

August 27, 2024

Electronically Filed in TPUC Docket Room on August 27, 2024 at 2:21 p.m.

#### **VIA ELECTRONIC FILING**

Hon. David Jones, Chairman c/o Ectory Lawless, Docket Room Manager Tennessee Public Utility Commission 502 Deaderick Street, 4<sup>th</sup> Floor Nashville, TN 37243 TPUC.DocketRoom@tn.gov

RE: Petition of Tennessee-American Water Company to Modify Tariff, Change and Increase Charges, Fees, and Rates, and for Approval of a General Rate Increase, TPUC Docket No. 24-00032

Dear Chairman Jones:

Attached for filing please find Tennessee-American Water Company's Responses to Second Set of Discovery Requests of Utility Workers Union of America, AFL-CIO, and UWUA Local 121 in the above-captioned matter.

As required, the original plus four (4) hard copies will follow. Should you have any questions concerning this filing, or require additional information, please do not hesitate to contact me.

Very truly yours,

**BUTLER SNOW LLP** 

Melvin J. Malone

clw

Attachments

cc: Bob Lane, TAWC

Shilina Brown, Consumer Advocate Division Victoria Glover, Consumer Advocate Division Phillip Noblett, City of Chattanooga Frederick Hitchcock, City of Chattanooga Scott Tift, UWUA

The Pinnacle at Symphony Place 150 3<sup>rd</sup> Avenue South, Suite 1600 Nashville, TN 37201 MELVIN J. MALONE 615.651.6705 melvin.malone@butlersnow.com

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# BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION NASHVILLE, TENNESSEE

PETITION OF TENNESSEE- AMERICAN WATER COMPANY TO MODIFY TARIFF, CHANGE AND INCREASE CHARGES, FEES, AND RATES, AND FOR APPROVAL OF A	) ) ) )	DOCKET NO. 24-00032
GENERAL RATE INCREASE	)	

## TENNESSEE-AMERICAN WATER COMPANY'S RESPONSE TO SECOND SET OF DISCOVERY REQUESTS OF UTILITY WORKERS UNION OF AMERICA, AFL-CIO, AND UWUA LOCAL 121

Tennessee-American Water Company ("TAWC"), by and through counsel, hereby submits its Response to Second Set of Discovery Requests propounded by Utility Workers Union of America, AFL-CIO, and UWUA Local 121 ("UWUA").

#### **GENERAL OBJECTIONS**

- 1. TAWC objects to all requests that seek information protected by the attorney-client privilege, the work-product doctrine and/or any other applicable privilege or restriction on disclosure.
- 2. TAWC objects to the definitions and instructions accompanying the requests to the extent the definitions and instructions contradict, are inconsistent with, or impose any obligations beyond those required by applicable provisions of the Tennessee Rules of Civil Procedure or the rules, regulations, or orders of the Tennessee Public Utility Commission ("TPUC" or "Authority").
- 3. The specific responses set forth below are based on information now available to TAWC, and TAWC reserves the right at any time to revise, correct, add to or clarify the objections or responses and supplement the information produced.

- 4. TAWC objects to each request to the extent that it is unreasonably cumulative or duplicative, speculative, unduly burdensome, irrelevant or seeks information obtainable from some other source that is more convenient, less burdensome or less expensive.
- 5. TAWC objects to each request to the extent it seeks information outside TAWC's custody or control.
- 6. TAWC's decision, now or in the future, to provide information or documents notwithstanding the objectionable nature of any of the definitions or instructions, or the requests themselves, should not be construed as: (a) a stipulation that the material is relevant or admissible, (b) a waiver of TAWC's General Objections or the objections asserted in response to specific discovery requests, or (c) an agreement that requests for similar information will be treated in a similar manner.
- 7. TAWC objects to those requests that seek the identification of "any" or "all" documents or witnesses (or similar language) related to a particular subject matter on the grounds that they are overbroad and unduly burdensome and exceed the scope of permissible discovery.
- 8. TAWC objects to those requests that constitute a "fishing expedition," seeking information that is not relevant or reasonably calculated to lead to the discovery of admissible evidence and is not limited to this matter.
- 9. TAWC does not waive any previously submitted objections to UWUA's discovery requests.

# TENNESSEE AMERICAN WATER COMPANY TENNESSEE PUBLIC UTILITY COMMISSION DOCKET NO. 24-00032 SECOND DISCOVERY REQUEST OF THE UWUA

Responsible Witness: Grady Stout

#### Question:

1. Please provide all documents that state TAWC's policies and procedures for inspections, replacement, exercising, operation, or repair of valves or fire hydrants in effect at any time since January 1, 2020. The documents produced shall include, without limitation, any TAWC or AWK policies and procedure manuals and/or standard operating procedures for inspections, replacement, exercising, operation, or repair of valves or hydrants.

## Response:

The Company objects to this request as overly broad and unduly burdensome to the extent it seeks or refers to "all" such documents. Subject to and without waiving this objection, the Company responds as follows:

Please see attached TAW\_R\_UWUADR2\_001\_082724\_Attachments 1 through 3.



## **Blow-Off Valve Operation, Inspection and Maintenance Practice**

Practice Number: PRA-OPS04/01

Applicability: American Water Works Company, Inc., and

its controlled subsidiaries as described below (together

"American Water" or the "Company")

Effective Date: October 1, 2020

**Document Owner: Operations Excellence** 

**Document Approver:** Operations Excellence - Director

**Executive Sponsor:** Operations Excellence - SVP

#### I. PURPOSE

The Blow-Off Valve Operations Practice establishes a consistent program to effectively inspect and maintain blow-off valves within its distribution systems in order to ensure the operational integrity of these assets and to optimize the utilization of personnel resources.

#### II. SUMMARY

Effective valve maintenance is important to local operations as a pro-active program to increase blow-off valve reliability, reduce blow-off valve failure, and extend blow-off valve life. Improper or insufficient maintenance may result in blow-off valve failure causing extensive damage to infrastructure and/or property loss, extended service interruptions to American Water customers, loss of fire protection, and can lead to costly repairs or replacement activities.

#### III. KEY ACTIVITIES

Area/ Function	Key Activities (S =Follow Safety Requirements)	Responsibility	Frequency/ Trigger	System	Links
T&D	Locate Blow-Off Valve Requiring Inspection	Valve Operator	Per Schedule	MapCall	<u>Search</u>
T&D	Physically Locate Blow-Off Valve (S)	Valve Operator	Every Inspection		
T&D	Ensure Blow-Off Valve operation will not cause damage to the distribution system	Valve Operator	Every Inspection	MapCall	
T&D	Clean out the Blow-Off Valve boxes if necessary (S)	Valve Operator	Every Inspection		
T&D	Insert Blow-Off Valve key onto valve nut, wheel, or tee head (S)	Valve Operator	Every Inspection		
T&D	Attach Blow-Off Piping, Gauge, Pressurize, and Record Static Pressure (S)	Valve Operator	Every Inspection		
T&D	Operate Blow-Off Valves through a full cycle, counting turns, and leave in normal operating position (S)	Valve Operator	Every Inspection		



T&D	Record Date and Time of Inspection	Valve Operator	Every Inspection	MapCall
T&D	Record Inspection Type	Valve Operator	Every Inspection	MapCall
T&D	Record Flow (Full – Y/N)	Valve Operator	Every Inspection	MapCall
T&D	Record Gallons per Minute (GPM)	Valve Operator	Every Inspection	MapCall
T&D	Record Minutes Flowed	Valve Operator	Every Inspection	MapCall
T&D	Record Residual Free Chlorine (S)	Valve Operator	Every Inspection	MapCall
T&D	Record Total Chlorine	Valve Operator	Every Inspection	MapCall
T&D	Update Blow-Off Valve attribute data to make corrections or additions	Valve Operator	As Needed	MapCall
T&D	Create Repair Orders, if needed	Valve Operator	As Needed	MapCall
T&D	Monitor Progress	Supervisor	Monthly	MapCall
T&D	Frequency Guidelines	Supervisor	Reference	

**Valve Operator –** Is not an official AW position but refers to the individual performing the activity. The individual can be referred to as a Field Worker as well. This activity can be performed by internal or third party resources.

