

What Happened?

Whilst undertaking Hydraulic Survey Works on a project, a Fire Hydrant cap was being removed by two engineers in Co Cork. The pressure was not checked or released before the cap was removed and as a result of high pressure within the pipeline, the cap blew off when opened. The cap was contained within the chamber and nobody was injured.

Immediate Actions

- The incident discussed with the crew by their Line Managers,
- A thorough investigation was carried out into the incident and the circumstances surrounding it,
- A report was compiled and communicated to the Local Authority and Irish Water,
- A toolbox talk was carried out with all relevant persons regarding the incident,
- A demonstration video was recorded to explain the incident in more detail for the benefit of future training, the client, contractors and subcontractors.
- A risk assessment was created especially for works being carried out on pressurised pipelines. This will be communicated to all site engineers through RAMS for all future works.

Further Actions – Lessons Learned

Fire Hydrant caps have the capability to cause injury when removed or tampered with;

Actions to prevent a re-occurrence:

- Should a data logger be encountered on a watermain line, no attempt should be made to remove it unless it is your job to do so.
- The owner/installer of the logger and fire hydrant cap should be contacted.
- Training and competence is required for the fitting and removal of any logger.
- Where a logger and fire hydrant cap are to be removed the following steps should be taken;
 - Read the method statement for the works fully,
 - Cordon off the works area,

- Carry out a Safe Systems of Work Plan,
- Remove chamber cover using chamber key (Figure 1),
- Turn off hydrant fully using valve key,
- Check for pressure using calibrated pressure gauge to ensure hydrant is not pressurised (Figure 2),
- Remove Logger and recoil hose from cap,
- Open quick release connection on hydrant cap valve to ensure there is no static pressure (double check),
- Remove cap from hydrant,
- Replace chamber cover.



Figure 1



Figure 2