Inblokken UGFW t.b.v. werkzaamheden

Hazard Analysis for Alternative Isolation Method

Alternative Isolation Method: ***Blokafsluiter (BW) dicht met single bleed via brandkraan (BK). Beiden voorzien van Rode Label.***

Reason for Alternative Isolation Method: *The L3G_06.05.C.02_Veilig_entree policy requires a CSE procedure to include:*

i. Air gap (met misalignment), OF;
ii. afsteken of afblinden, OF;
iii. Double Block & Bleed, goedgekeurd door een secundaire goedkeurder voor veilig entree, OF;
iv. een gevarenanalyse uitvoeren, waarbij:
   a. De alternatieve veiligstelmethode wordt beschreven, EN;
   b. de risico's die gepaard gaan met de alternatieve veiligstelmethode worden beoordeeld, EN;
   c. methoden worden geïmplementeerd om de risico die gepaard gaat met de alternatieve veiligstelmethode te beperken, EN;
   d. deze wordt goedgekeurd door
      1. De *Facility/Work Group Leader* (FWGL), EN;
      2. de *Responsible Care Leader* (RCL) of gedelegeerde (*[Nederland]*[1] Emergency Manager van dienst).

For fire water lines, option i, ii and iii are not possible or desired.
i is not possible because the lines are in the ground, therefor mis alignment cannot be achieved
ii is not possible because each attempt to place a blind, would result in another CSE and therefor a never ending circle
iii is possible but a) would result in a higher process safety risk due to the blocking of larger portions of the fire water grid. These systems could be impaired, but each impairment only reaches to 80% of the original protection.
b) the impairments need to be activated by hand, resulting in a longer duration of time before an fire or emission is mitigated. c) poses a personal safety risk due to hoses on the ground and extra manhours to put those in place.

Therefor option iv is needed.

Describe how this alternative isolation method could fail.	Describe the Hazard(s) created if the failure happens	Describe Methods Used to Mitigate the Hazard Associated With Failure of the Isolation Method
Instantaneous failure of block valve	**Exposure to high water pressure (10 bar)**	• **Use of block valves with a low failure rate (gate valves and butterfly valves).** • **Test if all the pressure left the system after blocking, by opening a hydrant. Only sign the IOES Red label master list, if the**

		system is free of pressure and the valves are not leaking. • **Make sure that failure of a block valve is noticed by opening a hydrant and label it in open position.** • **If possible, open multiple hydrants between the CSE location and the block valve.**
Approved by MOC nr: EH&STNZ2020060033		

Document history

The following information documents at least the last 3 changes to this document, including procedure reviews, with all the changes listed for the last 6 months

Datum	Naam	Wijzigingen
5 januari 2024	UA18714	Document review, no changes