#### IV. WAIVERS

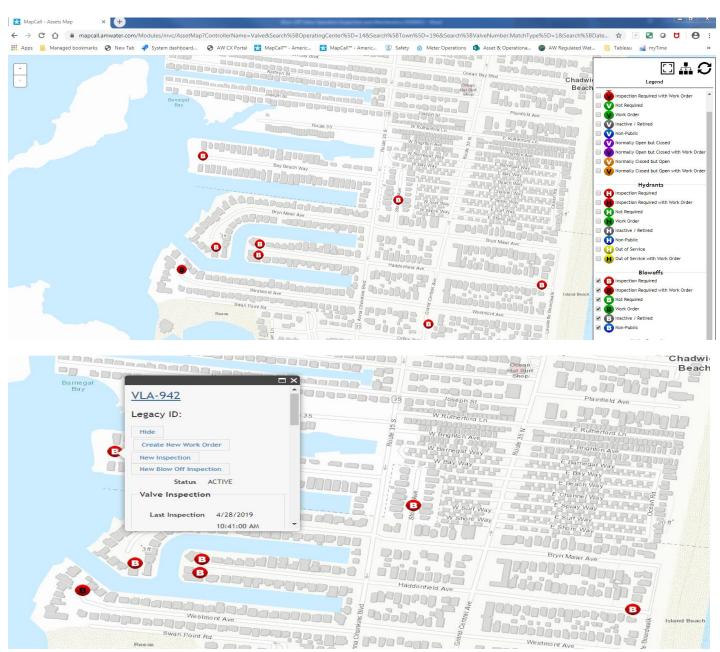
Any deviation, waiver or exception from this practice requires the prior written approval of the Document Approver of this practice. If the deviation, waiver or exception conflicts with any policy, approval from the Executive Sponsor of that policy is required. The Document Owner, or her or his designee, is responsible for tracking all requests for waivers, decisions with respect to those requests, and maintaining documentation related to each waiver request. Each individual receiving a waiver is responsible for retaining documentation of the waiver that was granted.

#### V. CONTACT INFORMATION; MONITORING

The Director of Operations Excellence can answer any questions and applicability of the practice.



# **Locate Blow-Off Valve requiring Inspection and Maintenance in MapCall**



The primary step to employ is to refer to the distribution mapped grid system to begin systematically routing Blow-Off Valves by hydraulic flow and adding a route and stop to each Blow-Off Valve.



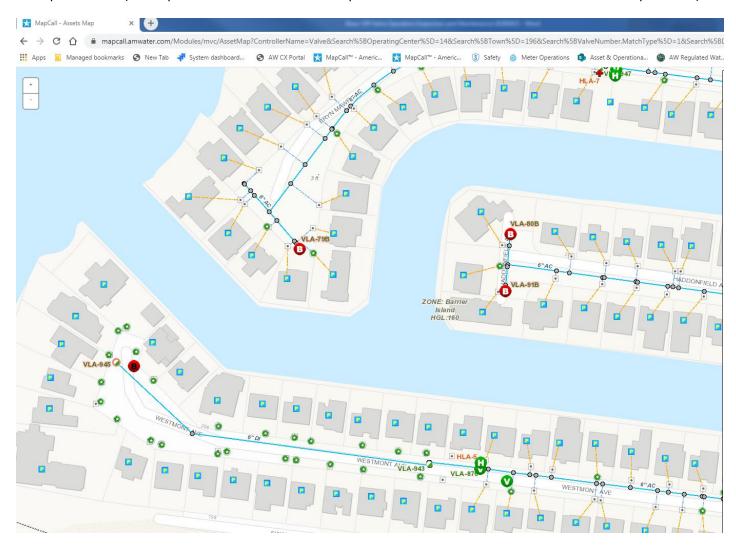
# **Physically Locate Valve (S)**



**CAUTION:** If system monitors (leak detection) are located in Blow-Off Valve boxes, exercise care in removing the Blow-Off Valve box lid because instrumentation and wiring may be attached to the lid.



Ensure blow-off valve operation will not cause damage to the distribution system by identifying critical areas and taking extra precautions (it is important that blow-off valve inspections are coordinated with the Production Department)





# Attach Blow-Off Piping, Gauge, Pressurize, and Record Static Pressure (S)

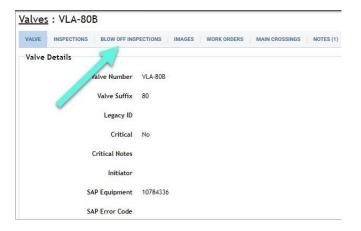
- ❖ Not all blow-offs have fittings to attach pressure gauges
  - → closest hydrant or service to blow-off may be used

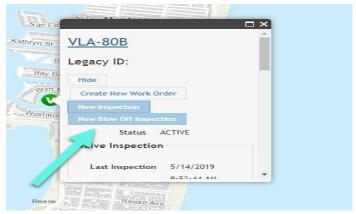


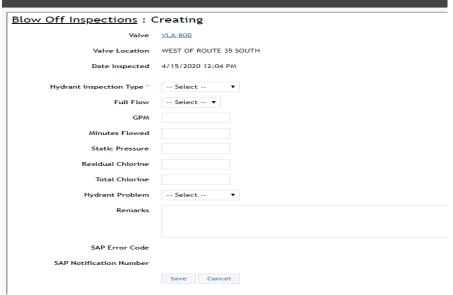
Caution: Do NOT stand above Blow-Off Valve while operating.



# **Record Blow-Off Valves Performance**







**What Success looks like** 



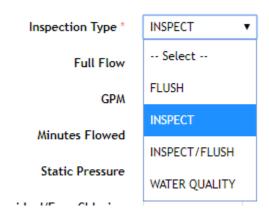


# Blow Off Inspections: 41843:

Valve	<u>VAH-343</u>
Valve Location	
Date Inspected *	5/1/2020 1:11 PM
Hydrant Inspection Type *	INSPECT/FLUSH ▼
Full Flow	Yes ▼
GPM *	500
Minutes Flowed *	5.00
Static Pressure	56.00
Post Residual/Free Chlorine	1.20
Free No Read Reason	Select ▼ 💍
Post Total Chlorine	1.30
Total No Read Reason	Select ▼ 💍
Hydrant Problem	Select ▼ 🗘
Remarks	
SAP Error Code	Successful
SAF EITOI COde	Successful
SAP Notification Number	18261862
	Save Done



# **Record Inspection Type**



- ❖ Inspection Types "Flush", "Inspect/Flush", and "Water Quality" requires testing for Free and Total Chlorine.
  - → If no values are entered, you will be required to explain:
    - Kit not available
    - Not directed by manager
- ❖ Inspection Type "Inspect" does not require testing for Free or Total Chlorine.
  - → Use "Inspect" when not flowing (Ex. Drought, CA, Other)



