

Resolution No. 2022 - 1

JOINT RESOLUTION TO ADOPT AND IMPLEMENT WATER SYSTEM PREVENTIVE
MAINTENANCE PROGRAM

RECITALS

WHEREAS, the Town of Keedysville owns, operates and maintains a water distribution system for the benefit of the citizens of the Town of Keedysville, Maryland; and

WHEREAS, the Town of Keedysville Water Commission has developed a *Water System Preventive Maintenance Program* which it believes would provide a systematic, organized and orderly approach regarding the regular maintenance and upkeep of the Town's Water Distribution System; and

WHEREAS, the Keedysville Water Commission is recommending that the Mayor and Council of the Town of Keedysville approve, adopt and authorize the *Water System Preventive Maintenance Program* attached to this Resolution as Exhibit "A" which is incorporated herein by reference; and

WHEREAS, it is the intent of the Mayor and Council and the Keedysville Water Commission to adopt said *Water System Maintenance Program* through the joint passage of this Resolution; and

WHEREAS, the Mayor and Council of the Town of Keedysville and the Keedysville Water Commission deem this action to be in the best interests of the citizenry of the Town.

RESOLUTION

NOW, THEREFORE, BE IT RESOLVED jointly by the Mayor and Council of the Town of Keedysville and the Keedysville Water Commission that the *Water System Preventive Maintenance Program* attached hereto as Exhibit "A" is approved, adopted and authorized; and be it further

RESOLVED, that the **RECITALS** set forth above are incorporated herein and made a part hereof; and it is further

RESOLVED, that as the need arises and conditions may dictate, this *Program* may be amended, revised and/or modified through the passage of a subsequent Joint Resolution; and be it further

RESOLVED, that any maintenance, repairs, replacements, upgrades to the water system and/or any expenditures related thereto pursuant to the *Water System Preventive Maintenance Program* shall be in accordance with and subject to the terms and conditions of the *Charter of the Town of Keedysville* and *The Code of Ordinances of the Town of Keedysville* as well as any other applicable statutes, laws and/or regulations; and be it further

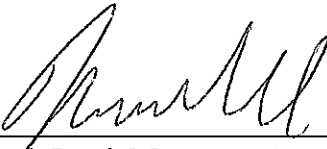
RESOLVED, that this Resolution shall be made a part of the Minutes of the June 1, 2022 Mayor and Council Meeting and the Minutes of the June 1, 2022 Keedysville Water Commission Meeting.

ATTEST:

**MAYOR AND COUNCIL OF
KEEDYSVILLE**



Lisa Riner, Town Administrator

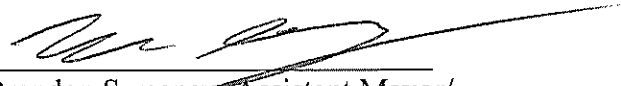


Kenneth Lord, Mayor

**KEEDYSVILLE WATER
COMMISSION**



Lisa Riner, Town Administrator



Brandon Sweeney, Assistant Mayor/
Chairman

Date of Introduction: June 1, 2022

Date of Passage: June 1, 2022

Effective Date: June 1, 2022

Please return the Resolution to:

**Lisa Riner
Town Administrator
Town of Keedysville
19 South Main Street
P.O. Box 359
Keedysville, MD 21713**

JUN 16 2022

EXHIBIT "A"

WATER SYSTEM PREVENTIVE MAINTENANCE PROGRAM

TOWN OF KEEDYSVILLE, MARYLAND

"Where Northern Thrift and Personality Blend with Southern Charm and Hospitality"

P.O. Box 359
19 South Main Street
Keedysville, MD 21756
301-432-5795
www.keedysvillemd.com



Ken Lord, Mayor
Brandon Sweeney, Assistant Mayor
Judy Kerns, Council
Matthew Hull, Council
Sarah Baker, Council

Preventative Maintenance Program

1. System Valves

The water system is comprised of varying types of valves. Mainline valves in the water distribution system are utilized to isolate portions of the system during various times, including maintenance and emergency shutdown periods. Valves at the well house, treatment plant, and pump station are used for control and isolation of equipment within the system. For this reason, these valves are to be exercised annually. Half of these valves shall be exercised in March, and the other half shall be exercised six (6) months later in September.

