**15-055**

**1. State Building Code to be Amended:**

International Building Code  State Energy Code

ICC ANSI A117.1 Accessibility Code  International Mechanical Code

International Existing Building Code  International Fuel Gas Code

International Residential Code  NFPA 54 National Fuel Gas Code

International Fire Code  NFPA 58 Liquefied Petroleum Gas Code

Uniform Plumbing Code  Wildland Urban Interface Code

**Section(s): 903.3.5.3 (NEW), 105.7.19 (NEW)**

(e.g.: Section: R403.2)

**Title: Underground portions of fire protection system supply piping.**

(e.g: Footings for wood foundations)

**2. Proponent Name (Specific local government, organization or individual):**

**Proponent: Shawn Shepherd**

**Title: Deputy Fire Marshal**

**Date: 2/27/2015**

**3. Designated Contact Person:**

**Name: Shawn Shepherd**

**Title: Deputy Fire Marshal**

**Address: 619 Division Street, Port Orchard, WA 98366**

**Office Phone: 360-337-5777 x3884**

**Cell: 360-516-9704**

**E-Mail address: sshepherd@co.kitsap.wa.us**

**4. Proposed Code Amendment**. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](https://fortress.wa.gov/ga/apps/sbcc/Page.aspx?nid=191))

**Code(s)** \_\_\_IFC\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Section(s)** \_\_**105.7.19 (NEW)\_903.3.5.3 (NEW)**\_\_\_

Enforceable code language must be used; see an example [by clicking here](https://fortress.wa.gov/ga/apps/SBCC/File.ashx?cid=1803).

Amend section to read as follows:

**105.7.19 Underground supply piping for automatic sprinkler system.** A construction permit is required for the installation of the portion of the underground water supply piping, public or private, supplying a water-based fire protection system. The permit shall apply to all underground piping and appurtenances downstream of the first control valve on the lateral piping or service line from the distribution main to one-foot above finished floor of the facility with the fire protection system. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.

**Exceptions.**

1. When the underground piping is installed by the aboveground piping contractor.
2. Underground piping serves a fire protection system installed in accordance with NFPA 13D.

**903.3.5.3** **Underground portions of fire protection system water supply piping.** The installation or modification of an underground water main, public or private, supplying a water-based fire protection system shall be in accordance with NFPA 24 and RCW 18.160. Piping and appurtenances downstream of the first control valve on the lateral or service line from the distribution main to one-foot above finished floor shall be approved by the fire code official. Such piping shall be installed by either a Level U licensed contractor or by an appropriately licensed contractor in accordance with RCW 18.160.

**Exceptions:** Portions of underground piping supplying automatic sprinkler systems installed in accordance with NFPA 13D.

1. **Briefly explain your proposed amendment, including the purpose, benefits and problems addressed.** Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

Through RCW 18.160 and WAC 212.80 Washington State requires specific licensing for fire sprinkler contractors. These rules break licensing down into categories based on the standard used for a specific fire sprinkler design. I.E. Level 3 contractors are allowed to design and install systems designed to NFPA 13, 13R and 13D, and specialized systems, whereas Level 2 contractor are only allowed to design and install systems designed to NFPA 13R or 13D. Additionally there is a license for underground piping only where the system is designed by a separate entity, such as a professional engineer or an appropriately licensed fire sprinkler contractor. The Level U contractor installs the piping per the direction of the other entity.

Projects today typically have the contract for installing the fire sprinkler system split between work inside the building and that work exterior, typically at an imaginary line 5 feet outside of the building. A common example is where the fire sprinkler contractor installs the aboveground piping and a civil or site contractor installs the underground piping. It is well known a permit is required for the aboveground piping and historically the aboveground contractor would also do the underground portion of the system they install. But very commonly in fire sprinkler construction documents the fire sprinkler contractor excludes the underground portion and only includes the information on their design documents to allow the reviewer to have all information needed. The permit is issued for the system, but only applies to the aboveground portion. When the underground installing contractor requests inspection for their work, if they request it at all because not permit was issued for their work, they are requesting an inspection for a portion of the system outside of the fire sprinkler contractors permit scope.

Furthermore, the site or civil contractor’s scope of work ends at the 5 foot envelope and the fire sprinkler contractor’s scope of work begins at one-foot above the floor. So there is a loss of continuity between these two points and whose is responsible for the installation and subsequent approval process. This additional permit requirement supports the current contract structure and clarifies a separate permit is required unless the aboveground contractor is installing both aboveground and underground piping. Additionally it clarifies the scope of the permit, the standards to apply and the responsible parties.

1. **Specify what criteria this proposal meets.** You may select more than one.

The amendment is needed to address a critical life/safety need.

The amendment is needed to address a specific state policy or statute.

The amendment is needed for consistency with state or federal regulations.

The amendment is needed to address a unique character of the state.

The amendment corrects errors and omissions.

1. **Is there an economic impact:**  Yes      No

Explain: The portion of the system should already be permitted and inspected but is not formally permitted or reviewed. The costs for this change currently happen behind the scenes thru change orders and contract dispute. This change will reduce costs as the requirement’s are clearly laid out and known of early in the project life.

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Building Type | Construction[[1]](#footnote-1) | | Enforcement[[2]](#footnote-2) | | Operations & Maintenance[[3]](#footnote-3) | |
| Costs | Benefits[[4]](#footnote-4) | Costs | Benefits4 | Costs | Benefits4 |
| Residential |  |  |  |  |  |  |
| Single family |  |  |  |  |  |  |
| Multi-family |  |  |  |  |  |  |
| Commercial/Retail |  |  |  |  |  |  |
| Industrial |  |  | $250 |  |  |  |
| Institutional |  |  |  |  |  |  |

Please send your completed proposal to: [sbcc@ga.wa.gov](mailto:sbcc@ga.wa.gov)

All questions must be answered to be considered complete. Incomplete proposals will not be accepted.

1. $ / square foot of floor area or other cost. Attach data. **Construction** costs are costs prior to occupancy, and include both design and direct construction costs

   that impact the total cost of the construction to the owner/consumer. [↑](#footnote-ref-1)
2. Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and other action required for enforcement. [↑](#footnote-ref-2)
3. Cost to building owner/tenants over the life of the project. [↑](#footnote-ref-3)
4. Measurable benefit. [↑](#footnote-ref-4)