# **Testing for Chlorine (S)**

Flow Blow-Off Valve until water is clear

Obtain chlorine reading until minimum requirements are met

**Follow local requirements** 

**AWWA Standards (Minimum):** 

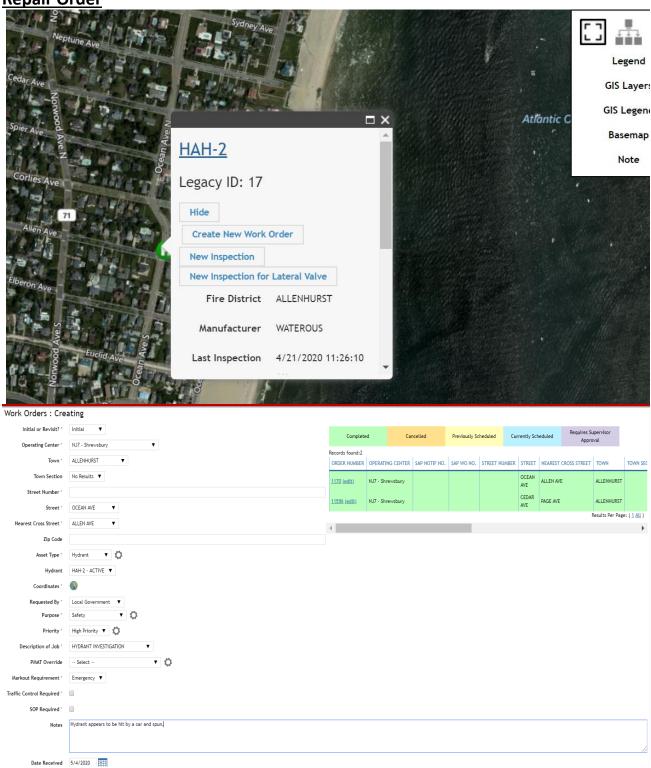
Free/Total = 0.2mg/l to 4.0mg/l

**TOTAL** = Total Chlorine detected in water (Sum of Combined + Free Chlorine)

**FREE** = Chlorine left (unused) for disinfection

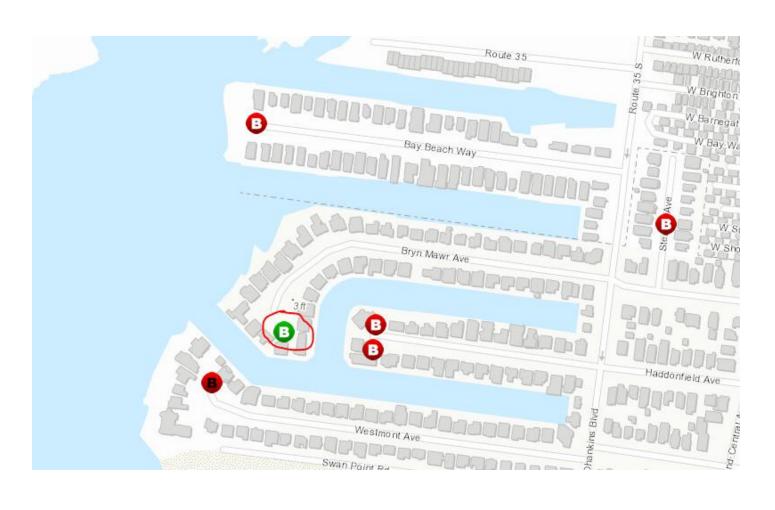


**Repair Order** 





# **Monitor Progress**





**Frequency Guidelines** 

		Work Lord					
Activity/ Task	Criticality	Frequent Trigger	cy Value	Work Load Hours #Staff		Specialty Tools/Skills	Comments
Inspect and Operate distribution	High	Time	Annually	1	1-2	Valve key/operator	Increase reliability, reduce failure, extend valve life
system transmission	Medium	Time	Every 2 yrs.	1	1-2	Valve key/operator	Same
valves	Low	Time	Every 5 yrs.	1	1-2	Valve key/operator	Same
	High	Time	Annually	0.25	1	Map, magnetic locator, valve sketch, valve box cleaners	Ensure accessibility
	Medium	Time	Every 2 yrs.	0.25	1	Map, magnetic locator, valve sketch, valve box cleaners	Ensure accessibility
	Low	Time	Every 5 yrs.	0.25	1	Map, magnetic locator, valve sketch, valve box cleaners	Ensure accessibility
Locate distribution system valves	Low	Activity (new paving, const., etc.)*	Within 1 yr. of activity	0.25	1	Map, magnetic locator, valve sketch, valve box cleaners	Ensure accessibility
	High	Time	Annually	0.33	1-2	Valve key/operator	Determine accessibility and operating condition
	Medium	Time	Every 2 yrs.	0.33	1-2	Valve key/operator	Determine accessibility and operating condition
Inspect and Operate distribution system valves	Low	Time	Every 5 yrs.	0.33	1-2	Valve key/operator	Determine accessibility and operating condition
	High	Time	Annually	0.33	1-2	Valve key/operator	Determine accessibility and operating condition
	Medium	Time	Every 10 yrs.	0.33	1-2	Valve key/operator	Determine accessibility and operating condition
Inspect and Operate hydrant auxiliary valves	Low	Time	Every 10 yrs.	0.33	1-2	Valve key/operator	Determine accessibility and operating condition

# PRACTICE DOCUMENT



This table indicates the valve maintenance activities to be performed, the frequency that the activities should be performed based on valve criticality rating, the estimated number of hours and staff members needed for the work, and the need for any specialty tools/skills.

In the column marked "Work Load," the Practice sets forth an estimate for the hours required for the maintenance work along with an appropriate number of employees to perform said work. In reviewing these guidelines and in determining the proper number of employees needed, a supervisor should consider the individual characteristics of the needed maintenance including the traffic conditions, safety of employees in the given area, and the difficulties that may be anticipated because of valve size, condition, location, and any other relevant information. The estimations are not meant as the enactment of any rule upon supervisors. Rather, the estimations are meant as a guide.

Additionally, the following criteria is offered for supervisors when applying the Frequency Table:

- The triggers for locating low criticality valves are paving reconstruction programs, new construction projects, main extensions, etc;
- The Practice attempts to provide a general framework for valve inspection even though local and/or state regulatory requirements may differ. Where such regulatory requirements differ, it is suggested that the implementation of this Practice may encourage regulatory agencies to reconsider the requirements that the law may currently impose. In other words, the regulations may be antiquated and not reflect current practice in the water industry. The successful implementation of a valve maintenance practice that differs in some manner from the regulatory requirements may support modifications in the regulatory environment.
- Frequency value for operating and locating low criticality transmission or distribution system valves (every five years) is the recommended value. Varied state regulatory compliance issues are to be considered when determining the actual frequency value to be implemented at a specific operating unit.
- Frequency value for operating hydrant auxiliary valves (every ten years) is the recommended value based on the scouring action of valve seats during hydrant inspection. Varied state regulatory compliance issues are to be considered when determining the actual frequency value to be implemented at a specific operating unit.



# Dry and Wet-Barrel Hydrant Operation, Inspection and Maintenance Practice

Practice Number: PRA-OPS03 Document Owner: Operations Excellence

**Applicability:** American Water Works Company, Inc., and its controlled subsidiaries as described below (together

"American Water" or the "Company")

Executive Sponsor: Operations Excellence - SVP

Effective Date: August 25, 2020

#### I. PURPOSE

The Dry and Wet-Barrel Hydrant Operation, Inspection and Maintenance Practice establishes a consistent program to effectively inspect and maintain hydrants within Company Transmission and Distribution (T&D) systems in order to ensure the operational integrity of these assets and to optimize the utilization of personnel resources.

#### II. SUMMARY

Effective hydrant maintenance is important to local operations as a pro-active program to increase hydrant reliability, reduce hydrant failure, and extend hydrant life. Improper or insufficient maintenance may result in hydrant failure causing extensive damage to infrastructure and/or property loss, extended service interruptions to American Water customers, loss of fire protection, and can lead to costly repairs or replacement activities.

#### III. KEY ACTIVITIES

Area/ Function	Key Activities (S=Follow Safety Requirements)	Responsibility	Frequency/ Trigger	System	Links
T&D	Locate Hydrant	Hydrant Operator	Per Schedule	MapCall	Search
T&D	Visually Inspect Hydrant – leaks, damage, missing parts, corrosion (S)	Hydrant Operator	Every Inspection		
T&D	<b>FOR WET HYDRANTS:</b> Check Oil via plug or grease via fitting. Add approved lubricant (S)	Hydrant Operator	Every Inspection		
T&D	Remove, Lubricate, and Replace Caps (S)	Hydrant Operator	As Needed		
T&D	Attach Gauge, Pressurize Hydrant, and Record Static Pressure (S)	Hydrant Operator	Every Inspection	MapCall	
T&D	Record Date and Time of Inspection	Hydrant Operator	Every Inspection	MapCall	
T&D	Record Inspection Type	Hydrant Operator	Every Inspection	MapCall	
T&D	Record Flow (Full – Y/N)	Hydrant Operator	Every Inspection	MapCall	



T&D	Record Gallons per Minute (GPM)	Hydrant Operator	Every Inspection	MapCall	
T&D	Record Minutes Flowed	Hydrant Operator	Every Inspection	MapCall	
T&D	Test for Chlorine (S)	Hydrant Operator	Every Inspection	MapCall	
T&D	Record Free and/or Total Chlorine	Hydrant Operator	Every Inspection	MapCall	
T&D	Record Hydrant Tag Status	Hydrant Operator	Every Inspection	MapCall	
T&D	Create Repair Orders if needed	Hydrant Operator	As Needed	MapCall	
T&D	Monitor Progress	Supervisor	Monthly	MapCall	Report
T&D	Frequency Guidelines	Supervisor	Reference		

**Hydrant Operator –** Is not an official AW position but refers to the individual performing the activity. The individual can be referred to as a Field Worker as well. This activity can be performed by internal or contracted resources.

#### IV. WAIVERS

Any deviation, waiver or exception from this practice requires the prior written approval of the Document Approver of this practice. If the deviation, waiver or exception conflicts with any policy, approval from the Executive Sponsor of that policy is required. The Document Owner, or her or his designee, is responsible for tracking all requests for waivers, decisions with respect to those requests, and maintaining documentation related to each waiver request. Each individual receiving a waiver is responsible for retaining documentation of the waiver that was granted.

#### V. DEFINITIONS

#### VI. NON-COMPLIANCE

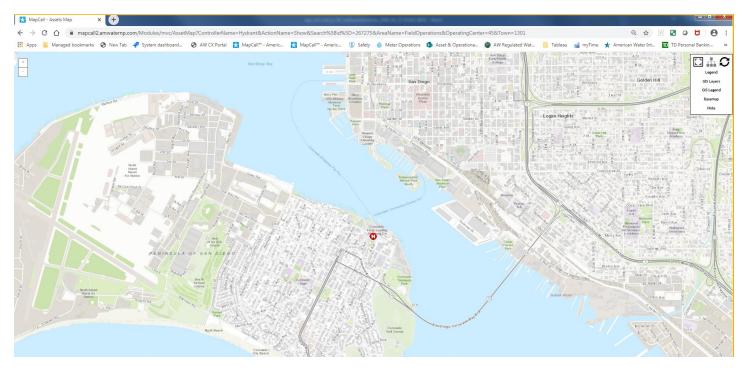
Any employee who violates or circumvents the practice may be subject to disciplinary action up to and including termination.

