Ford

IED Containment Plan Overview

Version: February 2024

Southern Water

Ford – Overview

- Site is planned to have advanced digestion after AMP8, as such intent is to install IED compliant containment solutions.
- Site will be provided with containment volume meeting the required 25% of the total tank volumes in the bund.
- Solutions remain subject to design development and evaluation against survey outcomes.

Southern Water

Ford – Containment Overview

Containment basis:
A site-wide containment solution will be provided utilising the existing site boundary which is an earth bank (to be lined with new impermeable surface) and existing roads and hard standing areas. New impermeable areas will be installed where required.
Review has determined the existing site layout does not have a feasible solution for smaller bunds near tanks.
Kerbs (existing & remediated) and speed humps (new) will be used to limit the spread of the spill.
An additional wall will be installed to protect the gas holder from uplift in the event of a spill.
Total volume stored 11,033m^3 and 25% rule applies, containment required is 2,758m^3.
(noting largest tank is 1,732m^3, 110% would be 2,033m^3)

Scope summary:

Soak-aways to be removed and new sump and pumps to head of works will be provided.

Southern Water

Ford – Spill modelling

The spill of the largest tank would spread over an extensive area of the site but largely remain on the STC side.

The WtW primary settlement tanks area (annotated) is currently included in the solution pending detailed surveys of existing equipment to ensure an appropriate balance between to provide an operationally-acceptable level (height) of spill.
The need for WtW-STC operational coordination is acknowledged, the site is owned by one company and managed by one operational team.

Additional Notes

- Solutions remain subject to survey and design development.
- This content relates to output of ADBA tool (doc ref. 790101-MMD-IED-FOR-CA-C-001 previously provided). Note: this does not change the classification identified.
- Containment volume calculations have been completed to determine initial wall heights.
- Solutions remain subject to Chartered Civil engineer acceptance of meeting CIRIA C736 requirements., planned to be completed as part of design development and check/review/approve process
- New impermeable surfaces type remains subject to further discussion and agreement with the regulator as stated in CIRIA C736
- Solution includes provision of sumps from which rainwater is pumped this includes a manual operator check for sludge prior to pumping to head of works
- All drainage within bunded area to return to head of works
- Agreement will be sought for bund capacity to not include fire fighting water based on CIRIA C736 figure 4.3 for non-combustible contents
- Limited rainwater bund capacity will be provided based on daily pumping and the ability to rapidly respond to any leak event
- No retrofitted leak detection under tanks is proposed – derogation anticipated once case established in more detail
- Need for sub-surface 1m impermeable soil to be challenged based on type of stored material (re. CIRIA C736 figure 8.4)