

WE WATCH FOR WEAK SIGNALS

One characteristic of most major process safety incidents is that before they occurred, there were noticeable indications that a problem was developing. Examples of weak signals include unusual vibration, ice unexpectedly forming on the outside of a pipe, weeps and seeps, passing valves, reoccurring alarms, or abnormal field readings. It is good practice for teams to discuss examples of weak signals that they have seen in their facility.

The key is to identify these “weak signals” and respond to them before something more serious occurs. Front-line workers are often those best placed to pick up on weak signals as they become very familiar with what is normal and what is not. Personnel are therefore encouraged to remain alert to these signals, even if they seem unimportant, so that they can be discussed and evaluated.

Operator rounds, visual inspections or just going about our routine work at site, are times when we can use our eyes and ears to remain alert to anything that seems out of place or different.

When weak signals are identified and reported it can be tempting to dismiss them too readily. Weak signals can be a vital opportunity to act early to avoid an accident, so it is important that they are persistently explored to understand the cause.

It is important to remain constantly aware of the potential for process safety incidents. Some companies describe this as maintaining a state of “chronic unease”. Always being aware of our vulnerability to a process safety event helps us to avoid having one!



Tips for Managers:

Be alert to weak signals and respond pro-actively when these signals are raised.

Additional guidance:

Energy Institute Reflective Learning Tools:

[Chronic unease](#)

International Association of Oil and Gas Producers:
[Weak signals video](#)