

If you have any questions or comments regarding SHEQual issues please contact your local SHEQual Advisor or the SHEQual Department

SHEQual Bulletin “Exploding” Chamber Lid

MWH have been made aware of the following incident.
The incident does not involve MWH.

A potentially serious injury was narrowly avoided at Huntington WTW due to pressure building up in a manhole.

Two Process Controllers attempted to open a manhole where the two sections and the edges of the manhole were frozen. As one of the employees walked away to get some warm water the second employee tapped the edges of the manhole with a lifting bar and ultimately broke the seal. At this point, the whole lid was blown out of the chamber, striking one of the employees and knocking him into the shaft. Fortunately he managed to hold on to the edge of the chamber and avoided serious injury.



The manhole in question is situated on a leg between the first and second stage filters. It appears the pressure build up / vacuum was created due to the ice seal and is of major concern under current weather conditions.

It would appear that the cause of the ‘explosion’ was a build up of air pressure within the chamber. However, the lid had become fixed to its seating and frosted over; this meant that a seal was formed around the lid. When the seal was broken the pressure built up below caused the lid to be blown upwards, before crashing back down onto the open chamber.



Please be aware of chamber lids around sites that could have the potential to cause a similar issue. This is the first such instance of this type, so please take extreme care around other such installations on your sites. In this instance, the chamber was carrying treated water, but similar occurrences may happen elsewhere.

The current prolonged period of cold weather is causing severe operational issues, but your health, safety and wellbeing are more important than any site issue. Please take extra care and ensure you are completely satisfied that tasks can be completed safely.

All defects / issues should be reported to your line manager in the first instance and if the chamber / lid appears unsafe they should be made safe / secure where possible.

Please ensure that all employees are aware of the risks involved with chambers & lids and the control measures that should be used to make a safer working environment.