

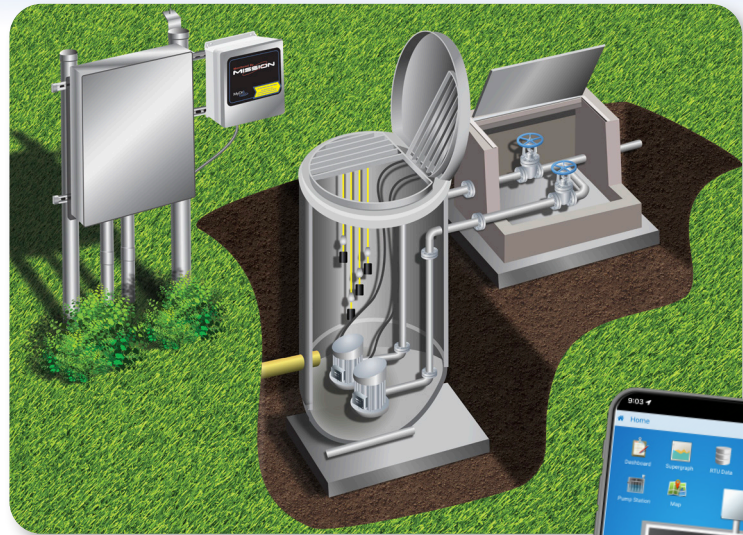
Lift stations need monitoring

A lift station's purpose is to pump wastewater from lower to higher elevations, directing sewage toward treatment plants. Properly equipped stations run automatically and efficiently, ensuring wastewater is removed from communities. But leaving them unmonitored leaves utilities in constant state of reacting to emergency spills and learning too late when equipment fails, endangering station components and the delivery system as a whole.

A lift station includes key components like a wet well for collecting wastewater, pumps, and pump controllers that manage cycles based on water levels. Valves and piping direct the flow and prevent backflow, while ventilation systems control odors and hazardous gases. The force main is crucial for transporting wastewater under pressure to higher elevations. A simple monitoring solution alerts operators to high water levels or pump issues. Remote monitoring tracks the performance of these components, ensuring everything runs smoothly and efficiently.

What must be monitored?

- High water level
- Low water level
- A/C power loss
- Pump overload
- Pump failure
- Pump overheating



Cloud-based SCADA

A cloud-based remote monitoring SCADA solution is crucial for preventing failures and flooding by providing early warnings of pump malfunctions, reducing health risks, and ensuring regulatory compliance. It enables proactive maintenance by detecting issues early, reducing downtime, and extending equipment lifespans. Real-time data enhances operational efficiency, lowers energy costs, and prevents emergency repairs. Accurate data ensures regulatory compliance and simplifies reporting. Continuous monitoring improves system reliability by detecting anomalies promptly and using historical data for better planning.



Consequences of NOT monitoring a lift station

- **Increased Risk of Failures:** Unnoticed pump failures can cause significant damage.
- **Health Hazards:** Overflows can spread harmful pathogens and lead to fines.
- **Higher Maintenance Costs:** Reactive maintenance is more expensive than proactive maintenance.
- **Regulatory Non-Compliance:** Can result in fines and legal action.
- **Operational Inefficiencies:** Lack of real-time data hinders optimization.

Mission keeps you connected to your lift stations



MyDro 150/850 RTUs

- Provide real-time alarms for AC power loss and dangerous wastewater levels.
- Collect pump data to stay informed on your system performance.
- Track pump state changes to detect clogs, inefficiencies, or degradation early.
- Generate detailed reports and graphs for easy analysis of trends and performance.
- Offer Emergency Backup Pump Control to keep pumps running during primary controller outages.
- Deliver secure, cloud-based access to your data anytime, from anywhere.



Real-Time Updates

Real-time updates provide constant visibility into your lift station's performance, ensuring you stay informed about critical system changes. With updates every two minutes or triggered by a 5% level change, you gain accurate, up-to-the-minute data for better decision-making. This rapid feedback allows operators to respond quickly to potential issues, minimizing downtime and disruptions. Real-time monitoring not only enhances operational control but also provides peace of mind, knowing your system is always under watch.

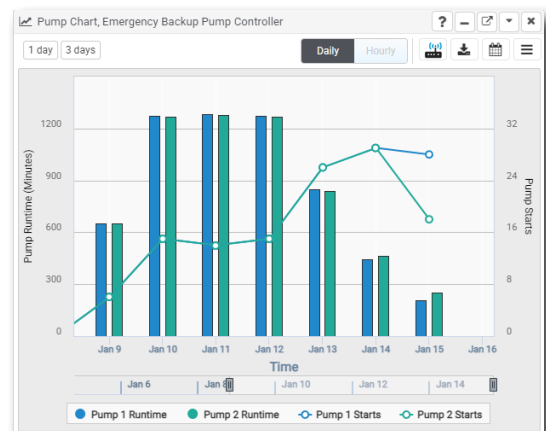


Daily/Hourly Graphs

Daily and hourly graphs present a clear visualization of pump starts, runtimes, and other critical data points. These graphs help operators identify anomalies, such as excessive starts or prolonged runtimes, which may indicate underlying issues. By analyzing trends over time, you can compare pump performance and diagnose inefficiencies with ease. This data-driven approach simplifies system management, making it easier to optimize performance and address concerns before they escalate.

