

Code Compliance Guideline

Private Fire Hydrants

Fire Prevention Bureau

3639 Parsons Ave Columbus, Ohio 43207 (614)645-8673 www.columbus.gov Issued: 6/3/2020

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Permit Not Required

This publication outlines the Columbus City Code (CCC) and State of Ohio Fire Code (OFC) fire safety requirements and prohibitions related to the Care and Maintenance of Private Hydrants in City of Columbus.

OVERVIEW:

The intent of this publication is to provide information to aid in the care and maintenance of private hydrants. Private hydrant systems must be maintained in an operative condition at all times and must be repaired where defective. Any needed additions, repairs, alterations and servicing of fire protection systems such as fire hydrants must comply with the national standard known as National Fire Protection Association Standard 25 (NFPA 25).

Hydrant Maintenance Procedures

Below are the key components of hydrant maintenance with the applicable Columbus City Code (2505.07.8). The appendix at the end of this document will explain each code in detail.

FLUSHING:

Hydrants should be flushed between April 15 and October 15 of each year to assure proper operation and to clear the hydrant of any foreign materials. (CCC 2505.07.8)

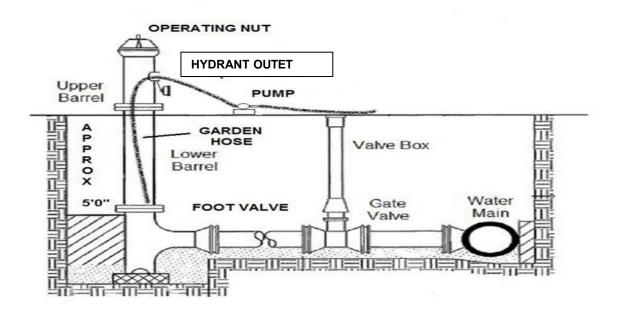
- 1. Using a proper hydrant wrench, (DO NOT USE A PIPE WRENCH TO OPERATE THE HYDRANT), remove the hydrant outlet cap.
- 2. Place hydrant wrench on operating nut and **slowly** open the valve until water begins to flow, continue opening the valve until water flows approximately 2 to 3 feet out of the hydrant. Allow the water to flow until it runs clear or for a minimum of 3 to 5 minutes.
- 3. Close the valve stem **slowly** until water ceases to flow from the outlet.
- 4. If water continues to flow after the valve stem has been tightened, reopen the valve and reclose the valve in an attempt to reseat
- 5. If water continues to flow after attempting to reseat valve, the hydrant is in need of immediate repair.(OFC 507.5.2 & 507.5.3)
- 6. Hydrants may be pumped dry at this time but no later than October 15 of each year. (see hydrant pumping procedures)

If you feel that you cannot perform the required maintenance yourself, qualified companies can be found in Columbus and vicinity by searching for "Fire Hydrants" and "Fire Protection Equipment-Repairing and Servicing".

PUMPING PROCEDURES (See illustration)

Use a small self-priming pump with approximately 8 feet of garden hose attached for suction. Remove the hydrant outlet cap and push the suction hose of the pump downward into the hydrant barrel until the end of the hose is against the foot valve, approximately 5 feet <u>below ground level</u>. Operate the pump until all water is removed from the hydrant barrel to the foot valve.

Hydrants should be checked for residual water in the barrel immediately after pumping and once every 6 weeks between October 15 and April 15. :



WINTER INSPECTIONS:

Columbus City Code 2505.07.8, requires private hydrants are to be kept free of water above the foot valve between October 15 and April 15 of each year. This is done to insure that all water has been removed from the barrel, and that the valve is not leaking which would allow the hydrant to fill with water and freeze. Winter inspections will be done every 6 weeks.

