

BILL NO. 1-2003

ORDINANCE NO. 26

AN ORDINANCE AMENDING THE  
**FIRE PREVENTION CODE**  
OF THE  
**EUREKA FIRE PROTECTION DISTRICT**  
OF  
**ST. LOUIS and JEFFERSON COUNTY, MISSOURI**

BE IT ORDAINED by the board of directors of the Eureka Fire Protection District of St. Louis and Jefferson County, Missouri, as follows:

An **ordinance** governing the design, construction, installation alteration, enlargement, equipment repair, demolition, removal, conservation, use and maintenance of all **dry hydrants and water supply areas**, prescribing minimum requirements and conditions to safeguard life, property and public welfare from the hazard of fire and explosion, adopting basic fire control measures and regulations which could impede or interfere with emergency duties, **known as regulating the fire prevention code**, providing penalties for the violation thereof; declaring and establishing fire limits; repealing existing and conflicting ordinances of the **EUREKA FIRE PROTECTION DISTRICT** of St. Louis and Jefferson County, Missouri and providing for the effective date of the ordinance.

**SECTION 1. Dry Hydrants and Water Supply**

**100.0 Dry Hydrants and Water Supply Areas:**

Dry hydrants and water supply areas may be permitted in areas being developed if the owner / developer can show that water mains and hydrants are inadequate or unavailable. There shall be a minimum of thirty thousand (30,000) gallons of usable water in a thirty (30) year drought frequency for the first (1<sup>st</sup>) projected thirty thousand square feet (30,000 sq.ft.) of structure, or combination thereof, within the development. There shall be an additional thirty thousand gallons (30,000 gal) of usable water supply for every additional projected thirty thousand square feet (30,000 sq.ft.) of structure, or combination thereof, within the proposed development. The minimum requirements of this section shall be deemed to the mandatory minimum requirements necessary to safeguard life, property and public welfare from the hazard of fire and explosion, however, the EUREKA FIRE

PROTECTION DISTRICT shall have authority to require additional dry hydrants and water supply areas for each thirty thousand square feet (30,000 sq.ft.) of structure based upon the special circumstances of each development, including, but not limited to, the lineal road distance of developmental roads, the topography of the development, and/or the proposed density of the development. The location(s) of any additional said water supply areas required shall be determined by the EUREKA FIRE PROTECTION DISTRICT. Dry hydrants shall be connected to approved lakes, approved ponds, approved retention areas, or to approved, above or below grade, storage tanks. Dry hydrants shall be installed, inspected, and operational prior to the issuing of any occupancy permits in the proposed developed land. All dry hydrants shall be inspected and approved by a member of the EUREKA FIRE PROTECTION DISTRICT.

#### **100.1 Locations:**

All proposed dry hydrant and water supply area locations shall be submitted to the EUREKA FIRE PROTECTION DISTRICT for review and approval. All locations shall be presented on a plot plan showing the proposed location of the dry hydrant(s), water supply area(s), and topographical elevation levels. The first (1st) dry hydrant and water supply shall be located within the first 1,000 feet from the main entrance of the proposed development, unless otherwise approved by the EUREKA FIRE PROTECTION DISTRICT in writing. All dry hydrants and water supply areas shall be constructed or installed on common ground areas or private parcels, or lots, as long as the proper easement for access, operation, and maintenance are approved in writing by the EUREKA FIRE PROTECTION DISTRICT and recorded as a matter of public record. All dry hydrants and water supply areas shall have an approved all-weather fire service access road [minimum 60,000 GVW(gross vehicle weight)], and located within the proposed development plot plan. Dry hydrant connections shall not be less than ten feet (10') or more than fifteen feet (15') from the edge of the fire service access road.

#### **100.2 Dry Hydrant Visibility and Protection:**

All dry hydrants shall be designated by an approved visible sign which reads, "DRY HYDRANT LOCATION, Fire Department Use Only." All dry hydrant connection areas shall be protected from impact hazards with a minimum of three steel bollards filled with concrete. The bollards shall be a minimum of five feet in length with not less than three feet (3ft) exposed above grade. The bollards shall be placed in a triangular position, approved by the EUREKA FIRE PROTECTION DISTRICT, around the dry hydrant location area.

#### **100.3 Design and Installation:**

NFPA 1142 (1999 edition) Appendix B, may be referenced to assist with design and installation requirements as a general guideline, but the rules and regulations of the EUREKA FIRE PROTECTION DISTRICT shall not be superceded by NFPA 1142 (1999 edition) Appendix B. Each dry hydrant shall be connected to its own individual approved water supply source set forth in section 100.0. There shall not be more than ten feet (10ft) of head lift to the discharge end of each dry hydrant.

**Exception:** More than one dry hydrant can be connected to an approved water supply source location, where the water supply ratio meets the 30,000 gallons to 1 dry hydrant, but the dry hydrants can not be tied together and shall have separate designs.

