

Operating Guideline # 604

Dry Hydrant Recognition

February 24, 2021



PURPOSE:

The Purpose of this Operating Guideline (OG) is to provide a method to recognize a dry hydrant for water supply and site plan purposes ensuring standards are met.

GUIDELINE:

- 1 This guideline requires that the following form be completed and returned to the authority having jurisdiction, Fire Chief, indicating that these standards are being adhered to.
- 2 If any information is missing or not provided, your application cannot be reviewed.
- 3 This guideline provides a method of simple calculation of an on-site water supply, taking into account building occupancy, size, construction and exposures, as well as minimum water duration requirements.
- 4 Recognition of a dry hydrant implies that the dry hydrant is suitably designed to meet the minimum criteria as a water supply
- 5 Photographs of the entire site in relation to the water source, and photos of the water source must be submitted.
- 6 Flow test results demonstrating flow capacity through the responding pumping apparatus. Flow tests will be carried out with a pitot gauge, which is calibrated annually, and witness by the Fire Chief. Minimum flow of 3,800 L/minute must be achieved.
- 7 Dry hydrant sketch or drawings should be submitted indicating where the pumping apparatus should be and the distance to the water source.
- 8 As required by NFPA 1142, (current edition), section 8.7.1 – Dry hydrants shall be inspected at least quarterly and maintained as necessary to keep them in good operating condition. All maintenance records must be forwarded to the Fire Chief annually in order to maintain recognition. Records must indicate frequency (quarterly), name of company/organization responsible for maintenance, contact name, email address, mailing address, diameter of pipe sizes, pipe material, GPS coordinates, dates inspected, environmental conditions affecting hydrant (silting, debris, vegetation), erosion, condition of access road to hydrant, and signage to indicate Fire Route and Hydrant.
- 9 To be acceptable, water supply sources shall maintain the minimum capacity and delivery requirements on a year-round basis, based on the 50-year drought cycle.
- 10 There shall be not less than 0.6 m of water above the strainer and less than 0.3 m below the strainer.
- 11 The dry hydrant described herein is designed in accordance with NFPA 1142, Water Supplies for Suburban and Rural Fire Fighting, (2017).

RESPONSIBILITY:

It is the responsibility of all fire department staff to ensure compliance with the provisions of this Operating Guideline, unless approved by the Fire Chief.

REFERENCES:

- Fire Underwriters Survey WS7 Hydrant Recognition
- NFPA 1142 Chapter 8
- OFM Technical Guidance Note 03-1999 Water Supply