Pump Insights

Detailed pump insights empower operators to track essential metrics like pump state changes, runtimes, and performance trends. These insights reveal critical information about pump health, enabling early detection of clogs, inefficiencies, or degradation. By analyzing pump activity, you can optimize energy use, schedule maintenance proactively, and extend equipment lifespan. Having this level of understanding ensures your lift station operates reliably and efficiently, reducing overall costs.



More than Just Monitoring!

Emergency Backup Pump Control

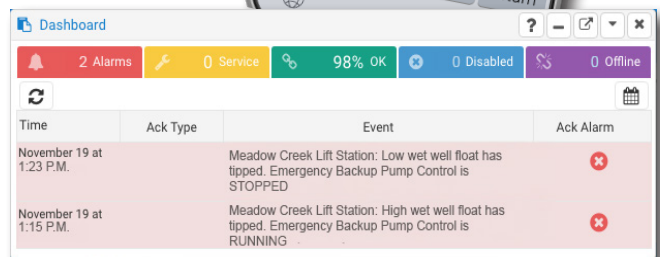
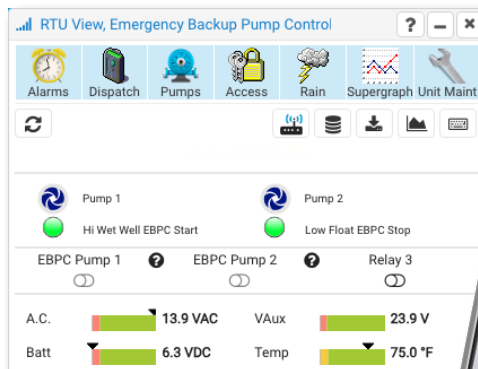
A pump controller in a lift station automatically manages pump operations based on water levels, ensuring efficient and reliable wastewater management. It turns pumps on and off as needed, prevents overflows, and monitors system parameters like pump run times and potential alarm triggers.

Occasionally, pump controllers may fail due to issues such as electrical faults or software glitches. In these cases, replacing the controller can take several weeks, during which the lift station must be operated manually—a resource-intensive and less reliable process.

To address this challenge, Mission has introduced an optional Emergency Backup Pump Control feature in the MyDro 150 and 850 devices. This local, software-enabled feature allows the MyDro units to temporarily take over pump control for up to two pumps in the system, ensuring the lift station remains operational while waiting for a replacement pump controller. This innovative solution minimizes downtime, reduces manual intervention, and maintains system reliability during critical periods.

What you get with Emergency Backup Pump Control

- Local, level-based backup pump control triggers
- More time to restore your primary lift station controller
- Notifications via text message or email of your backup control system stepping in to start and stop pumps, keeping operators aware of primary outage
- Tracking of Emergency Backup Pump Control operations in the cloud-based 123SCADA web portal





What you need for Emergency Backup Pump Control

- Mydro 150 or 850
- Two Safe Module Plus expansion modules (highly recommended)
- One normally-closed float for high level pump start command
- One normally-opened float for low level pump stop command
- Activated Emergency Backup Pump Control service



The MyDro Emergency Backup Pump Control feature is designed as a backup to a primary pump controller. It is not intended to serve as the primary pump controller.

Scalable Monitoring Solution **MyDr**

Lift Station RTU	MyDr150 	MyDr850 
Standard Mission offering		
<ul style="list-style-type: none"> Cellular connection, LTE, multi-carrier Backup battery for operation after A/C loss Technical support, 24/7 Warranty, 2 years Cloud-based SCADA web portal Interactive LCD touch display 	✓	✓
Connect to analog measurements and tracking	✓ Up to 9 15 minutes	✓ Up to 9 2 minutes or 5% updates
Pulse input for pulse readings such as pulse-based flow meters	✓ 15 minutes	✓ Up to 6 2 minute updates
Receive digital inputs to track data such as pump starts and stops	✓ Alarms only on change	✓ Report any on change
Pump runtime calculations to track individual pump workloads	✓ 2 runtimes	✓ Up to 8 runtimes
Emergency Backup Pump Control to temporarily assume lift station operation	✓	✓
Expanded DO/Relays to control devices such as a pump or blower		✓
Pump state change tracking		✓
Positive relay feedback logic to notify when equipment is not operating as expected		✓
Integrated flow calculation		✓
Volumetric calculation		✓
Analog Interconnect		✓
Digital Interconnect		✓



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