

Project Name: City of Melville Water Treatment Plant SCADA Upgrade & Well #2 Control System

Location: Melville, Saskatchewan

Owner: City of Melville, Saskatchewan

Consultant (Well #2 Project): Associated Engineering, Regina



Plant Facility: The Melville WTP supplies the city of Melville and some rural areas. Groundwater from 2 wells is processed through an Electro-Dialysis Reversal (EDR) system. Surface water is processed through a Trident filter. High-Lift pumps provide the distribution, the system pressure is maintained by a water tower. Plant Automation is based on a PLC/HMI system.

Delco Automation's Scope of Work: Designed, Developed, Engineered and Commissioned the control/automation system for the plant SCADA upgrade. Supplied the MCC and Controls package for Well #2.

Technology: The PLC functions as the primary control devices. It is programmed to operate the water treatment plant using Modicon Concept software. The PLC system provides the primary control of the supply, storage and distribution systems and also connects to treatment system skid packages. One full function SCADA node is connected to the PLC via 10/100 BaseT Ethernet. The reporting system gathers data from SCADA and uses MS Excel for creating reports. The I/O modules at Pump house, Wells and Water Tower communicate with WTP PLC using Ethernet radio modem.

