

January 14, 2019

J Logan
Los Altos Hill County Fire District
PO Box 1766
Los Altos, CA 94023

Dear Ms. Logan,

Purissima Hills Water District (PHWD) would like to replace the pumper caps on certain Los Altos Hills County Fire District (LAHCFD) owned hydrants with pumper caps with integrated leak sensors. A sample cap will be sent to the factory in order to manufacture a fully compatible cap.

PHWD has eighty miles of water mains, forty miles of which are cast iron and asbestos cement and over fifty years old. Due to our high pressure, some main breaks have caused tremendous damage to nearby properties and to the roads, resulting in overtime and long water outages. Recently, a leak on Moody Road caused one of the Town's important roads to be shut down for 24 hours while the water main was repaired.

PHWD has been investigating leak detection for a number of years and has purchased a "lift and shift" product from Gutermann Co. The ten leak detectors are dropped onto the top of water valves overnight to listen for leaks. Each morning, they would be collected to analyze the leak data and then moved to another set of valves. This method is very time consuming and not very efficient. A more efficient method is a fixed network that is continuously listening to water mains.

Echologics recently introduced a leak detector with cellular communication, making their product viable for use in the hilly PHWD service area. The technology is based on early leak detection, identifying the leaks when small so they can be repaired before causing catastrophic damage. Coverage for the forty miles of pipe is estimated to be 220 nodes. We would like to do a pilot study of 30 devices to test the effectiveness.

PHWD will be responsible for purchasing, installing and maintaining the 30 pumper caps on hydrants in the area of Foothill College, Elena, Robleda, Concepcion and Fremont roads. Specific hydrants will be provided after consulting with Echologics engineering team to determine adequate coverage in these areas. The pumper caps are metallic and operate with the same tools as the existing caps.

Sincerely,

Patrick Walter
General Manager