

Condensate leak

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The UK Step Change in Safety has published a 'safety moment' regarding a condensate leak. Whilst there were no injuries, this was a high potential incident and some of the issues and recommendations will be of interest to IMCA members.

What happened?

Before the incident, plant flowrates had changed, and there were high levels of vibration on the pipework on the main outlet of the condensate separator. This vibration caused a crack in the 2" line connected to the condensate outlet. Condensate leaked out at around 8 kg/second, and took 90 minutes to stop.

Issues identified include:

- there was a design failure.
- crew had become accustomed to the vibration.
- there was a lack of specialist competence.
- there was a lack of operations input to projects on valve issues and design.

Step Change recommendations for learning included:

- vibrating pipework is a warning sign – don't ignore it.
- vibration can result from original design as well as changing plant conditions.
- slow or creeping change can be difficult to spot – people can become accustomed to defective conditions.
- managing vibration requires engineering advice – constraining vibrating pipework can cause failure.

Step Change found that contributing factors to the incident were:

- complacency
- poor control of work
- lack of competence

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