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Pump expert shares top maintenance tips for public sector organisations this winter

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As winter approaches, ensuring essential infrastructure is properly maintained is critical for public sector organisations.

The early predictions for winter 2024/2025 suggest it will be one of the most challenging in recent years, with cold temperatures, increased snowfall, and wet, stormy conditions expected.

From heating systems to waste water management, pumps play a key role in the daily operation of public sector facilities and, like other key components of a building's infrastructure, face a greater risk of issues over winter due to freezing temperatures and increased demand.

John Calder, technical director at Dura Pump, has drawn on his 15 plus years of experience to share his top maintenance tips to help public sector organisations minimise downtime and any interruptions this winter.

Inspect pumps and systems regularly

Regular inspections are crucial to identifying early signs of wear, leaks, and other potential issues.

"During winter, special attention should be given to pumps' seals and bearings, which could be susceptible to additional loads from cold temperatures.

"Pump stations for wastewater, booster sets, and pressurisation sets, should be serviced a minimum of every 12 months, but in situations where there is a high demand they could need inspection as much as monthly," John said.

Remote monitoring is helping to transform this process, by providing real-time data on the performance and condition of pumps, enabling any issues to be spotted and rectified before they turn into major problems.

Clean and remove any debris

Winter storms and heavy rainfall often lead to more debris entering the drainage and water management systems, risking blockages in pump systems.

“Depending on the application of a pump system, winter can lead to higher volumes that need to be pumped. Regular inspections will help keep a pump in good service and be a means of monitoring any recurring issues,” John added.

Check your heating system

When heating systems are first switched on, water that has been sitting in the pump since last winter can cause the impellor to seize to the pump housing, resulting in a pump that cannot turn. It’s wise to run the pumps up early in the season so any issues can be rectified before the cold weather hits.

Hard water can also allow limescale and other deposits to build up around the mechanical seal making it rigid and brittle.

“When the system is pressurised, this mechanical seal will leak and could lead to a significant pump failure. A leaking system might last a few weeks before eventually failing, but we’d like to encourage people not to wait until there is an emergency situation before taking steps to fix it,” John said.

Failed pumps may mean that the buildings do not reach minimum temperature requirements set by the government, so they may have to close.

Guidance from the House of Commons Library and the Association of Teachers and Lecturers (ATL) recommends temperatures in accordance with activity levels, with 18°C suggested in places like classrooms and hospitals.

Drain pumps and pipe work

If a pump system is not expected to be in use for an extended period during the winter, it is advisable to drain the pump and associated piping to prevent freezing. Frozen water can cause significant damage, leading to burst pipes and pump casings.

John commented:

“When you return from a break, it’s important to do a test run. There should be no leaks from the pump. If there is a small weep, leave the pump to run for a maximum time of 10 minutes, to give it time to bed back in. If the leak continues, contact an expert to discuss what further actions should be taken.”

Rely on expert advice

If you suspect an issue with your pump system, it’s important to call on expert advice, rather than waiting until this becomes a crisis.

“Our engineers are trained to check for every aspect of how a pump system is working. They go through a checklist, assessing pressure, valves, sealings, bearings, the control panel, and more.

“Even though pumps are designed to put up with a lot, cold weather can be debilitating for pump systems. The last thing you need is an emergency or an unexpected breakdown that’s going to cost you time and money, so preventative maintenance is key.”

To find out more about Dura Pump, visit https://www.durapump.co.uk/