



PROTECT YOUR
BUSINESS FROM
CONTAMINANTS IN
YOUR WATER SUPPLY

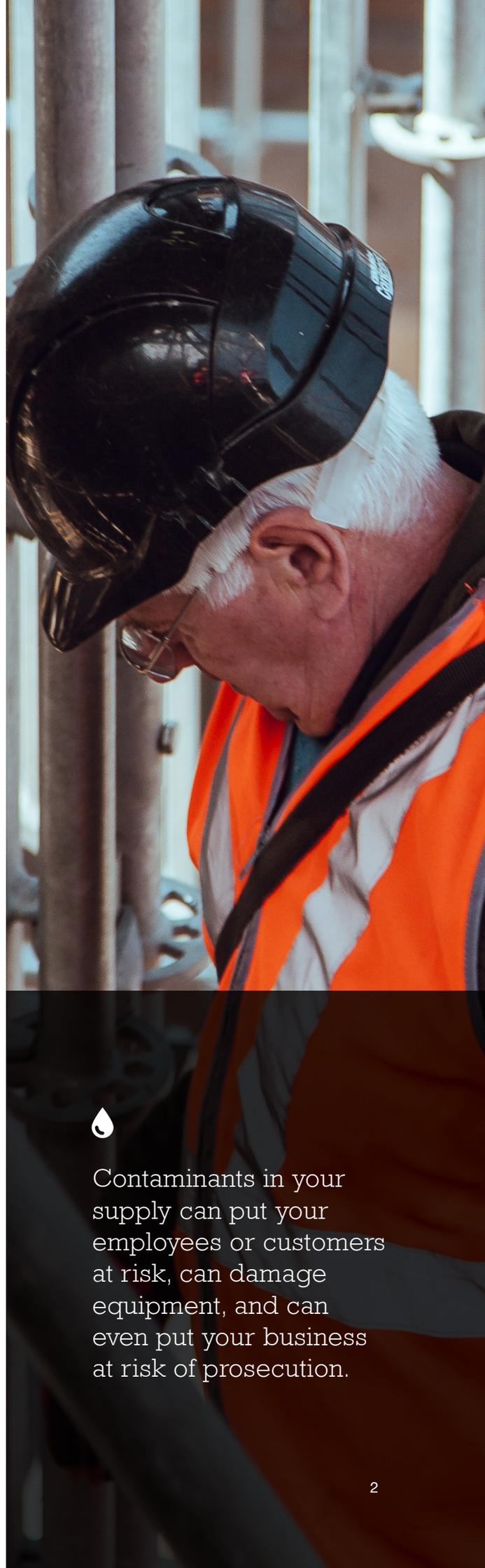
PROTECT YOUR BUSINESS FROM CONTAMINANTS IN YOUR WATER SUPPLY

Whatever industry your business operates in, a clean, safe water supply is a critical element of your day-to-day operations. Contaminants in your supply can put your employees or customers at risk, can damage equipment, and can even put your business at risk of prosecution.

There are a number of ways your water supply could become contaminated if not managed correctly. In this article we'll explain the major areas you need to be aware of, and how to make sure your water supply is safe, hygienic and clean.



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THE MAIN SOURCES OF WATER CONTAMINATION

There are three main types of water contamination:

- 💧 **Microbiological** – if faecal bacteria enter your water supply, or if high levels of other bacteria such as legionella build up in your water.
- 💧 **Chemical** – if chemicals, pesticides or fertilisers enter your water supply.
- 💧 **Physical** - if grit, sediment or other solid build-up occurs in your water supply.

PROTECTING YOUR SUPPLY

Key Risk Areas

These are some of the key areas of your water network which could pose a contamination risk:

Private water supplies

If your business gets water from its own private supply such as a well, borehole or stream, steps should be taken to ensure that this can't be contaminated, for example by agricultural waste run-off from the surrounding area. You're also likely to require a filtering system to remove sand and other physical particles from the water.

Rainwater or Greywater

Rainwater or greywater collection can help reduce your water usage significantly. However, rainwater contains contaminants from atmospheric pollution, while greywater is likely to contain faecal bacteria from washing. Because of this, it's important that steps are taken to make sure rainwater or greywater does not flow back into your mains water supply. Backflow can contaminate the mains supply, so systems must be designed with an air gap to prevent the two water sources from mixing.

Storing water in tanks

Water which is stored can pose a risk of contamination if the tank is not watertight and vermin-proof, or if ground water can enter it. Tanks should be regularly monitored and when necessary disinfected to reduce the risk of contamination.

Legionella

Legionella occurs naturally in clean water at very low levels. However, if precautions aren't taken, legionella bacteria can multiply to unsafe levels within your business's water system, leading to serious illness or even death. The main risk factors are standing water where the bacteria can multiply, and lukewarm water, which provides the right conditions for growth. Regular monitoring and checks to eliminate the risk of legionella are a legal requirement for businesses, so it's vital to have the right procedures in place.

Pipe quality and maintenance

The quality of your premises' water network can also affect the quality of your supply, and pose a risk if your pipes are not maintained. Damaged water pipes could allow ground water contaminants into your supply. In older networks, lead plumbing can contribute to increased lead levels within your water supply, which can also pose a risk to health.

WATER TESTING AND TREATMENT

If your business is at risk from any of the types of water contamination listed above, you are likely to have a legal requirement to conduct regular testing to monitor your water quality, as well as to take steps to remove contamination.