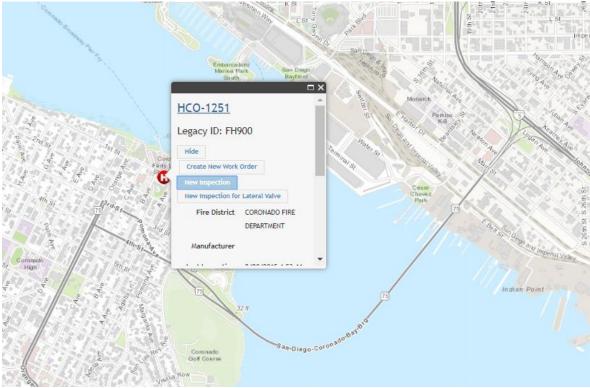
#### VII. CONTACT INFORMATION; MONITORING

Contact the Operations Excellence Director for questions and compliance monitoring of this practice.



# **Locate Hydrant requiring Inspection and Maintenance in MapCall**





The primary step to employ is to refer to the distribution mapped grid system to begin systematically routing hydrants by hydraulic flow and adding a route and stop to each hydrant. This will allow hydrants to be inspected in systematic hydraulic flow to pull the water through the system.

# PRACTICE DOCUMENT



NOTE - it is recommended when beginning a hydrant inspection program that one follows the schedule in the Work Management System since some inspections may not require full flowing

If data exists, however, a local operating unit may wish to sequence the hydrant inspections to focus on any of the following areas first:

- Beginning at the source of supply and moving to the extremities of the system;
- Where critical customers are located;
- Oldest hydrants in the system;
- Where hydrant redundancy does not exist;

At the same time, it is recognized that all operations have an approved maintenance system (Currently MapCall) and can employ various methods of inspecting and operating hydrants within their respective areas. Accordingly, the following guidance is offered to these areas as opportunities to improve the pre- existing program:

## **How to Improve a Pre-Existing Hydrant Program:**

- 1. Identify individual hydrant criticality and apply applicable maintenance frequencies
- 2. Add all inspections activities, including hydrants operated outside of a maintenance program;
- 3. Examine areas with substantial network activity;
- 4. Coordinate program with external programs, e.g. road reconstruction projects; external construction activity;
- 5. Coordinate program with other internal programs, e.g. valve inspection, mains flushing, internal construction activity;
- 6. Increase the Inspection Frequency requirement on Critical hydrants, and areas with poor water quality.

**NOTE** – in performing any hydrant work, the local operating unit must consider the impact on water quality and system pressure. For example, there may be an impact in the system where, during the operating of a hydrant, the flow of water stirs up sediment in the main. Water quality may not be affected where the operating of a hydrant does not result in flow velocities sufficient enough to stir up sediment. At the same time, if fully flowing hydrants at lower elevations, this practice may cause significant pressure reduction at high points within the system.



# <u>Visually Inspect Hydrant – leaks, damage, missing parts, corrosion</u> (S)



Dry-Barrel Hydrant



**Wet-Barrel Hydrant** 

<sup>\*</sup>Do NOT operate hydrant if damaged, leaning, or no longer facing the intended direction.



# Remove, Lubricate, and Replace Caps (S)



Apply approved (food grade) lubricant as needed.



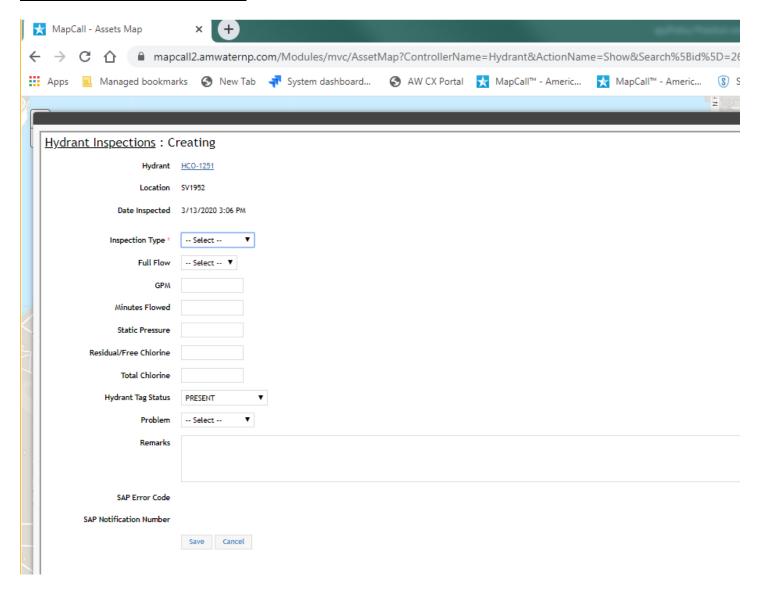
# Attach Gauge, Pressurize Hydrant, and Record Static Pressure (S)



**Caution:** Please consider safety and surroundings when about to operate hydrants (especially at full flow). Do NOT stand in front of hydrant while pressurizing.

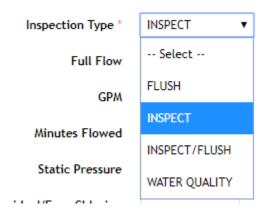


# **Record Hydrant Performance**





# **Record Inspection Type**



- ❖ Inspection Types "Flush", "Inspect/Flush", and "Water Quality" requires testing for Free and Total Chlorine.
  - → If no values are entered, you will be required to explain:
    - Kit not available
    - Not directed by manager
- ❖ Inspection Type "Inspect" does not require testing for Free or Total Chlorine.
  - → Use "Inspect" when not flowing (Ex. Drought, CA, Other)



# **Testing for Chlorine (S)**

Flow hydrant until water is clear

Obtain chlorine reading until minimum requirements are met

**Follow local requirements** 

**AWWA Standards (Minimum):** 

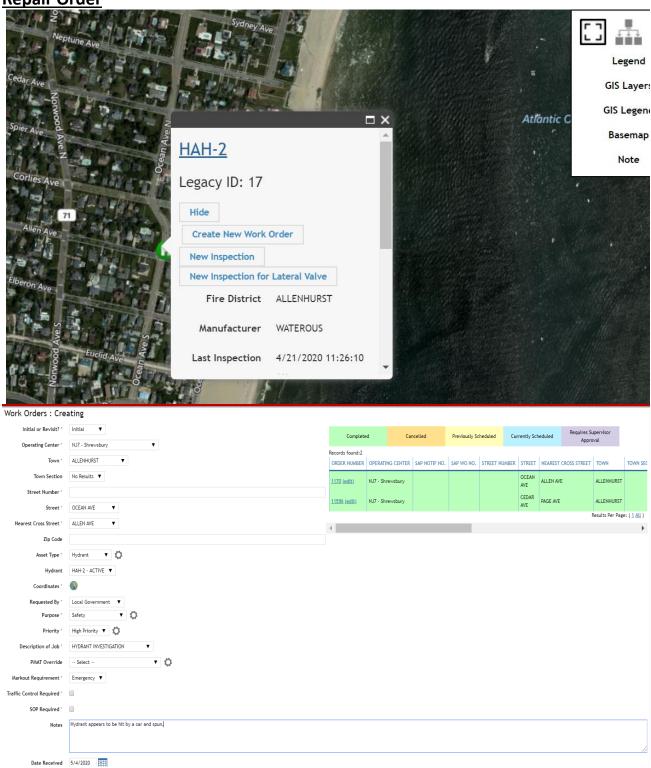
Free/Total = 0.2mg/l to 4.0mg/l

**TOTAL** = Total Chlorine detected in water (Sum of Combined + Free Chlorine)

**FREE** = Chlorine left (unused) for disinfection

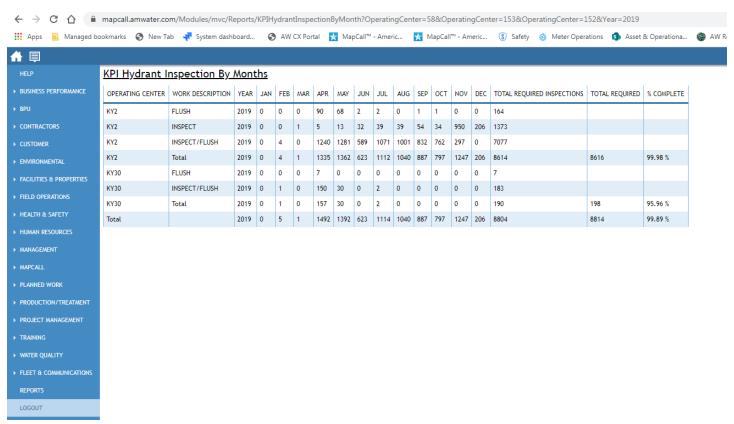


**Repair Order** 





# **Monitor Progress**



# Frequency Guidelines

**IMPORTANT:** Local protocols can supersede guidelines. Please consider safety and surroundings when about to operate hydrants.

# PRACTICE DOCUMENT



Appendix A: Policies and Practices related to: Dry & Wet Barrel Hydrant Operation, Inspection and Maintenance Practice

Practice	Related Policy
Dry & Wet Barrel Hydrant Operation, Inspection & Maintenance	none



## Valve Operation, Inspection and Maintenance Practice

Practice Number: PRA-OPS09 Document Owner: Operations Excellence

**Applicability:** American Water Works Company, Inc., and its controlled subsidiaries as described below (together

"American Water" or the "Company")

Executive Sponsor: Operations Excellence - SVP

Effective Date: August 25, 2020

#### I. PURPOSE

The Valve Operation, Inspection and Maintenance Practice establishes a consistent program to effectively inspect and maintain valves within Company Transmission and Distribution (T&D) systems in order to ensure the operational integrity of these assets and to optimize the utilization of personnel resources.

