

**ORDINANCE # 2015-04**

**AN ORDINANCE ADOPTING INSPECTION, TESTING AND MAINTENANCE  
OF FIRE HYDRANTS IN THE TOWNSHIP OF WEST DEPTFORD**

**NOW, THEREFORE, BE IT ORDAINED** by the Township Committee of the Township of West Deptford, County of Gloucester and State of New Jersey as follows:

**Section 1.** The purpose of this Ordinance is to establish a policy for the inspection, testing and maintenance of all fire hydrants.

**Section 2.** To insure their readiness for instantaneous use, all fire hydrants should be inspected, flow tested and maintained annually:

- 1) Visually inspect for damaged or missing parts.
- 2) Remove one nozzle cap and turn the operating nut counter clockwise using a hydrant wrench to open hydrant. *Note: A hydrant is fully open when turning the hydrant operating nut counter clockwise (19) times. If hydrant wrench keeps turning numerous times after (19) times the stem or internal parts need to be repaired, if hydrant operating nut keeps turning the hydrant is broke. Place hydrant out of service, bag hydrant with Orange out of service bag and notify the Superintendent in writing by filling out a Fire Hydrant Repair Request Form.*
- 3) Flush out the barrel and the hydrant lateral.
- 4) Turn the operating nut slowly clockwise to close the hydrant valve.
- 5) Replace the nozzle cap and tighten slightly and tighten the other caps.
- 6) Turn on the hydrant.
- 7) Finish tightening the nozzle cap when the water starts flowing.
- 8) If the hydrant has an oil plug, remove it to check the oil level.
- 9) Check the "O" rings, stem packing, and all gaskets for leaks.
- 10) Turn hydrant off slowly.
- 11) If the stem packing leaks, remove bonnet and either tighten the two stuffing box stud nuts or replace the two "O" rings if necessary.
- 12) Inspect and clean the stem; Replace stem if corroded or pitted.

- 13) Replace the bonnet and retest for leaks by repeating steps 5 thru 10. When replacing the bonnet, make sure that the filler plug hole is aligned with the offset portion of the oil reservoir.
- 14) **Remove all nozzle caps.**
- 15) Examine the inside of the barrel to make sure that the water has drained from the hydrant.
  - a) If the water fails to drain from the barrel, it may be caused by one or more of the following conditions:
    1. Drains clogged.
    2. Not enough gravel material was placed around the bottom of the hydrant during installation.
    3. Water table in ground is higher than the hydrant drains.
    4. Failure to leave the cap off after using the hydrant until the hydrant has fully drained.
    5. Hydrant main valve may not have seated correctly, reopen and flush, could have sediment or stone not letting it close properly. If continues main valve needs to be replaced. Record on report.
  - b) The following procedures can be used to open most blocked drain valves.
    1. With the nozzle caps in place, open the hydrant and fill the barrel. Close the hydrant and recheck.
    2. Dig up around the hydrant drain holes and clear them.
- 16) **Clean and lubricate all the threads. Replace all nozzle caps in a clockwise position.**
- 17) The fire hydrant body will be painted white. The bonnet, the pumper nozzle cap (unless Storz fitting) and the (2) - two and a half inch hose nozzle caps will be painted the color that reflects the NFPA GPM rating:
  - a) Class AA – Light Blue – 1500 GPM or greater.
  - b) Class A – Green – 1000-1499 GPM.
  - c) Class B – Orange – 500-999 GPM.
  - d) Class C – Red – less than 500 GPM.
- 18) The (2) - two and one half inch hose nozzles are National Standard threads.
- 19) The pumper nozzle will have a 5" Integral Storz fitting with cap.
- 20) The operating nut is a one and one half inch hexagon which opens counter clockwise.
- 21) The Superintendent will order all hydrants and hydrant parts.
- 22) Bag any hydrant that is out of service, then record on report, advise

Superintendent and Fire Marshall.

- 23) Superintendent will notify fire chiefs of out of service hydrants and locations and will send monthly reports to the Emergency Services Coordinating Council.
- 24) All fire hydrants are recommended to be flow tested annually.

### **Private Hydrants**

Private hydrants are determined if they are:

- (1) Beyond the water meters provided to the rate payer, and/or
- (2) Located within the private property of the rate payer, and/or
- (3) When on a private road which has not been deeded to the Township of West Deptford by the maintenance bond being released by the Township Committee, causing the care, custody and control of that roadway to be turned over to West Deptford Township, and/or
- (4) Where determined by the Superintendent of the West Deptford Water and Sewer Department because the hydrant is not under the direct control of his/her department.

