

Remote monitoring & controls for unmanned reliability

LONG-TERM LOW VOLUME SEEP COLLECTION

Challenge

Xylem was tasked with designing a seep collection system to collect water from a low volume seep through the wall of a decommissioned fly ash pond. The sump was located in an active river floodplain that flooded with as little as 1-2 inches of rain, so the customer needed an automatic shutdown when the river covered the sump. In addition, there was no existing power at this hard-to-reach location, so we had to provide the ability to remotely monitor and control the system.

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Solution

Xylem engineers developed an efficient, reliable system using Flygt submersible pumps and powered by Godwin generators. Custom control PLC panels provided the customer with a real time overview of performance variables as well as alarms, should the unmanned system encounter a problem.

Result

Backed by our extensive range of products and technical expertise, we met the project deadline while adapting to daily changes to the system design caused by intense regulatory pressure and state oversight. The system is still operational two years later and has required virtually no maintenance in that time. Thanks to our advanced telemetric monitoring and control capabilities, our customer has been able to minimize labor costs at this critical site while maximizing visibility and peace of mind.



Rental external fuel cell along with two generators provided extended run times between refuel and allowed for service of equipment without system being offline.



Rental transfer switch and PLC controller allowed for 24/7 operation of this system and provided back-up in the event equipment needed to be repaired or serviced.

PRODUCT LIST:

- Flygt submersible pumps
- Godwin generators
- Monitoring & control equipment including MJK flowmeters and level transducers
- Accessories, including HDPE pipe and fittings
- Services, including pipe fusion