High asbestos counts in Midcounty water

By BOB SMITH

High concentrations of water-borne asbestos have been found in one Aptos well, the Soquel Creek County Water District board was told Monday night.

The water district last November and December ordered spot checks of water samples taken from three widely scattered wells in the district and three points in the district's water distribution system.

The tests were ordered to see if the asbestos-cement pipe widely used in the water district was releasing microscopic asbestos fibers into the water supply.

But the tests showed that there were higher concentrations of asbestos in the water pumped directly from the district's wells than in the samples taken after prolonged contact with the asbestos pipe in the distribution system.

"There is a background level in our wells," district general manager Robert Johnson told the board, "but there is less when it goes through the distribution system."

The conclusion reached by board members Monday night is that the district's water is not "corrosive" and is not attacking the walls of the asbestos-cement pipe, releasing the fibers into the water supply.

In each of the samples collected in the Capitola, Aptos and La Selva Beach portions of the water system, there were measurable amounts of asbestos fibers, but the highest concentrations were measured in water collected from the Aptos Creek (Johnston) well on Aptos Creek above Aptos Village.

In that sample, 19 million fibers per liter of water were measured. Water from that well normally flows into the Aptos-Seacliff distribution system.

Water collected at the Tannery Well in Soquel (supplying Soquel and Capitola) had only 2.3 million fibers per liter and the Altivo Well sample (La Selva Beach) measured 7.4 million fibers per liter.

Samples taken from the water distribution system, which has extensive amounts of asbestos-cement pipe, had far fewer fibers.

Samples taken at homes and businesses were supposed to be correlated with the well samples, but Johnson said the Aptos samples were taken on two different sections of the district's lines.

The Aptos distribution sample, Johnson said, came from 510 Monterey Ave., Aptos, but Johnson told the board members that the water in that sample did not come from the Aptos Creek well, but another well in the Rio del Mar area.

Water from the Monterey Avenue sample contained 1.5 million fibers per liter.

The Tannery Well is one of the wells supplying water to the Capitola-Soquel area. Water samples collected at the Green Sheet office, 720 Capitola Ave., Capitola, showed only 500,000 fibers per liter.

Water from the La Selva system, which is isolated from the remainder of the water district, was collected at 311 Mar Monte Ave. It showed only 300,000 fibers per liter, the lowest of any of the samples collected.

The fibers counted in the local water samples are so small that an electron microscope must be used. Fibers counted in the test range from less than half a micron — one-half-millionth of a meter — up to more than five microns in length.

Airborne asbestos is a known cancer-causing material and its presence in the atmosphere is tightly regulated by federal and state governments. But so far there is no evidence, according to the federal Environmental Protection Agency, that water-borne asbestos poses the same health hazard as the airborne type.

However, EPA researchers have recently discovered that water-borne asbestos can pass through the intestinal walls of humans and animals into the blood stream, and ultimately concentrate in organs such as the kidneys and bladder.

But the Safe Water Drinking Committee of the National Academy of Sciences reviewed animal toxicology reports in the late 1970s and concluded that there was no evidence of increased cancer incidence by asbestos ingestion.

Subsequent studies also indicated no evidence of asbestos-caused cancer in humans regularly consuming large amounts of asbestos-laden water in other parts of the nation.

Currently, there are no federal or state standards for asbestos fibers in water supplies, but individual EPA researchers, using the airborne samples as a base, have proposed limits in the range of 400,000 to 600,000 fibers per liter.