

## **Project Update**

### **Latrobe Municipal Authority Wastewater Treatment Plant**

**8/19/2024**

**PROJECT DESCRIPTION:** The Latrobe Municipal Authority's wastewater treatment plant is currently suffering from poorly functioning electrical distribution gear. The main cause of this is due to the age of the equipment, which is long past its end-of-life functionality.

The equipment consists of the main switch gear which supplies power to the plant from the utility company. Subsequently, distribution circuit breakers feed the plant's six motor control centers and variable frequency drives, which distribute power and control to all of the plant's existing process equipment such as motors, blowers, compressors, heaters, etc.

Maintenance on this electrical gear is no longer possible because it is a line of equipment that is no longer supported by the manufacturer. The electrical gear has suffered over time due to many process components that have been taken out-of-service, or parts taken from one piece of equipment and installed into another. In addition, multiple wire junction boxes, conduits, enclosure pads and disconnects are showing extreme wear from surge damage, water ingress, and overall age and are in need of being replaced. Conduit along pipe galleries have experienced substantial rusting due to water leaks in the building's structure and has lead to damage to the wires.

The plant network and SCADA system will also be updated to include the new VFD and switchgear equipment that will enable the monitoring of motor speeds, temperatures, flow rates and run times along with any faults and/or alarms. This will include installing new network switches and communication cabling throughout the plant to bring all required data to the main control station. This will also involve upgrading to the latest industry standards for cyber security purposes which includes updating to all the latest software versions available for all computers, PLC's and network switches at the plant.

Work will also involve the replacement of badly deteriorated concrete at the first stage clarifier tunnel.

To accommodate this work, the wastewater treatment process may be temporarily modified which could potentially result in an increase in odor emanating from the plant. Odor is expected to dissipate as work is completed and operations return to normal conditions.

We appreciate the patience of our customers during the completion of these necessary upgrades.