh (justin.sensabaugh@amwater.com)

Thanks, Bob

Robert D. Money, PG
Manager, Water Quality and Environmental Compliance
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From:
To:
Bob Money

Cc: <u>Dorothy W Rader;</u>
Subject: Re: Communications

Date: Saturday, July 29, 2023 11:39:26 AM

Attachments: <u>image001.png</u>

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you click!".

Read at 3. At this point they look good

Get Outlook for iOS

From: Bob Money <Bob.Money@amwater.com> Sent: Saturday, July 29, 2023 11:36:52 AM

To: Chad Smart

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Subject: Re: Communications

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Manager, Water Quality and Environmental Compliance

Kentucky American Water

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com

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Cc: Dorothy W Rader < Dorothy.Rader@amwater.com>; Michael Mynear

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Thanks, Bob

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Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502 Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com

kentuckyamwater.com

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To: Bob Money <<u>Bob.Money@amwater.com</u>>

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Chad Smart

Superintendent

From: Bob Money < <u>Bob.Money@amwater.com</u>>

Sent: Friday, July 28, 2023 9:25 AM

To: Chad Smart

Cc: Dorothy W Rader < <u>Dorothy.Rader@amwater.com</u>>

Subject: Communications

Importance: High

Chad,

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Dorothy Radar (dorothy.radar@amwater.com)
Michael Maggard (michael.maggard@amwater.com)
Justin Sensabaugh (justin.sensabaugh@amwater.com)

Thanks, Bob

Robert D. Money, PG
Manager, Water Quality and Environmental Compliance
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From:
To:
Bob Money

Cc: <u>Dorothy W Rader;</u>
Subject: RE: Communications

Date: Friday, July 28, 2023 3:54:37 PM

Attachments: <u>image001.png</u>

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you click!".

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Superintendent

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Sent: Friday, July 28, 2023 9:58 AM

To: Chad Smart

Cc: Dorothy W Rader < Dorothy.Rader@amwater.com>; Michael Mynear

Subject: RE: Communications

Thanks Chad.

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502 Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



kentuckyamwater.com

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Subject: RE: Communications

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These are the folks that should be notified:

Bob Money (borothy Radar (dorothy.radar@amwater.com)

Michael Maggard (michael.maggard@amwater.com)

Justin Sensabaugh (justin.sensabaugh@amwater.com)

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502 Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



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From:
To:
Bob Money

Cc: <u>Dorothy W Rader;</u>
Subject: RE: Communications

Date: Friday, July 28, 2023 9:54:53 AM

Attachments: <u>image001.png</u>

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you click!".

Bob.

Michael called in the BWA earlier, we are on line and functioning as usual. I will let you know once we have pulled the bac t's and the time they go in the incubator with an estimated time the BWA should be lifted.

Chad Smart

Superintendent

From: Bob Money <Bob.Money@amwater.com>

Sent: Friday, July 28, 2023 9:25 AM

To: Chad Smart

Cc: Dorothy W Rader < Dorothy. Rader@amwater.com>

Subject: Communications

Importance: High

Chad,

I hope things are settling down for you folks this morning. It looked like a pretty rough night. It is my understanding there may be some system issues in Paris. I want to request that you let me know as soon as possible on matters that could affect our Millersburg system. We in turn have to let others know. We should be notified immediately as part of any BWA you issue so we can make proper arrangements. Thanks for your consideration and let me know if we can be of assistance.

These are the folks that should be notified:

Bob Money (bob.money@amwater.com)

Dorothy Radar (dorothy.radar@amwater.com)

Michael Maggard (michael.maggard@amwater.com)

Justin Sensabaugh (justin.sensabaugh@amwater.com)

Thanks,

Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

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From:
To:
Bob Money

Date: Wednesday, Mard 29, 2023 6:31:37 PM

Attachments: 2022 CCR - Paris.pdf

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you click!".

Bob,

Just received this. Wanted to get it on over to you. Everything you need should be in there

Get Outlook for iOS

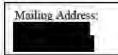
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Paris Water Works Water Quality Report 2022







Public Meetings: Paris Municipal Center at 525 High Street 2nd & 4th Tuesdays, monthly at 9am

The City of Pans uses Stoner Creek, a surface water, as its sole source of drinking water. Stoner Creek originates in Clark County as does Strodes Creek which is a major tributary of Stoner Creek. Both are part of the Licking River drainage basin. Our raw water supply is relatively good compared to some supplies as there is not a lot of industrial pollution. However, we are plagued by runoff from farm land. The fertilizers from the runoff can cause heavy algae bloom which in turn creates treatment problems. There are four dams on our raw water source with a total gross storage of 378 million gallons. Plant personnel maintain the dams that the City of Pans controls on Stoner Creek. There have not been any major problems with drought since two of our dams were raised in the 1950's. Our official Source Water Assessment Protection Plan deems our water supply to be moderately susceptible to contamination. There are a few areas of concern: several lighway bridges in the immediate vicinity of the plant make may pose a potential threat to the water supply. An accidental release or spill from any of these sites could reach our make. The same is true for railroads that occur between KY 627 and KY 1678 near. Kennedy Creek. In addition, areas of row crops, municipal sewer lines, a KPDES permitted discharger and a waste generator and/or transporter are causes for concern. There are numerous permitted operations and activities and other potential contaminant sources of moderate concern within the greater watershed (septic systems, major roads, hazardous chemical use) that cumulatively increase the potential for the release of contaminants in the area. The full report is available for inspection at the Paris Water Plant. Please call Chad Smart at 859-987-2118 if you would like to review the Source Water Assessment Protection Plan.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (300-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers. Takes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring numerals and, in some cases, radioactive material, and may pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include. Microbial contaminants, such as viruses and bacteria, (sewage plants, septic systems, livestock operations, or wildlife). Inorganic contaminants, such as salts and metals, (naturally occurring or from stormwater runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (stormwater runoff, agriculture or residential uses). Organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production, or from gas stations, stormwater runoff, or septic systems). Radioactive contaminants, (naturally occurring or from oil and gas production or mining activities). In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water to provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other uncrobial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Information About Lead:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Your local public water system is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Some or all of these definitions may be found in this report:

Maximum Contaminant Level (MCL) - the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) - the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - the level of a drinking water disinfectant below which there is no known or expected risk to health.

MRDLGs do not reflect the benefits of the use of disinfectants to control incrobial contaminants. Below Detection Levels (BDL) - laboratory analysis indicates that the contaminant is not present.

Not Applicable (N/A) - does not apply.

Parts per million (ppm) – or milligrams per liter (mg/l). One part per million corresponds to one manute in two years or a single penny in \$10,000. Parts per billion (ppb) – or micrograms per liter. (mg/l.). One part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.

Parts per trillion (ppt) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000

Parts per quadrillion (ppq) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000

Picocuries per liter (pCi/L) - a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - a measure of the presence of asbestos fibers that are longer than 10 micrometers

Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for uncrobal growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system shall follow.

Treatment Technique (TT) - a required process intended to reduce the level of a commimant in drinking water.

To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8 As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year Some of the data in this table, though representative, may be more than one year old Copies of this report are available upon request by contacting our office during business hours.

Regulated Contaminant T	est Nesu	iits	Paris Water	r work	S				
Contaminant			Report		Ran	ge	Date of		Likely Source of
[code] (units)	MCL	MCLG	Level	of	Dete	ction	Sample	Violation	Contamination
Inorganic Contaminants			-	-		,			•
Barium [1010] (ppm)	2	2	0 02	0 02	to	0 02	May-22	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	1 03	1 03	to	1 03	May-22	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	0 36	0 36	to	0 36	May-22	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Disinfectants/Disinfection	n Byprod	lucts and Prec	ursors						
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1 67 (lowest average)	1 31 (mo	to onthly	2 57 ratios)	2022	No	Naturally present in environment
*Monthly ratio is the % TOC	removal	achieved to the 9	% TOC remova	ıl require	d An	nual average	must be 1 00	or greater	for compliance
Chloramines (ppm)	MRDL = 4	MRDLG = 4	2 23 (highest average)	0 2	to	3 6	2022	No	Water additive used to control microbes
Chlorine (ppm)	MRDL = 4	MRDLG = 4	(highest	0	to	0			Water additive used to contro microbes
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	47 (high site average)	22 (range o	to of ind	70	2022	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	51 (high site average)	26 4	to	81 5	2022	No	Byproduct of drinking water disinfection
Household Plumbing Con	taminant	ts					•	•	
Copper [1022] (ppm) Round sites exceeding action level	AL = 1 3	1 3	0 06 (90 th percentile)	0	to	0 2	Aug-21	No	Corrosion of household plumbing systems
Lead [1030] (ppb) Round 1 sites exceeding action level 0	AL = 15	0	2 1 (90 th percentile)	0	to	4 5	Aug-21	No	Corrosion of household plumbing systems
Other Constituents			/						•
Turbidity (NTU) TT * Representative samples		lowable Levels	Highest Si Measurem	_]	Lowest Monthly %	Violation	Likely	Source of Turbidity
Turbidity is a measure of the clarity of the water and not a contaminant	Less than	than 1 NTU* 0 3 NTU in onthly samples	0 187	7		100	No		Soil runoff

	Average	Range of Detection	
Fluoride (added for dental health)	0.9	0.72 to 1.15	
Sodium (EPA guidance level = 20 mg/L)	17.0	17 to 17	

		Report	Range	Date of
Secondary Contaminant	Maximum Allowable Level	Level	of Detection	Sample
Aluminum	0 05 to 0 2 mg/l	0 05	0 05 to 0 05	May-22
Chloride	250 mg/l	32	32 to 32	May-22
Corrosivity	Noncorrosive	-0 11	-0 11 to -0 11	May-22
Fluoride	2 0 mg/l	1 03	1 03 to 1 03	May-22
Iron	0 3 mg/l	0 01	0 01 to 0 01	May-22
pН	6 5 to 8 5	7 44	7 44 to 7 44	May-22
Sulfate	250 mg/l	18	18 to 18	May-22
Total Dissolved Solids	500 mg/l	248	248 to 248	May-22

Secondary contaminants do not have a direct impact on the health of consumers. They are being included to provide additional information about the quality of the water.

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

From:
To:
Bob Money
Subject:
RE: CCR Data

Date: Tuesday, March 28, 2023 3:12:28 PM

Attachments: <u>image001.png</u>

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you click!".

Bob,

I'm still waiting on ours

From: Bob Money <Bob.Money@amwater.com>

Sent: Tuesday, March 28, 2023 8:54 AM **To:** Chad Smart <

Subject: CCR Data **Importance:** High

Chad,

Just checking to see if you could send over the CCR data today so we can get info to our consecutives before the end of the week.

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502 Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



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From:

To:

Subject:

Bob Money

RE: Millersburg

Date: Monday, March 27, 2023 8:56:33 AM

Attachments: <u>image001.png</u>

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you click!".

Bob,

They had an issue Saturday night getting it regulated, you should be seeing normal residuals anytime. We are going to switch back to chloramines early Wednesday morning.

From: Bob Money <Bob.Money@amwater.com>

Sent: Monday, March 27, 2023 8:51 AM **To:** Chad Smart

Subject: Millersburg **Importance:** High

Chad,

We noticed free CL2 is down to 0.83 this morning. Are you in process of switching back to chloramines by chance?

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance
Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502
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 From:
 Bob Money

 Cc:
 Ke

Subject: RE: Annual Flushing

Date: Thursday, February 16, 2023 3:01:19 PM

Attachments: <u>image001.png</u>

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you click!".

We intend to switch back to chloramines 3/31

From: Bob Money <Bob.Money@amwater.com>
Sent: Thursday, February 16, 2023 2:41 PM

To: Chad Smart <

g

Subject: RE: Annual Flushing

Thanks Chad. I am trying to schedule flushing in Millersburg to coincide with your flushing efforts. Do you have a target date you will go back on Chloramines at this point?

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502 Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



kentuckyamwater.com

From: Chad Smart

Sent: Thursday, February 16, 2023 2:10 PM **To:** Bob Money < Bob.Money@amwater.com **Cc:** Kevin Mayhorn

Subject: RE: Annual Flushing

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you click!".

Good afternoon Bob,

We will be switching to free CL2 3/1-3/31 with the plan to start flushing in April. Distribution typically

heads it up and we help out where/when we can. I've copied Kevin our new assistant city manager on this and he may have some thoughts as well.

From: Bob Money <<u>Bob.Money@amwater.com</u>>
Sent: Thursday, February 16, 2023 12:26 PM

To: Chad Smart

Subject: Annual Flushing

Chad,

Hope you are well. Do you have flushing plans for this year you could share with me?

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

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 From:
 Bob Money

 Cc:
 Bob Money

Subject: RE: Annual Flushing

Date: Thursday, February 16, 2023 2:10:24 PM

Attachments: <u>image001.png</u>

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you click!".

Good afternoon Bob.

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From: Bob Money <Bob.Money@amwater.com> Sent: Thursday, February 16, 2023 12:26 PM

To: Chad Smart

Subject: Annual Flushing

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Thanks, Bob

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 From:
 Bob Money

 To:
 RE: CCR

Date: Friday, March 25, 2022 4:32:35 PM

Attachments: image001.png 2021 CCR - Paris.pdf

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you click!".

Bob,

Got it a little earlier than expected, have a good weekend.

From: Bob Money <Bob.Money@amwater.com>
Sent: Wednesday, March 23, 2022 3:10 PM
To: Chad Smart <CSmart@paris.ky.gov>

Subject: Re: CCR

Thanks

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water

Direct: <u>859-268-6317</u> Mobile: <u>859-797-7374</u> | <u>bob.money@amwater.com</u>

From: Chad Smart <

Sent: Wednesday, March 23, 2022 3:09:21 PM **To:** Bob Money < <u>Bob.Money@amwater.com</u>>

Subject: RE: CCR

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you

click!".

Bob,

Probably early next week

From: Bob Money < <u>Bob.Money@amwater.com</u>>
Sent: Wednesday, March 23, 2022 2:25 PM

To: Chad Smart

Subject: CCR

Chad,

Just checking on CCR data. I don't think I have seen it as yet.

Thanks, Bob

Robert D. Money, PG
Manager, Water Quality and Environmental Compliance
Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502
Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



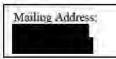
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Paris Water Works lity Report 2021







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The City of Pans uses Stoner Creek, a surface water, as its sole source of drinking water. Stoner Creek originates in Clark County as does Strodes Creek which is a major tributary of Stoner Creek. Both are part of the Lacking River drainage basin. Our raw water supply is relatively good compared to some supplies as there is not a lot of industrial pollution. However, we are plagued by runoff from farm land. The fertilizers from the runoff can cause heavy algae bloom which in turn creates treatment problems. There are four dams on our raw water source with a total gross storage of 378 million gallons. Plant personnel maintain the dams that the City of Pans controls on Stoner Creek. There have not been any major problems with drought since two of our dams were raised in the 1950's. Our official Source Water Assessment Protection Plan deems our water supply to be moderately susceptible to contamination. There are a few areas of concern: several lighway bridges in the immediate vicinity of the plant make may pose a potential threat to the water supply. An accidental release or spill from any of these sites could reach our make. The same is true for railroads that occur between KY 627 and KY 1678 near. Kennedy Creek. In addition, areas of row crops, municipal sewer lines, a KPDES permitted discharger and a waste generator and/or transporter are causes for concern. There are numerous permitted operations and activities and other potential contaminant sources of moderate concern within the greater watershed (septic systems, major roads, hazardous chemical use) that cumulatively increase the potential for the release of contaminants in the area. The full report is available for inspection at the Paris Water Plant. Please call Chad Smart at 859-987-2118 if you would like to review the Source Water Assessment Protection Plan.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (300-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers. Takes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring numerals and, in some cases, radioactive material, and may pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include. Microbial contaminants, such as viruses and bacteria, (sewage plants, septic systems, livestock operations, or wildlife). Inorganic contaminants, such as salts and metals, (naturally occurring or from stormwater runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (stormwater runoff, agriculture or residential uses). Organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production, or from gas stations, stormwater runoff, or septic systems). Radioactive contaminants, (naturally occurring or from oil and gas production or mining activities). In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water to provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other uncrobial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Information About Lead:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Your local public water system is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Some or all of these definitions may be found in this report:

Maximum Contaminant Level (MCL) - the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a masein of safety.

Maximum Residual Disinfectant Level (MRDL) - the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of incrobial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - the level of a drinking water disinfectant below which there is no known or expected risk to bealth, MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Below Detection Levels (BDL) - laboratory analysis indicates that the contaminant is not present.

Not Applicable (N/A) - does not apply.

Parts per million (ppm) – or milligrams per liter. (mg/l). One part per million corresponds to one manute in two years or a single penny in \$10,000. Parts per billion (ppb) – or micrograms per liter. (mg/l). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000

Parts per quadrillion (ppq) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000

Picocuries per liter (pCi/L) - a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for uncrobal growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system shall follow.

Treatment Technique (TT) - a required process intended to reduce the level of a contaminant in drinking water.

To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old. Copies of this report are available upon request by contacting our office during business hours.

Regulated Contaminant	Test Resu	ılts	Paris Water	r Works							
Contaminant			Report		Rar	nge	Date of	Violation	Likely Source of		
[code] (units)	MCL	MCLG	Level	of I	Det	ection	Sample		Contamination		
Inorganic Contaminants											
Barium [1010] (ppm)	2	2	0.02	0.02	to	0.02	Apr-21	No	Drilling wastes; metal refineries; erosion of natural deposits		
Fluoride [1025] (ppm)	4	4	0.79	0.79	to	0.79	Apr-21	No	Water additive which promotes strong teeth		
Nitrate [1040] (ppm)	10	10	0.49	0.49	to	0.49	Apr-21	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits		
Disinfectants/Disinfection	on Byproc	ducts and Pre	cursors								
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.92 (lowest average)	1.07 (moi	to nthly	3.23 y ratios)	2021	No	Naturally present in environment.		
*Monthly ratio is the % TO	*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.										
Chloramines (ppm)	MRDL = 4	MRDLG = 4	1.96 (highest average)	0.3	to	3	2021	No	Water additive used to control microbes.		
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	50 (high site average)	4 (range of	to f ind	87 lividual sites)	2021	No	Byproduct of drinking water disinfection		
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	62 (high site average)	11.9	to	85 lividual sites)	2021	No	Byproduct of drinking water disinfection.		
Household Plumbing Con	ntaminan	ts	ı	ı							
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.06 (90 th percentile)	0	to	0.2	Aug-21	No	Corrosion of household plumbing systems		
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	2.1 (90 th percentile)	0	to	4.5	Aug-21	No	Corrosion of household plumbing systems		
Other Constituents											
Turbidity (NTU) TT	Al	lowable	Highest Sing			Lowest	Violation				
* Representative samples		Levels	Measurem	ent		Monthly %	% Likely Source of Turbic		Source of Turbidity		
Turbidity is a measure of the clarity of the water and not a contaminant.	Less than	than 1 NTU* 0.3 NTU in onthly samples	0.275	5		100	No	Soil runoff			

	Average	Range of Detection
Fluoride (added for dental health)	0.8	0.61 to 0.97
Sodium (EPA guidance level = 20 mg/L)	13.0	12 to 14

Sourum (EA A guiuant	e rever – zo mg/L)		1	3.0	1.4	2 10	17
Secondary Contaminant	Maximum Allowable	Repo			Ran		Date of
	Level	Lev	eı	01	Dete	ction	Sample
Aluminum	0 05 to 0 2 mg/l	0 0	9	0 09	to	0 09	Apr-21
Chloride	250 mg/l	20 7	77	20 77	to	20 77	Apr-21
Corrosivity	Noncorrosive	-0 2	28	-0 28	to	-0 28	Apr-21
Fluoride	2 0 mg/l	0.8	3	0.8	to	0 8	Apr-21
Iron	0 3 mg/l	0.0	1	0 01	to	0 01	Apr-21
pН	6 5 to 8 5	7 4	2	7 42	to	7 42	Apr-21
Sulfate	250 mg/l	15 9	99	15 99	to	15 99	Apr-21
Total Dissolved Solids	500 mg/l	208	8	208	to	208	Apr-21

Secondary contaminants do not have a direct impact on the health of consumers. They are being included to provide additional information about the quality of the water.

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.





