

Life Saving Commitments

Stored Energy



Zero incidents
Zero harm
Zero compromise

Keeping you **healthy** and **safe**, every day **at work**.



Thames Water and its Partner organisations carry out thousands of activities each year that may have hazards from stored energy. These are often present in tasks when we are upgrading, installing, testing or repairing our assets. Hazards associated with these activities can cause harm to our colleagues and customers.

There are many examples of stored energy hazards across our working environments, but not limited to; mechanical systems i.e. rotating blades or springs/ coils of wire under tension, pressurised steam or waste/ water systems, hydraulic hoses used in lifting or excavation activities, pneumatic systems used with air-lance's or breakers, pipework and vessels holding fluids or gases, electrical systems such as capacitors.

Key areas to consider are:

- Pressurised Systems
- Confined Spaces
- Electrical and Hydraulic systems



Thames Water have several Standards that have been developed with our Partners to assist in developing your Safe Systems of Work or Risk Assessments and planning work activities. They can be found on the Health & Safety Hub in the Key documents section -

<http://www.healthandsafetyhub.co.uk/index.html>

In Particular, for Stored Energy, please refer to:

Essential Standards:

No.26 – Working on Live Mains, including the questions

No. 27 – Utility Management

No. 29 – Safe Isolation of Plant and Equipment

No. 32 – Lifting operations

Thames Water Visual Standards



Safe and effective isolations of assets and processes require good and careful planning

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Planning your site safely and monitoring activities and the environment are key to being in control and protecting those around us. Have you considered the following on your site?



Key Controls:

- ✓ Ensure Scope and design of a asset is specific to the substance it is intended for, following the requirements set out in the Thames water Asset Standards
- ✓ Take consideration of the materials and equipment to be selected and used they are suitable for the task or assets intended use
- ✓ All operatives involved in an activity must receive information on how to use and maintain the system safely, and are provided with a copy of written instructions and method of work
- ✓ All critical items are identified, recorded and appropriately planned in for routine maintenance
- ✓ Ensure instructions provided include the safe operating limits of the system and not to operate if protection devices are missing
- ✓ All safe systems and instructions must include details on the requirement to drain, depressurise, isolate, lock off and where required cleaned or purged prior to any maintenance or work activity
- ✓ Where fitted, protective devices such as safety valves and bursting discs are able to discharge to a safe place and are not blocked
- ✓ All protective devices have been adjusted to the correct settings, specified within the safe system and instructions
- ✓ If warning devices are fitted ensure they are noticeable visually or audibly
- ✓ Any fluid or gases in the system is correctly identified by signage
- ✓ All buildings housing pressure systems must be secured at all times to prevent unauthorised access
- ✓ Ensure operators are aware of the emergency procedures (e.g. isolation valves, drain/ blow down procedures, auxiliary valve operation and ventilation etc.) relating to the gas / liquid / air pressure system.



If something does not feel right, it probably not - challenge and report it

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Pressurised Systems;

While working with any pressurised system it is essential it is fully isolated or depressurised prior to working on it. Hydraulic fluids under pressure can cause significant injury, even when wearing the correct PPE. Establish clear controls and a safe system of work. Any means of recharging a system must be in writing

Electrical & Hydraulic Systems;

Always ensure electrical and hydraulic systems are maintained and regularly inspected. HSE have a description of all items that fall under pressure systems. Never touch, tamper or adjust any systems if not trained and competent

Confined Spaces;

Vessels or other equipment used to house fluids or gases under pressure may require maintenance or be inspected at certain intervals. If entering a vessel or other equipment you must consider the confined space hazards and put in place suitable and sufficient controls to ensure safe entry, exit and working. Permits will be required for specific tasks. These activities must be planned accordingly

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We can ALL help to create a safe working environment