

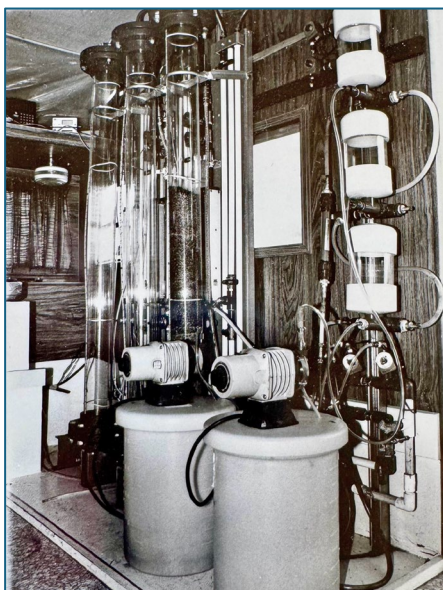
CH2M HILL'S 1ST WATER TREATMENT PILOT TRAILER

Contributed by Bob Chapman, July 2026

CH2M HILL's success and growth in the water and wastewater arena is steeped with a tradition of innovation and development of leading-edge process engineering technology. Much of that was enabled through bench-scale and pilot testing to develop, prove, and optimize treatment processes.

In the drinking water treatment arena, chemical coagulation and filtration are core processes for most surface water supplies. Onsite pilot testing of these processes was recognized to often be critically important for their optimization in treatment tailored to the unique nature and variability of each water supply.

In the late 1970s, Bob Chapman was working out of our Redding, CA, office and wearing the hat of the firm's Assistant Director of Water Supply and Treatment. Budgets were tight, and "overhead dollars" precious. But Bob made the case that having a mobile pilot plant whereby onsite testing could be rapidly and economically accomplished would be a worthy investment for both technical and marketing purposes. A whopping \$10,000 budget was



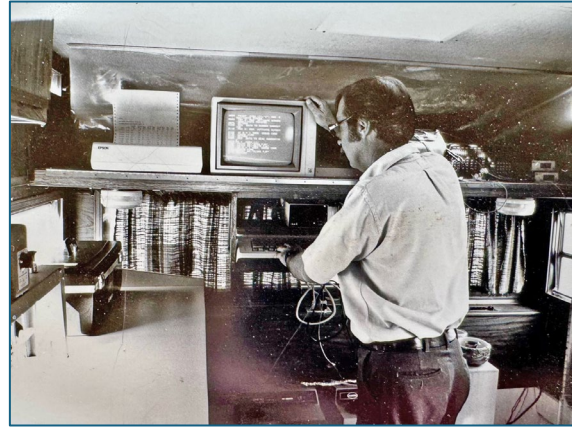
allocated to this endeavor! \$2,000 was spent buying an old travel trailer from a used car lot in Redding. The trailer was pulled into Bob's side yard; and fellow employees Ray Prettyman, John Stubbins, and others donated their time and talents towards retrofitting the trailer to create the firm's first mobile pilot plant.

The trailer was outfitted with chemical feed and pilot filter facilities, lab bench, and computer-based data collection devices. At

that time, the “State of the Art and Budget” included an Apple IIe computer and dot-matrix printer, and programable logic controllers to allow continuous recording of filter head loss and turbidity.

The first use of the trailer was in northern California. Bob’s father-in-law helped him set it up and operate it. Over ensuing years, this “little trailer that could” was used in several projects throughout the West. Notable memories include Brock McEwen hauling it to El Paso, where it was effectively used in the formative stages of designing a new plant for that community. Phil Butterfield was the last person to operate the pilot trailer, which led to a contract for designing a new treatment plant for Helena, MT.

While in transit to Helena, the trailer slid off a snowy road and ultimately was delivered on a flat bed trailer. Following that project, around 1990, the trailer was hauled to Salt Lake City, and some of the equipment transferred to a shiny new 50-foot trailer. The little trailer had proven its worth, and a new era was launched.



Ray Prettyman