Workorder ID: Paris MM M3 DBP 5 Workorder #: 622529

Analytical Results

PROCESS ONLY

Sample #: 62252901 **Date Collected:** 03/16/23 11:18 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 03/17/23 11:46
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited L	Jnderlined =	Reported to	o the State	^ = P	rovisionally	accredited	All Times in	Easter	n Time		MC	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHALO	METHANES ((THMs)										
THM LRAA	ND	mg/L	0.0005	1			03/17/23 20:	16 GLB				
THM OEL	ND	mg/L	0.0005	1			03/17/23 20:	16 GLB				
*Bromodichloromethane	0.0054	mg/L	0.0005	1			03/17/23 20:	16 GLB				
*Bromoform	ND	mg/L	0.0005	1			03/17/23 20:	16 GLB				
*Chloroform	0.0430	mg/L	0.0005	1			03/17/23 20:	16 GLB				
*Dibromochloromethane	ND	mg/L	0.0005	1			03/17/23 20:	16 GLB				
*Total Trihalomethanes	0.0485	mg/L	0.0005	1			03/17/23 20:	16 GLB				80.0
EPA 552.3 - HALOACI	ETIC ACIDS (HAAs)										
Bromochloroacetic Acid	0.0024	mg/L	0.0010	1	03/23/23 17	:05 FAH	03/24/23 11:	17 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	03/23/23 17	:05 FAH	03/24/23 11:	17 FAH				
*Dichloroacetic Acid	0.0225	mg/L	0.0010	1	03/23/23 17	:05 FAH	03/24/23 11:	17 FAH				
*Monobromoacetic Acid	ND	mg/L	0.0010	1	03/23/23 17	:05 FAH	03/24/23 11:	17 FAH				
*Monochloroacetic Acid	0.0016	mg/L	0.0010	1	03/23/23 17	:05 FAH	03/24/23 11:	17 FAH				
*Trichloroacetic Acid	0.0294	mg/L	0.0010	1	03/23/23 17	:05 FAH	03/24/23 11:	17 FAH				
Total Haloacetic Acids	0.0535	mg/L	0.0010	1	03/23/23 17	:05 FAH	03/24/23 11:	17 FAH	AL			0.06
Field Chlorine Residual	2.23	mg/L					03/16/23 11:	18 FLD				





Workorder ID: Paris MM M2 DBP 4 Workorder #: 618778

Analytical Results

PROCESS ONLY

Sample #: 61877801 **Date Collected**: 02/06/23 10:50 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 02/07/23 14:30
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported t	o the State	^ = P	rovisionally	accredited	All Times i	n Eastern	Time		MC	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			02/07/23 16:	26 GLB				
THM OEL	ND	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Bromodichlorometha	ne 0.0028	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Bromoform	ND	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Chloroform	0.0113	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Dibromochlorometha	ne ND	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Total Trihalomethane	s 0.0142	mg/L	0.0005	1			02/07/23 16:	26 GLB				80.0
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Ac	id 0.0016	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Dichloroacetic Acid	0.0084	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Monobromoacetic Ac	id ND	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Monochloroacetic Ac	id ND	mg/L	0.0010	1	02/08/23 16	6:10 FAH	02/09/23 10:	13 LMW				
*Trichloroacetic Acid	0.0063	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
Total Haloacetic Acids	0.0146	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				0.06
Field Chlorine Residua	al 2.31	mg/L					02/06/23 10:	50 FLD				





Workorder ID: Paris MM M1 DBP 4 Workorder #: 614907

Analytical Results

PROCESS ONLY

Sample #: 61490701 **Date Collected:** 01/24/23 12:28 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 01/25/23 11:47
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported t	o the State	^ = P	rovisionally	accredited	All Times in	Easterr	Time		MC	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHALO	OMETHANES ((THMs)										
THM LRAA	ND	mg/L	0.0005	1			01/26/23 11:5	6 GLB				
THM OEL	ND	mg/L	0.0005	1			01/26/23 11:5	6 GLB				
*Bromodichloromethan	e 0.0028	mg/L	0.0005	1			01/26/23 11:5	6 GLB				
*Bromoform	ND	mg/L	0.0005	1			01/26/23 11:5	6 GLB				
*Chloroform	0.0156	mg/L	0.0005	1			01/26/23 11:5	6 GLB				
*Dibromochloromethan	e ND	mg/L	0.0005	1			01/26/23 11:5	6 GLB				
*Total Trihalomethanes	0.0184	mg/L	0.0005	1			01/26/23 11:5	6 GLB				0.08
EPA 552.3 - HALOA	CETIC ACIDS ((HAAs)										
Bromochloroacetic Acid	0.0014	mg/L	0.0010	1	01/27/23 16	6:52 FAH	01/28/23 03:1	1 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	01/27/23 16	6:52 FAH	01/28/23 03:1	1 FAH				
*Dichloroacetic Acid	0.0123	mg/L	0.0010	1	01/27/23 16	6:52 FAH	01/28/23 03:1	1 FAH				
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	01/27/23 16	6:52 FAH	01/28/23 03:1	1 FAH				
*Monochloroacetic Acid	I ND	mg/L	0.0010	1	01/27/23 16	6:52 FAH	01/28/23 03:1	1 FAH				
*Trichloroacetic Acid	0.0111	mg/L	0.0010	1	01/27/23 16	6:52 FAH	01/28/23 03:1	1 FAH				
Total Haloacetic Acids	0.0234	mg/L	0.0010	1	01/27/23 16	6:52 FAH	01/28/23 03:1	1 FAH				0.06
Field Chlorine Residual	1.67	mg/L					01/24/23 12:2	8 FLD				

From: Bob Money

To:
Dorothy J Johnson

Subject: Water Quality at Paris Master Meter
Date: Monday, April 3, 2023 3:03:00 PM

Attachments: image001.png

2023-4-3 Paris elevated DBP letter.pdf

Importance: High

Chad/Pat:

Kentucky American Water wishes to convey our concerns regarding the safety of the water provided by City of Paris to our Millersburg district. Monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated THM and or HAA results.

Please see the attached letter. This notification is sent in accordance with our American Water Environmental Practice.

Thanks,

Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



From: Bob Money

To:
Cc: Dorothy J Johnson

Subject: Water Quality at Paris Master Meter

Date: Tuesday, January 3, 2023 1:51:00 PM

Attachments: 2023-1-3 Paris elevated DBP letter w-attachment.pdf

image001.png

Chad/Pat:

Kentucky American Water wishes to convey our concerns regarding the safety of the water provided by City of Paris to our Millersburg district. Monitoring conducted at your master meter feeding water to our Millersburg district has revealed elevated THM and or HAA results.

Please see the attached letter. This notification is sent in accordance with our American Water Environmental Practice.

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com







Workorder ID: Paris MM M3 DBP 4 Workorder #: 611718

Analytical Results

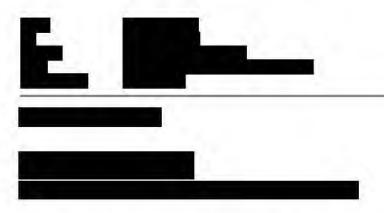
PROCESS ONLY

Sample #: 61171801 **Date Collected:** 12/20/22 11:36 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 12/21/22 11:09
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported t	o the State	^ = P	rovisionally	accredited	All Times in	n Easterr	Time		МС	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES ((THMs)										
THM LRAA	ND	mg/L	0.0005	1			12/21/22 19:3	35 GLB				
THM OEL	ND	mg/L	0.0005	1			12/21/22 19:3	35 GLB				
*Bromodichloromethan	e 0.0033	mg/L	0.0005	1			12/21/22 19:3	35 GLB				
*Bromoform	ND	mg/L	0.0005	1			12/21/22 19:3	35 GLB				
*Chloroform	0.0382	mg/L	0.0005	1			12/21/22 19:3	35 GLB				
*Dibromochloromethan	e ND	mg/L	0.0005	1			12/21/22 19:3	35 GLB				
*Total Trihalomethanes	0.0416	mg/L	0.0005	1			12/21/22 19:3	35 GLB				0.08
EPA 552.3 - HALOA	CETIC ACIDS ((HAAs)										
Bromochloroacetic Acid	0.0019	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	54 LMW				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	54 LMW				
*Dichloroacetic Acid	0.0336	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	54 LMW				
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	54 LMW				
*Monochloroacetic Acid	0.0021	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	54 LMW				
*Trichloroacetic Acid	0.0312	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	54 LMW				
Total Haloacetic Acids	0.0670	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	54 LMW	М			0.06
Field Chlorine Residual	2.39	mg/L					12/20/22 11:3	36 FLD				



From: Chad Smart

Sent: Friday, July 28, 2023 3:54 PM

To: Bob Money <Bob.Money@amwater.com>

Cc: Dorothy W Rader < Dorothy.Rader@amwater.com >; Michael Mynear

Subject: RE: Communications

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.kv.gov "Think before you click!".

Bac T's went in incubator at 3pm. Once we're in the clear I'll let you know.

Chad Smart

Superintendent

From: Bob Money < Bob, Money@amwater.com>

Sent: Friday, July 28, 2023 9:58 AM

To: Chad Smart

Cc: Dorothy W Rader < Dorothy.Rader@amwater.com >; Michael Mynear

Subject: RE: Communications

Thanks Chad.

Thanks,

Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317| Mobile: 859-797-7374 | bob.money@amwater.com



From: Chad Smart

Sent: Friday, July 28, 2023 9:55 AM

To: Bob Money < <u>Bob. Money@amwater.com</u>>

Cc: Dorothy W Rader < <u>Dorothy.Rader@amwater.com</u>>; Michael Mynear

Subject: RE: Communications

EXTERNAL EMAIL: The Actual Sender of this email is cSmart@paris.ky.gov "Think before you click!".

Bob,

Michael called in the BWA earlier, we are on line and functioning as usual. I will let you know once we have pulled the bac t's and the time they go in the incubator with an estimated time the BWA should be lifted.

Chad Smart Superintendent

From: Bob Money < <u>Bob.Money@amwater.com</u>>

Sent: Friday, July 28, 2023 9:25 AM

To: Chad Smart

Cc: Dorothy W Rader < <u>Dorothy.Rader@amwater.com</u>>

Subject: Communications

Importance: High

Chad,

I hope things are settling down for you folks this morning. It looked like a pretty rough night. It is my understanding there may be some system issues in Paris. I want to request that you let me know as soon as possible on matters that could affect our Millersburg system. We in turn have to let others know. We should be notified immediately as part of any BWA you issue so we can make proper arrangements. Thanks for your consideration and let me know if we can be of assistance.

These are the folks that should be notified:

Bob Money (<u>bob.money@amwater.com</u>)

Dorothy Radar (dorothy.radar@amwater.com)

Michael Maggard (michael.maggard@amwater.com)

Justin Sensabaugh (<u>justin.sensabaugh@amwater.com</u>)

Thanks,

Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



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Visit us online at <u>www.paris.ky.gov</u> and on Facebook.

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From: Chad Smart

Sent: Saturday, July 29, 2023 3:13 PM

To: Bob Money <Bob.Money@amwater.com>

Cc: Dorothy W Rader < Dorothy.Rader@amwater.com>;

Subject: Re: Communications

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you click!".

Bob.

BWA has been lifted

Get <u>Outlook for iOS</u>

From: Chad Smart < CSmart@paris.ky.gov> **Sent:** Saturday, July 29, 2023 11:39:14 AM **To:** Bob Money < <u>Bob. Money@amwater.com</u>>

Cc: Dorothy W Rader < Dorothy.Rader@amwater.com; Michael Mynear

Subject: Re: Communications

Read at 3. At this point they look good

Get <u>Outlook for iOS</u>

From: Bob Money < <u>Bob.Money@amwater.com</u>> **Sent:** Saturday, July 29, 2023 11:36:52 AM **To:** Chad Smart < <u>CSmart@paris.ky.gov</u>>

Cc: Dorothy W Rader < Dorothy.Rader@amwater.com; Michael Mynear

Subject: Re: Communications

Are you all reading at 18 or 24 hours?

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water

Direct: <u>859-268-6317</u> Mobile: <u>859-797-7374</u> | <u>bob.money@amwater.com</u>

From: Chad Smart

Sent: Friday, July 28, 2023 3:54:27 PM

To: Bob Money <<u>Bob.Money@amwater.com</u>>

Cc: Dorothy W Rader < <u>Dorothy.Rader@amwater.com</u>>; Michael Mynear

Subject: RE: Communications

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you

click!".

Bac T's went in incubator at 3pm. Once we're in the clear I'll let you know.

Chad Smart

Superintendent

From: Bob Money < <u>Bob.Money@amwater.com</u>>

Sent: Friday, July 28, 2023 9:58 AM **To:** Chad Smart < <u>CSmart@paris.ky.gov</u>>

Cc: Dorothy W Rader < <u>Dorothy.Rader@amwater.com</u>>; Michael Mynear

Subject: RE: Communications

Thanks Chad.

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502 Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com





kentuckyamwater.com

From: Chad Smart < <u>CSmart@paris.ky.gov</u>>

Sent: Friday, July 28, 2023 9:55 AM

To: Bob Money <<u>Bob.Money@amwater.com</u>>

Cc: Dorothy W Rader < <u>Dorothy.Rader@amwater.com</u>>; Michael Mynear < <u>mmynear@paris.ky.gov</u>>

Subject: RE: Communications

EXTERNAL EMAIL: The Actual Sender of this email is CSmart@paris.ky.gov "Think before you click!".

Bob,

Michael called in the BWA earlier, we are on line and functioning as usual. I will let you know once we have pulled the bac t's and the time they go in the incubator with an estimated time the BWA should be lifted.

Chad Smart Superintendent

From: Bob Money < <u>Bob.Money@amwater.com</u>>

Sent: Friday, July 28, 2023 9:25 AM

Cc: Dorothy W Rader < Dorothy.Rader@amwater.com>

Subject: Communications

Importance: High

Chad,

I hope things are settling down for you folks this morning. It looked like a pretty rough night. It is my understanding there may be some system issues in Paris. I want to request that you let me know as soon as possible on matters that could affect our Millersburg system. We in turn have to let others know. We should be notified immediately as part of any BWA you issue so we can make proper arrangements. Thanks for your consideration and let me know if we can be of assistance.

These are the folks that should be notified:

Bob Money (bob.money@amwater.com)
Dorothy Radar (dorothy.radar@amwater.com)
Michael Maggard (michael.maggard@amwater.com)
Justin Sensabaugh (justin.sensabaugh@amwater.com)

Thanks, Bob

Robert D. Money, PG
Manager, Water Quality and Environmental Compliance
Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502
Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com



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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
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04/19/2022	54.0	<mark>62.3</mark>
05/02/2022	38.4	35.1
06/15/2022	<mark>79.1</mark>	<mark>75.2</mark>
7/27/2022	58.8	<mark>78.0</mark>
8/1/2022	<mark>90.7</mark>	109.1
9/20/2022	65.3	<mark>81.9</mark>
10/18/2022	59.5	<mark>65.2</mark>
11/07/2022	73.1	<mark>67.6</mark>
12/20/2022	41.6	<mark>67.0</mark>

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

Robert D. Money

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





Workorder ID: Paris MM M3 DBP 4 Workorder #: 611718

Analytical Results

PROCESS ONLY

Sample #: 61171801 **Date Collected:** 12/20/22 11:36 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 12/21/22 11:09
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported	to the State	^ = P	rovisionally	accredited	All Times i	n Eastern	Time		МС	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			12/21/22 19:	35 GLB				
THM OEL	ND	mg/L	0.0005	1			12/21/22 19:	35 GLB				
*Bromodichloromethan	e 0.0033	mg/L	0.0005	1			12/21/22 19:	35 GLB				
*Bromoform	ND	mg/L	0.0005	1			12/21/22 19:	35 GLB				
*Chloroform	0.0382	mg/L	0.0005	1			12/21/22 19:	35 GLB				
*Dibromochloromethan	e ND	mg/L	0.0005	1			12/21/22 19:	35 GLB				
*Total Trihalomethanes	0.0416	mg/L	0.0005	1			12/21/22 19:	35 GLB				0.08
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Acid	0.0019	mg/L	0.0010	1	12/28/22 14	:50 LMW	12/29/22 04:	54 LMW				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	12/28/22 14	:50 LMW	12/29/22 04:	54 LMW				
*Dichloroacetic Acid	0.0336	mg/L	0.0010	1	12/28/22 14	:50 LMW	12/29/22 04:	54 LMW				
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	12/28/22 14	:50 LMW	12/29/22 04:	54 LMW				
*Monochloroacetic Acid	0.0021	mg/L	0.0010	1	12/28/22 14	:50 LMW	12/29/22 04:	54 LMW				
*Trichloroacetic Acid	0.0312	mg/L	0.0010	1	12/28/22 14	:50 LMW	12/29/22 04:	54 LMW				
Total Haloacetic Acids	0.0670	mg/L	0.0010	1	12/28/22 14	:50 LMW	12/29/22 04:	54 LMW	М			0.06
Field Chlorine Residual	2.39	mg/L					12/20/22 11:	36 FLD				



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:

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	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	<mark>75.6</mark>
04/19/2022	54.0	<mark>62.3</mark>
05/02/2022	38.4	35.1
06/15/2022	<mark>79.1</mark>	<mark>75.2</mark>
7/27/2022	58.8	<mark>78.0</mark>
8/1/2022	<mark>90.7</mark>	109.1
9/20/2022	65.3	<mark>81.9</mark>
10/18/2022	59.5	<mark>65.2</mark>
11/07/2022	73.1	<mark>67.6</mark>

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

Robert D. Money

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





Workorder ID: Paris MM M2 DBP 3 Workorder #: 607795

Analytical Results

PROCESS ONLY

Sample #: 60779501 **Date Collected**: 11/07/22 11:19 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 11/08/22 12:22
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported	to the State	^ = P	rovisionally	accredited	All Times i	n Easteri	n Time		МС	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			11/08/22 21:	51 GLB				
THM OEL	ND	mg/L	0.0005	1			11/08/22 21:	51 GLB				
Bromodichloromethane	e 0.0118	mg/L	0.0005	1			11/08/22 21:	51 GLB				
Bromoform	ND	mg/L	0.0005	1			11/08/22 21:	51 GLB				
Chloroform	0.0604	mg/L	0.0005	1			11/08/22 21:	51 GLB				
Dibromochloromethan	e 0.0010	mg/L	0.0005	1			11/08/22 21:	51 GLB				
Total Trihalomethanes	0.0731	mg/L	0.0005	1			11/08/22 21:	51 GLB	AL			0.08
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Aci	d 0.0044	mg/L	0.0010	1	11/09/22 17	':41 FAH	11/10/22 07:	10 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	11/09/22 17	':41 FAH	11/10/22 07:	10 FAH				
*Dichloroacetic Acid	0.0314	mg/L	0.0010	1	11/09/22 17	':41 FAH	11/10/22 07:	10 FAH				
*Monobromoacetic Aci	d ND	mg/L	0.0010	1	11/09/22 17	':41 FAH	11/10/22 07:	10 FAH				
*Monochloroacetic Aci	d 0.0023	mg/L	0.0010	1	11/09/22 17	':41 FAH	11/10/22 07:	10 FAH				
*Trichloroacetic Acid	0.0339	mg/L	0.0010	1	11/09/22 17	':41 FAH	11/10/22 07:	10 FAH				
Total Haloacetic Acids	0.0676	mg/L	0.0010	1	11/09/22 17	':41 FAH	11/10/22 07:	10 FAH	М			0.06
Field Chlorine Residua	al 2.04	mg/L					11/07/22 11:	19 FLD				



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:

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03/17/2022	52.2	<mark>75.6</mark>
04/19/2022	54.0	<mark>62.3</mark>
05/02/2022	38.4	35.1
06/15/2022	<mark>79.1</mark>	<mark>75.2</mark>
7/27/2022	58.8	<mark>78.0</mark>
8/1/2022	<mark>90.7</mark>	109.1
9/20/2022	65.3	<mark>81.9</mark>
10/18/2022	59.5	<mark>65.2</mark>

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

Robert D. Money

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





Workorder ID: Paris MM M1 DBP 3 Workorder #: 605033

Analytical Results

PROCESS ONLY

Sample #: 60503301 **Date Collected:** 10/18/22 10:55 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 10/19/22 11:21
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined = Reported to the State ^		^ = P	rovisionally	accredited	All Times in	Easterr	Time		L		
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			10/19/22 22:49	GLB				
THM OEL	ND	mg/L	0.0005	1			10/19/22 22:49	GLB				
Bromodichloromethane	0.0102	mg/L	0.0005	1			10/19/22 22:49	GLB				
Bromoform	ND	mg/L	0.0005	1			10/19/22 22:49	GLB				
Chloroform	0.0484	mg/L	0.0005	1			10/19/22 22:49	GLB				
Dibromochloromethane	0.0009	mg/L	0.0005	1			10/19/22 22:49	GLB				
Total Trihalomethanes	0.0595	mg/L	0.0005	1			10/19/22 22:49	GLB				0.08
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Acid	0.0043	mg/L	0.0010	1	10/21/22 1	5:06 FAH	10/22/22 05:43	3 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	10/21/22 15	5:06 FAH	10/22/22 05:43	3 FAH				
*Dichloroacetic Acid	0.0293	mg/L	0.0010	1	10/21/22 15	5:06 FAH	10/22/22 05:43	3 FAH				
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	10/21/22 15	5:06 FAH	10/22/22 05:43	3 FAH				
*Monochloroacetic Acid	0.0029	mg/L	0.0010	1	10/21/22 1	5:06 FAH	10/22/22 05:43	3 FAH				
*Trichloroacetic Acid	0.0330	mg/L	0.0010	1	10/21/22 15	5:06 FAH	10/22/22 05:43	B FAH				
Total Haloacetic Acids	0.0652	mg/L	0.0010	1	10/21/22 15	5:06 FAH	10/22/22 05:43	3 FAH	М			0.06
Field Chlorine Residua	2.17	mg/L					10/18/22 10:55	FLD				



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,

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Sincerely,

Bob Money

Manager, Water Quality & Environmental Compliance

Kentucky American Water

Robert D. Money

Enclosure: Master Meter lab results September 2022

cc: Gabe Tanner, DOW Compliance Assistance





Workorder ID: Paris MM M3 DBP 3 Workorder #: 602124

Analytical Results

PROCESS ONLY

Sample #: 60212401 **Date Collected:** 09/20/22 11:52 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 09/21/22 11:56
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	nderlined = Reported to the State ^ =		^ = P	rovisionally	accredited	All Times in	Easter	n Time	MCL		
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			09/21/22 21:3	9 GLB				
THM OEL	ND	mg/L	0.0005	1			09/21/22 21:3	9 GLB				
Bromodichloromethane	0.0081	mg/L	0.0005	1			09/21/22 21:3	9 GLB				
Bromoform	ND	mg/L	0.0005	1			09/21/22 21:3	9 GLB				
Chloroform	0.0566	mg/L	0.0005	1			09/21/22 21:3	9 GLB				
Dibromochloromethane	0.0006	mg/L	0.0005	1			09/21/22 21:3	9 GLB				
Total Trihalomethanes	0.0653	mg/L	0.0005	1			09/21/22 21:3	9 GLB	AL			80.0
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Acid	d 0.0051	mg/L	0.0010	1	09/26/22 1	5:56 FAH	09/27/22 08:4	3 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	09/26/22 1	5:56 FAH	09/27/22 08:4	3 FAH				
*Dichloroacetic Acid	0.0423	mg/L	0.0010	1	09/26/22 1	5:56 FAH	09/27/22 08:4	3 FAH				
*Monobromoacetic Aci	d ND	mg/L	0.0010	1	09/26/22 1	5:56 FAH	09/27/22 08:4	3 FAH				
*Monochloroacetic Acid	0.0018	mg/L	0.0010	1	09/26/22 1	5:56 FAH	09/27/22 08:4	3 FAH				
*Trichloroacetic Acid	0.0379	mg/L	0.0010	1	09/26/22 1	5:56 FAH	09/27/22 08:4	3 FAH				
Total Haloacetic Acids	0.0819	mg/L	0.0010	1	09/26/22 1	5:56 FAH	09/27/22 08:4	3 FAH	М			0.06
Field Chlorine Residua	1.85	mg/L					09/20/22 11:5	2 FLD				



