

Edina Water Treatment Plant Upgrades

After Progressive Consulting Engineers, Inc. (PCE) had successfully reconstructed three plants serving the City of Edina, the City retained PCE in 2002 to upgrade the last remaining Water Treatment Plant (WTP) No. 2. The Plant was constructed in the 1960s on the same property as the aging wellhouse building for Well No. 6 in Edina, MN. WTP No. 2 contained two pressure vessel filters that treat 1,700 gallons per minute of water from two wells for Edina's water supply. An Existing Facilities Evaluation/Design Report was completed to recommend changes to meet the recent Radionuclides Rule, extend the life of the filters, and improving the plant operation. The report also determined the condition of the buildings, filters, and equipment and recommended upgrades. The plant upgrade project was bid in September 2003. The existing wellhouse was demolished. An addition was constructed that connected WTP No. 2 and Well No. 6, as well as provided space for a new electrical control room, chemical room, and storage room for community youth programs.



The addition was designed to match the existing plant building. Filter renovations included new filter media, underdrains, piping, valves, and interior and exterior paint. Additions included an air wash system and provisions for future construction of a filter backwash recycle facility.



The chemical room features a below ground spill containment pit and closets with sprinklers to safely store chlorine gas cylinders. The controls in the electrical room fully automate the plant and a touch screen display allows operators to view and modify operations.

The plant design includes provisions for piping a third well (Well No. 17) to the head of the water treatment plant. Well No. 17 contains elevated levels of radium. Blending this well with the other two wells serving Plant No. 2 will result in radium levels below the combined radium standard level. WTP No. 2 was put into operation in June 2004 and produces water better than the aesthetic standards levels for iron and manganese. The project was constructed with less than 3 percent in change orders.



Client: City of Edina
Client Contact: Roger Glanzer, Utility Superintendent
Year Completed: 2004
Final Construction Cost: \$1.59 Million



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