#### **100.3.1 Design:**

All dry hydrants and water supply areas shall be designed by a Licensed Professional Engineer and submitted for approval to the EUREKA FIRE PROTECTION DISTRICT before installation. All necessary calculations for the design of the dry hydrant and water supply areas shall be submitted with the dry hydrant design that is being submitted for approval. Prior to final approval by the EUREKA FIRE PROTECTION DISTRICT, the Licensed Professional Engineer who signed and sealed the plans for the proposed dry hydrant, and or water supply area, shall submit to the EUREKA FIRE PROTECTION DISTRICT a completion certificate that certifies that the dry hydrant was installed in accordance with his/her design and is in good working order based upon his own personal knowledge.

##### **100.3.1.1 Dry Hydrant Piping and Connections**

All dry hydrants shall be of schedule 40 PVC pipe, six inches (6") in diameter. All fire department connections shall have six inch (6") National Hose (NH), [a.k.a. National Standard Thread (NST)], male thread. All inlet supply pipes, that are not connected to an approved above or below grade storage tank, shall be set on a concrete block and secured with copper wire at a minimum of twenty four inches (24") above and below the top and bottom surfaces of the water supply.

##### **100.3.1.2 Storage Tanks:**

All storage tanks designed for water supply shall be designed and equipped with an independent power source and independent water well to re-supply that

storage tank within 72 hours with the minimum required amount of usable water supply for fire suppression as set forth in section 100.0. All storage tanks shall be designed and equipped with a water level indicator that will activate a visual and audible alarm, located near the storage tank area, which will indicate that the water level of the tank is below 75% of its capacity.

### **100.3 Maintenance and Inspection:**

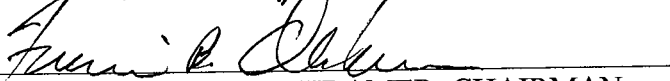
All dry hydrant connection locations shall be maintained and obstruction free for a minimum of ten feet (10') in all directions. All vegetation shall be maintained at a height no greater than six inches (6") in all directions around the dry hydrant connection and maintained thusly for a minimum of ten feet (10') in all directions. All dry hydrants and water supply areas shall be inspected, operated, and certified every two (2) years by a Licensed Professional Engineer who is knowledgeable and qualified to perform such inspections. All certification shall be submitted to, and approved by, the EUREKA FIRE PROTECTION DISTRICT. The cost of the inspection and certification shall be the responsibility of the owner(s) who own the dry hydrant and water supply area locations. In the event that the dry hydrant and or water supply area has become inadequate for the use of fire suppression operations, at such time deemed by the EUREKA FIRE PROTECTION DISTRICT and or a Licensed Professional Engineer, the dry hydrant and or water supply area shall be immediately repaired and placed back in working order at the owner(s) expense, with in 48 hours. Upon completion of any repairs, the dry hydrant and or water supply area shall be inspected, operated and certified by a Licensed Professional Engineer who is knowledgeable and qualified to perform such inspection. All building and occupancy permits issued for structures serviced by a dry hydrant system shall be subject to immediate revocation in the event that the dry hydrant and or water supply area has become inadequate for the use of fire suppression operations. All repair, maintenance, and certified documentation shall be submitted to, and approved by, the EUREKA FIRE PROTECTION DISTRICT on completion of any repair work.

#### **100.3.1 Fire Department Responsibility**


The EUREKA FIRE PROTECTION DISTRICT shall not be held responsible for any damage which may occur to equipment, pumps, or roads that are related to dry hydrants or water supply areas. The EUREKA FIRE PROTECTION DISTRICT shall not be held responsible to fill, maintain, repair or otherwise improve any dry hydrant or water supply areas.

## **SECTION 2. EMERGENCY ENACTMENT.**

It being deemed that the situation intended to be met by such ordinance constitutes an emergency directly affecting the lives, safety, and health of the inhabitants of the areas encompassed by this ordinance, and the protection of property within those areas, this ordinance shall take effect and be in full force and effect immediately from and after the enactment of same. This ordinance having been duly considered and voted upon by the board of directors of the EUREKA FIRE PROTECTION DISTRICT of St. Louis and Jefferson County, Missouri, the ordinance is enacted as an ordinance of the EUREKA FIRE PROTECTION DISTRICT of this 23<sup>rd</sup> day of December, 2003.


  
FRANCIS B. OBERKRAMER, CHAIRMAN  
BOARD OF DIRECTORS


ATTEST:

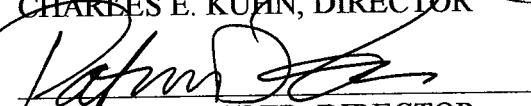
  
CHARLES E. KUHN, Secretary  
BOARD OF DIRECTORS

(SEAL)

APPROVED:

  
FRANCIS B. OBERKRAMER,  
DIRECTOR

  
CHARLES E. KUHN, DIRECTOR

  
PATRICK D. FEDER, DIRECTOR