

Revision: 1.00



Lockout/Tagout Procedures

Document No: IW-HSQE-SA-41

Approved By: James Cullen

1. What Happened?

Ingress of water into a sump/confined space during a cleaning task while a colleague was working in the area. The contractor noticed the water level rising in the tank and immediately ceased work and proceeded to exit the tank.

2. Why did this happen?

A short time after the cleaning activity commenced, a breach of the permit to work system occurred and the isolation of the raw water feed pumps was removed. The pumps re-energised and began pumping water into the

sump/confined space.

3. Immediate Actions

The work activity ceased immediately and the contractor exited the tank.

4. What can be done to prevent this from recurring? Further Actions

"Lockout/Tagout" ("LOTO") refers to specific practices and procedures to safeguard employees from the unexpected energisation or start-up of machinery and equipment, or the release of hazardous energy during service or maintenance activities.

An Employer has a duty to ensure that LOTO procedures are in place and that employees are competent to undertake LOTO procedures.

The LOTO process should provide for a competent and assigned ("Authorised") individual to ensure:





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- A. Turn off and disconnect the machinery or equipment from all of its energy source(s) before performing service or maintenance; and
- B. Apply a personal lock to the isolation device or the lock box and secure the key to prevent the release of hazardous energy, ingress of solids/liquids or energisation of plant and equipment; and
- C. If a lock cannot be applied to the isolation device a tag may be applied to the isolation device and must list the Name and contact details of who has applied the lock as well as the start time/date for work and the expected end time/date for the works and
- D. Take steps to verify that the energy has been isolated effectively and any stored energy is safely dissipated before work starts and
- E. Details of the isolation are to be clearly displayed/communicated in the work area to alert personnel that an isolation is in place to facilitate safe completion of works.

The Authorised Individual must have the knowledge and authority to operate all plant and equipment on site. Typically this will be the plant Caretaker or a contracted Operations Contractor.

6 main steps are required to ensure an effective LOTO process:

- 1. Preparation
- 2. Shutdown
- 3. Isolation
- 4. Lockout/tagout (test every lockout device to ensure they have been applied correctly and to verify effectiveness of the isolation).
- 5. Release/dissipation of Stored Energy
- 6. Isolation verification and signed off as effective before commencing



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work.

The process should also address the returning of the machine/equipment to normal operating condition when the servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition.





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To assist LAs in preparing a LOTO process, some useful sources of information may include:

- Health & Safety Authority: "Work Permits and Isolation of Equipment".
 https://www.hsa.ie/eng/Your_Industry/Quarrying/Maintenance_Operations/Work_Permits_and_Isolation_of_Equipment/
 - Health & Safety Authority: "Guide to the Safety, Health and Welfare at Work (General Application) Regulations 2007" Part 3: Electricity

https://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_App s_Electricity.pdf

 US Department of Labour – Occupational Safety and Health Administration (OSHA): "Control of Hazardous Energy (Lockout/Tag out)".

https://www.osha.gov/SLTC/controlhazardousenergy/

5. Further Information

For further information on this safety alert please contact hsqe@water.ie



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6. Distribution list

Internal		
Asset Operations ⊠	Asset Delivery⊠	Asset Management□
All IW Staff □		
Other Please Specify		
External		
Local Authority ⊠	DBO ⊠	Capital Contracts ⊠
Relevant Framewood		Please Specif
Other Please Specify		