January 3, 2023

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

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Sincerely,

Bob Money

Manager, Water Quality & Environmental Compliance

Kentucky American Water

Robert D. Money

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





Workorder ID: Paris MM M3 DBP 4 Workorder #: 611718

Analytical Results

PROCESS ONLY

Sample #: 61171801 **Date Collected:** 12/20/22 11:36 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 12/21/22 11:09
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Inderlined = Reported to the State ^ =		^ = P	rovisionally	accredited	All Times in	n Eastern	Time	MCL		
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHALO	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			12/21/22 19:3	35 GLB				
THM OEL	ND	mg/L	0.0005	1			12/21/22 19:3	35 GLB				
*Bromodichloromethan	e 0.0033	mg/L	0.0005	1			12/21/22 19:3	35 GLB				
*Bromoform	ND	mg/L	0.0005	1			12/21/22 19:3	35 GLB				
*Chloroform	0.0382	mg/L	0.0005	1			12/21/22 19:3	35 GLB				
*Dibromochloromethan	e ND	mg/L	0.0005	1			12/21/22 19:3	35 GLB				
*Total Trihalomethanes	0.0416	mg/L	0.0005	1			12/21/22 19:3	35 GLB				0.08
EPA 552.3 - HALOA	CETIC ACIDS ((HAAs)										
Bromochloroacetic Acid	0.0019	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	54 LMW				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:	54 LMW				
*Dichloroacetic Acid	0.0336	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	54 LMW				
*Monobromoacetic Acid	I ND	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:	54 LMW				
*Monochloroacetic Acid	0.0021	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	54 LMW				
*Trichloroacetic Acid	0.0312	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	54 LMW				
Total Haloacetic Acids	0.0670	mg/L	0.0010	1	12/28/22 14	1:50 LMW	12/29/22 04:5	54 LMW	М			0.06
Field Chlorine Residual	2.39	mg/L					12/20/22 11:3	36 FLD				



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

Robert D. Money

Enclosure: Master Meter lab results January, February & March 2023

cc: Gabe Tanner, DOW Compliance Assistance





Workorder ID: Paris MM M3 DBP 5 Workorder #: 622529

Analytical Results

PROCESS ONLY

Sample #: 62252901 **Date Collected:** 03/16/23 11:18 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 03/17/23 11:46
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	nderlined = Reported to the State				accredited	All Times i	d All Times in Eastern Time				MCL		
Parameter	Result	•	RL		Prepared	Ву	Analyzed	By	Qual	Sec	1	Prim		
EPA 524.2 - TRIHAL			, , _		Порагоа	_,	, many zou	_,	Quu.	000	•			
THM LRAA	ND	mg/L	0.0005	1			03/17/23 20:	16 GLB						
THM OEL	ND	mg/L	0.0005	1			03/17/23 20:	16 GLB						
*Bromodichloromethan	e 0.0054	mg/L	0.0005	1			03/17/23 20:	16 GLB						
*Bromoform	ND	mg/L	0.0005	1			03/17/23 20:	16 GLB						
*Chloroform	0.0430	mg/L	0.0005	1			03/17/23 20:	16 GLB						
*Dibromochloromethan	e ND	mg/L	0.0005	1			03/17/23 20:	16 GLB						
*Total Trihalomethanes	0.0485	mg/L	0.0005	1			03/17/23 20:	16 GLB				0.08		
EPA 552.3 - HALOA	CETIC ACIDS ((HAAs)												
Bromochloroacetic Acid	0.0024	mg/L	0.0010	1	03/23/23 17	7:05 FAH	03/24/23 11:	17 FAH						
*Dibromoacetic Acid	ND	mg/L	0.0010	1	03/23/23 17	7:05 FAH	03/24/23 11:	17 FAH						
*Dichloroacetic Acid	0.0225	mg/L	0.0010	1	03/23/23 17	7:05 FAH	03/24/23 11:	17 FAH						
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	03/23/23 17	7:05 FAH	03/24/23 11:	17 FAH						
*Monochloroacetic Acid	0.0016	mg/L	0.0010	1	03/23/23 17	7:05 FAH	03/24/23 11:	17 FAH						
*Trichloroacetic Acid	0.0294	mg/L	0.0010	1	03/23/23 17	7:05 FAH	03/24/23 11:	17 FAH						
Total Haloacetic Acids	0.0535	mg/L	0.0010	1	03/23/23 17	7:05 FAH	03/24/23 11:	17 FAH	AL			0.06		
Field Chlorine Residua	2.23	mg/L					03/16/23 11:	18 FLD						





Workorder ID: Paris MM M2 DBP 4 Workorder #: 618778

Analytical Results

PROCESS ONLY

Sample #: 61877801 **Date Collected:** 02/06/23 10:50 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 02/07/23 14:30
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported t	o the State	^ = P	rovisionally	accredited	All Times i	n Eastern	Time	MCL		
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	LOMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			02/07/23 16:	26 GLB				
THM OEL	ND	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Bromodichlorometha	ne 0.0028	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Bromoform	ND	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Chloroform	0.0113	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Dibromochlorometha	ne ND	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Total Trihalomethane	s 0.0142	mg/L	0.0005	1			02/07/23 16:	26 GLB				80.0
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Ac	id 0.0016	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Dichloroacetic Acid	0.0084	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Monobromoacetic Ac	id ND	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Monochloroacetic Ac	id ND	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Trichloroacetic Acid	0.0063	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
Total Haloacetic Acids	0.0146	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				0.06
Field Chlorine Residua	al 2.31	mg/L					02/06/23 10:	50 FLD				





Workorder ID: Paris MM M1 DBP 4 Workorder #: 614907

Analytical Results

PROCESS ONLY

Sample #: 61490701 **Date Collected**: 01/24/23 12:28 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 01/25/23 11:47
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported	to the State	^ = P	rovisionally	accredited	All Times i	n Eastern	Time	MCL		
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			01/26/23 11:	56 GLB				
THM OEL	ND	mg/L	0.0005	1			01/26/23 11:	56 GLB				
*Bromodichloromethan	ne 0.0028	mg/L	0.0005	1			01/26/23 11:	56 GLB				
*Bromoform	ND	mg/L	0.0005	1			01/26/23 11:	56 GLB				
*Chloroform	0.0156	mg/L	0.0005	1			01/26/23 11:	56 GLB				
*Dibromochloromethan	ne ND	mg/L	0.0005	1			01/26/23 11:	56 GLB				
*Total Trihalomethanes	s 0.0184	mg/L	0.0005	1			01/26/23 11:	56 GLB				0.08
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Aci	d 0.0014	mg/L	0.0010	1	01/27/23 16	:52 FAH	01/28/23 03:	11 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	01/27/23 16	:52 FAH	01/28/23 03:	11 FAH				
*Dichloroacetic Acid	0.0123	mg/L	0.0010	1	01/27/23 16	6:52 FAH	01/28/23 03:	11 FAH				
*Monobromoacetic Aci	d ND	mg/L	0.0010	1	01/27/23 16	:52 FAH	01/28/23 03:	11 FAH				
*Monochloroacetic Acid	d ND	mg/L	0.0010	1	01/27/23 16	6:52 FAH	01/28/23 03:	11 FAH				
*Trichloroacetic Acid	0.0111	mg/L	0.0010	1	01/27/23 16	6:52 FAH	01/28/23 03:	11 FAH				
Total Haloacetic Acids	0.0234	mg/L	0.0010	1	01/27/23 16	6:52 FAH	01/28/23 03:	11 FAH				0.06
Field Chlorine Residua	ıl 1.67	mg/L					01/24/23 12:	28 FLD				



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	<mark>70.9</mark>

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

To but D. Money

Enclosure: Master Meter lab results April, May & June 2023

cc: Gabe Tanner, DOW Compliance Assistance





Workorder ID: Paris MM M1 DBP 5 Workorder #: 627154

Analytical Results

PROCESS ONLY

Sample #: 62715401 **Date Collected**: 04/13/23 10:43 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 04/14/23 11:59
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported t	o the State	^ = P	rovisionally	accredited	All Times i	n Eastern	Time	MCL		
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			04/14/23 20:	55 GLB				
THM OEL	ND	mg/L	0.0005	1			04/14/23 20:	55 GLB				
*Bromodichlorometha	ne 0.0040	mg/L	0.0005	1			04/14/23 20:	55 GLB				
*Bromoform	ND	mg/L	0.0005	1			04/14/23 20:	55 GLB				
*Chloroform	0.0368	mg/L	0.0005	1			04/14/23 20:	55 GLB				
*Dibromochlorometha	ne ND	mg/L	0.0005	1			04/14/23 20:	55 GLB				
*Total Trihalomethane	s 0.0409	mg/L	0.0005	1			04/14/23 20:	55 GLB				80.0
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Ac	id 0.0022	mg/L	0.0010	1	04/19/23 16	6:45 LMW	04/20/23 06:	46 LMW				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	04/19/23 16	6:45 LMW	04/20/23 06:	46 LMW				
*Dichloroacetic Acid	0.0219	mg/L	0.0010	1	04/19/23 16	6:45 LMW	04/20/23 06:	46 LMW				
*Monobromoacetic Ac	id ND	mg/L	0.0010	1	04/19/23 16	6:45 LMW	04/20/23 06:	46 LMW				
*Monochloroacetic Ac	id 0.0015	mg/L	0.0010	1	04/19/23 16	6:45 LMW	04/20/23 06:	46 LMW				
*Trichloroacetic Acid	0.0201	mg/L	0.0010	1	04/19/23 16	6:45 LMW	04/20/23 06:	46 LMW				
Total Haloacetic Acids	0.0435	mg/L	0.0010	1	04/19/23 16	6:45 LMW	04/20/23 06:	46 LMW				0.06
Field Chlorine Residua	al 2.39	mg/L					04/13/23 10:	43 FLD				





Workorder ID: Paris MM M2 DBP 5 Workorder #: 631029

Analytical Results

PROCESS ONLY

Sample #: 63102901 **Date Collected**: 05/01/23 09:32 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 05/02/23 11:35
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported to	o the State	^ = P	rovisionally	accredited	All Times i	n Fastorr	Time		МС	ı
		•			_						,	
Parameter	Result		RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	/	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			05/02/23 15:	19 GLB				
THM OEL	ND	mg/L	0.0005	1			05/02/23 15:	19 GLB				
*Bromodichloromethan	e 0.0054	mg/L	0.0005	1			05/02/23 15:	19 GLB				
*Bromoform	ND	mg/L	0.0005	1			05/02/23 15:	19 GLB				
*Chloroform	0.0376	mg/L	0.0005	1			05/02/23 15:	19 GLB				
*Dibromochloromethar	ie ND	mg/L	0.0005	1			05/02/23 15:	19 GLB				
*Total Trihalomethanes	0.0431	mg/L	0.0005	1			05/02/23 15:	19 GLB				80.0
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Aci	d 0.0024	mg/L	0.0010	1	05/04/23 17	7:00 FAH	05/05/23 01:	28 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	05/04/23 17	7:00 FAH	05/05/23 01:	28 FAH				
*Dichloroacetic Acid	0.0263	mg/L	0.0010	1	05/04/23 17	7:00 FAH	05/05/23 01:	28 FAH				
*Monobromoacetic Aci	d ND	mg/L	0.0010	1	05/04/23 17	7:00 FAH	05/05/23 01:	28 FAH				
*Monochloroacetic Acid	0.0030	mg/L	0.0010	1	05/04/23 17	7:00 FAH	05/05/23 01:	28 FAH				
*Trichloroacetic Acid	0.0170	mg/L	0.0010	1	05/04/23 17	7:00 FAH	05/05/23 01:	28 FAH				
Total Haloacetic Acids	0.0464	mg/L	0.0010	1	05/04/23 17	7:00 FAH	05/05/23 01:	28 FAH				0.06
Field Chlorine Residua	1.45	mg/L					05/01/23 09:	32 FLD				





Workorder ID: Paris MM M3 DBP 6 Workorder #: 635948

Analytical Results

PROCESS ONLY

Sample #: 63594801 **Date Collected**: 06/21/23 12:02 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 06/22/23 13:07
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported to	o the State	^ = P	rovisionally	accredited	All Times in	Easter	n Time		MC	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			06/22/23 19:3	34 GLB				
THM OEL	ND	mg/L	0.0005	1			06/22/23 19:3	34 GLB				
*Bromodichloromethar	ne 0.0078	mg/L	0.0005	1			06/22/23 19:3	34 GLB				
*Bromoform	ND	mg/L	0.0005	1			06/22/23 19:3	34 GLB				
*Chloroform	0.0593	mg/L	0.0005	1			06/22/23 19:3	34 GLB				
*Dibromochloromethai	ne 0.0005	mg/L	0.0005	1			06/22/23 19:3	34 GLB				
*Total Trihalomethane	s 0.0677	mg/L	0.0005	1			06/22/23 19:3	34 GLB	AL			0.08
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Aci	id 0.0032	mg/L	0.0010	1	06/23/23 17	:30 DEK	06/26/23 23:5	6 DEK				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	06/23/23 17	:30 DEK	06/26/23 23:5	6 DEK				
*Dichloroacetic Acid	0.0329	mg/L	0.0010	1	06/23/23 17	:30 DEK	06/26/23 23:5	6 DEK				
*Monobromoacetic Ac	id ND	mg/L	0.0010	1	06/23/23 17	:30 DEK	06/26/23 23:5	6 DEK				
*Monochloroacetic Aci	d 0.0031	mg/L	0.0010	1	06/23/23 17	:30 DEK	06/26/23 23:5	6 DEK				
*Trichloroacetic Acid	0.0350	mg/L	0.0010	1	06/23/23 17	:30 DEK	06/26/23 23:5	6 DEK				
*Total Haloacetic Acid	s 0.0709	mg/L	0.0010	1	06/23/23 17	:30 DEK	06/26/23 23:5	6 DEK	М			0.06
Field Chlorine Residua	al 1.26	mg/L					06/21/23 12:0	2 FLD				



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:

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

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

Robert D. Money

Enclosure: Master Meter lab results July and August 2023

cc: Gabe Tanner, DOW Compliance Assistance





Workorder ID: Paris MM M1 DBP 6 Workorder #: 641474

Analytical Results

PROCESS ONLY

Sample #: 64147401 **Date Collected**: 07/20/23 12:07 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 07/21/23 12:57
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	ited Underlined = Reported to the State			^ = P	rovisionally	accredited	All Times in	Eastern	Time	MCL		
Parameter	Result	Unit	RL		Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			07/21/23 21:51	JMB1				
THM OEL	ND	mg/L	0.0005	1			07/21/23 21:51	JMB1				
*Bromodichloromethan	e 0.0073	mg/L	0.0005	1			07/21/23 21:51	JMB1				
*Bromoform	ND	mg/L	0.0005	1			07/21/23 21:51	JMB1				
*Chloroform	0.0828	mg/L	0.0005	1			07/21/23 21:51	JMB1				
*Dibromochloromethan	e ND	mg/L	0.0005	1			07/21/23 21:51	JMB1				
*Total Trihalomethanes	0.0901	mg/L	0.0005	1			07/21/23 21:51	JMB1	М			0.08
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Acid	d 0.0036	mg/L	0.0010	1	07/24/23 16	3:30 DEK	07/25/23 23:42	DEK				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	07/24/23 16	3:30 DEK	07/25/23 23:42	DEK				
*Dichloroacetic Acid	0.0384	mg/L	0.0010	1	07/24/23 16	3:30 DEK	07/25/23 23:42	DEK				
*Monobromoacetic Aci	d ND	mg/L	0.0010	1	07/24/23 16	3:30 DEK	07/25/23 23:42	DEK				
*Monochloroacetic Acid	0.0026	mg/L	0.0010	1	07/24/23 16	3:30 DEK	07/25/23 23:42	DEK				
*Trichloroacetic Acid	0.0414	mg/L	0.0010	1	07/24/23 16	3:30 DEK	07/25/23 23:42	DEK				
*Total Haloacetic Acids	0.0824	mg/L	0.0010	1	07/24/23 16	3:30 DEK	07/25/23 23:42	DEK	М			0.06
Field Chlorine Residua	1.34	mg/L					07/20/23 12:07	FLD				





Workorder ID: Paris MM M2 DBP 6 Workorder #: 671593

Analytical Results

PROCESS ONLY

Sample #: 67159301 **Date Collected**: 08/07/23 10:35 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 08/08/23 13:06
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported to	o the State	^ = P	rovisionally	accredited	All Times in	n Easteri	n Time		MC	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			08/08/23 17:3	33 GLB				
THM OEL	ND	mg/L	0.0005	1			08/08/23 17:3	33 GLB				
*Bromodichloromethar	ne 0.0090	mg/L	0.0005	1			08/08/23 17:3	33 GLB				
*Bromoform	ND	mg/L	0.0005	1			08/08/23 17:3	33 GLB				
*Chloroform	0.0695	mg/L	0.0005	1			08/08/23 17:3	33 GLB				
*Dibromochlorometha	ne 0.0005	mg/L	0.0005	1			08/08/23 17:3	33 GLB				
*Total Trihalomethane	s 0.0790	mg/L	0.0005	1			08/08/23 17:3	33 GLB	AL			0.08
EPA 552.3 - HALOA	CETIC ACIDS ((HAAs)										
Bromochloroacetic Aci	d 0.0039	mg/L	0.0010	1	08/09/23 16	:30 LMW	08/10/23 09:3	35 LMW				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	08/09/23 16	:30 LMW	08/10/23 09:3	35 LMW				
*Dichloroacetic Acid	0.0374	mg/L	0.0010	1	08/09/23 16	:30 LMW	08/10/23 09:3	35 LMW				
*Monobromoacetic Ac	id ND	mg/L	0.0010	1	08/09/23 16	:30 LMW	08/10/23 09:3	35 LMW				
*Monochloroacetic Aci	d 0.0028	mg/L	0.0010	1	08/09/23 16	:30 LMW	08/10/23 09:3	35 LMW				
*Trichloroacetic Acid	0.0362	mg/L	0.0010	1	08/09/23 16	:30 LMW	08/10/23 09:3	35 LMW				
*Total Haloacetic Acid	s 0.0764	mg/L	0.0010	1	08/09/23 16	:30 LMW	08/10/23 09:3	35 LMW	М			0.06
Field Chlorine Residua	al 0.98	mg/L					08/07/23 10:3	35 FLD				

RE: KAW/City of Paris Connection

Jamie Mille

Fri 8/11/2023 8:19 AM

To:Justin Lane < Justin.Lane@amwater.com>

EXTERNAL EMAIL: The Actual Sender of this email is

"Think before you click!".

Great, I will send out an outlook.

Jamie Miller

City of Paris

From: Justin Lane < Justin.Lane@amwater.com>

Sent: Friday, August 11, 2023 8:18 AM

To: Jamie Mille

Subject: Re: KAW/City of Paris Connection

I can meet at 11 on Monday

From: Jamie Miller

Sent: Friday, August 11, 2023 8:14:44 AM

To: Justin Lane < <u>Justin.Lane@amwater.com</u> > Subject: RE: KAW/City of Paris Connection

EXTERNAL EMAIL: The Actual Sender of this email i

Think before you click!".

Justin,

Sorry to be a pain, just following up for Monday?

Thanks

Jamie Miller

City of Paris

From: Justin Lane < <u>Justin.Lane@amwater.com</u>> Sent: Wednesday, August 9, 2023 2:00 PM

To: Jamie Mille

Subject: Re: KAW/City of Paris Connection

I don't, I will get back to you on if I have availability on Monday or Tuesday of next week.

From: Jamie Miller

Sent: Wednesday, August 9, 2023 12:57:43 PM
To: Justin Lane < <u>Justin.Lane@amwater.com</u>>
Subject: RE: KAW/City of Paris Connection

EXTERNAL EMAIL: The Actual Sender of this email is

"Think before you click!",

Do you have any time available later that same day?

Jamie Miller City of Paris

-----Original Appointment-----

From: Justin Lane < <u>Justin.Lane@amwater.com</u>> Sent: Wednesday, August 9, 2023 1:56 PM

To: Jamie Miller

Subject: Declined: KAW/City of Paris Connection

When: Friday, August 11, 2023 1:00 PM-2:30 PM (UTC-05:00) Eastern Time (US & Canada).

Where: 525 High St; - Commission Chambers

Can we reschedule, I have had something come up.

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Visit us online at https://urldefense.com/v3/ http://www.paris.ky.gov ;!!OJENptLVxUSb3Q3wC4SM5x-ZD0k!kuNrEZWpdh4fuZZ3xAnkklMdU-SDDD-

Tca48pSesMQkmHhl5wiolDmfQ-TIRiTKM8i3vhBqQn1vlG1VB zWjEs0\$

< https://urldefense.com/v3/ http://www.paris.ky.gov ;!!OJENptLVxUSb3Q3wC4SM5x-ZD0k!kuNrEZWpdh4fuZZ3xAnkklMdU-SDDD-Tca48pSesMQkmHhl5wiolDmfQ-TIRiTKM8i3vhBqQn1vlG1VB zWjEs0\$ > and on Facebook.

