

October 18, 2007

Summary of Discussion with Kathe Barton, REHS, Inyo County Health Services

Department: (Note that an audio tape of the discussion was made but, contrary to expectations, technical difficulties have delayed its conversion to a file that can be placed on the Aspendell.org website.)

Kathe has reviewed the AMWC system since the mid-late 1990's. She reported that she conducts an extensive sanitary survey inspection every 2 years. This includes a review of the physical integrity of the wells, reservoir and flush valves. Water samples are regularly collected for testing; the results are reported in the annual consumer confidence reports. Bacterial sampling is conducted monthly. Kathe noted that there is naturally occurring arsenic in the wells. The concentration in one well is close to the current federal standard of 10 parts per billion, but with blending with water from the other well, the concentration is below the level of concern. Issues related to lead and copper in water supply systems in general were also discussed. Kathe stated that AMWC water is fairly "aggressive" resulting in some leaching but is still low in copper and lead concentrations. Leaching is a function of standing contact time and Kathe recommends allowing a short (30 seconds-1 minute) daily flushing when a faucet is first turned on. This is particularly important after an absence. (As you have seen in newsletters, AMWC recommends that the lines be flushed for 15-20 minutes after an absence.)

In response to a question, Kathe indicated that she believes that the AMWC system is one of the most reliable in Inyo County. Kathe voiced her concern about the many dead-end lines in the system (five total) and noted that routine maintenance (flushing) is important in mitigating the effects of the dead ends. She acknowledged Ken Kuencer conducts this flushing.

Bacteria-related issues were discussed. Testing is conducted for total coliform bacteria. The relatively low temperatures of Aspendell and the pristine nature of the watershed (no man-made contaminants) are positive factors in overall water quality.

There was discussion of the imprecise description of the location of the Aspendell wells. Kathe indicated that since 911, descriptions are purposefully vague as a matter of security. The County does not disseminate information on the latitude and longitude of wells.

There was also discussion of cross-connections, including abandoned lines, and the hazards they may pose to the AMWC water system. Kathe discussed the abandoned line at the end of Iris and stated that the concern is if the valves on either side of the abandoned segment should leak and the pressure in the system becomes negative (e.g., as the result of a major line break or the draining of the entire reservoir due to failure of both wells), then there is the potential for input of bacteria from the abandoned line to the remainder of the system. She indicated that the cross-connection regulations do not allow for valves to be the solution in such situations.

It was suggested that the abandoned line should be part of an independent engineering assessment. Kathe stated that there is a point in every water system's life when a review, by an engineer or other qualified professional, is appropriate. She suggested that

this assessment would include consideration of options to address the abandoned line and their relative advantages/disadvantages.

The question was posed of whether it is acceptable to not uncover valves that were originally installed for flushing. Kathe responded that this needs to be considered on a case-specific basis.

There was further discussion of the need for an assessment by a qualified individual to determine whether and how the line closure on Iris affects system flows and pressure. It was noted that one of the AMWC members is a licensed civil engineer with extensive experience of water systems, including the State Water Project. This individual might be able to assist with the assessment. In response to a question, Kathe indicated that she would recommend a system assessment; she stated that it is good to have a contingency plan that addresses technical, managerial and financial matters, especially in light of escalating costs. She indicated that new waterworks standards are expected to be out in a couple of months and she expects that they will provide the County the discretion to require a system evaluation.

Kathe indicated that the County would review the option(s) selected to address the abandoned line on Iris to assure conformance with applicable regulations. She noted that it is important to have an operations and maintenance plan that includes flushing dead ends. (AMWC has such a plan and implements it.)