

Sheboygan's UV Disinfection Facility Receives Engineering Excellence, State Finalist Award

Water, the kind we use every day, can have a lot of issues that arise that make it unsafe to use. The Sheboygan Water Utility decided to take a proactive approach to its citizens' health by enacting new procedures to reduce the risk of bacterial issues like cryptosporidium.



CDM Smith designed a new UV disinfection facility that would provide a multi-barrier disinfection approach and was uniquely suited to dealing with bacteria. One of the main issues was the small site plan – the existing treatment plant is located on Lake Michigan and does not have room for serious

expansion. By reexamining space previously thought to be unusable, the design team was able to install a separate UV facility that also reduced the need for intermediate pumping. The gains in efficiency allowed the plant to stay in operation during construction and be finished on schedule. Another major improvement was close coordination with state officials to create a memorandum of understanding that allowed the facility to receive environmental credits from the state for its UV facility. This joint discussion and design was the first in Wisconsin and sets a precedent for future treatment plant projects.



Through clever siting and careful negotiation, the design team was able to meet client expectations and provide even safer and more reliable water for the population of Sheboygan.

The project earned an [ACEC 2017 Engineering Excellence Award](#).