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RE: [E] Thank you! Regional Industrial Park Site Visit

www.csxindustrialdevelopment.com

Fri 12/2/2022 2:53 PM							
To: Lassiter. Jody	-	>;'Gordon Wilson'		dge Hamilton'	-		
		300000000000000000000000000000000000000		'Stan Galbraith'			
					-1-		;'Mcdow
Will'	0.00	7		n>;Justin Lane			
<justin.lane@amw< td=""><td>ater.com:</td><td></td><td></td><td></td><td></td><td>4</td><td></td></justin.lane@amw<>	ater.com:					4	
¥.							
EXTERNAL EMA	AIL: The Actual	Sender of this email i		"Think before	e you clic	k!".	
Thank you so much	Jodyl						
From: Lassiter, Jody	r	>					
Sent: Thursday, Dec	The state of the s	2 PM					
To: Gordon Wilson			ıdge Hamil	ton			
					; Sta	n Galbraith	
KU.com; Justin Lane	<justin.lane@am< li=""></justin.lane@am<>	water.com>					
	file and the second sec	ndustrial Park Site Visit					
Gordon:							
		f Bourbon and Nicholas Cou to Josh and Michaela at Mil				ers for the impres	sive show of
Regards,							
Jody							
	Jody A. Lassit						
CU	Business Deve	looment Manager, KY-MD-	-VA-WV-DC CSX Tra	ansportation			
COX	1	Maria de la companya della companya					
	1 / / / /Docur	nents/Templates					

From: Gordon Wilson
Sent: Thursday, December 1, 2022 1:51 PM

· Stan Galbraith

; Justin Lane < Justin.Lane@amwater.com >;

Subject: [E] Thank you! Regional Industrial Park Site Visit

This Message Is From an External Sender

This message came from outside your organization.

Hello Everyone,

I want to extend my deepest appreciation to all of you for attending and presenting at our Site Selection Group visit for the proposed Regional Industrial Park back on November 16th. I could not have been prouder of Bourbon and Nicholas Counties and all we were able to cover for SSG as far as what we have to offer and what the E.R. Stephen's/Finfrock property brings to the table for future growth in our communities. The utility companies, railroads, Representative Koch, Judge Hamilton and Economic Development Specialist for Bluegrass ADD, Greyson Evans gave amazing presentations and the feedback to questions asked by Site Selection were clear and unmatched. One of the most professional interviews I have seen.

Now we wait. Praying we are blessed with the KPDI award from our great state of Kentucky to move forward with this positive plan.

All my best and thanks again to all of you, Gordon

Gordon E. Wilson Executive Director Paris-Bourbon County EDA

http://www.parisbourponcountyeda.org

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Regional Industrial Park Site Selection Visit Agenda

Gordon Wilson Tue 11/15/2022 9:17 AM

To.

ustin Lane <Justin.Lane@amwater.com>,

1 attachments (56 KB)

Live Site Visit Agenda.docx;

EXTERNAL EMAIL: The Actual Sender of this email is gwilson@paris.ky.gov "Think before you click!".

Hello all,

Please see the attached agenda for our meeting with the Site Selection Group on Wednesday, November 16th.

Thank you, GEW

Gordon E. Wilson Executive Director Paris-Bourbon County EDA

http://www.parisbourboncountyeda.org

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the original message.

Fw: YOU'RE INVITED - Innovative Housing Construction Project Kick-Off

Gordon Wilson

Wed 10/26/2022 10:40 AM

To:Justin Lane < Justin.Lane@amwater.com>

EXTERNAL EMAIL: The Actual Sender of this email i

'hink before you click!".

Hi Justin,

Thank you again for your time yesterday, it was great catching up with you. Below is the invite to the Innovative Housing Construction Project Kick-Off as we said we would share with you. Hope to see you there.

Talk to you soon, GEW

Gordon E. Wilson Executive Director Paris-Bourbon County EDA

http://www.parisbourboncountyeda.org

From: Jonah Brown

Sent: Friday, October 21, 2022 12:36 PM

Subject: YOU'RE INVITED - Innovative Housing Construction Project Kick-Off





Watch Us Build A House In A Day!

Community Ventures and Baya Build are teaming up to build the first new home in Millersburg since 2006 and unveil a unique home building process that represents the future of new home construction.





Available to Explore Millersburg and Surrounding Region.

VIP Reception
Begins at 6:00 PM

Mustard Seed Hill
Allen House
1122 Main Street,
Millersburg, KY 40348

Join Community Ventures, Baya Build, Kentucky State and Local Elected Officials, Representatives from the U.S. Department of Energy and others to celebrate this new advancement in home construction.

Stop by or plan to stay the entire day to watch the house be assembled in one day.

Please RSVP to Jonah Brown at ______ no later than Wednesday, Nov. 2.

We hope to see you there!





Jonah Brown
President of Marketing

Community Ventures



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Main Installation /foot price

Justin Lane <Justin.Lane@amwater.com>
Tue 6/27/2023 3:48 PM
To:Gordon Wilsol
Gordon,

Below are those prices per foot we discussed over lunch. I apologize for just now getting back to you.

- · Main installation within grassed area: \$100 per foot
- · Main installation within paved roadway: \$175 per foot

Justin Lane Senior Manager Business Development Kentucky American Water 2300 Richmond Road Lexington, KY 40502

Cell: 606-776-3768

E-mail: justin.lane@amwater.com

WE KEEP LIFE FLOWING "



FW: Communications

Bob Money <Bob.Money@amwater.com>

Fri 7/28/2023 9:57 AM

To:Justin Lane <Justin.Lane@amwater.com>

FYI

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance

Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502 Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com

WE KEEP LIFE FLOWING



kentuckyamwater.com

From: Chad Smart

Sent: Friday, July 28, 2023 9:55 AM

To: Bob Money <Bob.Money@amwater.com>

Cc: Dorothy W Rader < Dorothy.Rader@amwater.com>; Michael Mynear

Subject: RE: Communications

EXTERNAL EMAIL: The Actual Sender of this email i

Think before you click!".

Bob,

Michael called in the BWA earlier, we are on line and functioning as usual. I will let you know once we have pulled the bac t's and the time they go in the incubator with an estimated time the BWA should be lifted.

Chad Smart Superintendent

From: Bob Money < Bob Money@amwater.com>

Sent: Friday, July 28, 2023 9:25 AM

To: Chad Smart

Cc: Dorothy W Rader < Dorothy, Rader@amwater.com>

Subject: Communications

Importance: High

Chad,

I hope things are settling down for you folks this morning. It looked like a pretty rough night. It is my understanding there may be some system issues in Paris. I want to request that you let me know as soon as possible on matters that could affect our Millersburg system. We in turn have to let others know. We should be notified immediately as part of any BWA you issue so we can make proper arrangements. Thanks for your consideration and let me know if we can be of assistance.

These are the folks that should be notified:

Bob Money (bob.money@amwater.com)
Dorothy Radar (dorothy.radar@amwater.com)
Michael Maggard (michael.maggard@amwater.com)
Justin Sensabaugh (justin.sensabaugh@amwater.com)

Thanks, Bob

Robert D. Money, PG

Manager, Water Quality and Environmental Compliance Kentucky American Water | 2300 Richmond Road | Lexington, KY 40502

Direct: 859-268-6317 | Mobile: 859-797-7374 | bob.money@amwater.com

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kentuckyamwater.com

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RE: Lunch

Justin Lane <Justin.Lane@amwater.com>
Wed 10/12/2022 3:37 PM
To:Gordon Wilson
Great!! I will give you a call on the 18th.

Justin Lane
Project Manager Operations
2300 Richmond Road, Lexington KY 40502
P: 859-266-1117 C: 606-776-3768
Justin,lane@amwater.com

WE KEEP LIFE FLOWING "

From: Gordon Wilson

Sent: Tuesday, October 11, 2022 3:57 PM
To: Justin Lane < Justin.Lane@amwater.com>

Subject: Re: Lunch

EXTERNAL EMAIL: The Actual Sender of this email

nink before you click!".

Hi Justin,

That should work for me. Let's touch base on the 18th to make sure nothing has changed.

Thank you for the invite! GEW

Gordon E. Wilson Executive Director Paris-Bourbon County EDA

http://www.parisbourboncountyeda.org

From: Justin Lane < <u>Justin Lane@amwater.com</u>>
Sent: Tuesday, October 11, 2022 2:01 PM
Ter Gordon Wilson

To: Gordon Wilson Subject: Lunch

Good afternoon Gordon,

Do you have time on October 25th for lunch? I would like to catch up.

Thank you,

Justin Lane
Project Manager Operations
2300 Richmond Road, Lexington KY 40502
P: 859-266-1117 C: 606-776-3768
Justin Jane@amwater.com

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Re: Paris-Bourbon County EDA Christmas Reception

Gordon Wilson

Fri 12/16/2022 1:30 PM

To:Susan L Lancho <Susan.Lancho@amwater.com>

Cc:Justin Lane < Justin.Lane@amwater.com>

EXTERNAL EMAIL: The Actual Sender of this email is

/ "Think before you click!".

Many, many thanks to you.

Looking so forward to seeing you, Gordon

Gordon E. Wilson Executive Director Paris-Bourbon County EDA

http://www.parisbourboncountyeda.org

From: Susan L Lancho <Susan.Lancho@amwater.com>

Sent: Thursday, December 15, 2022 5:18 PM

To: Gordon Wilsor

Cc: Justin Lane < Justin.Lane@amwater.com>

Subject: RE: Paris-Bourbon County EDA Christmas Reception

Hi, Gordon. I wanted to let you know that a check in the amount of \$250 is on its way to you, if not received already, for the reception at Mustard Seed Hill next week.

Susan Lancho

Senior Manager, External and Government Affairs Kentucky American Water 2300 Richmond Road . Lexington, Kentucky 40502
(O) 859-268-6332 (M) 859-537-0736 susan.lancho@amwater.com

From: Gordon Wilson

Sent: Monday, December 5, 2022 3:46 PM

To: Susan L Lancho <Susan.Lancho@amwater.com>

Cc: Justin Lane < Justin.Lane@amwater.com>

Subject: Re: Paris-Bourbon County EDA Christmas Reception

EXTERNAL EMAIL: The Actual Sender of this email is

ik before you click!".

Hi Susan,

The check will be made out to the Paris-Bourbon County EDA.

Thank you again,

Gordon E. Wilson Executive Director Paris-Bourbon County EDA

http://www.parisbourboncountyeua.org

From: Susan L Lancho < Susan.Lancho@amwater.com>

Sent: Monday, December 5, 2022 10:40 AM

To: Gordon Wilsor

Cc: Justin Lane < Justin.Lane@amwater.com>

Subject: RE: Paris-Bourbon County EDA Christmas Reception

Thanks, Gordon. To what entity would we make the payment?

Susan

From: Gordon Wilson

Sent: Monday, December 5, 2022 9:47 AM

To: Susan L Lancho < Susan Lancho@amwater.com >; Justin Lane < Justin Lane@amwater.com >

Subject: Re: Paris-Bourbon County EDA Christmas Reception

EXTERNAL EMAIL: The Actual Sender of this email is

'hink before you click!".

Good Morning!

Thank you so much Susan. The other sponsors are giving \$500. We are grateful for whatever amount works for you.

So much appreciated!

GEW

Gordon E. Wilson Executive Director Paris-Bourbon County EDA

http://www.parisbourboncountyeda.org

From: Susan L Lancho < Susan. Lancho@amwater.com >

Sent: Monday, December 5 2022 2 22 1

To: Gordon Wilson ______, Justin Lane < Justin.Lane@amwater.com >

Subject: RE: Paris-Bourbon County EDA Christmas Reception

Hi, Gordon. We'd be happy to chip in. Do you have a recommended amount for sponsorship?

Susan Lancho

Senior Manager, External and Government Affairs Kentucky American Water 2300 Richmond Road . Lexington, Kentucky 40502 859-268-6332 (o) 859-537-0736 (m) susan.lancho@amwater.com

From: Gordon Wilson

Sent: Tuesday, November 29, 2022 2:47 PM

To: Justin Lane < Justin Lane@amwater.com >; Susan L Lancho < Susan.Lancho@amwater.com >

Subject: Paris-Bourbon County EDA Christmas Reception

EXTERNAL EMAIL: The Actual Sender of this email is

" --- "Think before you click!".

Hi Justin and Susan,

We are having a Christmas Reception at Mustard Seed Hill on December 21, from 9am to 11am. This is our EDA Board Meeting's regularly scheduled time, but in place of business we are having a reception instead. We will be inviting all local government and community partners from Bourbon and Nicholas Counties along with those groups from Millersburg. We will also be inviting all those that were in attendance for our site selection visit as well; this includes our utility companies.

All that said we are reaching out to you and our local banks for sponsorship of our event. Is there any interest in a sponsorship from your company? This will be an amazing morning at Mustard Seed Hill and either way, we will look forward to sharing our reception with you.

We will be sending out the formal Outlook invitation early next week with all the final details.

Thank you for all you do! Gordon

Gordon E. Wilson Executive Director Paris-Bourbon County EDA

http://www.parisbourboncountyeda.org

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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	<mark>75.6</mark>

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

Robert D. Money

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





Workorder ID: Paris MM M3 DBP 1 Workorder #: 580910

Analytical Results

PROCESS ONLY

Sample #: 58091001 **Date Collected**: 03/17/22 10:11 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 03/18/22 12:49
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined = F	Reported t	o the State	^ = P	rovisionally	accredited	All Times in	Eastern	Time	MCL		
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES (THMs)										
*Bromodichloromethan	e 0.0056	mg/L	0.0005	1			03/18/22 18:49	NAM1				
*Bromoform	ND	mg/L	0.0005	1			03/18/22 18:49	NAM1				
*Chloroform	0.0466	mg/L	0.0005	1			03/18/22 18:49	NAM1				
*Dibromochloromethan	e ND	mg/L	0.0005	1			03/18/22 18:49	NAM1				
*Total Trihalomethanes	0.0522	mg/L	0.0005	1			03/18/22 18:49	NAM1				0.08
EPA 552.3 - HALOA	CETIC ACIDS (I	HAAs)										
Bromochloroacetic Acid	0.0031	mg/L	0.0010	1	03/23/22 10	6:00 NFS	03/24/22 13:53	NFS				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	03/23/22 10	6:00 NFS	03/24/22 13:53	NFS				
*Dichloroacetic Acid	0.0318	mg/L	0.0010	1	03/23/22 10	6:00 NFS	03/24/22 13:53	NFS				
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	03/23/22 10	6:00 NFS	03/24/22 13:53	NFS				
*Monochloroacetic Acid	0.0021	mg/L	0.0010	1	03/23/22 10	6:00 NFS	03/24/22 13:53	NFS				
Total Haloacetic Acids	0.0756	mg/L	0.0010	1	03/23/22 10	6:00 NFS	03/24/22 13:53	NFS	М			0.06
*Trichloroacetic Acid	0.0417	mg/L	0.0010	1	03/23/22 10	6:00 NFS	03/24/22 13:53	NFS				
Field Chlorine Residua	2.32	mg/L					03/17/22 10:1	I FLD				



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	<mark>75.6</mark>
04/19/2022	54.0	<mark>62.3</mark>

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

Robert D. Money

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





Workorder ID: Paris MM M1 DBP 1 Workorder #: 582154

Analytical Results

PROCESS ONLY

Sample #: 58215401 **Date Collected:** 04/19/22 11:32 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 04/20/22 11:33
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined = I	Reported to	the State	^ = P	rovisionally	accredited	All Times in	Eastern	Time		МС	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES (THMs)										
*Bromodichloromethan	e 0.0036	mg/L	0.0005	1			04/21/22 18:30	3 JMB1				
*Bromoform	ND	mg/L	0.0005	1			04/21/22 18:30	3 JMB1				
*Chloroform	0.0504	mg/L	0.0005	1			04/21/22 18:30	3 JMB1				
*Dibromochloromethan	ne ND	mg/L	0.0005	1			04/21/22 18:30	3 JMB1				
*Total Trihalomethanes	0.0540	mg/L	0.0005	1			04/21/22 18:30	3 JMB1				0.08
EPA 552.3 - HALOA	CETIC ACIDS (HAAs)										
Bromochloroacetic Aci	d 0.0018	mg/L	0.0010	1	04/22/22 1	6:30 NFS	04/23/22 01:39	9 NFS				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	04/22/22 1	6:30 NFS	04/23/22 01:3	9 NFS				
*Dichloroacetic Acid	0.0319	mg/L	0.0010	1	04/22/22 1	6:30 NFS	04/23/22 01:39	9 NFS				
*Monobromoacetic Aci	d ND	mg/L	0.0010	1	04/22/22 1	6:30 NFS	04/23/22 01:39	9 NFS				
*Monochloroacetic Acid	d 0.0026	mg/L	0.0010	1	04/22/22 1	6:30 NFS	04/23/22 01:39	9 NFS				
Total Haloacetic Acids	0.0623	mg/L	0.0010	1	04/22/22 1	6:30 NFS	04/23/22 01:39	9 NFS	M			0.06
*Trichloroacetic Acid	0.0278	mg/L	0.0010	1	04/22/22 1	6:30 NFS	04/23/22 01:39	9 NFS				
Field Chlorine Residua	1 2.42	mg/L					04/19/22 11:3	2 FLD				



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:

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	<mark>75.6</mark>
04/19/2022	54.0	<mark>62.3</mark>
05/02/2022	38.4	35.1
06/15/2022	<mark>79.1</mark>	<mark>75.2</mark>

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

Robert D. Money

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





Workorder ID: Paris MM M3 DBP 2 Workorder #: 589397

Analytical Results

PROCESS ONLY

Sample #: 58939701 **Date Collected:** 06/15/22 11:28 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 06/17/22 11:51
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported	to the State	^ = P	rovisionally	accredited	All Times in	Eastern	Time		МС	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	0.0000	mg/L		1			06/23/22 20:4	1 JMB1				
THM OEL	0.0000	mg/L		1			06/23/22 20:4	1 JMB1				
*Bromodichloromethan	e 0.0092	mg/L	0.0005	1			06/23/22 20:4	1 JMB1				
*Bromoform	ND	mg/L	0.0005	1			06/23/22 20:4	1 JMB1				
*Chloroform	0.0693	mg/L	0.0005	1			06/23/22 20:4	1 JMB1				
*Dibromochloromethan	e 0.0006	mg/L	0.0005	1			06/23/22 20:4	1 JMB1				
*Total Trihalomethanes	0.0791	mg/L	0.0005	1			06/23/22 20:4	1 JMB1	AL			0.08
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Acid	0.0037	mg/L	0.0010	1	06/23/22 1	5:55 FAH	06/24/22 05:3	2 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	06/23/22 1	5:55 FAH	06/24/22 05:3	2 FAH				
*Dichloroacetic Acid	0.0375	mg/L	0.0010	1	06/23/22 1	5:55 FAH	06/24/22 05:3	2 FAH				
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	06/23/22 1	5:55 FAH	06/24/22 05:3	2 FAH				
*Monochloroacetic Acid	0.0021	mg/L	0.0010	1	06/23/22 1	5:55 FAH	06/24/22 05:3	2 FAH				
*Trichloroacetic Acid	0.0356	mg/L	0.0010	1	06/23/22 1	5:55 FAH	06/24/22 05:3	2 FAH				
Total Haloacetic Acids	0.0752	mg/L	0.0010	1	06/23/22 1	5:55 FAH	06/24/22 05:3	2 FAH	M			0.06
Field Chlorine Residua	2.11	mg/L					06/15/22 11:2	8 FLD				



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:

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	<mark>75.6</mark>
04/19/2022	54.0	<mark>62.3</mark>
05/02/2022	38.4	35.1
06/15/2022	<mark>79.1</mark>	<mark>75.2</mark>
7/27/2022	58.8	<mark>78.0</mark>

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





Workorder ID: Paris MM M1 DBP 2 Workorder #: 594001

Analytical Results

PROCESS ONLY

Sample #: 59400101 **Date Collected**: 07/27/22 12:04 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 07/28/22 14:16
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined = F	Reported t	to the State	^ = P	rovisionally	accredited	All Times in	Eastern	Time		МС	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHALOMETHANES (THMs)												
THM LRAA	ND	mg/L	0.0005	1			07/29/22 16:1	3 JMB1				
THM OEL	ND	mg/L	0.0005	1			07/29/22 16:1	3 JMB1				
*Bromodichloromethan	e 0.0060	mg/L	0.0005	1			07/29/22 16:1	3 JMB1				
*Bromoform	ND	mg/L	0.0005	1			07/29/22 16:1	3 JMB1				
*Chloroform	0.0528	mg/L	0.0005	1			07/29/22 16:1	3 JMB1				
*Dibromochloromethan	e ND	mg/L	0.0005	1			07/29/22 16:1	3 JMB1				
*Total Trihalomethanes	0.0588	mg/L	0.0005	1			07/29/22 16:1	3 JMB1				0.08
EPA 552.3 - HALOACETIC ACIDS (HAAs)												
Bromochloroacetic Acid	d 0.0036	mg/L	0.0010	1	07/29/22 16	:36 FAH	07/30/22 01:2	6 NFS				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	07/29/22 16	:36 FAH	07/30/22 01:2	6 NFS				
*Dichloroacetic Acid	0.0435	mg/L	0.0010	1	07/29/22 16	:36 FAH	07/30/22 01:2	6 NFS				
*Monobromoacetic Aci	d ND	mg/L	0.0010	1	07/29/22 16	:36 FAH	07/30/22 01:2	6 NFS				
*Monochloroacetic Acid	0.0023	mg/L	0.0010	1	07/29/22 16	:36 FAH	07/30/22 01:2	6 NFS				
*Trichloroacetic Acid	0.0323	mg/L	0.0010	1	07/29/22 16	:36 FAH	07/30/22 01:2	6 NFS				
Total Haloacetic Acids	0.0780	mg/L	0.0010	1	07/29/22 16	:36 FAH	07/30/22 01:2	6 NFS	М			0.06
Field Chlorine Residua	0.99	mg/L					07/27/22 12:0	4 FLD				



