

# QSHE ALERT 2018-04

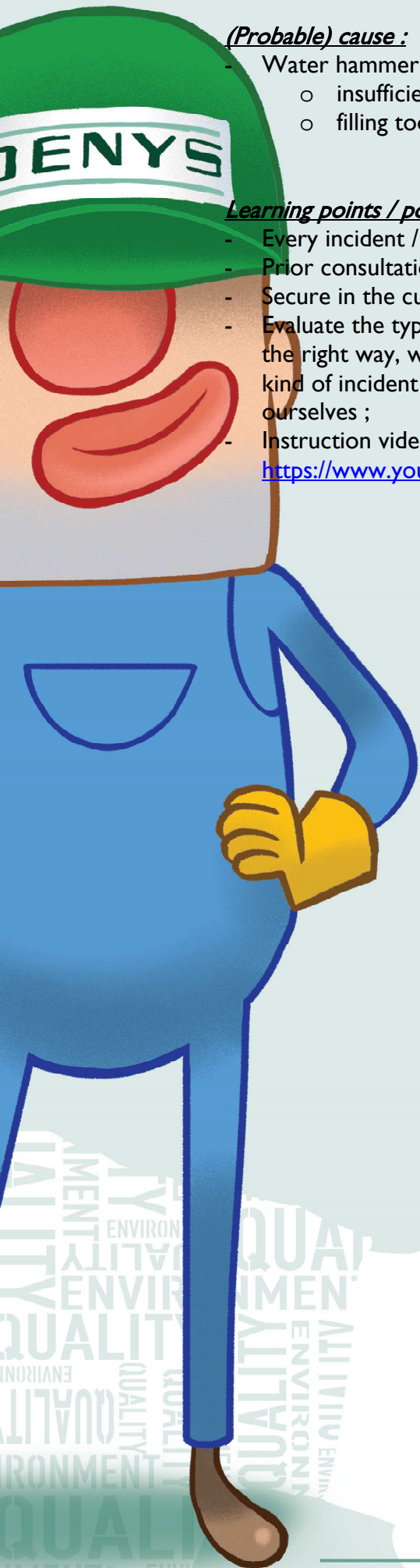
## “Water and air” under pressure are a bad combination

Denys had to repair a leak in a cast-iron extinguishing system in a business area. A new HDPE pipe DN300 PN16 was installed which was combined with a Supa Maxi Straight coupling to the existing cast-iron pipe DN300.



After completing the works, the pipe had to be made operational by the client. During the filling operation (pressure presumably +/- 11 bar) a coupling came loose and moved in the direction of our employees.

Luckily, nobody got hurt. An incident investigation with the client still has to be done.



***(Probable) cause :***

- Water hammer because of :
  - o insufficient or incorrect venting and/or ;
  - o filling too quickly and uncontrollably.



***Learning points / points of attention :***

- Every incident / accident must be fully investigated ;
- Prior consultation on such difficult operations is necessary (step-by-step plan) ;
- Secure in the curves/bends (concrete thrust block, ...) ;
- Evaluate the type of coupling. Nevertheless, the coupling was compatible and installed the right way, we heard via internal conversations this was not the first time this kind of incident happened --> only by reporting every incident properly, we can improve ourselves ;
- Instruction video concerning the correct use fittings available via link:  
[https://www.youtube.com/watch?v=xOzm-3COK\\_0&feature=youtu.be](https://www.youtube.com/watch?v=xOzm-3COK_0&feature=youtu.be)