For testing purposes, the valves should be completely closed, reopened, and re-closed until they seat properly. They should then be put back into their correct positions. When performing this work, the contractor shall use the attached spreadsheet to provide all required information. This includes the date the valve is exercised, the initial position of the valve, the number and direction of turns to completely close the valve from a fully open position, a physical description of the valve (rusted, new, leaking, failure to close, etc.), and any additional notes.

If it is determined that a valve repair is required, this should be coordinated with Town Hall and scheduled appropriately. Refer to Section 8.

2. Fire Hydrants

Fire hydrants provide water for fire fighting services and can be utilized to flush the water distribution system. Flushing a system can clear out any sediment that may have gathered. The entire system should be flushed in an outward direction from the plant, on an annual basis. When flushing the system, any open fire hydrants are to be flushed away from private property. Additionally, when operating a dry-barrel hydrant, the contractor must close it completely so that the drain will open completely. If this does not occur, water may remain in the hydrant and could freeze and damage it during colder weather.

During the flush, the contractor shall meter the water to account for a more accurate water loss record. Also, the contractor shall use the attached spreadsheet to provide all required information. This includes, verifying accessibility to the fire hydrants, noting the condition of the fire hydrants (needs repainted, new, leaking, etc.), checking the operation and condition of the fire hydrant valves, observing the initial color of the water during

the flush, recording the amount of water used for the flush, recording the time it takes to complete the flush (which occurs until the water is clear), verifying the drain is working properly, and any additional notes. Please reviewing of the fire hydrant, please check for any signs of tampering or vandalism.

If it is determined that a repair is required, this should be coordinated with Town Hall and scheduled appropriately. Refer to Section 8.

3. Booster Pump Station

The Keedysville booster pump station allows water to be transferred between Keedysville and Boonsboro, depending on the requirements. On an annual basis, the pump station is to be reviewed for the following items:

- Check the condition of the pumps and looking for issues with vibration, heat, seals, etc.,
- Check the controls to ensure proper operation of the booster pumps,
- Verify the pump operating times are equalized,
- Check the controls for any signs of corrosion or physical damage that could cause shorts or failures,
- Verify the condition of the booster pump station facility and look for any signs of physical deterioration or damage, and
- Verify ventilation and the associated fans for the pump station are working properly and that there are no blockages in the ventilation system.

On a monthly basis, the pump station split air condition system is to be reviewed for the following items:

- There are no blockages and proper cleanliness is maintained with the ductwork system,
- There is no signs of leaks, rust, or damage within the system, and
- Fans are in proper working condition.

If it is determined that a repair is required, this should be coordinated with Town Hall and scheduled appropriately. Refer to Section 8.

4. Water Storage Tank

The water storage tank serves two main purposes for the water distribution system. Those include providing additional volume to the system and maintaining adequate pressure within the system. On an annual basis, the water storage tank is to be reviewed for the following items:

- Check supports for anchors, for their structural condition, and for seismic integrity,
- Check the pressure tank for signs of rust, corrosion, warping or any damage,
- Inspect the storage tank interior for pitting, rot, corrosion, rust, biofilm build-up, or any damage,
- Evaluate the stored water for clarity, sediments, floating materials or films, unusual odors, insects, or other animals, and
- Verify the American Society of Mechanical Engineers (ASME) certified pressure relief valve (PRV) is functioning properly by following the manufacturer's procedures.

Every three (3) to five (5) years, the following items should be addressed regarding the water storage tank:

- Wash out the tank interior, which include:
 - Draining the water storage tank,
 - Washing out the tank interior to remove accumulated sediment,
 - Removing any debris from the tank,
 - Sterilizing the tank interior using the American Water Works Association (AWWA) disinfection standards,

- Refilling the water storage tank.

