



North Dakota
INSURANCE
DEPARTMENT
PROTECTING THE PUBLIC GOOD
SPECIAL FUNDS DIVISION

Advisory

Lift Station Equipment Maintenance

Sanitary sewer and wastewater lift station equipment requires regular inspection and maintenance. Operating this equipment in extreme conditions and at capacity for long periods of time can result in early failure. Commercial property insurance policies do not cover replacement of worn or failed equipment. In addition, policies won't cover loss or damage from power failure, low power supply, electrical problems or mechanical breakdown.

Consider the following actions to reduce equipment failure:

- Pump out and clean wet wells at least twice a year to prevent build-up.
- Inspect electrical controls, connections and fuses twice a year for bad connections and worn parts.
- Inspect check valves twice a year.
- Inspect pumps and clean floats quarterly.
- Inspect the light and alarm systems weekly.
- Install an hour meter on each motor to provide a record of how often each motor is cycling and the amount of water being pumped through the system. Keep a record book on motor hours, dates and maintenance.
- Install a flow meter on each pump to provide a record of how much flow is being handled by the system. Keep a record book of flow, dates and maintenance.
- Once a month, take amp and vibration readings for each motor in an on-site lift station. If the amp readings do not meet the manufacturer's specifications, it might mean something is stuck in the propeller or that water has gotten into the motor housing or wiring.
- On emergency back-up generators, check fuel levels, battery life and general condition. They should be operated under load to ensure proper operation at least quarterly. To test, trip the power to the station and watch a successful transfer to generator power for at least 15 minutes.