BEFORE LEAVING THE OFFICE

Situation	Examples	Requirements & Considerations
High traffic area	N/A	Notify Water DistributionSuperintendentTraffic control
High-profile customers	Medical facilitiesLarge water usersManufacturing facilities	 Notify Water Distribution Superintendent Additional coordination Timeliness Advanced notice
High system impact	Pumping stationsReservoirsSpecial pipe/valve config.	 Notify Water Distribution Superintendent Additional coordination
Valves inside vault	ManholeBox	Confined space entry
Pipe diameter > 14 in.	N/A	 Notify Water Distribution Superintendent Special equipment Exercise great caution!
Drastic changes in temperature	Early SpringLate FallWinter	 If possible, exercise valves in between Spring and Fall
Related valve(s) not in use	Valve closed for a reason	 Know your system and make sure your maps are updated!
Break in related pipe	N/A	Water quality tests required

WHILE PERFORMING MAINTENANCE

Valve Diameter (in.)	Approximate # of Turns	Recommended Tool
1	5	
2	8	
3	11	
4	14	
6	20	
8	26	
10	32	Valve key
12	38	
14	44	
16	50	
18	56	
20	62	
24	74	
30	92	
36	110	
42	128	Exerciser (valve turning) tool
48	146	
72	218	

BEFORE LEAVING THE SITE

Condition	Descriptors
Inoperable	 Broken stem Main valve or bypass spins free Frozen at operating torque limit Work order required
Poor	 Packing leak cannot be snugged High torque level (> 300 ft-lbs.) Unstable torque Open/closed positions not shown clearly on torque chart
Fair	 Valve must be in snugged position to avoid packing leak Required multiple exercise cycles (> 3) to reduce torque Intermediate torque level (> 200 ft-lbs.) Stable torque Open/closed positions show clearly on torque chart
Good	 Operating nut backs off quarter-turn after last exercise without leaking Low torque (< 200 ft-lbs.) Stable torque