

EXHIBIT A TO RESOLUTION NO. 2016-

FINDINGS AND DETERMINATION THAT CHANGES OR MODIFICATIONS TO THE 2016 CALIFORNIA PLUMBING CODE, 2016 EDITION, PERTAINING TO THE ADDITION OF REQUIRING SEISMIC GAS SHUTOFFS UNDER SPECIFIC CRITERIA, ARE REASONABLY NECESSARY BECAUSE OF LOCAL CONDITIONS

1. In connection with the adoption by reference of the California Plumbing Code, 2016 Edition in that document entitled “The California Building Standards Code,” it is hereby expressly found and determined that the following change to the 2016 California Plumbing Code is reasonably necessary because of local climatic, geological or topographical conditions:

Section 7-5-930: Shutoff Valves. Section 1208.10.1 shall be added to the California Plumbing Code as follows:

§1208.10.1 Earthquake-actuated Gas Shutoff Valves.
Earthquake-actuated gas shutoff valves, certified conforming to California Referenced Standard 12-16-1, Shall be provided:

- a. On all new construction utilizing gas.
 - b. On any project utilizing gas, which the value of the project exceeds \$10,000.00.
2. The aforesaid local amendment is reasonably necessary in order to lessen the threat to life, safety and property represented by certain local climatic, geographical and topographical conditions existing in the City of San Leandro.
 3. The aforesaid local amendment is enacted pursuant to the authority of Section 17958.5 of the California Health and Safety Code, for the purpose of addressing the aforesaid conditions which are more specifically described as follows:
 - (a) The City of San Leandro lies in the near vicinity of the Hayward Fault and in fact, a substantial portion of the residential area of the City lies within the Alquist-Priolo Act Special Studies Zone, requiring special geologic studies prior to development. This increases the likelihood of seismic disturbances of substantial magnitude occurring and causing consequent damage. Such damage is often accompanied by structural fire. Because plastic pipe is combustible, emits toxic gases and acids and generates large amounts of smoke, its presence would increase the threat to life and

property in the event of a seismic disturbance.

- (b) The travel time to a fire or other emergency within San Leandro may be impeded by the following conditions:
 - (1) Three major railway lines, the elevated BART line, three major freeways and a natural creek, divide the City into numerous sections, and equipment responding to emergencies face potential delays and obstruction of access in crossing these barriers.
 - (2) San Leandro lies in the path of two major water reservoirs which, upon failure, would inundate a large portion of the City, further delaying the response to a fire or other emergency.
 - (3) A growing community of single-family and multi-family dwellings presently exists on the easterly side of Highway 580, which is itself a potential physical barrier impeding response to a fire or other emergency.
 - (4) The two major north-south emergency response routes aside from the freeways are dependent upon bridges spanning San Leandro Creek. Failure of these bridges would isolate a heavily populated section of the City north of the creek.

In the event of fire, toxic gases and acids emitted by plastic pipe and the smoke generated by plastic pipe, represent an increased life hazard and since most loss of life in fires is from asphyxiation, a rapid response by emergency equipment becomes more critical.
- (c) All drain and waste pipes flow into the San Leandro Sewage Treatment Plant. Any chemical reaction between plastic pipe and the waste flowing through it, may produce contaminants, threatening the biological process of the Treatment Plant itself and in turn thereby threatening the marine life in the San Francisco Bay.
- (d) A large area of potential residential development in the westerly portion of the City, adjacent to the Bay, is potentially subject to liquefaction which may cause a loss of lateral support for plastic pipe, resulting in its failure. Liquefaction also often results in a greater degree and different form of differential movement than occurs elsewhere, which may cause excessive strain on plastic pipe.
- (e) High wind conditions normally exist in the hillside and shoreline areas of

the City, increasing the potential for fire spread. The presence of plastic pipe increases the life hazard.

- (f) Prevailing temperatures in San Leandro periodically reach levels that may cause excessive expansion of plastic pipe, resulting in its failure.
 - (g) A substantial portion of the residential area of San Leandro is the natural habitat of various species of animals and rodents. Plastic pipe has been known to be damaged by such animals and rodents.
4. The City Council hereby takes official notice of the General Plan (and all elements thereof) of the City of San Leandro, all documents on file with the City relating to the Alquist-Priolo Act Special Studies Zone and to plastic pipe, and the findings and recommendations of the Board of Appeals in this matter.