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Proses veiligheid stories!

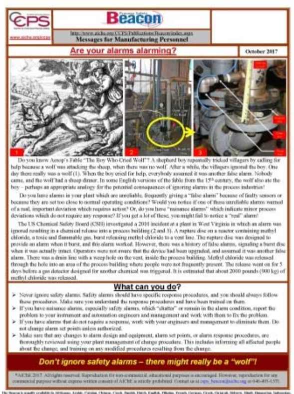
Januarie 2019

Dis algemeen bekend dat storie vertelling 'n kragtige manier is om die mense se harte en brein te beinvloed en die geskiedenis te bewaar. Kinders oral oor die wêreld leer uit sprokies en vertellings. Dink maar aan Jakkals en Wolf en ander bekende sprokies. Kinders onthou die stories en die lesse uit die sprokies vir die res van hulle lewe.

Die pionier van proses veiligheid, Dr Trevor Kletz (1922-2013) het sterk menings gehad oor die rol van stories in proses veiligheid. Mense onthou stories beter as lesings oor proses veiligheid of ander opleidings sessies. Gelukkig het die proses industrie goeie vordering gemaak om die frekwensie van groot ongelukke te verlaag. In die verlede het werkers respek gehad vir proses veiligheid risiko's omdat hulle uit eie ervaring van ongelukke geweet het wat kan verkeerd gaan as die proses nie behoorlik beheer word nie.

Rooikappie en die wolf

Aesop se storie van die kraai en die kruik herinner ons aan die waarde van vindingrykheid.



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Messages for Manufacturing Personnel

Are your alarms alarming?

October 2017

Do you know Aesop's Fable "The Boy Who Cried Wolf"? A shepherd boy repeatedly tricked villagers by calling for help because a wolf was attacking the sheep, when there was no wolf. After a while, the villagers ignored the boy. One day there really was a wolf (1). When the boy cried for help, everybody assumed it was another false alarm. Nobody came, and the wolf had a sheep dinner. In some English versions of the fable from the 15th century, the wolf also ate the boy – perhaps an appropriate analogy for the potential consequences of ignoring alarms in the process industries!

Do you have alarms in your plant which are unreliable, frequently giving a "false alarm" because of faulty sensors or because they are set too close to normal operating conditions? Would you notice if one of these unreliable alarms warned of a real, important deviation which requires action? Or, do you have "nuisance alarms" which indicate minor process deviations which do not require any response? If you get a lot of these, you might fail to notice a "real" alarm!

The US Chemical Safety Board (CSB) investigated a 2010 incident at a plant in West Virginia in which an alarm was ignored resulting in a chemical release into a process building (2 and 3). A rupture disc on a reactor containing methyl chloride, a toxic and flammable gas, burst releasing methyl chloride to a vent line. The rupture disc was designed to provide an alarm when it burst, and this alarm worked. However, there was a history of false alarms, signaling a burst disc when it was actually intact. Operators were not aware that the device had been upgraded, and assumed it was another false alarm. There was a drain line with a weep hole on the vent, inside the process building. Methyl chloride was released through the hole into an area of the process building where people were not frequently present. The release went on for 5 days before a gas detector designed for another chemical was triggered. It is estimated that about 2000 pounds (900 kg) of methyl chloride was released.

What can you do?

- Never ignore safety alarms. Safety alarms should have specific response procedures, and you should always follow these procedures. Make sure you understand the response procedures and have been trained on them.
- If you have nuisance alarms, especially safety alarms, which "chatter" or remain in the alarm condition, report the problem to your instrument and automation engineers and management and work with them to fix the problem.
- If you have alarms that do not require a response, work with your engineers and management to eliminate them. Do not change alarm set points unless authorized.
- Make sure that any changes to alarm design and equipment, alarm set points, or alarm response procedures, are thoroughly reviewed using your plant management of change procedure. This includes informing all affected people about the change, and training on any modified procedures resulting from the change.

Don't ignore safety alarms – there might really be a "wolf"!

Die Beacon van Okt 2017 gaan oor Aesop se fable van die Seun wat Wolf geskree het.

As mense nie eie ervaring van werklike ongelukke het nie, moet mens staatmaak op opleiding, oefening en prosedures om ons daaglikse werk veilig te doen. As daar nie 'n sterk verband is tussen "wat ons moet doen" en "hoekom ons dit so doen" nie, kan mens gemaklik of onverskillig raak. Hoekom moet ons al hierdie proses veiligheids prosedures volg om ongelukke te voorkom wat nooit gebeur nie? Ons vergeet dat proses veiligheids ongelukke nie gereeld gebeur nie, **juis omdat** ons die proses veiligheids prosedures volg. Prosedures word dan nie nougeset gevolg nie. Onverskilligheid en om prosedures nie nougeset te volg nie is van die eerste stappe op die pad wat lei na 'n toekomstige ernstige ongeluk.

Wat kan jy doen?

- As jy jare se ervaring het in die proses industrie, dan onthou jy stories uit die verlede van insidente wat jy self ervaar het, of wat aan jou vertel is deur jou voorgangers. Vertel die stories vir jou minder ervare kolegas. Herinner hulle dat "dit hier kan gebeur" omdat dit "reeds voorheen hier gebeur het".
- As jy relatief onervare is in die proses industrie, vra ouer en ervare kolegas om jou te vertel van insident wat voorheen plaasgevind het.
- Stel voor aan bestuur dat verhale van insidente neergeskryf word sodat die herinneringe aan die verlede nie verlore raak as ouer mense aan beweeg nie of aftree nie.
- Wees op die uitkyk vir stories wat in enige industrie plaasvind. Kyk of daar iets is wat jy daaruit kan leer en van toepassing kan wees in jou aanleg. Die Beacon is 'n voorbeeld van waar mens kan leer waar dinge kan verkeerd loop en hoe dit soms onbenullige dinge kan wees wat dit veroorsaak. Voorbeelde sluit in 'n brand op 'n passasiersboot (Sep. 2016, MOC), 'n vliegtuig enjin wat faal by 'n lughawe (Okt. 2018, Instandhouding) en 'n brand op Atlanta Lughawe (Des. 2018, gemeenskaplike oorsaak faling en noodplan)

"Stories is waar herinneringe heen gaan as hulle vergeet word!

- Doctor Who, Serie 9, Episode 12

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