### **Flushing - Regular**

Flushing the water system is an important part of operations. Sediment builds up in the mains and must be removed by flushing. Dead Ends should be flushed regularly to maintain a chlorine residual in the main. All hydrants should be flushed two (2) times per year. No flushing will be done when the temperature is at or below freezing.

- 1) The Superintendent will set up the procedure for the employee to flush. The locations are usually based on the knowledge of the system and complaints received. The procedure will include:
  - a) The hydrant or blow off location.
  - b) The order in which the employee will flush each location.
  - c) The time each location should be flushed.
  - d) The location of any valves that should be operated during flushing.
  - e) The order in which the valves are to be operated.
  - f) The wells that must be turned on for the flushing.
  - g) Any special instructions required for the flushing.
- 2) Prior to beginning flushing, the employee will make sure he has the following tools and equipment:
  - a) Hydrant wrench
  - b) Fire hose
  - c) Heavy metal pans
  - d) Valve key
  - e) Blow off pipe

- f) Blow off key
  - g) Pipe wrench
  - h) Reflective cones
  - i) Residual kit
  - j) Grease
- 3) Contact the West Deptford Township Police Department Shift Supervisor to advise him or her that you are flushing that night.
  - 4) Check the tank levels at storage tanks: Red Bank Avenue, Paradise Road and Jessup Road.
  - 5) Follow the flushing procedure outlined by the Superintendent.
  - 6) Go to the first hydrant location and wear reflective safety vest.
  - 7) Protect the street and property by using the metal pan or fire hose as required.
    - a) If using the pan, make sure it is anchored securely so that it does not wash away during flushing.
    - b) If using a hose, make sure that the end is anchored securely so that damage does not occur.
  - 8) Using a hydrant wrench, turn the steamer cap counter clockwise to remove.
  - 9) Place the hydrant wrench on the hydrant operating nut and turn counter clockwise gradually to open.
  - 10) Continue to open gradually until you reach the desired flow. Although you do not want to open the hydrant all the way, you do want to get a good flow from the hydrant. Usually, you want the hydrant water stream to flow 12 to 18 inches from the hydrant.
  - 11) Check the pan to make sure it is secure. Turn off the hydrant and start again if you need to adjust the pan. Do not cause property damage. Do not cause traffic hazards. Use reflective cones.
  - 12) Note the water conditions when it starts flowing.
  - 13) Flow the hydrant the amount of time specified. If it requires more time to clear, you are authorized to continue until it is clear.
  - 14) Turn off the hydrant clockwise slowly to avoid causing damage to the system by water hammer.
  - 15) Grease threads, replace stemmer cap, and tighten clockwise.
  - 16) If using a blow off:
    - a) Remove the blow off pipe cap.

- b) Open the blow off valve box lid.
- c) Place the valve key onto the blow off valve stem.
- d) Place any additional pipe needed onto the blow off pipe.
- e) Open the blow off valve counter clockwise.
- f) Make sure you do not cause damage from the water pressure.
- g) Flow the blow off for the amount of time specified.
- h) Close the blow off valve clockwise.
- i) Remove the key and replace the valve box lid.
- j) Remove the extra blow off pipe and replace the pipe cap.

17) After flushing at the location, write the following information on your report:

- a) Location
- b) Condition of water at start.
  1. Color
  2. Odor
- c) Chlorine residual at end.
- d) Clarity of the water at end.
- e) Time run
- f) Any problems encountered.

18) Go to the next hydrant location and repeat procedure.

19) During the flushing period, make at least one check of the tank levels. If they drop below 25 feet turn on another well. Follow placing well in service procedure from SOP.

20) Complete flushing report and submit to the Superintendent.

### **Flushing Semi-Annual**

All hydrants are to be flushed (2) times per year. The goal is to start at the wells and tanks, and flush to the ends of the distribution system. Flushing is to be completed at night.

A} Superintendent

- 1) Devises general procedures and flushing order.
- 2) Reviews and make revisions to schedule as required.
- 3) Prepares schedule and submits it to the South Jersey Times for publication.
- 4) Schedules employees to handle night flushing.
- 5) Prepares specific procedures for each night's work.
- 6) Provides flushing instructions and guidelines for the employee.
- 7) Reviews employee's reports.

8) Revises the procedures accordingly.

