Landmark Milwaukee program honored as top engineering feat

The Milwaukee Water Pollution Abatement Program has been recognized with a special Wonders of Wisconsin Engineering Award presented by the American Council of Engineering Companies of Wisconsin. As part of its 50th anniversary celebration, ACEC-Wisconsin held a special awards ceremony in February, recognizing outstanding engineering projects across the state. Entries were judged by a panel composed of ACEC-Wisconsin past presidents and members of the media.

The Milwaukee Water Pollution Abatement Program was selected as the winner of the special projects category, which included program management. CH2M HILL was the program manager for the 18-year program, working with a diverse team of district and program subconsultants to manage and deliver more than 300 construction and equipment contracts. This landmark project served as a catalyst for CH2M HILL’s future program management services.

“This is a terrific honor,” said CH2M HILL Chairman and CEO Ralph Peterson. “It is wonderful to see this milestone for our firm recognized by ACEC-Wisconsin.”

The award announcement in February coincided with the start of Engineer’s Week, and CH2M HILL was presented with an award plaque at ACEC-Wisconsin’s annual awards banquet in April. Posters of the award-winning projects were displayed at the state capitol and will be shown at several conferences throughout the year.

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The Milwaukee Water Pollution Abatement Program

In 1977, the Milwaukee Metropolitan Sewerage District, which treats sewage from a 420-square-mile (1,088-square-kilometer) area and serves more than 1 million people, launched the Water Pollution Abatement Program to reduce the frequency of untreated sewage discharges into Lake Michigan following large storms. The $2.3 billion program was the largest public works project in Wisconsin history.

CH2M HILL invested hundreds of thousands of hours in the project, with many people spending years devoted to the job. In fact, according to Jim Smith of the Corvallis, Oregon, office, “Just about the entire office back in the 1980s contributed to the design of the Jones Island Wastewater Treatment Plant improvements, which was one of the major components of the overall program.”

The district’s wastewater collection and interceptor system conveys both sanitary sewage and combined sanitary and stormwater flows to the Jones Island and South Shore wastewater plants for treatment and disinfection before discharge to Lake Michigan. The program increased treatment capacity and replaced aging infrastructure by upgrading the two plants, improving and replacing sewer lines, constructing several deep tunnels to store peak-period sewage flows, and constructing a new biosolids fertilizer production plant. The program improved water quality for Lake Michigan area residents and helped safeguard the environment through significant reduction of discharges into the lake.

The program, which ended in 1994, was delivered 1 year ahead of schedule and within 8 percent of the original budget. Few public works programs of this magnitude can equal this accomplishment.

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