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
01/19/2022	16.6	18.1
02/07/2022	24.1	28.8
03/17/2022	52.2	<mark>75.6</mark>
04/19/2022	54.0	<mark>62.3</mark>
05/02/2022	38.4	35.1
06/15/2022	<mark>79.1</mark>	<mark>75.2</mark>
7/27/2022	58.8	<mark>78.0</mark>
8/1/2022	<mark>90.7</mark>	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

Robert D. Money

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





Workorder ID: Paris MM M2 DBP 2 Workorder #: 598012

Analytical Results

PROCESS ONLY

Sample #: 59801201 **Date Collected:** 08/01/22 11:46 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 08/02/22 12:08
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported	to the State	^ = Provisionally accredited		All Times in	n Eastern	Time		L		
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHALO	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			08/03/22 02:	19 JMB1				
THM OEL	ND	mg/L	0.0005	1			08/03/22 02:	19 JMB1				
*Bromodichloromethan	e 0.0069	mg/L	0.0005	1			08/03/22 02:	19 JMB1				
*Bromoform	ND	mg/L	0.0005	1			08/03/22 02:	19 JMB1				
*Chloroform	0.0839	mg/L	0.0005	1			08/03/22 02:	19 JMB1				
*Dibromochloromethan	e ND	mg/L	0.0005	1			08/03/22 02:	19 JMB1				
*Total Trihalomethanes	0.0907	mg/L	0.0005	1			08/03/22 02:	19 JMB1	М			80.0
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Acid	0.0032	mg/L	0.0010	1	08/03/22 16	6:03 FAH	08/05/22 16:3	39 NFS				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	08/03/22 16	8:03 FAH	08/05/22 16:3	39 NFS				
*Dichloroacetic Acid	0.0507	mg/L	0.0010	1	08/03/22 16	6:03 FAH	08/05/22 16:3	39 NFS				
*Monobromoacetic Acid	l ND	mg/L	0.0010	1	08/03/22 16	8:03 FAH	08/05/22 16:3	39 NFS				
*Monochloroacetic Acid	l ND	mg/L	0.0010	1	08/03/22 16	6:03 FAH	08/05/22 16:	39 NFS				
*Trichloroacetic Acid	0.0566	mg/L	0.0010	1	08/03/22 16	8:03 FAH	08/05/22 16:3	39 NFS				
Total Haloacetic Acids	0.1091	mg/L	0.0010	1	08/03/22 16	6:03 FAH	08/05/22 16:3	39 NFS	М			0.06
Field Chlorine Residual	1.03	mg/L					08/01/22 11:4	46 FLD				



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	<mark>75.6</mark>
04/19/2022	54.0	<mark>62.3</mark>
05/02/2022	38.4	35.1
06/15/2022	<mark>79.1</mark>	<mark>75.2</mark>
7/27/2022	58.8	<mark>78.0</mark>
8/1/2022	<mark>90.7</mark>	109.1
9/20/2022	65.3	<mark>81.9</mark>

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

Robert D. Money

Enclosure: Master Meter lab results September 2022

cc: Gabe Tanner, DOW Compliance Assistance





Workorder ID: Paris MM M3 DBP 3 Workorder #: 602124

Analytical Results

PROCESS ONLY

Sample #: 60212401 **Date Collected:** 09/20/22 11:52 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 09/21/22 11:56
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Jnderlined = Reported to the State ^		^ = P	rovisionally	accredited	All Times in Eastern Time			MCL		
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			09/21/22 21:	39 GLB				
THM OEL	ND	mg/L	0.0005	1			09/21/22 21:	39 GLB				
Bromodichloromethane	0.0081	mg/L	0.0005	1			09/21/22 21:	39 GLB				
Bromoform	ND	mg/L	0.0005	1			09/21/22 21:	39 GLB				
Chloroform	0.0566	mg/L	0.0005	1			09/21/22 21:	39 GLB				
Dibromochloromethane	0.0006	mg/L	0.0005	1			09/21/22 21:	39 GLB				
Total Trihalomethanes	0.0653	mg/L	0.0005	1			09/21/22 21:	39 GLB	AL			0.08
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Acid	0.0051	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:	43 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:	43 FAH				
*Dichloroacetic Acid	0.0423	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:	43 FAH				
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:	43 FAH				
*Monochloroacetic Acid	0.0018	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:	43 FAH				
*Trichloroacetic Acid	0.0379	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:	43 FAH				
Total Haloacetic Acids	0.0819	mg/L	0.0010	1	09/26/22 15	5:56 FAH	09/27/22 08:	43 FAH	М			0.06
Field Chlorine Residua	1.85	mg/L					09/20/22 11:	52 FLD				



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	<mark>75.6</mark>
04/19/2022	54.0	<mark>62.3</mark>
05/02/2022	38.4	35.1
06/15/2022	<mark>79.1</mark>	<mark>75.2</mark>
7/27/2022	58.8	<mark>78.0</mark>
8/1/2022	<mark>90.7</mark>	<mark>109.1</mark>
9/20/2022	65.3	<mark>81.9</mark>
10/18/2022	59.5	<mark>65.2</mark>

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

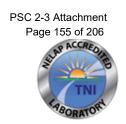
Manager, Water Quality & Environmental Compliance

Kentucky American Water

Robert D. Money

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





Workorder ID: Paris MM M1 DBP 3 Workorder #: 605033

Analytical Results

PROCESS ONLY

Sample #: 60503301 **Date Collected:** 10/18/22 10:55 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 10/19/22 11:21
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported t	o the State	^ = Provisionally accredited		All Times in	All Times in Eastern Time			МС		
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			10/19/22 22:4	9 GLB				
THM OEL	ND	mg/L	0.0005	1			10/19/22 22:4	9 GLB				
Bromodichloromethane	0.0102	mg/L	0.0005	1			10/19/22 22:4	9 GLB				
Bromoform	ND	mg/L	0.0005	1			10/19/22 22:4	9 GLB				
Chloroform	0.0484	mg/L	0.0005	1			10/19/22 22:4	9 GLB				
Dibromochloromethane	0.0009	mg/L	0.0005	1			10/19/22 22:4	9 GLB				
Total Trihalomethanes	0.0595	mg/L	0.0005	1			10/19/22 22:4	9 GLB				0.08
EPA 552.3 - HALOA	CETIC ACIDS ((HAAs)										
Bromochloroacetic Acid	0.0043	mg/L	0.0010	1	10/21/22 15	:06 FAH	10/22/22 05:4	3 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	10/21/22 15	:06 FAH	10/22/22 05:4	3 FAH				
*Dichloroacetic Acid	0.0293	mg/L	0.0010	1	10/21/22 15	:06 FAH	10/22/22 05:4	3 FAH				
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	10/21/22 15	:06 FAH	10/22/22 05:4	3 FAH				
*Monochloroacetic Acid	0.0029	mg/L	0.0010	1	10/21/22 15	:06 FAH	10/22/22 05:4	3 FAH				
*Trichloroacetic Acid	0.0330	mg/L	0.0010	1	10/21/22 15	:06 FAH	10/22/22 05:4	3 FAH				
Total Haloacetic Acids	0.0652	mg/L	0.0010	1	10/21/22 15	:06 FAH	10/22/22 05:4	3 FAH	М			0.06
Field Chlorine Residual	2.17	mg/L					10/18/22 10:5	5 FLD				



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	<mark>75.6</mark>
04/19/2022	54.0	<mark>62.3</mark>
05/02/2022	38.4	35.1
06/15/2022	<mark>79.1</mark>	<mark>75.2</mark>
7/27/2022	58.8	<mark>78.0</mark>
8/1/2022	<mark>90.7</mark>	109.1
9/20/2022	65.3	<mark>81.9</mark>
10/18/2022	59.5	<mark>65.2</mark>
11/07/2022	73.1	<mark>67.6</mark>

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

Robert D. Money

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





Workorder ID: Paris MM M2 DBP 3 Workorder #: 607795

Analytical Results

PROCESS ONLY

Sample #: 60779501 **Date Collected**: 11/07/22 11:19 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 11/08/22 12:22
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported	to the State	^ = Provisionally accredited		All Times in	n Easter	n Time		L		
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			11/08/22 21:	51 GLB				
THM OEL	ND	mg/L	0.0005	1			11/08/22 21:	51 GLB				
Bromodichloromethane	0.0118	mg/L	0.0005	1			11/08/22 21:	51 GLB				
Bromoform	ND	mg/L	0.0005	1			11/08/22 21:	51 GLB				
Chloroform	0.0604	mg/L	0.0005	1			11/08/22 21:	51 GLB				
Dibromochloromethane	e 0.0010	mg/L	0.0005	1			11/08/22 21:	51 GLB				
Total Trihalomethanes	0.0731	mg/L	0.0005	1			11/08/22 21:	51 GLB	AL			80.0
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Acid	d 0.0044	mg/L	0.0010	1	11/09/22 17	':41 FAH	11/10/22 07:	10 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	11/09/22 17	':41 FAH	11/10/22 07:	10 FAH				
*Dichloroacetic Acid	0.0314	mg/L	0.0010	1	11/09/22 17	':41 FAH	11/10/22 07:	10 FAH				
*Monobromoacetic Aci	d ND	mg/L	0.0010	1	11/09/22 17	':41 FAH	11/10/22 07:	10 FAH				
*Monochloroacetic Acid	d 0.0023	mg/L	0.0010	1	11/09/22 17	':41 FAH	11/10/22 07:	10 FAH				
*Trichloroacetic Acid	0.0339	mg/L	0.0010	1	11/09/22 17	':41 FAH	11/10/22 07:	10 FAH				
Total Haloacetic Acids	0.0676	mg/L	0.0010	1	11/09/22 17	':41 FAH	11/10/22 07:	10 FAH	М			0.06
Field Chlorine Residua	1 2.04	mg/L					11/07/22 11:	19 FLD				



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	<mark>75.6</mark>
04/19/2022	54.0	<mark>62.3</mark>
05/02/2022	38.4	35.1
06/15/2022	<mark>79.1</mark>	<mark>75.2</mark>
7/27/2022	58.8	<mark>78.0</mark>
8/1/2022	<mark>90.7</mark>	109.1
9/20/2022	65.3	<mark>81.9</mark>
10/18/2022	59.5	<mark>65.2</mark>
11/07/2022	73.1	<mark>67.6</mark>
12/20/2022	41.6	<mark>67.0</mark>

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

Robert D. Money

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

Lobut D. Money

Enclosure: Master Meter lab results January, February & March 2023

cc: Gabe Tanner, DOW Compliance Assistance





Workorder ID: Paris MM M3 DBP 5 Workorder #: 622529

Analytical Results

PROCESS ONLY

Sample #: 62252901 **Date Collected:** 03/16/23 11:18 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 03/17/23 11:46
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Inderlined = Reported to the State		^ = P	rovisionally	accredited	All Times in Eastern Time			MCL		
Parameter	Result	•	RL		Prepared	By	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL			, , _		Порагоа	_,	, many zou	_,	Quu.	000	•	
THM LRAA	ND	mg/L	0.0005	1			03/17/23 20:	16 GLB				
THM OEL	ND	mg/L	0.0005	1			03/17/23 20:	16 GLB				
*Bromodichloromethan	e 0.0054	mg/L	0.0005	1			03/17/23 20:	16 GLB				
*Bromoform	ND	mg/L	0.0005	1			03/17/23 20:	16 GLB				
*Chloroform	0.0430	mg/L	0.0005	1			03/17/23 20:	16 GLB				
*Dibromochloromethan	e ND	mg/L	0.0005	1			03/17/23 20:	16 GLB				
*Total Trihalomethanes	0.0485	mg/L	0.0005	1			03/17/23 20:	16 GLB				0.08
EPA 552.3 - HALOA	CETIC ACIDS ((HAAs)										
Bromochloroacetic Acid	d 0.0024	mg/L	0.0010	1	03/23/23 17	':05 FAH	03/24/23 11:	17 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	03/23/23 17	':05 FAH	03/24/23 11:	17 FAH				
*Dichloroacetic Acid	0.0225	mg/L	0.0010	1	03/23/23 17	':05 FAH	03/24/23 11:	17 FAH				
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	03/23/23 17	':05 FAH	03/24/23 11:	17 FAH				
*Monochloroacetic Acid	0.0016	mg/L	0.0010	1	03/23/23 17	':05 FAH	03/24/23 11:	17 FAH				
*Trichloroacetic Acid	0.0294	mg/L	0.0010	1	03/23/23 17	':05 FAH	03/24/23 11:	17 FAH				
Total Haloacetic Acids	0.0535	mg/L	0.0010	1	03/23/23 17	':05 FAH	03/24/23 11:	17 FAH	AL			0.06
Field Chlorine Residua	2.23	mg/L					03/16/23 11:	18 FLD				





Workorder ID: Paris MM M2 DBP 4 Workorder #: 618778

Analytical Results

PROCESS ONLY

Sample #: 61877801 **Date Collected:** 02/06/23 10:50 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 02/07/23 14:30
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	nderlined = Reported to the State			rovisionally	All Times in Eastern Time			MCL			
Parameter	Result	•	RL		Prepared	Ву	Analyzed	By	Qual	Sec	1	- Prim
EPA 524.2 - TRIHAL	OMETHANES ((THMs)				<u> </u>		,				
THM LRAA	ND	mg/L	0.0005	1			02/07/23 16:	26 GLB				
THM OEL	ND	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Bromodichloromethan	e 0.0028	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Bromoform	ND	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Chloroform	0.0113	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Dibromochloromethan	e ND	mg/L	0.0005	1			02/07/23 16:	26 GLB				
*Total Trihalomethanes	0.0142	mg/L	0.0005	1			02/07/23 16:	26 GLB				80.0
EPA 552.3 - HALOA	CETIC ACIDS ((HAAs)										
Bromochloroacetic Acid	0.0016	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Dichloroacetic Acid	0.0084	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Monochloroacetic Acid	d ND	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
*Trichloroacetic Acid	0.0063	mg/L	0.0010	1	02/08/23 16	3:10 FAH	02/09/23 10:	13 LMW				
Total Haloacetic Acids	0.0146	mg/L	0.0010	1	02/08/23 16	8:10 FAH	02/09/23 10:	13 LMW				0.06
Field Chlorine Residua	2.31	mg/L					02/06/23 10:	50 FLD				





Workorder ID: Paris MM M1 DBP 4 Workorder #: 614907

Analytical Results

PROCESS ONLY

Sample #: 61490701 **Date Collected**: 01/24/23 12:28 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 01/25/23 11:47
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined = F	Reported t	to the State	^ = P	rovisionally	accredited	All Times in Eastern Time			MCL		
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES (THMs)										
THM LRAA	ND	mg/L	0.0005	1			01/26/23 11:	56 GLB				
THM OEL	ND	mg/L	0.0005	1			01/26/23 11:	56 GLB				
*Bromodichloromethan	e 0.0028	mg/L	0.0005	1			01/26/23 11:	56 GLB				
*Bromoform	ND	mg/L	0.0005	1			01/26/23 11:	56 GLB				
*Chloroform	0.0156	mg/L	0.0005	1			01/26/23 11:	56 GLB				
*Dibromochloromethar	ne ND	mg/L	0.0005	1			01/26/23 11:	56 GLB				
*Total Trihalomethanes	0.0184	mg/L	0.0005	1			01/26/23 11:	56 GLB				0.08
EPA 552.3 - HALOA	CETIC ACIDS (I	HAAs)										
Bromochloroacetic Aci	d 0.0014	mg/L	0.0010	1	01/27/23 16	3:52 FAH	01/28/23 03:	11 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	01/27/23 16	3:52 FAH	01/28/23 03:	11 FAH				
*Dichloroacetic Acid	0.0123	mg/L	0.0010	1	01/27/23 16	3:52 FAH	01/28/23 03:	11 FAH				
*Monobromoacetic Aci	d ND	mg/L	0.0010	1	01/27/23 16	3:52 FAH	01/28/23 03:	11 FAH				
*Monochloroacetic Acid	d ND	mg/L	0.0010	1	01/27/23 16	3:52 FAH	01/28/23 03:	11 FAH				
*Trichloroacetic Acid	0.0111	mg/L	0.0010	1	01/27/23 16	3:52 FAH	01/28/23 03:	11 FAH				
Total Haloacetic Acids	0.0234	mg/L	0.0010	1	01/27/23 16	8:52 FAH	01/28/23 03:	11 FAH				0.06
Field Chlorine Residua	1.67	mg/L					01/24/23 12:	28 FLD				



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	<mark>70.9</mark>

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

To but D. Money

Enclosure: Master Meter lab results April, May & June 2023

cc: Gabe Tanner, DOW Compliance Assistance





Workorder ID: Paris MM M1 DBP 5 Workorder #: 627154

Analytical Results

PROCESS ONLY

Sample #: 62715401 **Date Collected**: 04/13/23 10:43 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 04/14/23 11:59
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported t	o the State	te ^ = Provisionally accredited		All Times in	n Eastern	Time	MCL		L	
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES ((THMs)										
THM LRAA	ND	mg/L	0.0005	1			04/14/23 20:	55 GLB				
THM OEL	ND	mg/L	0.0005	1			04/14/23 20:	55 GLB				
*Bromodichlorometha	ne 0.0040	mg/L	0.0005	1			04/14/23 20:	55 GLB				
*Bromoform	ND	mg/L	0.0005	1			04/14/23 20:	55 GLB				
*Chloroform	0.0368	mg/L	0.0005	1			04/14/23 20:	55 GLB				
*Dibromochlorometha	ne ND	mg/L	0.0005	1			04/14/23 20:	55 GLB				
*Total Trihalomethane	s 0.0409	mg/L	0.0005	1			04/14/23 20:	55 GLB				0.08
EPA 552.3 - HALOA	CETIC ACIDS (HAAs)										
Bromochloroacetic Ac	id 0.0022	mg/L	0.0010	1	04/19/23 16	:45 LMW	04/20/23 06:4	46 LMW				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	04/19/23 16	:45 LMW	04/20/23 06:4	46 LMW				
*Dichloroacetic Acid	0.0219	mg/L	0.0010	1	04/19/23 16	:45 LMW	04/20/23 06:4	46 LMW				
*Monobromoacetic Ac	id ND	mg/L	0.0010	1	04/19/23 16	:45 LMW	04/20/23 06:4	46 LMW				
*Monochloroacetic Ac	d 0.0015	mg/L	0.0010	1	04/19/23 16	:45 LMW	04/20/23 06:4	46 LMW				
*Trichloroacetic Acid	0.0201	mg/L	0.0010	1	04/19/23 16	:45 LMW	04/20/23 06:4	46 LMW				
Total Haloacetic Acids	0.0435	mg/L	0.0010	1	04/19/23 16	:45 LMW	04/20/23 06:4	46 LMW				0.06
Field Chlorine Residua	al 2.39	mg/L					04/13/23 10:4	43 FLD				
		-										





Workorder ID: Paris MM M2 DBP 5 Workorder #: 631029

Analytical Results

PROCESS ONLY

Sample #: 63102901 **Date Collected**: 05/01/23 09:32 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 05/02/23 11:35
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Reported t	o the State	^ = P	rovisionally	accredited	All Times in	Easteri	n Time		МС	L
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES	(THMs)										
THM LRAA	ND	mg/L	0.0005	1			05/02/23 15:1	9 GLB				
THM OEL	ND	mg/L	0.0005	1			05/02/23 15:1	9 GLB				
*Bromodichloromethan	e 0.0054	mg/L	0.0005	1			05/02/23 15:1	9 GLB				
*Bromoform	ND	mg/L	0.0005	1			05/02/23 15:1	9 GLB				
*Chloroform	0.0376	mg/L	0.0005	1			05/02/23 15:1	9 GLB				
*Dibromochloromethan	e ND	mg/L	0.0005	1			05/02/23 15:1	9 GLB				
*Total Trihalomethanes	0.0431	mg/L	0.0005	1			05/02/23 15:1	9 GLB				0.08
EPA 552.3 - HALOA	CETIC ACIDS	(HAAs)										
Bromochloroacetic Acid	0.0024	mg/L	0.0010	1	05/04/23 17	7:00 FAH	05/05/23 01:2	8 FAH				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	05/04/23 17	7:00 FAH	05/05/23 01:2	8 FAH				
*Dichloroacetic Acid	0.0263	mg/L	0.0010	1	05/04/23 17	7:00 FAH	05/05/23 01:2	8 FAH				
*Monobromoacetic Acid	d ND	mg/L	0.0010	1	05/04/23 17	7:00 FAH	05/05/23 01:2	8 FAH				
*Monochloroacetic Acid	0.0030	mg/L	0.0010	1	05/04/23 17	7:00 FAH	05/05/23 01:2	8 FAH				
*Trichloroacetic Acid	0.0170	mg/L	0.0010	1	05/04/23 17	7:00 FAH	05/05/23 01:2	8 FAH				
Total Haloacetic Acids	0.0464	mg/L	0.0010	1	05/04/23 17	7:00 FAH	05/05/23 01:2	8 FAH				0.06
Field Chlorine Residual	1.45	mg/L					05/01/23 09:3	2 FLD				