Every five (5) to eight (8) years, the following items should be addressed regarding the water storage tank:

- Repaint the exterior, which includes:
 - Pressure washing the exterior surface,
 - Cleaning all rusted areas in accordance with the Steel Structures Painting Council (SSPC) surface preparation standards,
 - Applying a prime coat of an epoxy-mastic primer to all bare metal surfaces applied at 2.5 to 3.5 mils dry film thickness,
 - Applying a full finish coat of polyurethane paint to all exterior surfaces applied at 2.0 to 3.0 mils dry film thickness, and
 - Reapplying the signs as previous displayed.

Every ten (10) to fifteen (15) years, the following items should be addressed regarding the water storage tank:

- Repaint the interior, which includes:
 - Performing an abrasive blast on all interior surfaces to bare metal in accordance with SSPC surface preparation standards,
 - Applying a full prime coat of an epoxy primer that is National Sanitation Foundation (NSF) approved for contact with potable water to all interior surfaces applied at 4.0 to 5.0 mils dry film thickness for wet areas and 2.5 to 3.5 mils dry film thickness for dry areas,
 - Applying a "stripe coat" of epoxy that is NSF approved for contact with potable water to all interior surfaces applied at 4.0 to 5.0 mils dry film thickness for wet areas,
 - Applying a full finish coat of epoxy that is NSF approved for contact with potable water to all interior surfaces applied at 4.0 to 5.0 mils dry film thickness for wet areas and 2.5 to 3.5 mils dry thickness for dry areas,
 - Testing the abrasive blast debris for the Resource Conservation and Recovery Act (RCRA) eight (8) metals using the Toxicity Characteristic Leaching Procedure (TCLP),
 - Disposing of any abrasive blast debris in accordance with Federal, State, and Local regulations, and
 - Sterilizing the tank interior using AWWA disinfection standards.

5. Winter Operation Preparation

Prior to the winter months, it is important to ensure that all exposed components within the water distribution system are properly protected to eliminate any potential freezing concerns. The following activities should be performed prior to the winter season, and no later than October 1st:

- All exposed components are insulated properly,
- Heaters at the pump station are operable and in a good, safe working condition,
- Vents at the pump station are closed,
- Any sprinkler systems are drained or properly addressed (e.g. insulation, heat tracing, etc.),
- Fire hydrants are drained,
- All propane or fuel tanks used for heating are filled,
- Lower the water level in the storage tank slightly,
- All unnecessary equipment is properly decommissioned,
- Close the main park restroom water supply valve, and
- Drain all piping, equipment, and plumbing fixtures associated with the park restrooms.

After the winter season, the following activities should be performed, roughly by April 1st:

- Vents at the pump station are opened,

- Any previously drained sprinkler systems are refilled,
- Any drained fire hydrants are refilled,
- Raise back the water level in the storage tank,
- All previously decommissioned equipment is to be recommissioned, and
- Open the main park restroom water supply valve, and
- Refill all piping, equipment, and plumbing fixtures associated with the park restrooms.

If it is determined that a repair is required, this should be coordinated with Town Hall and scheduled appropriately. Refer to Section 8.

6. Leak Detection

Leaks in a water system can impact the water system's capacity, quality, and cost. Potential leaks are generally determined by comparing the water loss to the water production records for the town. Every two (2) to three (3) years, or as required, a leak detection survey for the entire Keedysville water distribution system is to be performed. This survey shall include using a listening device to find any leaks in pipes, fittings, or valves within the distribution system.

If it is determined that a repair is required, this should be coordinated with Town Hall and scheduled appropriately. Refer to Section 8.

7. Landscaping and Security Checks

On a weekly basis, the exposed portions of the water distribution system shall be reviewed to ensure there is proper access to equipment, minimal accumulation of debris, and adequate protection against vandalism and unauthorized entry.

