

Special Applications

Special Applications Case Studies



Case #22

Measurement & Datalogging of pH, ORP & Conductivity in Sewer Lines Down in Manhole for Discharge Compliance.

The Problem

A publicly owned treatment works (POTW) facility wanted to ascertain the origination source that caused pH excursions in the water sent to their treatment plant that did not appear in the pH compliance reports provided from facilities that were performing pH monitoring in fulfill of their discharge permits.

The Solution

Since most critical locations of interest had neither no power available nor any SCADA to which the measurement data could be interfaced a novel solution was needed that could support interfacing heavy industrial grade sensors. Since the locations were intermittently wet and dry a solution was need that could support these field conditions.

To minimize the cost of finding the location of discharge violations fully self-contained battery powered ultralow-power smart digital measurement systems were installed to monitor the pH, ORP and conductivity parameters with heavy industrial fully submersible and waterproof sensors suitable for use in intermittent wet and dry conditions with extreme dehydration resistant reference systems for the pH & ORP sensors.

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