



Presidio Trust Fire Marshal's Office

1750 Lincoln Blvd. San Francisco, California 94129

Date: February 27, 2022

Revision: Sept 10, 2023

Standard: FDA-004

Title: Hydrant Preventative Maintenance

Approved By: *Tomas Kaselionis*

SCOPE

All hydrants in the Presidio Trust Area B will be inspected annually and will follow the below Preventative Maintenance Program and shall meet the following code requirements:

- [National Fire Protection Association, NFPA 1, Fire Code](#)
- [National Fire Protection Association, NFPA 24, Standard for the Installation of Private Fire Service Mains and Their Appurtenances](#)

1. PREVENTATIVE MAINTENANCE PROGRAM

- 1.1 All hydrants will be appropriately tagged with their hydrant numbers.
- 1.2 Blue reflective marks will be placed in location to meet Presidio Trust Fire Marshal Standard for markers of hydrants.
- 1.3 External Inspection:
 - 1.3.1 Check chains, make sure they allow the nozzle cap to turn freely.
 - 1.3.2 Check all caps, make sure they all can be removed.
 - 1.3.3 Check paint, remove all lose paint and repaint if necessary.
- 1.4 Lubricate Hydrant Prior to Operating Hydrant
 - 1.4.1 Where oil is specified use white mineral oil USP (Mobile Whiterex 425 or equal)
 - 1.4.2 Where grease is specified use Mystik FG-2 Food Machinery Grease

2. FLUSHING FIRE HYDRANT

- 2.1 ***In drought seasons, hydrants will only be opened enough just to flush all sediment out of the hydrant.**
- 2.2 Using a hydrant wrench, turn the hydrant in the direction of opening indicated by an arrow cast in the hydrant. A pipe wrench is not the equivalent of a hydrant operating wrench.
- 2.3 Open hydrant at a moderate pace: Typically, one turn per second.
- 2.4 Open hydrant to FULL OPEN, it will come to solid stopping point. DO NOT try and open hydrant past this point. Damage can be done to the internal parts of the hydrant. If hydrant is not fully open water will flow out of drain or weep holes and cause damage to the drain field around the hydrant. Water may come up the sides of the hydrant or nearest valve box.
- 2.5 Flow hydrant until water becomes clear and no objects are flowing from the hydrant such as rocks. Be sure to control the direction of the flow of the hydrant so that damage is not done to anything in the water's path. Using some type of diffuser is recommended.
- 2.6 Close hydrant slowly, 1 (one) turn every 1+ (one or more) seconds so that the hydrant does not close too quickly and create a water hammer that could possibly blow a water main.

- 2.7 When hydrant is closed, you should be able to back off the operating nut a quarter to half turn water pressure should hold hydrant valve shut.
- 2.8 Leave nozzle cap off or loose to allow for hydrant to drain. Closing cap tightly before hydrant is drained will cause water to remain in hydrant barrel. In the winter, this could freeze and cause the hydrant barrel to split or damage internal parts of the hydrant. It could even possibly cause the hydrant to open itself up because of the weight of the ice in the barrel.
- 2.9 When hydrant has drained, place small amount of food grade grease on nozzles and put on nozzle caps. Failing to routinely remove and grease nozzles could cause cap to rust to the nozzle and not allow the cap to be removed.
- 2.10 If hydrant fails to shut off, DO NOT force hydrant to close. Open hydrant back up and try to flush the obstruction out of the hydrant. It may take 3 (three) to 4 (four) attempts to flush out the obstruction. If this does not work, hydrant must be taken apart for main valve and possibly a hydrant seat replacement.
- 2.11 If hydrant fails to drain, put all caps in place and tighten. Then open the hydrant 2 (two) to 3 (three) turns to attempt to flush out the drains of the hydrant. Let sit in this open position for 5 (five) to 10 (ten) minutes. Close hydrant and remove one of the caps to check for drainage. If hydrant still does not drain, it should be pumped after each use.