#### II. SUMMARY

Effective valve maintenance is important to local operations as a pro-active program to increase valve reliability, reduce valve failure and extend valve life. Improper or insufficient maintenance may result in valve failure causing extensive damage to infrastructure and/or property loss, extended service interruptions to American Water customers, loss of fire protection, and can lead to costly repairs or replacement activities.

#### III. KEY ACTIVITIES

Area/ Function	Key Activities (S=Follow Safety Requirements)	Responsibility	Frequency/ Trigger	System	Links
T&D	Locate Valve Requiring Inspection	Valve Operator	Per Schedule	MapCall	<u>Search</u>
T&D	Physically Locate Valve (S)	Valve Operator	Every Inspection		
T&D	Ensure valve operation will not cause damage to the distribution system	Valve Operator	Every Inspection	MapCall	
T&D	Clean out the valve box if necessary (S)	Valve Operator	Every Inspection		
T&D	Insert valve key onto valve nut, wheel, or tee head (S)	Valve Operator	Every Inspection		
T&D	Operate valves through a full cycle, counting turns, and leave in normal operating position (S)	Valve Operator	Every Inspection		
T&D	Record Date and Time of Inspection	Valve Operator	Every Inspection	MapCall	
T&D	Record Operated Y/N	Valve Operator	Every Inspection	MapCall	



T&D	Record Position Found	Valve Operator	Every Inspection	MapCall	
T&D	Record Position Left	Valve Operator	Every Inspection	MapCall	
T&D	Record Number of Turns	Valve Operator	Every Inspection	MapCall	
T&D	Update valve attribute data to make corrections or additions	Valve Operator	As Needed	MapCall	
T&D	Create Repair Orders if needed	Valve Operator	As Needed	MapCall	
T&D	Monitor Progress	Supervisor	Monthly	MapCall	Report
T&D	Frequency Guidelines	Supervisor	Reference		

**Valve Operator –** Is not an official AW position but refers to the individual performing the activity. The individual can be referred to as a Field Worker as well. This activity can be performed by internal or contracted resources.

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#### V. DEFINITIONS

#### VI. NON-COMPLIANCE

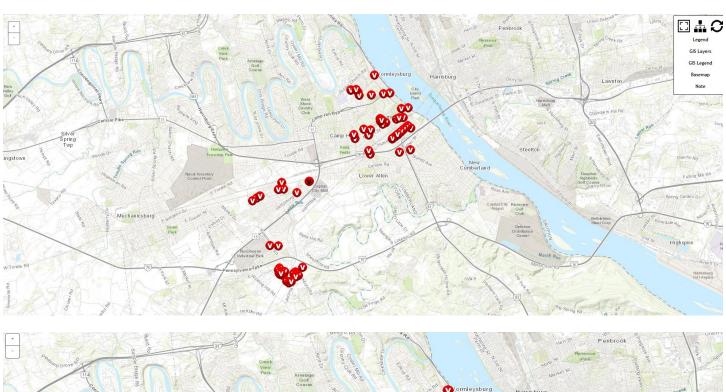
Any employee who violates or circumvents the practice may be subject to disciplinary action up to and including termination.

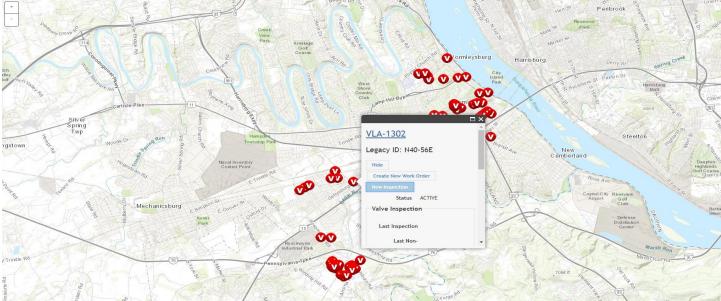
#### VII. CONTACT INFORMATION; MONITORING

Contact the Operations Excellence Director for questions and compliance monitoring of this practice.



# **Locate Valve requiring Inspection and Maintenance in MapCall**





The primary step to employ is to refer to the distribution mapped grid system to begin systematically routing valves by hydraulic flow and adding a route and stop to each valve.



# **Physically Locate Valve (S)**



**CAUTION:** If system monitors (leak detection) are located in valve boxes, exercise care in removing the valve box lid because instrumentation and wiring may be attached to the lid.



Ensure valve operation will not cause damage to the distribution system by identifying critical areas and taking extra precautions (it is important that valve inspections are coordinated with the Production Department)



- Critical notes should be added to valves (where needed) advising to proceed with caution and requiring tight communication & coordination with production operators/supervisors
  - ★ Ensure critical notes are viewed and observed/followed for each asset

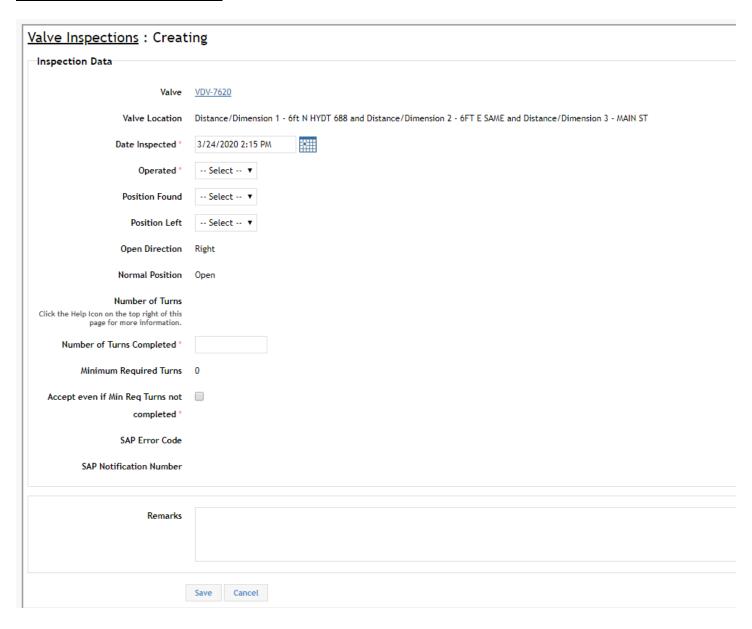


### **Typical Valve Number of Turns (S)**

						Typica	l numb	er of t	urns fo	r Valve	r Type	and Si	ze					
Valve Size	2"	2.5"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	42"	48"	54"
Gate Valve	8	11	11	14	21	27	33	39	44	49	57	63	75	93	111	131	149	149
Tapping Valve	8	11	11	14	21	27	33	39	44	49	57	63	75	93	111	131	149	149
Butterfly Valve	NA	NA	NA	32	32	32	32	32	30	30	40	40	40	44	44	136	215	
Ball Valve	0.25	0.25	0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Telescopic																		
Pressure Reducing	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Check Valve	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

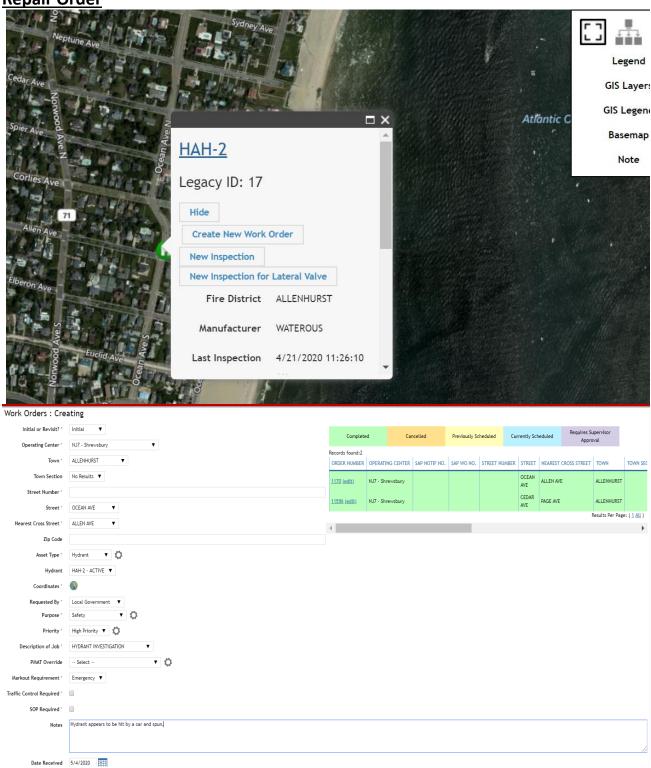


### **Record Valve Performance**





**Repair Order** 





### **Monitor Progress**

### Valves Due Inspections

OPERATING CENTER	TOWN	COUNT
IA2	BETTENDORF	3081
IA2	BLUE GRASS	1
IA2	DAVENPORT	19
IA2	LE CLAIRE	637
IA2	PANORAMA PARK	14
IA2	RIVERDALE	79



