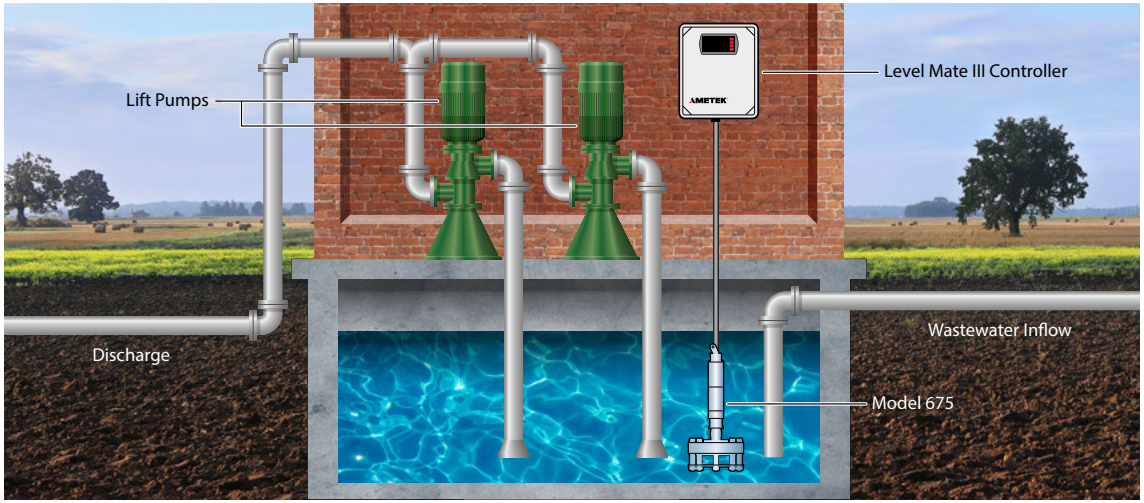
Wet Well Wastewater Level Measurement



The Problem

Water treatment facilities need to process raw sewage from residential and industrial customers without causing spills back into the environment. Any spill presents environmental issues, health hazards, and is extremely costly to clean up.

The raw sewage, influent, or wastewater initially enters a lift station. The lift station is a wet well that holds the raw sewage until it moves to the next step of the process, which is the bar screen for primary treatment. Lift pumps maintain the wastewater level in the wet well. When the wet well level raises to a pre-set value, the pumps turn on and move the wastewater to the next step of the treatment process. The level in the wet well is measured by some type of level measurement instrument that communicates with a controller for the pumps. Many of these level instruments are prone to failure because of the harsh environment.

Fast moving wastewater, introduced into the wells under pressure, constantly jostles sensors, often forcing them into the sides of the well with enough force to cause them to malfunction or to fail altogether.

Our Solution

AMETEK PMT's Model 675 is a submersible level transmitter designed for these tough wastewater applications. The Model 675 has a 7 lb, heavy-duty SST protective cage built around a durable 3.5" flush diaphragm to prevent the unwanted buildup of debris, fats, oils, greases, or other bio-solids by eliminating the potential gaps in the measurement area. The durable construction and weight of the unit eliminates the effects of turbulence in the wet well transmitter, whether it's located at the bottom of the well, or a stand-off. The Model 675's all 316 stainless steel construction offers outstanding environmental protection. A replaceable lower diaphragm seal provides for longer transmitter life expectancy and serviceability.



The Model 675 is CSA approved for Intrinsically Safe operations, Class I Division 1. It has a 4-20 mA output that can be linked into a controller for the pumps, or into our Level-Mate III system.