A method of checking the water level in hydrants is as follows:

- 1. Remove the outlet cap and slowly lower a lightweight rope with a weight on the end to the foot valve of the hydrant, (approximately 5 feet below ground level). Be careful not to let go of the rope or to let it wrap around the hydrant stem.
- Then slowly pull the rope out of the hydrant, if more than 6 inches water shows on the rope, pump the hydrant dry. You may attempt to reseat the valve. (See FLUSHING step 4),
- 3. If pumping of the hydrant was needed it will need to be checked/inspected for water for 3 consecutive days.
- 4. Water showing continuously on the rope will indicate the valve is not properly seated and is in need of immediate repair. (**OFC 507.5.2**)

PUBLIC WATER SUPPLY PROTECTION:

If any activity or Regulated Substance poses a risk to or may have a deleterious effect directly or indirectly upon the public water supply or wellfields or when deemed by the Director to be in the best interest of managing the water utility.

Pursue any actions that are legally available such as, administrative remedies or enforcement actions including, but not limited to injunctive relief, and penalties.(CCC 1115.12)



MARKINGS:

All private fire hydrants shall be painted in accordance with City of Columbus standards. The body of the hydrant shall be painted **RED** with machine implement paint or approved equal. The top (Crown) and outlet caps of all hydrants shall be painted **WHITE**.

PREMISE IDENTIFICATION:

New and existing buildings shall have approved **address numbers**, building numbers or approved building identification placed in a position to be plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. The numbers shall be a minimum of 4 inches high with a minimum stroke width of 0.5 inches.

Streets and roads shall be identified with **approved signs**. Temporary signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles. Signs shall be of an approved size, weather resistant and be maintained until replaced by permanent signs.

FIRE APPARATUS ACCESS:

It is the responsibility of the owner of the property or their designated property management company to maintain Fire Division vehicle access to the property at all times. This includes the enforcement of fire lanes and no parking zones within the complex. When accesses to emergency scenes are hampered by blocked access, including vehicles, the property owner and property management company may be held responsible both civilly and criminally. (OFC 507.5.4 & 507.5.5)

PERMITS:

A fire protection permit is required prior the installation, replacement, or modification of private fire hydrants or system. An operational permit is required for the removal from service, use or operation of private fire hydrants. With very limited exceptions, an operational permit is also required to use or operate private fire hydrants systems or valves intended for fire suppression purposes.

Questions regarding the permit requirements or apparatus access should be directed to the Plans Review Office at 614-645-8673 during regular office hours, Monday thru Friday, 8 a.m to 4 p.m.

CODES:

OFC 507.5.2 Inspection, testing and maintenance. Fire hydrant systems shall be subject to periodic tests as required by the fire code official. Fire hydrant systems shall be maintained in an operative condition at all times and shall be repaired where defective. Additions, repairs, alterations and servicing shall comply with approved standards. Records of tests and required maintenance shall be maintained.

OFC 507.5.3 Private fire service mains and water tanks. Private fire service mains and water tanks shall be periodically inspected, tested and maintained in accordance with NFPA 25 as listed in rule 1301:7-7-80 of the Administrative Code at the following intervals:

- i) Private fire hydrants of all types: Inspection annually and after each operation; flow test and maintenance annually.
- ii) Fire service main piping: Inspection of exposed, annually; flow test every 5 years.
- iii) Fire service main piping strainers: Inspection and maintenance after each use.

Records of inspections, testing and maintenance shall be maintained.

OFC 507.5.4 Obstruction. Unobstructed access to fire hydrants shall be maintained at all times. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.

OFC 507.5.5 Clear space around hydrants. A 3-foot clear space shall be maintained around the circumference of fire hydrants except as otherwise required or approved.

OFC 507.5.6 Physical protection. Where fire hydrants are subject to impact by a motor vehicle, guard posts or other approved means shall comply with paragraph (L)(312) of rule <u>1301:7-7-03</u> of the Administrative Code.

After October 15 of this year, Firefighters will be checking private hydrants throughout the City to ascertain compliance with this code. Failure to comply with the code may subject you to civil penalties and criminal penalties as set forth in the Columbus City Fire Code.

Questions regarding the content of this publication should be directed to the Fire Hydrant Liaison Office at (614) 645-6422 option 4, or email at firehydrantliaisonoffice@columbus.gov during regular office hours, Monday through Friday, 8:00 a.m. to 4:00 p.m.