**Frequency Guidelines** 

				***				
Activity/ Task	Criticality	Frequency Trigger Value		Work Load Hours #Staff		Specialty Tools/Skills	Comments	
Inspect and Operate distribution	High	Time	Annually	1	1-2	Valve key/operator	Increase reliability, reduce failure, extend valve life	
system transmission	Medium	Time	Every 2 yrs.	1	1-2	Valve key/operator	Same	
valves	Low	Time	Every 5 yrs.	1	1-2	Valve key/operator	Same	
	High	Time	Annually	0.25	1	Map, magnetic locator, valve sketch, valve box cleaners	Ensure accessibility	
	Medium	Time	Every 2 yrs.	0.25	1	Map, magnetic locator, valve sketch, valve box cleaners	Ensure accessibility	
	Low	Time	Every 5 yrs.	0.25	1	Map, magnetic locator, valve sketch, valve box cleaners	Ensure accessibility	
Locate distribution system valves	Low	Activity (new paving, const., etc.)	Within 1 yr. of activity	0.25	1	Map, magnetic locator, valve sketch, valve box cleaners	Ensure accessibility	
	High	Time	Annually	0.33	1-2	Valve key/operator	Determine accessibility and operating condition	
	Medium	Time	Every 2 yrs.	0.33	1-2	Valve key/operator	Determine accessibility and operating condition	
Inspect and Operate distribution system valves	Low	Time	Every 5 yrs.	0.33	1-2	Valve key/operator	Determine accessibility and operating condition	
	High	Time	Annually	0.33	1-2	Valve key/operator	Determine accessibility and operating condition	
	Medium	Time	Every 10 yrs.	0.33	1-2	Valve key/operator	Determine accessibility and operating condition	
Inspect and Operate hydrant auxiliary valves	Low	Time	Every 10 yrs.	0.33	1-2	Valve key/operator	Determine accessibility and operating condition	

### PRACTICE DOCUMENT



This table indicates the valve maintenance activities to be performed, the frequency that the activities should be performed based on valve criticality rating, the estimated number of hours and staff members needed for the work, and the need for any specialty tools/skills.

In the column marked "Work Load," the Practice sets forth an estimate for the hours required for the maintenance work along with an appropriate number of employees to perform the work. In reviewing these guidelines and in determining the proper number of employees needed, a supervisor should consider the individual characteristics of the needed maintenance including the traffic conditions, safety of employees in the given area, and the difficulties that may be anticipated because of valve size, condition, location, and any other relevant information. The estimations are not meant as the enactment of any rule upon supervisors. Rather, the estimations are meant as a guide.

Additionally, the following criteria is offered for supervisors when applying the Frequency Table:

- The triggers for locating low criticality valves are paving reconstruction programs, new construction projects, main extensions, etc:
- The Practice attempts to provide a general framework for valve inspection even though local and/or state regulatory requirements may differ. Where such regulatory requirements differ, it is suggested that the implementation of this Practice may encourage regulatory agencies to reconsider the requirements that the law may currently impose. In other words, the regulations may be antiquated and not reflect current practice in the water industry. The successful implementation of a valve maintenance practice that differs in some manner from the regulatory requirements may support modifications in the regulatory environment.
- Frequency value for operating and locating low criticality transmission or distribution system valves (every five years) is the recommended value. Varied state regulatory compliance issues are to be considered when determining the actual frequency value to be implemented at a specific operating unit.
- Frequency value for operating hydrant auxiliary valves (every ten years) is the recommended value based on the scouring action of valve seats during hydrant inspection. Varied state regulatory compliance issues are to be considered when determining the actual frequency value to be implemented at a specific operating unit.

### PRACTICE DOCUMENT



### Appendix A – Summary of Policies Related to The Valve Operation Inspection and Maintenance Practice

Practice	Related Policy
	none

Responsible Witness: Grady Stout

#### Question:

Please provide copies of any water utility industry standards or guidelines in the possession of TAWC or AWK that describe recommended or best practices or procedures for valve or fire hydrant inspections, replacement, exercising, operation, or repair, including but not limited to any such standards or guidelines concerning the frequency of valve or hydrant inspections and/or the time period within which utilities should repair valves or hydrants once they have been discovered to be broken, in disrepair, or out of service.

### Response:

The Company objects to this request as overly broad and unduly burdensome to the extent it seeks or refers to "any" such documents. Subject to and without waiving this objection, the Company responds as follows:

Please refer to the attachments for DR 2-1 - TAW\_R\_UWUADR2\_001\_082724\_Attachments 1 through 3.

Responsible Witness: Grady Stout

#### Question:

3. Please provide copies of all laws, rules, or regulations that TAWC believes govern its inspections, replacement, exercising, operation, or repair of valves or fire hydrants, including but not limited to laws, rules, or regulations concerning the frequency of valve or hydrant inspections and/or the time period within which the Company must repair valves or hydrants once they have been discovered to be broken, in disrepair, or out of service.

### Response:

The Company objects to this request on the grounds that any such information is public and therefore obtainable from readily available sources. TAWC further objects to this request on the grounds that it is overly broad and unduly burdensome to the extent it seeks or refers to "all" such laws, rules or regulations and as it calls for a legal conclusion. Subject to and without waiving these objections, the Company responds as follows:

The official compilation of the Rules and Regulations for the Tennessee Public Utility Commission can be found on the Tennessee Secretary of State's website at this link: https://publications.tnsosfiles.com/rules/1220/1220.htm

Responsible Witness: Grady Stout

#### Question:

4. Please provide a full and detailed statement of and documents showing any instructions given by TAWC to employees concerning the policies, practices, procedures, or expectations to be followed or met for the inspection, replacement, exercising, operation, or repair of valves or fire hydrants at any time since January 1, 2020. The information provided shall include a statement describing in detail any oral instructions given by TAWC to employees concerning procedures to be followed for inspections of valves or hydrants (including during all meetings of Distribution Department employees), as well as copies of any written instructions. TAWC's response should also include a detailed description of any changes implemented since January 1, 2023 of any instructions, policies, practices, procedures, or expectations to be followed or met for the inspection, replacement, exercising, operation, or repair of valves or fire hydrants.

### Response:

The Company objects to this request as overly broad and unduly burdensome to the extent it seeks or refers to "any" such statements or documents. Subject to and without waiving this objections, the Company responds as follows:

Please see response and attachments to UWUA DR 2-1 and please see response and attachments to UWUA DR 1-2 through DR 1-8, for TAWC's expectations of field employees and the completion of service orders and Key Performance Indicators ("KPIs").

As concerning any such oral statements or instructions that may be given by TAWC to employees from time to time concerning the policies, practices, and procedures to be followed or met for the inspections, replacement, exercising, operations, or repair of valves or fire hydrants, such oral statements or instructions should be consistent with the Company's policies, practices, procedures, or expectations regarding the same, and the Company does not maintain records regarding any such oral statements or instructions.

The Valve Operating, Inspection and Maintenance Practice guidelines referenced in the Company's Response to UWUA DR 2-1 recommend generally that valve operation

occur every five (5) years. The Company has the discretion to operate valves on longer or shorter timeframes depending on the size of the valve, its purpose and its location. With respect to policies, practices, and procedures to be followed or met for the inspections, replacement, exercising, operations, or repair of valves, on January 1, 2023, the Company implemented some changes in its valve zones. Valve zones refer to a specific geographic area and these areas and valve size determine the frequency in which the valves are inspected. These changes could have accelerated or delayed some valve inspections as valves were assigned a new area and a new inspection frequency. Once all valves are transitioned to their new inspection cycle, all 12" and smaller valves will be on a 6 year inspection cycle.

Responsible Witness: Grady Stout

#### Question:

5. Please identify all TAWC supervisory or managerial employees who have provided instructions to hourly employees – whether orally or in writing – concerning the policies, practices, procedures, or expectations to be followed or met for the inspection, replacement, exercising, operation, or repair of valves or fire hydrants, or changes made to such instructions or policies, at any time since January 1, 2023. Please also provide copies of any notes, reports, or similar documents taken or prepared by such supervisory or managerial employees that reflect, summarize, or otherwise concern any such instructions or changes in instructions or policies.

### Response:

The Company objects to this request as overly broad and unduly burdensome as it seeks or refers to "all" such instructions, statements or documents or "any" such notes, reports, or similar documents, the breadth of which is not defined. The Company further objects to this request as overly broad and unduly burdensome as it seeks all oral communications between TAWC supervisory or managerial employees and hourly employees. Subject to and without waiving these objections, the Company responds as follows:

Oral instructions may have been given from time to time by TAWC supervisory or managerial employees to hourly employees concerning the policies, practices, procedures, or expectations to be followed or met for the inspections, replacement, exercising, operations, or repair of valves or fire hydrants. The Company expects such oral statements or instructions to be consistent with the Company's policies, practices, procedures, or expectations regarding the same, and the Company does not maintain records regarding such oral statements or instructions.