Workorder ID: Paris MM M3 DBP 6 Workorder #: 635948

Analytical Results

PROCESS ONLY

Sample #: 63594801 **Date Collected**: 06/21/23 12:02 **Facility ID**: 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 06/22/23 13:07
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	Underlined =	Renorted t	o the State	^ = D	rovisionally	accredited	All Times in	n Faster	n Time		МС	ı
		•			•						,	
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
EPA 524.2 - TRIHAL	OMETHANES (THMs)										
THM LRAA	ND	mg/L	0.0005	1			06/22/23 19:	34 GLB				
THM OEL	ND	mg/L	0.0005	1			06/22/23 19:3	34 GLB				
*Bromodichloromethan	e 0.0078	mg/L	0.0005	1			06/22/23 19:	34 GLB				
*Bromoform	ND	mg/L	0.0005	1			06/22/23 19:	34 GLB				
*Chloroform	0.0593	mg/L	0.0005	1			06/22/23 19:	34 GLB				
*Dibromochloromethan	e 0.0005	mg/L	0.0005	1			06/22/23 19:	34 GLB				
*Total Trihalomethanes	0.0677	mg/L	0.0005	1			06/22/23 19:	34 GLB	AL			80.0
EPA 552.3 - HALOA	CETIC ACIDS (HAAs)										
Bromochloroacetic Aci	d 0.0032	mg/L	0.0010	1	06/23/23 17	7:30 DEK	06/26/23 23:	56 DEK				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	06/23/23 17	7:30 DEK	06/26/23 23:	56 DEK				
*Dichloroacetic Acid	0.0329	mg/L	0.0010	1	06/23/23 17	7:30 DEK	06/26/23 23:	56 DEK				
*Monobromoacetic Aci	d ND	mg/L	0.0010	1	06/23/23 17	7:30 DEK	06/26/23 23:	56 DEK				
*Monochloroacetic Acid	0.0031	mg/L	0.0010	1	06/23/23 17	7:30 DEK	06/26/23 23:	56 DEK				
*Trichloroacetic Acid	0.0350	mg/L	0.0010	1	06/23/23 17	7:30 DEK	06/26/23 23:	56 DEK				
*Total Haloacetic Acids	0.0709	mg/L	0.0010	1	06/23/23 17	7:30 DEK	06/26/23 23:	56 DEK	М			0.06
Field Chlorine Residua	1.26	mg/L					06/21/23 12:	02 FLD				



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,

Kentucky American Water

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



Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

Workorder: 511035

Workorder ID:

Paris MM Q DBP 24

PROCESS ONLY

Lab ID: 51103501 Date Received: 8/4/2020 12:20 ET

Drinking Water Matrix:

Sample ID: Paris MM Date Collected: 8/3/2020 09:20 ET

* = TNI accredited	Underlined = Rep	orted to the	State	ET = Eastern Time (All	Times nor	malized to Easte	rn Time)		MCL
Parameters	Results	Units	RDL	DF Prepared	Ву	Analyzed	Ву	Qual	Sec / Prim

Parameters	Results	Units	RDL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec /	Prim
Field Measurements			Analytical Me	thod: F	ield Measurements						
Field Chlorine Residual	1.22	mg/L					8/3/2020 09:20 ET	FLD			
HALOACETIC ACIDS (HA	As)										
EPA 552.3			Preparation I	Method:	EPA 552.3 Prep						
			Analytical Me	thod: E	PA 552.3						
Bromochloroacetic Acid	0.0054	mg/L	0.0010	1	8/4/2020 15:00 ET	AB2	8/5/2020 08:12 ET	AB2			
*Dibromoacetic Acid	ND	mg/L	0.0010	1	8/4/2020 15:00 ET	AB2	8/5/2020 08:12 ET	AB2			
*Dichloroacetic Acid	0.0360	mg/L	0.0010	1	8/4/2020 15:00 ET	AB2	8/5/2020 08:12 ET	AB2			
*Monobromoacetic Acid	ND	mg/L	0.0010	1	8/4/2020 15:00 ET	AB2	8/5/2020 08:12 ET	AB2			
*Monochloroacetic Acid	ND	mg/L	0.0010	1	8/4/2020 15:00 ET	AB2	8/5/2020 08:12 ET	AB2			
Total Haloacetic Acids	0.0834	mg/L	0.0010	1	8/4/2020 15:00 ET	AB2	8/5/2020 08:12 ET	AB2	M		0.06
*Trichloroacetic Acid	0.0474	mg/L	0.0010	1	8/4/2020 15:00 ET	AB2	8/5/2020 08:12 ET	AB2			
TRIHALOMETHANES (THI	Ms)										
EPA 524.2			Analytical Me	thod: E	PA 524.2						
*Bromodichloromethane	0.0134	mg/L	0.0005	1			8/4/2020 15:54 ET	NH			
*Bromoform	ND	mg/L	0.0005	1			8/4/2020 15:54 ET	NH			
*Chloroform	0.0687	mg/L	0.0005	1			8/4/2020 15:54 ET	NH			
*Dibromochloromethane	0.0014	mg/L	0.0005	1			8/4/2020 15:54 ET	NH			
*Total Trihalomethanes	0.0835	mg/L	0.0005	1			8/4/2020 15:54 ET	NH	М		0.08



Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

Workorder: 519249

Field Measurements

Workorder ID:

Paris MM Sept DBP 5

PROCESS ONLY

Lab ID: 51924901

Date Received: 9/23/2020 12:27 ET

Matrix: Drinking Water

Sample ID: Paris MM

Date Collected: 9/22/2020 09:36 ET

* = TNI accredited Underlined = Reported to the State ET = Eastern Time (All Times normalized to Eastern Time)

MCL

Parameters Results Units RDL DF Prepared By Analyzed By Qual Sec / Prim

Analytical Method: Field Measurements

Field Chlorine Residual	1.64	mg/L				9/22/2020 09:36 ET	FLD		
HALOACETIC ACIDS (HAA	s)								
EPA 552.3			Preparation M	ethod: EPA 552.3 F	Prep				
			Analytical Met	hod: EPA 552.3					
Bromochloroacetic Acid	0.0032	mg/L	0.0010	1 9/29/2020 16	6:10 ET NI	FS 9/30/2020 12:54 ET	NFS		
*Dibromoacetic Acid	ND	mg/L	0.0010	1 9/29/2020 16	6:10 ET NI	FS 9/30/2020 12:54 ET	NFS		
*Dichloroacetic Acid	0.0564	mg/L	0.0020	2 9/29/2020 16	6:10 ET N	FS 10/1/2020 02:28 ET	NFS		
*Monobromoacetic Acid	ND	mg/L	0.0010	1 9/29/2020 16	6:10 ET N	FS 9/30/2020 12:54 ET	NFS		
*Monochloroacetic Acid	ND	mg/L	0.0010	1 9/29/2020 16	6:10 ET N	FS 9/30/2020 12:54 ET	NFS		
Total Haloacetic Acids	0.1224	mg/L	0.0020	2 9/29/2020 16	6:10 ET N	FS 10/1/2020 02:28 ET	NFS	M	0.06
*Trichloroacetic Acid	0.0660	mg/L	0.0020	2 9/29/2020 16	6:10 ET N	FS 10/1/2020 02:28 ET	NFS		
TRIHALOMETHANES (THM	ls)								
EPA 524.2			Analytical Met	hod: EPA 524.2					
*Bromodichloromethane	0.0063	mg/L	0.0005	1		9/24/2020 13:24 ET	NAM 1		
*Bromoform	ND	mg/L	0.0005	1		9/24/2020 13:24 ET	NAM 1		
*Chloroform	0.0744	mg/L	0.0005	1		9/24/2020 13:24 ET	NAM 1		
*Dibromochloromethane	ND	mg/L	0.0005	1		9/24/2020 13:24 ET	NAM 1		
*Total Trihalomethanes	0.0807	mg/L	0.0005	1		9/24/2020 13:24 ET	NAM	М	80.0



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

Robert D. Money

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



Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

Workorder: 530559 Workorder ID: Paris MM Jan DBP 5

PROCESS ONLY

Lab ID: 53055901 Date Received: 1/21/2021 11:44 ET Matrix: Drinking Water

Sample ID: Paris MM Date Collected: 1/20/2021 10:06 ET

* = TNI accredited Underlined = Reported to the State ET = Eastern Time (All Times normalized to Eastern Time)

MCL

Parameters Results Units RDL DF Prepared By Analyzed By Qual Sec / Prim

Field Measurements			Analytical Met	hod: Field l	Measurements				
Field Chlorine Residual	2.09	mg/L					1/20/2021 10:06 ET	FLD	
HALOACETIC ACIDS (HAA	As)								
EPA 552.3			Preparation M	ethod: EPA	552.3 Prep				
			Analytical Met	hod: EPA 5	52.3				
Bromochloroacetic Acid	0.0016	mg/L	0.0010	1 1/26	/2021 15:00 ET	NFS	1/27/2021 02:05 ET	NFS	
*Dibromoacetic Acid	ND	mg/L	0.0010	1 1/26	/2021 15:00 ET	NFS	1/27/2021 02:05 ET	NFS	
*Dichloroacetic Acid	0.0080	mg/L	0.0010	1 1/26	/2021 15:00 ET	NFS	1/27/2021 02:05 ET	NFS	
*Monobromoacetic Acid	ND	mg/L	0.0010	1 1/26	/2021 15:00 ET	NFS	1/27/2021 02:05 ET	NFS	
*Monochloroacetic Acid	ND	mg/L	0.0010	1 1/26	/2021 15:00 ET	NFS	1/27/2021 02:05 ET	NFS	
Total Haloacetic Acids	0.0139	mg/L	0.0010	1 1/26	/2021 15:00 ET	NFS	1/27/2021 02:05 ET	NFS	0.06
*Trichloroacetic Acid	0.0060	mg/L	0.0010	1 1/26	/2021 15:00 ET	NFS	1/27/2021 02:05 ET	NFS	
TRIHALOMETHANES (THI	Ms)								
EPA 524.2			Analytical Met	hod: EPA 5	24.2				
*Bromodichloromethane	0.0031	mg/L	0.0005	1			1/21/2021 21:46 ET	JMB1	
*Bromoform	ND	mg/L	0.0005	1			1/21/2021 21:46 ET	JMB1	
*Chloroform	0.0115	mg/L	0.0005	1			1/21/2021 21:46 ET	JMB1	
*Dibromochloromethane	ND	mg/L	0.0005	1			1/21/2021 21:46 ET	JMB1	
*Total Trihalomethanes	0.0147	mg/L	0.0005	1			1/21/2021 21:46 ET	JMB1	0.08



Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

Workorder: 534796 Workorder ID: Paris MM Q DBP 26

PROCESS ONLY

Lab ID: 53479601 Date Received: 2/2/2021 09:44 ET Matrix: Drinking Water

Sample ID: Paris MM Date Collected: 2/1/2021 09:34 ET

* = TNI accredited Underlined = Reported to the State ET = Eastern Time (All Times normalized to Eastern Time)

MCL

Parameters Results Units RDL DF Prepared By Analyzed By Qual Sec / Prim

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Field Measurements			Analytical Me	ethod: F	Field Measurements						
Field Chlorine Residual	1.64	mg/L					2/1/2021 09:34 ET	FLD			
HALOACETIC ACIDS (HA	As)										
EPA 552.3			Preparation I	Method	: EPA 552.3 Prep						
			Analytical Me	ethod: E	PA 552.3						
Bromochloroacetic Acid	0.0012	mg/L	0.0010	1	2/2/2021 16:15 ET	NFS	2/3/2021 17:54 ET	NFS			
*Dibromoacetic Acid	ND	mg/L	0.0010	1	2/2/2021 16:15 ET	NFS	2/3/2021 17:54 ET	NFS			
*Dichloroacetic Acid	0.0138	mg/L	0.0010	1	2/2/2021 16:15 ET	NFS	2/3/2021 17:54 ET	NFS			
*Monobromoacetic Acid	ND	mg/L	0.0010	1	2/2/2021 16:15 ET	NFS	2/3/2021 17:54 ET	NFS			
*Monochloroacetic Acid	ND	mg/L	0.0010	1	2/2/2021 16:15 ET	NFS	2/3/2021 17:54 ET	NFS			
Total Haloacetic Acids	0.0280	mg/L	0.0010	1	2/2/2021 16:15 ET	NFS	2/3/2021 17:54 ET	NFS			0.06
*Trichloroacetic Acid	0.0141	mg/L	0.0010	1	2/2/2021 16:15 ET	NFS	2/3/2021 17:54 ET	NFS			
TRIHALOMETHANES (TH	Ms)										
EPA 524.2			Analytical Me	ethod: E	PA 524.2						
*Bromodichloromethane	0.0025	mg/L	0.0005	1			2/2/2021 13:47 ET	JMB1			
*Bromoform	ND	mg/L	0.0005	1			2/2/2021 13:47 ET	JMB1			
*Chloroform	0.0184	mg/L	0.0005	1			2/2/2021 13:47 ET	JMB1			
*Dibromochloromethane	ND	mg/L	0.0005	1			2/2/2021 13:47 ET	JMB1			
*Total Trihalomethanes	0.0209	mg/L	0.0005	1			2/2/2021 13:47 ET	JMB1			0.08



Phone: (618) 235-3600 Fax: (618) 235-6349



Drinking Water

ANALYTICAL RESULTS

Workorder: 538520 Workorder ID: Paris MM March DBP 6

PROCESS ONLY

Lab ID: 53852001 Date Received: 3/24/2021 12:01 ET Matrix:

Sample ID: Paris MM Date Collected: 3/23/2021 08:14 ET

* = TNI accredited Underlined = Reported to the State ET = Eastern Time (All Times normalized to Eastern Time) MCL

Parameters Results Units RDL DF Prepared By Analyzed By Qual Sec / Prim

Field Measurements

Field Chlorine Residual

2.02 mg/L

HALOACETIC ACIDS (HAAs)

Analytical Method: Field Measurements

3/23/2021 08:14 ET FLD

EPA 552.3			Preparation M	ethc	d: EPA 552	3 Prep					
			Analytical Me	nod:	EPA 552.3						
Bromochloroacetic Acid	0.0018	mg/L	0.0010	•	3/25/202	15:20 ET	NFS	3/27/2021 05:44 ET	AB2		
*Dibromoacetic Acid	ND	mg/L	0.0010	•	3/25/2021	15:20 ET	NFS	3/27/2021 05:44 ET	AB2		
*Dichloroacetic Acid	0.0424	mg/L	0.0010		3/25/2021	15:20 ET	NFS	3/27/2021 05:44 ET	AB2		
*Monobromoacetic Acid	ND	mg/L	0.0010	•	3/25/2021	15:20 ET	NFS	3/27/2021 05:44 ET	AB2		
*Monochloroacetic Acid	0.0025	mg/L	0.0010	•	3/25/202	15:20 ET	NFS	3/27/2021 05:44 ET	AB2		
Total Haloacetic Acids	0.1073	mg/L	0.0010	•	3/25/202	15:20 ET	NFS	3/27/2021 05:44 ET	AB2	M	0.06
*Trichloroacetic Acid	0.0624	mg/L	0.0010	•	3/25/2021	15:20 ET	NFS	3/27/2021 05:44 ET	AB2		

TRIHALOMETHANES (THMs)

EPA 524.2			Analytical Me	thod: EPA 524.2	
*Bromodichloromethane	0.0033	mg/L	0.0005	1	3/25/2021 15:37 ET JMB1
*Bromoform	ND	mg/L	0.0005	1	3/25/2021 15:37 ET JMB1
*Chloroform	0.0594	mg/L	0.0005	1	3/25/2021 15:37 ET JMB1
*Dibromochloromethane	ND	mg/L	0.0005	1	3/25/2021 15:37 ET JMB1
*Total Trihalomethanes	0.0627	mg/L	0.0005	1	3/25/2021 15:37 ET JMB1 0.08



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
02/01/2021	21	28
03/23/2021	63	107
04/13/2021	31	36
05/03/2021	38	41
06/14/2021	<mark>107</mark>	<mark>150</mark>

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

Robert D. Money

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



Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

Workorder: 550180

Workorder ID:

Paris MM Jun DBP 6

PROCESS ONLY

Lab ID: 55018001

Date Received: 6/15/2021 11:38 ET

Matrix: Drinking Water

6/15/2021 20:58 ET

6/15/2021 20:58 ET JMB1 M

JMB1

Sample ID: Paris MM

Date Collected: 6/14/2021 09:01 ET

* = TNI accredited Underlined = Reported to the State ET = Eastern Time MCL

Parameters Results Units RDL DF Prepared By Analyzed By Qual Sec / Prim

Field Measurements Analytical Method: Field Measurements Field Chlorine Residual 1.69 6/14/2021 09:01 ET FLD mg/L **HALOACETIC ACIDS (HAAs)** EPA 552.3 Preparation Method: EPA 552.3 Prep Analytical Method: EPA 552.3 Bromochloroacetic Acid 0.0016 mg/L 0.0010 1 6/16/2021 15:30 ET NFS 6/17/2021 05:43 ET NFS *Dibromoacetic Acid ND mg/L 0.0010 1 6/16/2021 15:30 ET NFS 6/17/2021 05:43 ET NFS *Dichloroacetic Acid 0.0671 0.0010 1 6/16/2021 15:30 ET NFS 6/17/2021 05:43 ET NFS mg/L *Monobromoacetic Acid 0.0010 1 6/16/2021 15:30 ET NFS 6/17/2021 05:43 ET ND mg/L *Monochloroacetic Acid 0.0010 0.0032 1 6/16/2021 15:30 ET NFS 6/17/2021 05:43 ET NFS mg/L Total Haloacetic Acids 0.0010 0.06 0.1498 mg/L 1 6/16/2021 15:30 ET NFS 6/17/2021 05:43 ET NFS M *Trichloroacetic Acid 0.0795 mg/L 0.0010 1 6/16/2021 15:30 ET NFS 6/17/2021 05:43 ET NFS E, R **TRIHALOMETHANES (THMs)** Analytical Method: EPA 524.2 EPA 524.2 *Bromodichloromethane 0.0052 mg/L 0.0005 1 6/15/2021 20:58 ET JMB1 *Bromoform 0.0005 ND mg/L 1 6/15/2021 20:58 ET JMB1 *Chloroform 0.1016 0.0005 1 6/15/2021 20:58 ET JMB1 mg/L

1

1

*Dibromochloromethane

*Total Trihalomethanes

ND

0.1068

mg/L

mg/L

0.0005

0.0005

0.08



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
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	<mark>73.1</mark>

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

Robert D. Money





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
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	<mark>117.6</mark>	<mark>166</mark>

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

Robert D. Money

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



Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

Workorder: 557376

Sample ID:

Workorder ID:

Paris MM Q DBP 29

PROCESS ONLY

Lab ID: 55737601

Paris MM

Date Received: 8/3/2021 11:04 ET

Drinking Water Matrix:

Date Collected: 8/2/2021 09:34 ET

* = TNI accredited Un	derlined = Rep	orted to the	ne State			ET	= Eastern Time			MC	L
Parameters	Results	Units	RDL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec /	Prim
Field Measurements			Analytical Me	thod: F	ield Measurements						
Field Chlorine Residual	1.06	mg/L					8/2/2021 09:34 ET	FLD			
HALOACETIC ACIDS (HA	AAs)										
EPA 552.3			Preparation N	/lethod:	EPA 552.3 Prep						
			Analytical Me	thod: E	PA 552.3						
Bromochloroacetic Acid	0.0021	mg/L	0.0010	1	8/3/2021 17:40 ET	NFS	8/4/2021 09:19 ET	ВС			
*Dibromoacetic Acid	ND	mg/L	0.0010	1	8/3/2021 17:40 ET	NFS	8/4/2021 09:19 ET	BC			
*Dichloroacetic Acid	0.0777	mg/L	0.0010	1	8/3/2021 17:40 ET	NFS	8/4/2021 09:19 ET	BC	E, R		
*Monobromoacetic Acid	ND	mg/L	0.0010	1	8/3/2021 17:40 ET	NFS	8/4/2021 09:19 ET	BC			
*Monochloroacetic Acid	ND	mg/L	0.0010	1	8/3/2021 17:40 ET	NFS	8/4/2021 09:19 ET	BC			
Total Haloacetic Acids	0.1660	mg/L	0.0010	1	8/3/2021 17:40 ET	NFS	8/4/2021 09:19 ET	BC	M		0.06
*Trichloroacetic Acid	0.0883	mg/L	0.0010	1	8/3/2021 17:40 ET	NFS	8/4/2021 09:19 ET	BC	E, R		
TRIHALOMETHANES (TI	HMs)										
EPA 524.2			Analytical Me	thod: E	PA 524.2						
*Bromodichloromethane	0.0039	mg/L	0.0005	1			8/3/2021 18:13 ET	JMB	1		
*Bromoform	ND	mg/L	0.0005	1			8/3/2021 18:13 ET	JMB	1		
*Chloroform	0.1137	mg/L	0.0005	1			8/3/2021 18:13 ET	JMB	1		
*Dibromochloromethane	ND	mg/L	0.0005	1			8/3/2021 18:13 ET	JMB	1		
*Total Trihalomethanes	0.1176	mg/L	0.0005	1			8/3/2021 18:13 ET	JMB	1 M		0.08



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
02/01/2021	21	28
03/23/2021	63	<mark>107</mark>
04/13/2021	31	36
05/03/2021	38	41
06/14/2021	<mark>107</mark>	<mark>150</mark>
07/23/2021	<mark>73.9</mark>	<mark>73.1</mark>
08/02/2021	<mark>117.6</mark>	<mark>166</mark>
09/23/2021	<mark>74.5</mark>	<mark>65.8</mark>
10/21/2021	55.1	44.5
11/01/2021	62.4	<mark>76.6</mark>

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

Robert D. Money

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





Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

Workorder: 568876

Workorder ID:

Paris MM Q DBP 30

PROCESS ONLY

Lab ID: 56887601

Date Received: 11/2/2021 13:12 ET

Matrix: Drinking Water

Sample ID: Paris MM Date Collected: 11/1/2021 09:28 ET

* = TNI accredited Underlined = Reported to the State ET = Eastern Time MCL

Parameters Results Units RDL DF Prepared By Analyzed By Qual Sec / Prim

Field Measurements			Analytical Me	hod: Field Measurements					
Field Chlorine Residual	2.05	mg/L				11/1/2021 09:28 ET	FLD		
HALOACETIC ACIDS (HAA	As)								
EPA 552.3			Preparation M	lethod: EPA 552.3 Prep					
			Analytical Me	hod: EPA 552.3					
Bromochloroacetic Acid	0.0022	mg/L	0.0010	1 11/2/2021 16:30 E	T NFS	11/3/2021 04:15 ET	ВС		
*Dibromoacetic Acid	ND	mg/L	0.0010	1 11/2/2021 16:30 E	T NFS	11/3/2021 04:15 ET	BC		
*Dichloroacetic Acid	0.0359	mg/L	0.0010	1 11/2/2021 16:30 E	T NFS	11/3/2021 04:15 ET	BC		
*Monobromoacetic Acid	ND	mg/L	0.0010	1 11/2/2021 16:30 E	T NFS	11/3/2021 04:15 ET	BC		
*Monochloroacetic Acid	0.0025	mg/L	0.0010	1 11/2/2021 16:30 E	T NFS	11/3/2021 04:15 ET	BC		
Total Haloacetic Acids	0.0766	mg/L	0.0010	1 11/2/2021 16:30 E	T NFS	11/3/2021 04:15 ET	BC	M	0.06
*Trichloroacetic Acid	0.0381	mg/L	0.0010	1 11/2/2021 16:30 E	T NFS	11/3/2021 04:15 ET	BC		
TRIHALOMETHANES (TH	VIs)								
EPA 524.2			Analytical Me	hod: EPA 524.2					
*Bromodichloromethane	0.0074	mg/L	0.0005	1		11/2/2021 12:59 ET	JMB1		
*Bromoform	ND	mg/L	0.0005	1		11/2/2021 12:59 ET	JMB1		
*Chloroform	0.0550	mg/L	0.0005	1		11/2/2021 12:59 ET	JMB1		
*Dibromochloromethane	ND	mg/L	0.0005	1		11/2/2021 12:59 ET	JMB1		
*Total Trihalomethanes	0.0624	mg/L	0.0005	1		11/2/2021 12:59 ET	JMB1		0.08



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
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	<mark>74.5</mark>	<mark>65.8</mark>

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

Robert D. Money

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



Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

Workorder: 560532

Workorder ID:

Paris MM Sept DBP

PROCESS ONLY

Lab ID: 56053201

Date Received: 9/23/2021 12:09 ET

Matrix: Drinking Water

Sample ID: Paris MM Date Collected: 9/22/2021 10:15 ET

* = TNI accredited Underlined = Reported to the State ET = Eastern Time MCL

Parameters Results Units RDL DF Prepared By Analyzed By Qual Sec / Prim

Field Measurements			Analytical Me	ethod: Field Measurements
Field Chlorine Residual	2.32	mg/L		9/22/2021 10:15 ET FLD
HALOACETIC ACIDS (HAA	is)			
EPA 552.3			Preparation M	Method: EPA 552.3 Prep
			Analytical Me	ethod: EPA 552.3
Bromochloroacetic Acid	0.0034	mg/L	0.0010	1 9/24/2021 16:00 ET NFS 9/25/2021 19:14 ET NFS
*Dibromoacetic Acid	ND	mg/L	0.0010	1 9/24/2021 16:00 ET NFS 9/25/2021 19:14 ET NFS
*Dichloroacetic Acid	0.0287	mg/L	0.0010	1 9/24/2021 16:00 ET NFS 9/25/2021 19:14 ET NFS
*Monobromoacetic Acid	ND	mg/L	0.0010	1 9/24/2021 16:00 ET NFS 9/25/2021 19:14 ET NFS
*Monochloroacetic Acid	ND	mg/L	0.0010	1 9/24/2021 16:00 ET NFS 9/25/2021 19:14 ET NFS
Total Haloacetic Acids	0.0658	mg/L	0.0010	1 9/24/2021 16:00 ET NFS 9/25/2021 19:14 ET NFS M 0.06
*Trichloroacetic Acid	0.0346	mg/L	0.0010	1 9/24/2021 16:00 ET NFS 9/25/2021 19:14 ET NFS
TRIHALOMETHANES (THM	ls)			
EPA 524.2			Analytical Me	ethod: EPA 524.2
*Bromodichloromethane	0.0087	mg/L	0.0005	1 9/23/2021 21:54 ET JMB1
*Bromoform	ND	mg/L	0.0005	1 9/23/2021 21:54 ET JMB1
*Chloroform	0.0653	mg/L	0.0005	1 9/23/2021 21:54 ET JMB1
*Dibromochloromethane	0.0006	mg/L	0.0005	1 9/23/2021 21:54 ET JMB1
*Total Trihalomethanes	0.0745	mg/L	0.0005	1 9/23/2021 21:54 ET JMB1 AL 0.08



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	<mark>107</mark>
04/13/2021	31	36
05/03/2021	38	41
06/14/2021	<mark>107</mark>	<mark>150</mark>
07/23/2021	<mark>73.9</mark>	<mark>73.1</mark>
08/02/2021	<mark>117.6</mark>	<mark>166</mark>
09/23/2021	<mark>74.5</mark>	<mark>65.8</mark>
10/21/2021	55.1	44.5
11/01/2021	62.4	<mark>76.6</mark>
12/15/2021	47.0	<mark>67.1</mark>

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

Robert D. Money

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





Workorder ID: Paris MM Dec DBP 6 Workorder #: 571314

Analytical Results

PROCESS ONLY

Sample #: 57131401 **Date Collected:** 12/15/21 10:29 **Facility ID:** 0090287DS001

 Sample ID:
 Paris MM
 Date Received:
 12/17/21 11:38
 Site ID:
 MM1

 PWS ID:
 KY0090287
 Certified Lab ID:
 90005
 Site Sample Type:
 DS

* = TNI accredited	ed Underlined = Reported to the State		^ = P	rovisionally a	All Times in Eastern Time			MCL				
Parameter	Result	Unit	RL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	1	Prim
Field Chlorine Residual	2.23	mg/L		1			12/15/21 10:	29 FLD				
EPA 552.3 - HALOA	ETIC ACIDS (I	HAAs)										
Bromochloroacetic Acid	0.0011	mg/L	0.0010	1	12/17/21 15:	30 JRW1	12/18/21 02:	36 NFS				
*Dibromoacetic Acid	ND	mg/L	0.0010	1	12/17/21 15:	30 JRW1	12/18/21 02:	36 NFS				
*Dichloroacetic Acid	0.0324	mg/L	0.0010	1	12/17/21 15:	30 JRW1	12/18/21 02:	36 NFS				
*Monobromoacetic Acid	l ND	mg/L	0.0010	1	12/17/21 15:	30 JRW1	12/18/21 02:	36 NFS				
*Monochloroacetic Acid	0.0037	mg/L	0.0010	1	12/17/21 15:	30 JRW1	12/18/21 02:	36 NFS				
Total Haloacetic Acids	0.0671	mg/L	0.0010	1	12/17/21 15:	30 JRW1	12/18/21 02:	36 NFS	М			0.06
*Trichloroacetic Acid	0.0311	mg/L	0.0010	1	12/17/21 15:	30 JRW1	12/18/21 02:	36 NFS				
EPA 524.2 - TRIHALO	OMETHANES (THMs)										
*Bromodichloromethane	e 0.0027	mg/L	0.0005	1			12/17/21 16:	03 JMB1				
*Bromoform	ND	mg/L	0.0005	1			12/17/21 16:	03 JMB1				
*Chloroform	0.0443	mg/L	0.0005	1			12/17/21 16:	03 JMB1				
*Dibromochloromethan	e ND	mg/L	0.0005	1			12/17/21 16:	03 JMB1				
*Total Trihalomethanes	0.0470	mg/L	0.0005	1			12/17/21 16:	03 JMB1				80.0



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

Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

Client: KY Kentucky American Water Profile: 1324 KAW Millersburg Workorder: 401767 Paris MM Jul DBP 3

PROCESS ONLY

Lab ID: 40176701 Date Received: 7/24/2018 09:30 Matrix: Drinking Water

Sample ID: Paris MM Date Collected: 7/23/2018 10:19

	Illied - Keboi	ted to the St	tate							M	CL
Parameters	Results	Units	RDL		F Prepared	Ву	Analyzed	Ву	Qual	Sec /	Prim
HALOACETIC ACIDS (HAAs	5)										
EPA 552.3		Pre	paration Metho	d: EPA	552.3 Prep						
		Ana	alytical Method:	EPA 5	52.3						
Bromochloroacetic Acid	0.0035	mg/L	0.0010	1	7/26/2018 15:00	BC	7/27/2018 01:28	BC			
Dibromoacetic Acid	ND	mg/L	0.0010	1	7/26/2018 15:00	BC	7/27/2018 01:28	BC			
Dichloroacetic Acid	0.0333	mg/L	0.0010	1	7/26/2018 15:00	BC	7/27/2018 01:28	BC	P		
Monobromoacetic Acid	ND	mg/L	0.0010	1	7/26/2018 15:00	BC	7/27/2018 01:28	BC			
Monochloroacetic Acid	0.0016	mg/L	0.0010	1	7/26/2018 15:00	BC	7/27/2018 01:28	BC			
Total Haloacetic Acids	0.0702	mg/L	0.0010	1	7/26/2018 15:00	BC	7/27/2018 01:28	BC	M		0.06
*Trichloroacetic Acid	0.0354	mg/L	0.0010	1	7/26/2018 15:00	BC	7/27/2018 01:28	BC			
TRIHALOMETHANES (THM:	s)										
EPA 524.2		Ana	alytical Method:	EPA 5	24.2						
*Bromodichloromethane	0.0091	mg/L	0.0005	1			7/24/2018 19:08	SMR			
Bromoform	ND	mg/L	0.0005	1			7/24/2018 19:08	SMR			
*Chloroform	0.0630	mg/L	0.0005	1			7/24/2018 19:08	SMR			
*Dibromochloromethane	0.0006	mg/L	0.0005	1			7/24/2018 19:08	SMR			
*Total Trihalomethanes	0.0728	mg/L	0.0005	1			7/24/2018 19:08	SMR			0.08
Field pH		Ana	alytical Method:	Field p	Н						
Field Chlorine Residual	2.16	mg/L		1			7/23/2018 10:19	FLD			

Report ID: 401767

Page 4 of 5

CERTIFICATE OF ANALYSIS

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> Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

Client: KY Kentucky American Water Profile: 1324 KAW Millersburg Workorder: 397838 Paris MM Jun DBP 3

PROCESS ONLY

Lab ID: 39783801 Date Received: 6/29/2018 09:20 Matrix: Drinking Water

Sample ID: Paris MM Date Collected: 6/26/2018 09:11

Sample ID: Paris MM					Date Collected: 6	5/26/20	18 09:11				
* = TNI accredited Under	erlined = Repor	ted to the S	tate							MC	L
Parameters	Results	Units	RDL		OF Prepared	Ву	Analyzed	Ву	Qual	Sec /	Prim
HALOACETIC ACIDS (HAA	s)										
EPA 552.3		Pre	eparation Metho	d: EPA	552.3 Prep						
		An	alytical Method:	EPA 5	52.3						
Bromochloroacetic Acid	0.0057	mg/L	0.0010	1	7/2/2018 15:00	BC	7/3/2018 04:41	BC			
*Dibromoacetic Acid	ND	mg/L	0.0010	1	7/2/2018 15:00	BC	7/3/2018 04:41	BC			
*Dichloroacetic Acid	0.0382	mg/L	0.0010	1	7/2/2018 15:00	BC	7/3/2018 04:41	BC			
*Monobromoacetic Acid	ND	mg/L	0.0010	1	7/2/2018 15:00	BC	7/3/2018 04:41	BC			
*Monochloroacetic Acid	ND	mg/L	0.0010	1	7/2/2018 15:00	BC	7/3/2018 04:41	BC			
Total Haloacetic Acids	0.0748	mg/L	0.0010	1	7/2/2018 15:00	BC	7/3/2018 04:41	BC	M		0.06
*Trichloroacetic Acid	0.0366	mg/L	0.0010	1	7/2/2018 15:00	BC	7/3/2018 04:41	BC			
TRIHALOMETHANES (THM	(s)										
EPA 524.2		An	alytical Method:	EPA 5	24.2						
*Bromodichloromethane	0.0121	mg/L	0.0005	1			7/1/2018 11:51	SMR			
*Bromoform	ND	mg/L	0.0005	1			7/1/2018 11:51	SMR			
*Chloroform	0.0632	mg/L	0.0005	1			7/1/2018 11:51	SMR			
*Dibromochloromethane	0.0012	mg/L	0.0005	1			7/1/2018 11:51	SMR			
*Total Trihalomethanes	0.0765	mg/L	0.0005	1			7/1/2018 11:51	SMR			0.08
Field pH		An	alytical Method:	Field	Н						
Field Chlorine Residual	2.02	mg/L		1			6/26/2018 09:11	FLD			

Report ID: 397838 Page 4 of 5



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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 reveals elevated TTHM and HAA5 results. Although the values dipped n 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 form 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



Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

Workorder: 449802

Workorder ID:

Paris MM Jul DBP 4

PROCESS ONLY

Lab ID: 44980201

Date Received: 7/17/2019 13:30 ET

Date Collected: 7/16/2019 10:50 ET

Drinking Water

Sample ID: Parls MM

ET = Eastern Time (All Times normalized to Eastern Time)

Matrix:

MCL

* = TNI accredited

Underlined = Reported to the State

remied - IVe	ported to	lile State		Eastern Time (All Til	Hes H	illialized to Lastelli I	iiiie)		IVI	JL
Results	Units	RDL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec /	Prim
		Analytical Me	thod: F	ield Measurements						
1.36	mg/L					7/16/2019 10:50 ET	FLD			
As)										
		Preparation I	Method:	EPA 552.3 Prep						
		Analytical Me	thod: E	PA 552.3						
0.0022	mg/L	0.0010	1	7/18/2019 16:20 ET	BC	7/19/2019 00:46 ET	BC			
ND	mg/L	0.0010	1	7/18/2019 16:20 ET	BC	7/19/2019 00:46 ET	BC			
0.0352	mg/L	0.0010	1	7/18/2019 16:20 ET	BC	7/19/2019 00:46 ET	BC			
ND	mg/L	0.0010	1	7/18/2019 16:20 ET	BC	7/19/2019 00:46 ET	BC			
ND	mg/L	0.0010	1	7/18/2019 16:20 ET	BC	7/19/2019 00:46 ET	BC			
0.0812	mg/L	0.0010	1	7/18/2019 16:20 ET	BC	7/19/2019 00:46 ET	BC	M		0.06
0.0459	mg/L	0.0010	1	7/18/2019 16:20 ET	BC	7/19/2019 00:46 ET	BC			
Ms)										
		Analytical Me	thod: E	PA 524.2						
0.0068	mg/L	0.0005	1			7/17/2019 14:10 ET	SMR			
ND	mg/L	0.0005	1			7/17/2019 14:10 ET	SMR			
0.0790	mg/L	0.0005	1			7/17/2019 14:10 ET	SMR			
ND	mg/L	0.0005	1			7/17/2019 14:10 ET	SMR			
0.0858	mg/L	0.0005	1			7/17/2019 14:10 ET	SMR	M		0.08
	1.36 As) 0.0022 ND 0.0352 ND ND 0.0812 0.0459 Ms) 0.0068 ND 0.0790 ND	1.36 mg/L 1.36 mg/L 0.0022 mg/L ND mg/L 0.0352 mg/L ND mg/L 0.0812 mg/L 0.0459 mg/L Ms) 0.0068 mg/L ND mg/L 0.0790 mg/L ND mg/L	Analytical Me 1.36 mg/L As) Preparation Manalytical Me 0.0022 mg/L 0.0010 ND mg/L 0.0010 O.0812 mg/L 0.0010 O.0459 mg/L 0.0010 Ms) Analytical Me 0.0068 mg/L 0.0005 ND mg/L 0.0005 ND mg/L 0.0005 ND mg/L 0.0005	Results Units RDL DF	Analytical Method: Field Measurements 1.36 mg/L Ass) Preparation Method: EPA 552.3 Prep Analytical Method: EPA 552.3 Prep Analytical Method: EPA 552.3 0.0022 mg/L 0.0010 1 7/18/2019 16:20 ET ND mg/L 0.0010 1 7/18/2019 16:20 ET 0.0352 mg/L 0.0010 1 7/18/2019 16:20 ET ND mg/L 0.0010 1 7/18/2019 16:20 ET ND mg/L 0.0010 1 7/18/2019 16:20 ET ND mg/L 0.0010 1 7/18/2019 16:20 ET 0.0812 mg/L 0.0010 1 7/18/2019 16:20 ET 0.0459 mg/L 0.0010 1 7/18/2019 16:20 ET Ms) Analytical Method: EPA 524.2 0.0068 mg/L 0.0005 1 ND mg/L 0.0005 1 ND mg/L 0.0005 1 ND mg/L 0.0005 1 ND mg/L 0.0005 1	Analytical Method: Field Measurements 1.36 mg/L Ass) Preparation Method: EPA 552.3 Prep Analytical Method: EPA 520.9 Prep Analytical Method: EPA 520.9 Prep Analytical Method: EPA 520.9 Prep Analytical Method: EPA 524.2 Analytical Method: EPA 524.2	Analytical Method: Field Measurements 1.36 mg/L Preparation Method: EPA 552.3 Prep Analytical Method: EPA 552.3 Prep Analytical Method: EPA 552.3 0.0022 mg/L ND mg/L 0.0010 1 7/18/2019 16:20 ET BC 7/19/2019 00:46 ET ND mg/L 0.0010 1 7/18/2019 16:20 ET BC 7/19/2019 00:46 ET ND mg/L 0.0010 1 7/18/2019 16:20 ET BC 7/19/2019 00:46 ET ND mg/L 0.0010 1 7/18/2019 16:20 ET BC 7/19/2019 00:46 ET ND mg/L 0.0010 1 7/18/2019 16:20 ET BC 7/19/2019 00:46 ET ND mg/L 0.0010 1 7/18/2019 16:20 ET BC 7/19/2019 00:46 ET 0.0812 mg/L 0.0010 1 7/18/2019 16:20 ET BC 7/19/2019 00:46 ET 0.0459 mg/L 0.0010 1 7/18/2019 16:20 ET BC 7/19/2019 00:46 ET Ms) Analytical Method: EPA 524.2 0.0068 mg/L 0.0005 1 7/17/2019 14:10 ET ND mg/L 0.0005 1 7/17/2019 14:10 ET ND mg/L 0.0005 1 7/17/2019 14:10 ET	Results Units RDL DF Prepared By Analyzed By	Results Units RDL DF Prepared By Analyzed By Qual	Analytical Method: Field Measurements



Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

Workorder: 443648

Workorder ID:

mg/L

Paris MM Jun DBP 4

PROCESS ONLY

Lab ID: 44364801

Date Received: 6/12/2019 12:35 ET

Matrix: Drinking Water

6/11/2019 08:53 ET FLD

6/13/2019 22:37 ET SMR R

6/13/2019 22:37 ET SMR R

6/13/2019 22:37 ET SMR R

Sample ID: Paris MM

Date Collected: 6/11/2019 08:53 ET

Dilliking water

* = TNI accredited Underlined = Reported to the State

1.81

0.0454

0.0007

0.0542

mg/L

mg/L

mg/L

0.0005

0.0005

0.0005

ET = Eastern Time (All Times normalized to Eastern Time)

MCL

Parameters	Results	Units	RDL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	/ Prim
Field Measurements			Analytical M	ethod: Fi	eld Measuremen	ts					

HAL CACETIO	40100	
HALOACETIC	ACIDS	ITHAASI

Field Chlorine Residual

*Chloroform

*Dibromochloromethane

*Total Trihalomethanes

HALOACETIC ACIDS (HA	As)								
EPA 552.3			Preparation M	Method	I: EPA 552.3 Prep				
			Analytical Me	thod:	EPA 552.3				
Bromochloroacetic Acid	0.0030	mg/L	0.0010	1	6/17/2019 16:00 ET	BC	6/17/2019 21:47 ET	BC	
*Dibromoacetic Acid	ND	mg/L	0.0010	1	6/17/2019 16:00 ET	BC	6/17/2019 21:47 ET	BC	
*Dichloroacetic Acid	0.0262	mg/L	0.0010	1	6/17/2019 16:00 ET	BC	6/17/2019 21:47 ET	BC	
*Monobromoacetic Acid	ND	mg/L	0.0010	1	6/17/2019 16:00 ET	BC	6/17/2019 21:47 ET	BC	
*Monochloroacetic Acld	ND	mg/L	0.0010	1	6/17/2019 16:00 ET	BC	6/17/2019 21:47 ET	BC	
Total Haloacetic Acids	0.0550	mg/L	0.0010	1	6/17/2019 16:00 ET	BC	6/17/2019 21:47 ET	BC	0.06
*Trichloroacetic Acid	0.0288	mg/L	0.0010	1	6/17/2019 16:00 ET	BC	6/17/2019 21:47 ET	BC	
TRIHALOMETHANES (TH	Ms)								
EPA 524.2			Analytical Me	thod:	EPA 524.2				
*Bromodichloromethane	0.0082	mg/L	0.0005	1			6/13/2019 22:37 ET	SMR R	
*Bromoform	ND	mg/L	0.0005	1			6/13/2019 22:37 ET	SMR R	

