



Marysville Fire District

Thomas J. Maloney, Deputy Chief – Fire Marshal
1094 Cedar Avenue
Marysville, WA 98270
marysvillefiredistrict.org

360-363-8506
360 363-8500
FAX 360 659-1382

tmaloney@marysvillewa.gov

April 14, 2022

Washington State Building Code Council
1500 Jefferson Street SE
Olympia, WA 98504
sbcc@des.wa.gov

Members of the State Building Code Council:

It has come to my attention that there is opposition to the emergency rule regarding fire sprinklers in elevator pits. Having been a Fire Code Official for over 20-years, it has become clear to me that the use of fire sprinklers in elevator pits and equipment rooms are not necessary for the safety of the building occupants and fire responders. Having fire sprinklers in the elevator pit and/or equipment room requires detection and a shunt-trip (shut down) of power before the fire sprinklers can release water. This is due to the adverse reaction of the electrical equipment when it is exposed to water. As can be imagined, the power loss is quick and results in the elevator stopping which can be between floors. This has the potential of trapping the occupants who could be either civilian or first responders. That makes it apparent that public safety is at risk with the use of fire sprinklers in the pit or elevator equipment room.

The likelihood of a fire in the pit or elevator equipment room is negligible. The hydraulic oil is considered a Class IIIB combustible liquid as the flash point of the liquid is above 200 deg. F. The hydraulic oils used currently have a flashpoint between 450-500 deg. F.

There have been statements made that there can be several barrels of the combustible hydraulic oil (not flammable as indicated by others) located below the elevator floor at the bottom landing. Per Table 5003.1.1(1) of the State adopted 2018 International Fire Code, the maximum allowable quantity for this liquid to be in storage or use is 13,200 gallons. That is considerably more than several barrels.

It is true that the requirement for fire sprinklers in hydraulic elevator pits and equipment rooms exists in NFPA 13. That requirement has been in the code for many years and is based on hydraulic oils that did have lower flash point temperatures and were considered flammable. Over time, the oils have changed and are less hazardous and less likely to burn intensely.

Within the commentary for the 2016 edition of NFPA 13 (currently adopted in Washington State) for section 8.15.5, it states that the cost and benefits returned for the protection must be weighed against the small number of fires in elevator shafts. This indicates that NFPA does not deem the requirements for sprinklers in shafts to be necessary.

The cost of providing the sprinklers is just not the cost of the sprinklers, but it does include the shunt trip. Whether it is provided with the elevator or separately, it is a cost that the building owner bears, not to mention the continued testing and maintenance of the system.

In closing, the Fire Service is considered the biggest supporter for fire sprinklers. We also acknowledge that there are some codes that are outdated and not applicable in the current time period. There is no specific data supporting that the installation of fire sprinklers in the pit and equipment room have reduced the number of fires as there is no data indicating that fires are occurring over the past couple of decades. As a Fire Code Official, it behooves me to address code that does not serve a purpose anymore and request that the State Building Code Council maintain the emergency rule and pursue efforts to make a change to the NFPA 13 standard to remove the requirement for fire sprinklers in hydraulic elevator pits and equipment rooms.

Thank you for your consideration in this matter.

Sincerely,

Thomas J. Maloney, MBA/PA, CFO, EFO, FM
Deputy Chief/Fire Marshal