Further, the Company has not discovered any notes, reports, or similar documents taken or prepared by such supervisory or managerial employees that reflect, summarize, or otherwise concern any such instructions or changes in instructions or policies. Please see the Company's Responses to UWUA DRs 2-1 and 2-4.

To the best that the Company has been able to determine, the supervisory or managerial employees that had the potential to provide instructions are listed below.

**Grady Stout** Grant Evitts Kevin Kruchinski Megan Catalina Keith Hillard Martin Berndt William Blevins William T. Simms Jason Campbell Philip Roberson Michael Griffith David McBay Neil Bratcher Jason Ha Mark Snyder Bryan Betty Jennifer Ponder

Responsible Witness: Grady Stout

#### Question:

6. TAWC's response to UWUA First Discovery Request 2 and TAW\_R\_UWUADR1\_002\_073024\_Response identify 646 open work orders for water valves in need of repair or investigation as of June 30, 2024, including 48 open work orders for broken water valves, 76 for leaking valves, and 33 for valves otherwise in need of repair. Please provide a full and detailed explanation of why the Company has failed to complete work orders for all broken or leaking valves for which work orders have been open for more than one year, as well as an explanation and assessment of the potential reliability and public safety impacts of failure to ensure that a water utility's distribution valves are operating properly.

### Response:

Of the 12,455 distribution valves asked about in the first discovery request the following explanation applies to the open work orders for the 48 broken and 76 leaking valves. Of those open work orders there are only 42 broken valves and 61 leaking valves that have been open for longer than one year:

25 leaking valve work orders are on smaller diameter distribution mains. A leaking valve on a line this small is unlikely to inhibit repairs as a reduced flow of water will likely allow the pipe to be clamped. Further, other valves further back in the distribution system could be used to fully stop the flow of water, if necessary.

17 broken valve work orders are on smaller diameter distribution mains. A broken valve on a line of this small a size will increase the area impacted by a repair but because of the small diameter of pipe the area impacted will remain likely small. Also, the Company has determined that these valves are best and most cost-effectively addressed by rolling their repair into a larger main replacement project. In the interim the Company believes it has sufficient redundant valves in its system to keep reliability and safety impacts to a minimum.

1 broken and 10 leaking valve work orders were duplicated in the Company's system of record. These duplicate work orders have been cancelled, and the Company has confirmed the work has been completed.

17 leaking valve work orders were open in the Company's system of record due to incomplete finalization of the work order. In these instances, the work had been completed in the field thus restoring the valve to full function, but the work order was not properly closed out and finalized in the MapCall system. The Company has completed the close out of these 17 work orders.

24 broken and 9 leaking valves have active work orders that will be scheduled in the future to address the repairs or replacements.

The Company has conducted no formal engineering or operational assessment on the potential reliability or public safety impacts of these broken or leaking valves. Valves are an important asset that help mitigate the impact and speed of repairs to the Company's system, in the event of a water main break. The Company's established practices and procedures recognize and prioritize these repairs based on their criticality in the system.

Responsible Witness: Grady Stout

#### Question:

7. With reference to the "large valve project" cited in TAW R UWUADR1 001 073024 Response, please provide a full and detailed description of and documents concerning this project. The documents produced shall include, without limitation, documents provided to hourly employees instructing employees to inspect particular valves and what such inspections should entail, or notes of any such oral instructions; reports or similar documents prepared by hourly employees summarizing the results of such inspections, including any documents that summarize or reflect the identities of valves inspected and their locations, accessibility, size, and/or operability or functionality; reports, results of valve inspections, or similar documents submitted to TAWC's Engineering Department; reports, work orders, or similar documents prepared by Engineering Department or other TAWC personnel assessing or reporting on any results or findings of the large valve project, including any documents reflecting valves in need of repair, maintenance, or replacement; and documents showing the actions TAWC took in response to any recommendations for valves found to be in need of repair, maintenance, or replacement.

### Response:

The Company objects to this request to the extent it seeks or refers to "any" such oral instructions, to "any" such documents or to "any" such recommendations on the grounds that such requests are overly broad and unduly burdensome. Subject to and without waiving its objection, TAWC responds as follows:

As technology has progressed and advanced, TAWC has transitioned from paper valve books to geospatial information systems and computerized asset management. During this transition, we discovered varying sources of information about large valves in our water system. Thereafter, TAWC undertook a project to locate, access and determine one reliable internal source of information for our large valves, defined as 16" and larger.

This project looked at 431 of TAWC 12,455 in line valves in our water system that were indicated as a large valve. The results of this project found that 86 of these valves were not large valves, but smaller valves in our water system. Three hundred and five (305) of these valves were large valves. Forty (40) valves that were investigated during this project were removed as duplicate records. There were 14 large valves identified in the distribution system and added to asset management systems during this project and 2 additional large valves similarly added after the completion of this project to bring our large valve total to 321 as of June 30<sup>th</sup> 2024. These findings from the large valve identification project have been manually applied to TAWC Asset Management system to reflect the updated information about all the large valves identified in this project.

A geodatabase file was provided to the hourly employees assigned to this project. The file contains the 431 potential large valves to access and determine TAWC large valves. The hourly employees were asked to obtain a GNSS (Global Navigation Satellite System) point and fill out the geodatabase fields; Field\_Turn, Field\_Direction, Field\_Position, Field\_Size, Field\_Type, Field\_Bypass, Field\_Broken, Field\_CNL, and Field\_Comments. This geodatabase was also used to report findings to the Engineering department to assess capital infrastructure needs. Upon written request by the UWUA to counsel for TAWC, TAWC will make reasonable efforts and accommodations during regular business hours to provide an IPAD and a guest login for an opportunity to review the geodatabase file. Please see the attached file,

TAW\_R\_UWUADR2\_007\_082724\_Attachment 1, this attachment is the bulk upload file that added all inspections conducted during the large valve project to TAWC's asset management system. (Provided in Excel only due to the format of the spreadsheet)

Responsible Witness: Grady Stout

#### Question:

8. TAWC's response to UWUA First Discovery Request 5 and TAW\_R\_UWUADR1\_006\_073024\_Attachment identify thirty-one "active" fire hydrants that are "out of service" as of June 30, 2024, and indicate that these hydrants have been out of service since dates ranging from December 8, 2022 through June 19, 2024. Please provide a full and detailed explanation why the Company has failed to promptly return these thirty-one hydrants to service, as well as an explanation and assessment of the potential public safety impacts of allowing fire hydrants to remain out of service for extended periods of time.

### Response:

The Company denies the question's assertion that the repair of the 31 identified as "out of service" has not been prompt or that the status of these 31 hydrants has negatively impacted public safety.

Eleven (11) of the thirty-one (31) hydrants were listed as out of service in the Company's system of record due to incomplete finalization of the out of service note. In these instances, the work had been completed to repair or restore the hydrant, but the note was not properly closed out and finalized in the MapCall system. The Company has completed the close out of these 11 notes, and these eleven (11) hydrants are back in service or retired.

Seventeen (17) of the thirty-one (31) hydrants are identified for replacement or relocations. The work orders to be replaced or relocated have been created.

Three (3) of the thirty-one (31) hydrants are identified for repair. The work orders to be repaired have been created.

When a hydrant has a change in service noted in our records, the Company notifies the fire department of the change. For the 31 hydrants in this question, public safety is not impacted as nearby hydrants are available and the fire department knows which hydrants to use in case of emergency. For any hydrant that goes out of service, the Company's practices and procedures prioritize repairs based upon their criticality.

Responsible Witness: Grady Stout

### Question:

9. With reference to TAW\_R\_UWUADR1\_006\_073024\_Attachment, please provide a statement detailing the circumstances in which TAWC places fire hydrants in "retired" status.

### Response:

The Company generally places fire hydrants in retired status when a fire hydrant is removed from its physical location.

Responsible Witness: Grady Stout

#### Question:

10. TAWC's response to UWUA First Discovery Request 15 and TAW\_R\_UWUADR1\_015\_073024\_Response identify 395 open work orders as of June 30, 2024 involving reported leaks in water mains, service lines, or other infrastructure, including eight work orders opened between May 2023 and April 2024 involving water main breaks or water main investigations designated by TAWC as "emergencies." Please provide a full and detailed explanation why the Company has failed to complete these eight work orders, and also whether TAWC has completed the four additional "emergency" or "high priority" work orders involving water main breaks or main investigations opened in June 2024.

### Response:

Main investigation work orders can be created by the Field Representative Call Center "FRCC" when a customer calls to report a leak. This can create duplicate orders. Of the eight (8) work orders that have been opened between May 2023 and April 2024, five (5) are duplicate orders that have been cancelled and the work has been completed. Two (2) of the eight (8) work orders were main investigations that were found to have no leak, and the order has been completed as "No Issue Found". One (1) of the eight (8) work orders needs to be scheduled and is a minor leak.

