

Wireless Sump Alarming

Company Profile

This customer is a leading specialty chemicals company with 60 production sites worldwide. They specialize in the development, manufacturing, and marketing of chemical intermediates, additives, specialty chemicals, and plastics.

Challenge

A chemical manufacturer has several reactor areas with equipment in below-grade sumps. Due to weather or equipment mishaps, water frequently enters these sumps and floods the equipment, primarily electric motors in the sumps. Over the past 18 months, 10 pumps have needed to be replaced at an equipment cost of over \$10,000. Also not accounted for is lost production time, and in-house labor to replace the equipment.

The control room operators have no way of knowing there is water present in the sumps until equipment failures trigger alarms. With some earlier notice of water leakage, measures could be taken to remedy the situation before equipment is flooded and damaged.



Solution

Rawson/Industrial Controls provided a thermal leak-detection switch for each sump location along with six local control panels with wireless discrete input transmitters. These panels communicate via point-to-point wireless communication to a receiver radio in the control rooms which provides contact alarms to the customer's DCS as well as initiates a horn/strobe alarm to alert the operators of a problem.



Results

Rawson/Industrial Controls' knowledge of level and control applications allowed us to craft a solution from readily available components to supply an annunciation system to work with their current control system. Rawson/Industrial Controls' engineers were able to configure and program the system to the point where the customer can integrate it into their DCS. With mobile test equipment and the willingness to offer a presale site survey, the customer can have a high degree of confidence the solution will work once implemented.