

# Infrastructure self-audit checklist

## Water Supply

### Do you monitor water consumption?

Doing so can help you save money and identify issues in your supply network. Consider implementing regular monitoring of network flows and pressures, storage levels, and any other locations that will help track water consumption (including water treatment plant production).

### Does your water supply distribution network have branches that have not been used for some weeks?

Pipework branches and network zones that have been stagnant should be flushed to allow any biological growth (biogrowth) to be completely flushed and replaced with properly chlorinated water prior to bringing back online.

### Are your assets able to provide uninterrupted supply?

Maintaining critical assets like distribution pumps is necessary for continuous uninterrupted supply, but the instrumentation that controls these pumps is just as critical and can fail at the most inopportune times. Consider performing some "critical function" testing of key equipment, for instance switching off power to a duty pump and seeing that the standby pump automatically starts, or lifting a level sensor (if a float type) to see that it stops/starts a pump at high level. Always keep safety front of mind. If it can't be done safely then have a licenced plumber or electrician (depending on the test) carry these tests out on your behalf

and provide you with a report that details what is working and what needs work.

### If you have a water treatment plant or rechlorination systems, refreshing chemical stocks is critical to ensuring good quality water and possible health risks.

Sodium hypochlorite will degrade to water and salt with drastically reduced disinfection properties. Chlorate is also a by-product of this degradation so rather than just topping up the same day tank, make a point of emptying the old residual chemical prior to the busy season, give the day tank a good clean (as appropriate and safely), and provide fresh chemical to your water treatment plant or disinfection system.

### Do you have seasonal water quality issues that will be more challenging for your WTP Operators e.g. high turbidity in the raw water?

Prepare you and your operators for more challenging raw water quality conditions that may apply to the busy season. Review previous operational history (e.g. last season's raw water quality and chemical dose rates), update your procedures and work instructions. Have contingency plans in place if historical experience highlights any risk (e.g. tanker potable water supply in if the raw water quality becomes too challenging and the WTPs "safe operating envelope" is breached).

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