1



August 14, 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 and at the MCL for HAA5s. Samples collected recently at the master meter had the following results:

8-05-19 – Paris Master Meter: TTHM = 91 ppb, HAA5 = 58 ppb 7-16-19 – 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 form 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



Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

Workorder: 45	7266		Vorkorder	ID: Paris	MM Q	DBP 20						
Lab ID: Sample ID:	45726601 Paris MM				Date	Received: 8/6/20 Collected: 8/5/20	19 12:28 19 09:41	(E)	x: [Orinking	Water	
* = TNI accred	lited U	nderlined = Re	ported to	the State	ET:	Eastern Time (All	Times n	ormalized to Eastern	Time)		М	CL
Parameters		Results	Units	RDL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec	/ Prim
Field Measure	ments			Analytical M	lethod: F	Field Measurements						
Field Chlorine	Residual	0.64	mg/L					8/5/2019 09:41 ET	FLD			
HALOACETIC	ACIDS (H	AAs)										
EPA 552.3				Preparation	Method	: EPA 552.3 Prep						
				Analytical M	lethod: I	EPA 552.3						
Bromochloroa	cetic AcId	0.0012	mg/L	0.0010	1	8/7/2019 16:00 ET	BC	8/8/2019 07:53 ET	BC			
Dibromoacetic	Acld	ND	mg/L	0.0010	1	8/7/2019 16:00 ET	BC	8/8/2019 07:53 ET	BC			
Dichloroacetic	Acid	0.0153	mg/L	0.0010	1	8/7/2019 16:00 ET	BC	8/8/2019 07:53 ET	BC			
Monobromoad	cetic Acid	ND	mg/L	0.0010	1	8/7/2019 16:00 ET	BC	8/8/2019 07:53 ET	BC			
Monochloroac	etic Acid	ND	mg/L	0.0010	1	8/7/2019 16:00 ET	BC	8/8/2019 07:53 ET	BC			
Total Haloacet	tic Acids	0.0581	mg/L	0.0010	1	8/7/2019 16:00 ET	BC	8/8/2019 07:53 ET	BC			0.0
Trichloroacetic	c Acid	0.0428	mg/L	0.0010	1	8/7/2019 16:00 ET	BC	8/8/2019 07:53 ET	BC			
TRIHALOMET	THANES (T	'HMs)										
EPA 524.2				Analytical M	lethod:	EPA 524.2						
Bromodichlord	omethane	0.0067	mg/L	0.0005	1			8/6/2019 14:42 ET	SMF	3		
Bromoform		ND	mg/L	0.0005	1			8/6/2019 14:42 ET	SMF	2		
Chloroform		0.0844	mg/L	0.0005	1			8/6/2019 14:42 ET	SMF	2		

1

1

0.0005

0.0005

8/6/2019 14:42 ET

8/6/2019 14:42 ET

SMR

SMR M

*Dibromochloromethane

*Total Trihalomethanes

ND

0.0911

mg/L

mg/L



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 form 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 Uliasz – DOW Compliance Assistance





Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

Workorder: 462718 Workorder ID: Paris MM Sept DBP 4

PROCESS ONLY

Lab ID: 46271801 Date Received: 9/26/2019 11:45 ET Matrix: Drinking Water

Sample ID: Paris MM Date Collected: 9/25/2019 09:40 ET

* = TNI accredited Underlined = Reported to the State ET = Eastern Time (All Times normalized to Eastern Time)

MCL

Parameters Results Units RDL DF Prepared By Analyzed By Qual Sec / Prim

Field Measurements Analytical Method: Field Measurements Field Chlorine Residual 9/25/2019 09:40 ET FLD 0.90 mg/L HALOACETIC ACIDS (HAAs) EPA 552.3 Preparation Method: EPA 552.3 Prep Analytical Method: EPA 552.3 Bromochloroacetic Acid 0.0027 mg/L 0.0010 1 9/27/2019 14:40 ET NFS 9/28/2019 05:44 ET BC *Dibromoacetic Acid 0.0010 1 9/27/2019 14:40 ET NFS 9/28/2019 05:44 ET BC ND mg/L *Dichloroacetic Acid 0.0250 mg/L 0.0010 1 9/27/2019 14:40 ET NFS 9/28/2019 05:44 ET BC *Monobromoacetic Acid mg/L 0.0010 NFS 9/28/2019 05:44 ET BC ND 1 9/27/2019 14:40 ET *Monochloroacetic Acid ND 0.0010 1 9/27/2019 14:40 ET NFS 9/28/2019 05:44 ET BC mg/L Total Haloacetic Acids 0.06 0.0528 mg/L 0.0010 1 9/27/2019 14:40 ET NFS 9/28/2019 05:44 ET BC *Trichloroacetic Acid 0.0279 0.0010 1 9/27/2019 14:40 ET NFS 9/28/2019 05:44 ET mg/L TRIHALOMETHANES (THMs) EPA 524.2 Analytical Method: EPA 524.2 *Bromodichloromethane 0.0085 0.0005 1 9/27/2019 13:46 ET SMR mg/L *Bromoform SMR ND mg/L 0.0005 1 9/27/2019 13:46 ET *Chloroform 9/27/2019 13:46 ET SMR 0.0578 0.0005 1 mg/L *Dibromochloromethane 0.0006 mg/L 0.0005 1 9/27/2019 13:46 ET SMR *Total Trihalomethanes 0.0669 0.0005 1 9/27/2019 13:46 ET SMR 0.08 mg/L



Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

Workorder: 467770

Workorder ID:

Paris MM Oct DBP 4

46777001

PROCESS ONLY Date Received: 10/24/2019 12:10 ET

Lab ID:

Matrix:

Ву

Drinking Water

M

Sample ID:

Paris MM

Date Collected: 10/23/2019 09:10 ET

* = TNI accredited

Underlined = Reported to the State RDL

mg/L

ET = Eastern Time (All Times normalized to Eastern Time)

MCL

0.06

Parameters

Results Units

DF Prepared

Ву Analyzed

1 10/29/2019 14:55 ET NFS 10/29/2019 22:29 ET BC

Sec / Prim Qual

Field Measurements

Analytical Method: Field Measurements

Field Chlorine Residual

1.33 mg/L 10/23/2019 09:10 ET FLD

HALOACETIC ACIDS (HAAs)

EPA 552.3

*Trichloroacetic Acid

Preparation Method: EPA 552.3 Prep

			Analytical Me	ethod: I	EPA 552.3	A CONTRACTOR OF THE PARTY OF TH
Bromochloroacetic Acid	0.0035	mg/L	0.0010	1	10/29/2019 14:55 ET NFS	10/29/2019 22:29 ET BC
*Dibromoacetic Acid	ND	mg/L	0.0010	1	10/29/2019 14:55 ET NFS	10/29/2019 22:29 ET BC
*Dichloroacetic Acid	0.0298	mg/L	0.0010	1	10/29/2019 14:55 ET NFS	10/29/2019 22:29 ET BC
*Monobromoacetic Acid	ND	mg/L	0.0010	1	10/29/2019 14:55 ET NFS	10/29/2019 22:29 ET BC
*Monochloroacetic Acid	ND	mg/L	0.0010	1	10/29/2019 14:55 ET NFS	10/29/2019 22:29 ET BC
Total Haloacetic Acids	0.0707	mg/L	0.0010	1	10/29/2019 14:55 ET NFS	10/29/2019 22:29 ET BC

0.0010

TRIHALOMETHANES (THMs)

EPA 524.2			Analytical Me	thod: EPA 524.2			
*Bromodichloromethane	0.0142	mg/L	0.0005	1	10/24/2019 14:47 ET NH		
*Bromoform	ND	mg/L	0.0005	1	10/24/2019 14:47 ET NH		
*Chloroform	0.0760	mg/L	0.0005	1	10/24/2019 14:47 ET NH		
*Dibromochloromethane	0.0011	mg/L	0.0005	1	10/24/2019 14:47 ET NH		
*Total Trihalomethanes	0.0913	mg/L	0.0005	1	10/24/2019 14:47 ET NH	M	0.08



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

11/5/2019 11:30 ET SMR

11/5/2019 11:30 ET SMR



American Water 1115 South Illinols Street Belleville, IL 62220-3102

Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

			AIV.	ALI III	SAL KLOULIS						
Workorder: 470879	1	Vorkorder	ID: Paris	MMQ	OBP 21						
Lab ID: 47087901 Sample ID: Paris MM				Date	Received: 11/5/201 Collected: 11/4/201			: 0	rinking	Water	
* = TNI accredited Und	derlined = Re	ported to	the State	ET =	Eastern Time (All Tir	mes no	rmalized to Eastern T	ime)		М	CL
Parameters	Results	Units	RDL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec /	Prim
Field Measurements			Analytical M	lethod: F	ield Measurements						
Field Chlorine Residual	1.77	mg/L	•				11/4/2019 08:59 ET	FLD			
HALOACETIC ACIDS (HA	As)										
EPA 552.3			Preparation	Method	EPA 552.3 Prep			1			
			Analytical M	lethod: E	PA 552.3			1			
Bromochloroacetic Acid	0.0020	mg/L	0.0010		11/6/2019 16:50 ET	LKR	11/7/2019 01:01 ET	LKR			
Dibromoacetic Acid	ND	mg/L	0.0010	1	11/6/2019 16:50 ET	LKR	11/7/2019 01:01 ET	LKR			
*Dichloroacetic Acid	0.0296	mg/L	0.0010	1	11/6/2019 16:50 ET	LKR	11/7/2019 01:01 ET	LKR			
*Monobromoacetic Acid	ND	mg/L	0.0010	1	11/6/2019 16:50 ET	LKR	11/7/2019 01:01 ET	LKR			
*Monochloroacetic Acid	ND	mg/L	0.0010	1	11/6/2019 16:50 ET	LKR	11/7/2019 01:01 ET	LKR			
Total Haloacetic Acids	0.0647	mg/L	0.0010	1	11/6/2019 16:50 ET	LKR	11/7/2019 01:01 ET	LKR	M		0.0
*Trichloroacetic Acid	0.0336	mg/L	0.0010	1	11/6/2019 16:50 ET	LKR	11/7/2019 01:01 ET	LKR			
TRIHALOMETHANES (TH	Ms)										
EPA 524.2			Analytical M	lethod: E	PA 524.2						
*Bromodichloromethane	0.0070	mg/L	0.0005	1			11/5/2019 11:30 ET	SMR			
*Bromoform	ND	mg/L	0.0005	1			11/5/2019 11:30 ET	SMR			
*Chloroform	0.0562	mg/L	0.0005	1			11/5/2019 11:30 ET	SMR			

0.0005

0.0005

1

ND

0.0632

mg/L

mg/L

*Dibromochloromethane

*Total Trihalomethanes



Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

Workorder: 477784 Workorder ID: X-Paris MM Proc DBP PROCESS ONLY Lab ID: 47778401 Date Received: 12/3/2019 12:48 ET Matrix: **Drinking Water** Date Collected: 11/27/2019 09:13 ET Sample ID: Paris MM * = TNI accredited Underlined = Reported to the State ET = Eastern Time (All Times normalized to Eastern Time) MCL **Parameters** Results Units RDL DF Prepared By Analyzed Ву Qual Sec / Prim Field Measurements Analytical Method: Field Measurements Field Chlorine Residual 2.00 mg/L 11/27/2019 09:13 ET FLD 1 HALOACETIC ACIDS (HAAs) EPA 552.3 Preparation Method: EPA 552.3 Prep Analytical Method: EPA 552.3 Bromochloroacetic Acid 0.0019 1 12/5/2019 19:00 ET LKR 12/6/2019 06:53 ET mg/L 0.0010 *Dibromoacetic Acid ND mg/L 0.0010 1 12/5/2019 19:00 ET LKR 12/6/2019 06:53 ET LKR *Dichloroacetic Acid 0.0240 mg/L 0.0010 1 12/5/2019 19:00 ET LKR 12/6/2019 06:53 ET *Monobromoacetic Acid 1 12/5/2019 19:00 ET LKR 12/6/2019 06:53 ET LKR ND mg/L 0.0010 *Monochloroacetic Acid 0.0018 mg/L 0.0010 1 12/5/2019 19:00 ET LKR 12/6/2019 06:53 ET LKR **Total Haloacetic Acids** 0.0497 1 12/5/2019 19:00 ET LKR 12/6/2019 06:53 ET LKR 0.06 mg/L 0.0010 1 12/5/2019 19:00 ET LKR 12/6/2019 06:53 ET *Trichloroacetic Acid 0.0239 mg/L 0.0010 LKR TRIHALOMETHANES (THMs) Analytical Method: EPA 524.2 EPA 524.2 *Bromodichloromethane 0.0050 mg/L 0.0005 1 12/3/2019 15:07 ET NH *Bromoform ND mg/L 0.0005 1 12/3/2019 15:07 ET NH

Report ID: 477784

*Chloroform

*Dibromochloromethane

*Total Trihalomethanes

0.0429

0.0479

ND

mg/L

mg/L

mg/L

0.0005

0.0005

0.0005

1

1

1

12/3/2019 15:07 ET

12/3/2019 15:07 ET

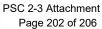
12/3/2019 15:07 ET

NH

NH

NH

Page 4 of 6





Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

					JAL INLO	OLIO					
Workorder: 476241		Workorder	ID: Paris	s MM De	c DBP 4						
Lab ID: 47624* Sample ID: Paris I	75.70			Date		12/19/2019 12: 12/18/2019 09:		Matrix:	Drinking	Water	
* = TNI accredited	Underlined = Re	eported to	the State	ET=	Eastern Tir	ne (All Times no	rmalized to Eas	stern Time	e)	M	CL
Parameters	Results	Units	RDL		Prepared	Ву	Analyzed	Ву		Sec /	Prim
Field Measurements			Analytical M	lethod: F	ield Measur	rements					
Field Chlorine Residua	al 2.03	mg/L					12/18/2019 09	:46 ET F	LD		
HALOACETIC ACIDS	(HAAs)										
EPA 552.3			Preparation	Method:	EPA 552.3	Prep					
			Analytical M	lethod: E	PA 552.3			- 341			
Bromochloroacetic Ac	id 0.0011	mg/L	0.0010	1	12/19/2019	17:00 ET NFS	12/20/2019 10):31 ET L	.KR		
*Dibromoacetic Acid	ND	mg/L	0.0010	1	12/19/2019	17:00 ET NFS	12/20/2019 10):31 ET L	.KR		
*Dichloroacetic Acid	0.0388	mg/L	0.0010	1	12/19/2019	17:00 ET NFS	12/20/2019 10):31 ET L	.KR		
*Monobromoacetic Aci	d ND	mg/L	0.0010	1	12/19/2019	17:00 ET NFS	12/20/2019 10):31 ET L	.KR		
*Monochloroacetic Acid	d 0.0026	mg/L	0.0010	1	12/19/2019	17:00 ET NFS	12/20/2019 10):31 ET L	.KR		
Total Haloacetic Acids	0.1031	mg/L	0.0010	1	12/19/2019	17:00 ET NFS	12/20/2019 10):31 ET L	KR M,		0.0
*Trichloroacetic Acid	0.0616	mg/L	0.0010	1	12/19/2019	17:00 ET NFS	12/20/2019 10):31 ET L	KR E, R		
TRIHALOMETHANES	S (THMs)										
EPA 524.2			Analytical N	Method: E	PA 524.2						
*Bromodichloromethar	ne 0.0026	mg/L	0.0005	1			12/20/2019 16	3:41 ET N	٧H		
*Bromoform	ND	mg/L	0.0005	1			12/20/2019 16	3:41 ET N	H		
*Chloroform	0.0543	mg/L	0.0005	1			12/20/2019 16	3:41 ET N	NH		
*Dibromochloromethar	ne ND	mg/L	0.0005	1			12/20/2019 16	6:41 ET N	ИH		

*Total Trihalomethanes

0.0568

mg/L

0.0005

80.0

12/20/2019 16:41 ET NH



January 10, 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 reveals elevated TTHM and HAA5 results, the most recent being 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 on 12-26-18 had the following results:

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.

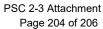
Sincerely.

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





Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

Workorder:	421796	Workorder ID:	Paris MM Dec DBP 3			
			PROCESS ONLY			-
Lab ID:	42179601		Date Received:	12/27/2018 11:37	Matrix:	Drinking Water

1 -1-10	40470004					Data Danah ad	40/07/06	140 44.07		Dalla lakere	IAI-L-	
Lab ID:	42179601					Date Received:			C; I	Drinking	vvater	
Sample ID:	Paris MM					Date Collected:	12/26/20	018 10:29				
* = TNI accredited Underlin		lined = Repor	ed to the Sta	ate					1		MCL	
Parameters		Results	Units	RDL	D	F Prepared	Ву	Analyzed	Ву	Qual	Sec /	Prim
Field Measu	rements		An	alytical Method:	Field N	/leasurements						
Field Chlorin	ne Residual	1.89	mg/L		1			12/26/2018 10:29	FLD			
HALOACET	HALOACETIC ACIDS (HAAs)											
EPA 552.3			Pre	paration Metho	d: EPA	552.3 Prep						
			An	alytical Method:	EPA 5	52.3						
Bromochlore	pacetic Acid	0.0019	mg/L	0.0010	1	12/31/2018 17:30	KMK	1/1/2019 11:30	KMK			
*Dibromoace	*Dibromoacetic Acid		mg/L	0.0010	1	12/31/2018 17:30	KMK	1/1/2019 11:30	KMK			
*Dichloroacetic Acid		0.0238	mg/L	0.0010	1	12/31/2018 17:30	KMK	1/1/2019 11:30	KMK			
Monobromoacetic Acid		ND	mg/L	0.0010	1	12/31/2018 17:30	KMK	1/1/2019 11:30	KMK			
Monochloroacetic Acid		ND	mg/L	0.0010	1	12/31/2018 17:30	KMK	1/1/2019 11:30	KMK			
Total Haloacetic Acids		0.0624	mg/L	0.0010	1	12/31/2018 17:30	KMK	1/1/2019 11:30	KMK			0.06
Trichloroacetic Acid		0.0367	mg/L	0.0010	1	12/31/2018 17:30	KMK	1/1/2019 11:30	KMK			
TRIHALOM	ETHANES (THMs	s)										
EPA 524.2			An	alytical Method:	EPA 5	24.2						
*Bromodichloromethane		0.0052	mg/L	0.0005	1			12/27/2018 14:56	SMR			
·n (1.3345		35							

EPA 524.2		An	alytical Method:	EPA 524.2		
*Bromodichloromethane	0.0052	mg/L	0.0005	1	12/27/2018 14:56 SMR	
*Bromoform	ND	mg/L	0.0005	1	12/27/2018 14:56 SMR	
*Chloroform	0.0492	mg/L	0.0005	1	12/27/2018 14:56 SMR	
*Dibromochloromethane	ND	mg/L	0.0005	1	12/27/2018 14:56 SMR	
*Total Trihalomethanes	0.0544	mg/L	0.0005	1	12/27/2018 14:56 SMR	0.08



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 reveals 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



Phone: (618) 235-3600 Fax: (618) 235-6349



ANALYTICAL RESULTS

Workorder: 42	5231	١	Vorkorder	ID: Paris	MM Jar	DBP 3						
	42523101 Paris MM				Date	Received: 1/24/20° Collected: 1/23/20°			(; I	Drinking	Water	
* = TNI accredi	ted U	nderlined = Re	ported to	the State	ET =	Eastern Time (All Ti	mes no	rmalized to Eastern T	ime)		M	CL
Parameters		Results	Units	RDL	DF	Prepared	Ву	Analyzed	Ву	Qual	Sec /	Prim
Field Measurer	ments			Analytical M	ethod: F	ield Measurements						
Field Chlorine	Residual	2.06	mg/L	7				1/23/2019 11:21 ET	FLD			
HALOACETIC	ACIDS (H	AAs)	1									
EPA 552.3				Preparation	Method:	EPA 552.3 Prep						
				Analytical M	ethod: E	PA 552.3						
Bromochloroad	cetic Acid	0.0018	mg/L	0.0010	1	1/25/2019 19:15 ET	LKR	1/26/2019 19:17 ET	LKR			
*Dibromoacetic	Acid	ND	mg/L	0.0010	1	1/25/2019 19:15 ET	LKR	1/26/2019 19:17 ET	LKR	l.		
*Dichloroacetic Acid		0.0275	mg/L	0.0010	1	1/25/2019 19:15 ET	LKR	1/26/2019 19:17 ET	LKR	L,		
*Monobromoacetic Acid		ND	mg/L	0.0010	1	1/25/2019 19:15 ET	LKR	1/26/2019 19:17 ET	LKR			
*Monochloroacetic Acid		0.0020	mg/L	0.0010	1	1/25/2019 19:15 ET	LKR	1/26/2019 19:17 ET	LKR			
Total Haloacetic Acids		0.0785	mg/L	0.0010	1	1/25/2019 19:15 ET	LKR	1/26/2019 19:17 ET	LKR			0.06
*Trichloroacetic Acid 0.049		0.0490	mg/L	0.0010	1	1/25/2019 19:15 ET	LKR	1/26/2019 19:17 ET	LKR	1		
TRIHALOMET	HANES (T	HMs)										
EPA 524.2				Analytical M	ethod: E	PA 524.2			1			
*Bromodichloro	methane	0.0032	mg/L	0.0005	1			1/24/2019 17:37 ET	SMF	3		
*Bromoform		ND	mg/L	0.0005	1			1/24/2019 17:37 ET	SMF	3		

1/24/2019 17:37 ET SMR

1/24/2019 17:37 ET SMR

1/24/2019 17:37 ET SMR

*Chloroform

*Dibromochloromethane

*Total Trihalomethanes

0.0436

0.0469

ND

mg/L

mg/L

mg/L

0.0005

0.0005

0.0005

1