This is not just to protect your own employees and customers – contaminated water can leak back into the public mains and cause a much wider risk if not managed correctly.

Testing and monitoring your supply

Regular laboratory testing can give you a clear picture of the quality of your water supply, and of the levels of any contaminants it might contain. Depending on your specific risk factors, a range of bacteriological and chemical testing methods are available, with regular sampling and testing recommended to ensure that the preventative measures you implement are working.

Treating your supply

If there's a risk of contamination to your water supply, a variety of different treatment methods exist to ensure your water remains clean and safe.

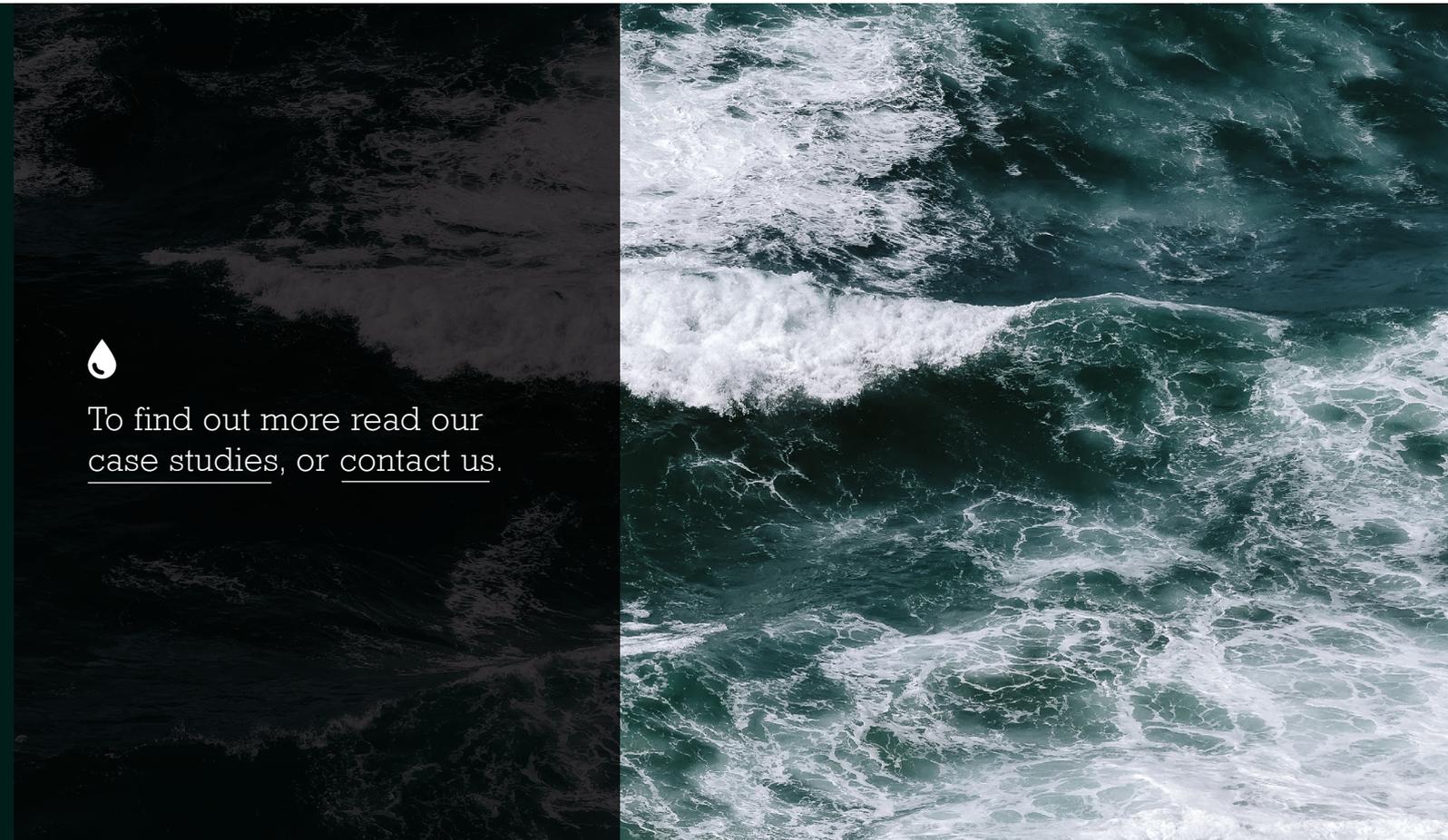
- 💧 For physical contaminants such as sand or grit, settlement tanks and filtration systems can remove any particles from the water.
- 💧 Filtration and reverse osmosis systems can be used to filter chemical contaminants from water, particularly for medical or pharmaceutical applications where it's necessary that water is very pure.
- 💧 For bacteriological contamination, chlorination is commonly used to disinfect water and the systems it runs through. Alternatively, ozone and ultra-violet light can also be used to kill bacteria.

MONITOR AND ENSURE THE QUALITY OF YOUR WATER SUPPLY

Total Water Solutions' extensive expertise means we're able to support you with a wide range of consultancy, advice, and tailored services to help keep your water supply safe and clean. We offer straightforward legionella consultancy and training, chlorination and bacteriological testing, as well as a range of services to help your business get the most from its water network.



To find out more read our [case studies](#), or [contact us](#).





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how we can help you call us on
0800 028 3557 or email tw@nwl.co.uk