B) Employee who is flushing:

1) Review the flushing procedure in advance.

2) Set up your personal schedule to comply with the flushing schedule. Your sleep period is very important.

3) Reports to work at 10:30P.M. to setup truck for flushing at 11:00 P.M.

4) Make sure you have the following tools and equipment.

a) Hydrant wrench

b) Fire hose

c) Heavy metal pans

d) Valve key

e) Blow off pipe

f) Blow off key

g) Pipe wrench

h) Reflective cones

i) Residual kit

j) Grease

5) Contact the West Deptford Township Police Department Shift Supervisor advise of the area in which you are flushing.

6) Check the tank levels at the storage tanks: Red Bank Avenue, Paradise Road and Jessup Road. If they drop below 25 feet turn on another well. Follow placing well in service procedure from SOP.

7) Follow the flushing procedure outlined by the Superintendent.

8) Go to the first hydrant location and wear reflective safety vest.

9) Protect the street and property by using the metal pan or fire hose as required.

a) If using the pan, make sure it is anchored securely so that it does not wash away during flushing.

b) If using a hose, make sure that the end is anchored securely so that damage does not occur.

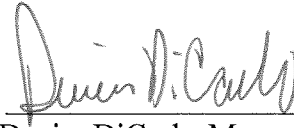
10) Using a hydrant wrench, turn the steamer cap counter clockwise to remove.

11) Place the hydrant wrench on the hydrant operating nut and turn counter clockwise gradually to open.

- 12) Continue to open gradually until you reach the desired flow. Although you do not want to open the hydrant all the way, you do want to get a good flow from the hydrant. Usually, you want the hydrant water stream to flow 12 to 18 inches from the hydrant.
- 13) Check the pan to make sure it is secure. Turn off the hydrant and start again if you need to adjust the pan. Do not cause property damage. Do not cause traffic hazards. Use reflective cones.
- 14) Note the water conditions when it starts flowing.
- 15) Flow the hydrant the amount of time specified. If it requires more time to clear you are authorized to continue until it is clear.
- 16) Turn off the hydrant clockwise slowly to avoid causing damage to the system by water hammer.
- 17) Grease threads, replace steamer cap, thread on clockwise.
- 18) If using a blow off:
  - a) Remove the blow off pipe cap.
  - b) Open the blow off valve box lid.
  - c) Place the valve key onto the blow off valve stem.
  - d) Place any additional pipe needed onto the blow off pipe.
  - e) Open the blow off valve counter clockwise.
  - f) Make sure you do not cause damage from the water pressure.
  - g) Flow the blow off for the amount of time specified.
  - h) Close the blow off valve clockwise.
  - i) Remove the key and replace the valve box lid.
  - j) Remove the extra blow off pipe and replace the pipe cap.
- 19) After flushing at the location, write the following information on your report:
  - a) Location
  - b) Condition of water at start.
    1. Color
    2. Odor
  - c) Chlorine residual at end.
  - d) Clarity of the water at end.
  - e) Time run
  - f) Any problems encountered.
- 20) Go to the next scheduled location and repeat procedure.
- 21) During the flushing period, make at least one check of the tank levels. If they drop below 25 feet, turn on another well. Follow placing well in service procedure from SOP.
- 22) Complete your flushing report and submit it to the Superintendent.
- 23) Make sure that you have completed the schedule by 6:00 A.M. as advertised.

**BE IT FURTHER ORDAINED** that this Ordinance shall take effect immediately upon final passage and publication as required by law.

**TOWNSHIP OF WEST DEPTFORD**



Denice DiCarlo, Mayor

Attest:



AMY LESO, RMC, Clerk

**INTRODUCED** at a meeting of the Township Committee of the Township of West Deptford, held on February 18, 2015.

<b>ROLL CALL VOTE</b>				
	<b>AYES</b>	<b>NAYS</b>	<b>ABSTAIN</b>	<b>ABSENT</b>
Denice DiCarlo	X			
Jeff Hansen	X			
James Mehaffey	X			
Jerry Maher		X		
Adam Reid	X			
<b>TALLY:</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>



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**ADOPTED** at a meeting of the Township Committee of the Township of West  
Deptford, held on March 18, 2015.

	<b>AYES</b>	<b>NAYS</b>	<b>ABSTAIN</b>	<b>ABSENT</b>
Denice DiCarlo	X			
Jeff Hansen	X			
James Mehaffey	X			
Jerry Maher		X		
Adam Reid	X			

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