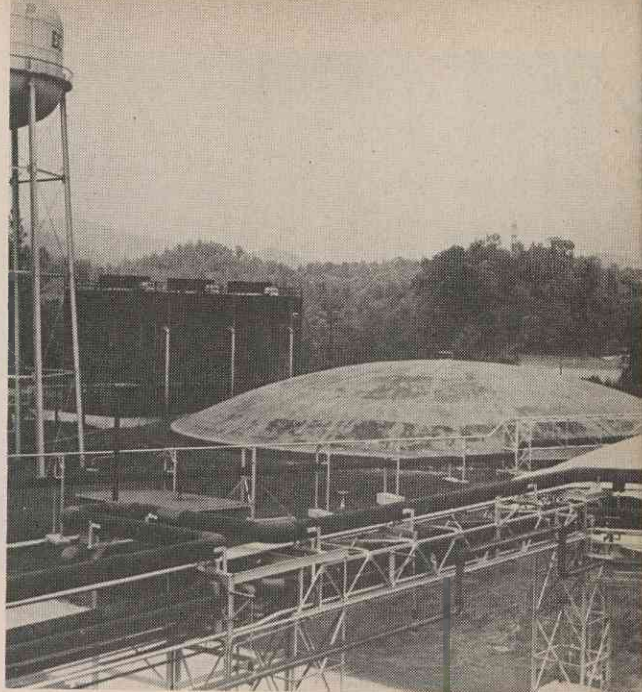


Left: Fritz Waldrop, Water Supervisor, is shown checking a sample of water from one of the two settling basins. Each basin has a capacity of 1½ million gallons. Right: The 250,000 gallon service tank and one of the 1½ million gallon reservoirs.

Pure Water For Ecusta



OUR PLANTS stand beside the old Estatoe Trail—route of the Cherokees.

While traveling this long and mountainous trail between their winter camp grounds in Georgia and summer camps in the Carolinas and Virginia, they always rested on the banks of the Davidson River. The Indians called the stream "Ecusta", which in their language meant "rippling waters". The stream and the "stopping-over" place was known as Ecusta until 1790, when Benjamin Davidson changed the name to Davidson River after he had received a grant of 640 acres in this area.

The Davidson River is the source of all water that we use. The stream drains an area of 40.4 square miles of uninhabited forest land, lying wholly within the boundaries of Pisgah National Forest. It is interesting to note that every inch of rainfall over the water shed is equivalent to 700 million gallons of water.

By virtue of the mountainous terrain in which it rises and flows, the Davidson is a flashy stream. Its rate of flow, therefore, varies considerably throughout the year and in direct relation to the amount and intensity of the rainfall.

The rainfall in this area is high, averaging close to 63 inches per year with a maximum on record of 82.76 inches and a minimum of 44.34 inches for the past 20 years. As much as 17.77 inches

has fallen in one month; 8.51 inches, in a day; 2.64 inches, in an hour.

As a result of such variations, the discharge of the Davidson has varied from as high as 1600 million gallons a day to as low as 18 million within the same year, as compared with the 32 year daily average of 83.5 million gallons.

Water from the Davidson is what is technically known as surface supply and as such picks up color, turbidity and tastes, the degree of which varies with the rainfall. During the dry periods, however, the stream is fed entirely from springs which serve as outlets for the natural underground water storage created by that part of the rainfall which seeps into and through the soil. That this underground supply is of considerable magnitude is evidenced by the substantial flow of the river during protracted periods of little or no rainfall.

The geological formation of our mountains is such that water passing through it does not materially change in chemical make-up and the absence of all limestone precludes any appreciable increase in hardness. Thus, the water we obtain is normally low in hardness, iron and manganese content, salt and bacteria.

Since cigarette paper ultimately reaches the lips of smokers and cellophane is used for the wrapping and packaging of food products, they must be manufactured under the most sanitary conditions possible. Therefore, every drop of water used must meet the highest standards for human consumption as well as the exacting requirements for process.

This is accomplished in our eleven-bed Filter