If it is determined that an action is required to correct the situation, this should be coordinated with Town Hall and scheduled appropriately. For any required maintenance actions, refer to Section 8.

8. Maintenance Activities

All maintenance activities shall be coordinated through the Keedysville Town Hall and documented on the Maintenance Log by a Keedysville Town Hall employee, or another designated representative. This log should include the date the needed action was noticed, the Keedysville point of contact, the maintenance point of contact, the equipment or component impacted (number, type, and location, as applicable), a description of the maintenance activity required, the date the activity is scheduled for, the date the activity is completed, and any additional notes.

9. Maintenance Inventory Log

On an annual basis, all inventory items shall be recorded in the Maintenance Inventory Log. This log shall include the component type, manufacturer, model, size, and quantity, and any additional notes as appropriate. The Keedysville Water Commission shall review this log and determine if additional items are required to be on-hand for any potential maintenance activities.

10. Customer Service Log

Contact with any customer of the water distribution system shall be recorded in the Customer Service Log. This will ensure proper follow-up to any actions required. This log shall include the date and time the question or concern is reported, the name, address, and contact information from the person asking the question or reporting the concern, a description of the question or concern, the name of the person responsible for

addressing the question or concern, the date and time of any actions taken, a description of the actions taken, and any additional notes.

If it is determined that an action is required to correct the situation, this should be coordinated with Town Hall and scheduled appropriately. For any required maintenance actions, refer to Section 8.

Liber 13 Folio 758
Acts, Ordinances, Resolutions- Town
Clerk of the Circuit Clerk
Washington County

Mainline Valve Log

Number	Valve		Date Checked	Initial Position	Turns to Closure		Physical Condition	Notes
	Type	Location			Number	Direction		

Liber 13 Folio 759

Acts, Ordinances, Resolutions- Town
Clerk of the Circuit Clerk
Washington County

Fire Hydrant Log

Fire Hydrant Number	Location	Date Checked	Hydrant Accessibility	Hydrant Condition	Valve Condition	Flushing			Drain Operation	Notes
						Initial Color	Quantity	Time		

Liber 13 Folio 760
 Acts, Ordinances, Resolutions- Town
 Clerk of the Circuit Clerk
 Washington County

Maintenance Log

Date Identified	Point of Contact		Equipment / Component			Description of Maintenance Activity	Date		Notes
	Keedysville	Maintenance	Number	Type	Location		Scheduled	Completed	

Liber 13 Folio 761
Acts, Ordinances, Resolutions- Town
Maintenance Inventory Log
Clerk of the Circuit Clerk
Washington County

Type	Manufacturer	Model Number	Size	Quantity	Notes

Liber 13 Folio 762
Acts, Ordinances, Resolutions- Town
Clerk of the Circuit Clerk
Washington County

Customer Service Log

Date/Time Reported	Customer			Question, Concern, or Potential Problem	Responsible Person	Action Taken		Notes		
	Name	Address	Contact Info			Date/Time	Description			

Send Certification to:

Mr. Lisa Riner, Town Administrator
Town of Keedysville
Town Hall
P. O. Box 359
Keedysville, MD 21756

Liber 13 Folio 764
Acts, Ordinances, Resolutions- Town
Clerk of the Circuit Clerk
Washington County

LR - Government
Instrument 0.00
Agency Name: Town of
Keedysville
Instrument List: Other
Describe Other:
Resolution
Ref: 2022-1

=====
Total: 0.00
06/14/2022 03:36
CC21-RD
#16321068 CC0403 -
Washington
County/CC04.03.01 -
Register 01

This page not to be counted in calculating Recording Fee

**Clerk of Circuit Court
Washington County, Maryland**

Kevin R. Tucker, Clerk
24 Summit Avenue
Hagerstown, MD 21740
301-790-7991

For Clerks Use Only

Improvement Fee _____
Recording Fee _____
County Transfer Tax _____
Recordation Tax _____
State Transfer Tax _____
Non-Resident Tax _____
TOTAL _____