Of the four (4) work orders that were created in June of 2024 that were marked as emergency or high priority, three (3) were duplicates orders that have been cancelled, and the work has been completed. The remaining one (1) work order of the four (4) has also been completed.

In conclusion, of the twelve (12) referenced above, only one (1) remains open.

Responsible Witness: Grady Stout

#### Question:

11. For each calendar year since and including 2020 and for the half-year ending June 30, 2024, please provide a detailed statement of the average waiting time for TAWC customers requesting new service installations (from the time of the new service request until the date of completion), categorized by meter size, as well as copies of all TAWC or AWK reports or other documents summarizing or reporting this information.

### Response:

For clarity and context, an explanation of the Company's new service process is below.

When a customer requests a new service, that request is a new service notification. As explained in the Company's response to DR UWUA's 1-17(b), not all requested services are ready for installation upon notification. For example, some customers may request the new service months before their site is ready for installation. When the Company confirms with the customer that a new service notification is ready for installation, the new service notification is converted to a new service work order. After the installation is complete, the new service work order is moved to complete status.

Table 1 below provides customer wait times between the opening of a new service work order and work order completion (in days):

Table 2: Average wait time (in days) between an open new service work order and work order completion

	Meter Size								
Year	5/8"	1"	1 1/2"		2"	4"	6"	No Size	
2020	48	31		35	48	40			27
2021	16	27		14	28	23			44
2022	41	5		17	20				57
2023	16	10		17	13	22	4		35
2024	20	1		27	51	36	172		19

<sup>\*</sup>For the years 2020 – 2022 – wait times were impacted by supply chain issues caused by the COVID-19 Pandemic.

There are no reports or other documents summarizing or reporting this information.

Responsible Witness: Grady Stout

#### Question:

12. With reference to TAWC's response to UWUA First Discovery Request 17(b), please explain what the Company means when it states that some of the unfulfilled new service installation work orders "include requests from developers that are not yet ready for installation by field crews," and provide the specific number of unfulfilled service requests as of June 30, 2024 that fall into this category.

### Response:

For clarity and context, please refer to TAWC's Response to UWUA DR 2-11.

As of June 30, 2024, there are 347 new service notifications that are not yet ready for installation by TAWC field reps and therefore, have not reached work order status.

Responsible Witness: Grady Stout

#### Question:

13. Grady Stout's prepared testimony at 38:14-16 states that the Company added 1,652 new customers in 2023, while TAWC's response to UWUA First Discovery Request 17(b) states the Company completed only 1,333 work orders that year for new service installations. Please explain this discrepancy.

### Response:

New customers do not necessarily equate 1 to 1 to new service installation work orders. For example, a new customer can be added that utilizes an existing service to a lot that has been vacant. So, it is possible to add a new customer where service already exists without such addition resulting in completed work order.

Responsible Witness: Grady Stout

#### Question:

14. TAWC's response to UWUA First Discovery Request 17(b) states there were 505 unfulfilled new service installations as of June 30, 2024, but TAW\_R\_UWUADR1\_017\_073024\_Response shows 158 incomplete NSI work orders as of that date. Please explain this discrepancy.

### Response:

For clarity and context, please refer to TAWC's Response to UWUA DR 2-11 for an explanation of the process of notifications and installation work orders.

For TAWC's new service process, there are different and progressive stages to a request. When a customer requests a new service, that request is a new service notification. Because some notifications are received many months before a site is ready for install, the notification remains in a notification status. Once a site is ready, the notification is moved from notification status to a new service installation work order. There are other reasons that a work order might be "unfulfilled," including the customer delayed the installation.

In UWUA's DR1-17(b), UWUA used the term "unfulfilled." So, the Company used that same term in its Response to DR1-17(b). Further, in the excel document that the Company attached to its Response to UWUA DR1-17(b), the Company used the terms "complete" and "incomplete." Therefore, it may be helpful to clarify here that the terms "fulfilled" and "unfulfilled" mean the same in this context as the words "complete" and "incomplete." The terms "unfulfilled" and "incomplete" both refer to new service notifications that have not progressed. As of June 30, 2024, the 505 incomplete new service installations include both the 158 incomplete new service work orders and the 347 incomplete new service notifications.

Responsible Witness: Grady Stout

#### Question:

15. With reference to the "All Incompleted Notifications" worksheet in TAW\_R\_UWUADR1\_017\_073024\_Response, please explain what TAWC means by an "incompleted notification" and specifically what information this worksheet is designed to convey.

### Response:

For clarity and context, please refer to TAWC's Response to UWUA DR 2-11 and DR 2-14 for an explanation of the process of notifications and installation work orders. The worksheet is designed to convey the numbers for each step in the process.

Responsible Witness: Grady Stout

#### Question:

16. For each calendar year since and including 2020 and for the half-year ending June 30, 2024, provide data detailing the number of new service request forms issued by TAWC to Distribution Department employees; the number of new "meter set orders" or "service turn-on (STO)" forms completed by Meter Shop employees; the corresponding number of backlogs of unfulfilled new service requests; copies of any TAWC or AWK reports summarizing or documenting this information; and a detailed explanation if TAWC's response to this discovery request differs in any way from the work order data provided by TAWC in its response to UWUA First Discovery Request 17.

### Response:

TAWC does not have new service request forms issued by TAWC to Distribution Department employees. TAWC does not have Meter Set Orders and Service turn on orders.

TAWC does have a work order type STO that stands for Set Meter Turn On which includes any meter that is set, whether it is a new service or an existing service that needs a meter set to turn a customer on. Therefore, these numbers are not a 1 to 1 match with new service requests.

The number of new service installation requests and the number of backlogs of unfulfilled new services have already been provided in UWUA First Discovery Request 17.

Please see table below.

Number of STO Work Orders Completed each Year							
Morts Order Tyre			Year				
Work Order Type	2020	2021	2022	2023	2024		
STO	734	1320	1430	1672	711		

There are no reports or other documents summarizing or reporting this information.

Responsible Witness: Grady Stout

#### Question:

17. For each calendar year since and including 2020 and for the half-year ending June 30, 2024, provide data detailing (a) the total dollar amounts paid by TAWC to outside contractors and (b) the total hours worked by contractor employees for the delivery of utility services, in each case categorized separately for water production, distribution system maintenance, construction, outside commercial (e.g., meter reading, maintenance, and installation), and other.

### Response:

a. Please see the table below for the total dollar amounts paid by TAWC to outside contractors for the years requested.

Year	Total Dollar Amount
2020	\$31,141,892.89
2021	\$35,887,916.40
2022	\$39,338,653.95
2023	\$47,984,461.09
2024	\$29,270,174.45

b. The Company objects to this request on the grounds that it is unduly burdensome in that it seeks information the Company does not maintain and any attempt to compile such information would be both resource prohibitive and futile, for a host of reasons, including that many contractors provide services across the referenced categories. Subject to and without waiving these objections, the Company responds as follows:

The Company does not maintain the information requested in subsection (b) and cannot produce it.

Responsible Witness: Grady Stout

#### Question:

18. TAWC's response to UWUA First Discovery Request 1 and TAW\_R\_UWUADR1\_001\_073024 (under Response B) provide no data showing the target number of valve inspections planned by TAWC for the years 2022, 2023, or 2024. Please provide the number of valve inspections targeted by TAWC for each of the years from 2022-2024.

### Response:

Please refer to TAWC's Supplemental Response to UWUA DR 1-1 submitted on August 14, 2024.

Responsible Witness: Grady Stout

#### Question:

19. TAWC's response to UWUA First Discovery Request 21 does not provide data showing which of the referenced job classifications are currently filled, and which additional job classifications the Company may fill in the future as part of its forecasted 117 full-time employees.

Please supplement TAWC's response to this discovery request by providing this information.

### Response:

Please refer to TAWC's Supplemental Response to UWUA DR 1-21 submitted on August 14, 2024.

### BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION NASHVILLE, TENNESSEE

PETITION OF TENNESSEE- AMERICAN WATER COMPANY TO MODIFY TARIFF, CHANGE AND INCREASE CHARGES, FEES, AND RATES, AND FOR APPROVAL OF A GENERAL RATE INCREASE	) ) DOCKET NO. 24-00032 ) )
VERI	FICATION
STATE OF <u>Tennessee</u> ) COUNTY OF <u>Hamilton</u> )	
I, ROBERT C. LANE, being duly swo	orn, state that I am authorized to testify on behalf of
Tennessee-American Water Company in the	above-referenced docket, that if present before the
Commission and duly sworn, verifies that the	e data requests and discovery responses are accurate
to the best of my knowledge.	
	ROBERT C. LANE
AM Gold	STATE OF TENNESSEE NOTARY PUBLIC TON COUNTY

#### CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served via U.S. Mail or electronic mail upon:

Shilina B. Brown, Esq.
Assistant Attorney General
Office of the Tennessee Attorney
General
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This the 27<sup>th</sup> day of August 2024.

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