

YESTERDAY AND TODAY

CH2M HILL has ties to Hanford dating back to early 1960s

It was nearly 40 years ago that Walt Conley, a senior engineer with General Electric's reactor division at the Hanford site in Washington, was lured to a small engineering firm in Corvallis, Ore.

"I would lay awake at night wondering 'What have I done?'" Conley said in a recent interview with *Unlimited*. He left the security of the corporate giant in 1962 to join the comparatively tiny, obscure Oregon-based CH2M (Hill and Associates joined the firm in 1970).

At the time, CH2M rarely strayed from its northwestern cradle. But with Conley came a water treatment process that, after some enhancements, would be the catalyst for CH2M becoming a nationally recognized leader in water and wastewater treatment.

Conley developed a two-medium filtration process (filter sand and coal) at Hanford to treat water from the Columbia River that cooled reactors used in the manufacturing of plutonium for the nation's nuclear arsenal. It was the world's largest water treatment plant and fed 100 million to 250 million gallons a day to each of nine reactors. Archie Rice, who became a partner in the firm in 1948, headed a team of CH2M engineers, including Conley, to make further improvements to the process by adding garnet sand as a third medium. The process would become known as MicroFLOC. After it was used in a half-dozen or so small projects, MicroFLOC was incorporated into the

design of the country's first large-scale advanced wastewater treatment plant, located at Lake Tahoe.

"The Lake Tahoe installation is 'the first waste water treatment plant of its type in this country and probably the most advanced purifying system in the world,' according to the U.S. Public Health Service, which assisted in the financing of the project." This quote was included in a 1960s vintage CH2M marketing brochure.

Another of the firm's partners, Ralph Roderick, often proclaimed that the Lake Tahoe project "brought the firm to a place of prominence," Conley said. "He may have overstated it, but it was an important project."

Although CH2M sold MicroFLOC in 1965 to Neptune Meter Company, the technology continues to be used today, a legacy of CH2M HILL and its first generation of engineers.

Walt Conley, 82, works part-time as a consultant and lives in Corvallis. Archie Rice died in 1995 and Ralph Roderick died in the mid-1980s. ♦



Hanford History

Hanford was home to the world's first full-scale nuclear reactor and was part of the Manhattan Project. Today, Hanford is the most radioactively contaminated site in the Western Hemisphere and is one of the most complicated environmental cleanup projects in U.S. history. In December, CH2M HILL acquired Lockheed Martin Hanford Group. The newly formed CH2M HILL Hanford Group is responsible for managing Hanford's tank farm under the direction of the Department of Energy's Office of River Protection.

