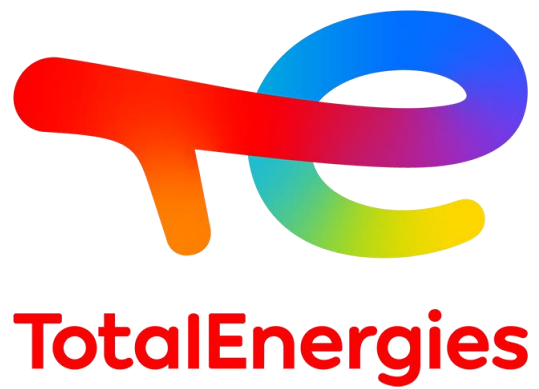




PART 8 CLOSURE

Presented to the SAPIA CLC



P8 CLOSURE

Assessment Strategy

- ✓ Initial assessments (phase 1 and 2) follows a Tier 1 Risk Based Assessment approach.
 - Generic risk screening criteria. They assume the receptor is located at the area where sample was taken
 - Concentrations above Tier 1 triggers a Tier 2 risk assessment. Consider site specific factors.

Closure Report must cover/proof the Following:

ROD Condition – “The closure report must amongst others include the following”:

- a.) Evidence to demonstrate that the site does not pose any significant harm to the environment &/or human health either immediately or in future;*
- b.) Monitoring objectives are achieved; and*
- c.) Any other information relevant to prove completion of the monitoring activities.*

Approach For P8 Closure:

- ✓ Operating site:
 - Stick to Risk Based Approach when evaluating site.
 - The presence of FPP does not directly translate to risk.
 - Consider Tier 2 RBSLs if Tier 1 levels are exceeded.
 - Consider doing fate and transport model where a receptor is present and not impacted.
 - If there is no risk, you can propose closure.
- ✓ Decommission & Closure
 - Consider possible future land use when evaluating risk. There maybe comebacks.

P8 CLOSURE_CASES

Some P8 Closure Cases

Comments	Recommendation	PSH Prese	PSH Wells	Closure
The site is located in a commercial residential area. The depth to groundwater ranges between 4.14 m and 7.60m bgl. Groundwater flow is in a south easterly direction. PSH has been observed to be localised in MW1 and MW4 over the past 17 sampling events. Currently there is no PSH in any monitoring wells onsite. No groundwater users have been identified within close proximity to the site. No surface waters are in close proximity to the site. Hydrocarbon concentrations were below the detection limit in MW2, located upgradient of site infrastructure. No BTEX compounds were detected in MW1 and MW4 with only low concentrations of DROs detected (max concentrations - 2 140 ug/l). No applicable screening criteria were exceeded by concentrations detected in these wells. Trace concentrations of benzene (13ug/l) and xylenes (13 ug/l) below applicable screening criteria, were detected in MW5. GRO concentrations (3 589 ug/l) were detected in MW5. These concentrations exceeded SSTLs protective of groundwater ingestion and vapour inhalation in a residential scenario. Given the sites location in a commerical area (nearest residential receptors ~200 m east) and the absence of boreholes within close proximity to the site, these SSTLs are not considered applicable. When screened against Tier 1 screening criteria applicable to a commercial area, no exceedances were noted. Furthermore, given the depth to groundwater onsite (> 4 m bgl), vapour intrusion risks associated with the dissolved phase plume beneath the site are considered unlikely.	Push for closure.	No	N/A	Yes

Comments	Recommendation	PSH Prese	PSH Wells	Closure
Benzene concentrations in MW10 exceeded SSTLs calculated for the site. No PSH was found to be on or off-site. Depth to water ranges between 1.26 m - 2.02 m bgl. One borehole was located at 9 Admiralty Way, borehole was sampled and had BDL concentrations. The borehole was sampled on multiple events all indicating BDL concentrations. Sub slab vapour sampling of vapour pins within the onsite building reported concentrations of toluene, xylenes and ethylbenzene in the soil gas at concentrations below applicable tier 1 screening criteria. Notably benzene was absent in both sub slab soil vapour samples. Although benzene concentrations in MW10 exceeded SSTLs for vapour inhalation, results of sub slab vapour samples collected from beneath the site building indicated that vapour intrusion risk are unlikely to be realised. Overall, the dissolved phase plume appears to be confined to the site within close proximity to MW10 and appears to be stable. Hydrocarbons in other wells around the site (to the north, west and south) are either at trace concentrations or BDL.	Push for closure.	No	N/A	Yes

P8 CLOSURE REJECTION

It is not the end of the world

- Review and understand the rejection letter and decide on either of the following options;
 1. Accept rejection and continue with further actions?
 2. Engage further with the DFFE, to present your case and interpretation of current results on;
 - Extent of the plume on site
 - Plume dynamics (stable or migrating)
 - Causes of observed changes (SWL variation or new contamination)
 - How RBCA was applied on the case

❖ NB* Both parties could have interpreted results differently. Remember your consultant is an independent voice.



NEW ISSUE/CONTAMINATION POST P8 CLOSURE

New contamination/complaint or risk identified post closure?

- Investigate the new contamination to establish facts;
 - ✓ Is it new or old contamination?
 - ✓ what is the risk presented?
 - ✓ Decide whether you need to notify authorities or not?
- ❖ NB* Be open, the objectives for both parties is to prevent risk.

RE: Project Closure Total [REDACTED]



Kelebogile Bassie <KBASSIE@dffe.gov.za>

To ● Millicent MKHATSHWA

Cc ✓ Erasmus CHAUKE; ○ Xoliswa Bango

 Restricted

Good day Millicent

Notification of borehole contamination at Total [REDACTED] duly received, Ms Bango will revert to you in due cause.

Regards
Kelebogile

From: Millicent MKHATSHWA <millicent.mkhatsywa@totalenergies.com>

Sent: Friday, 17 March 2023 11:27

To: Kelebogile Bassie <KBASSIE@dffe.gov.za>

Cc: Erasmus CHAUKE <erasmus.chauke@totalenergies.com>; Xoliswa Bango <XBANGO@dffe.gov.za>

Subject: RE: Project Closure Total [REDACTED]

Dear Kelebogile and Xoliswa,

Please find attached a notification letter regarding TotalEnergies [REDACTED]

Feel free to contact me if you have any questions.

Kind regards,

Mkhatsywa Millicent

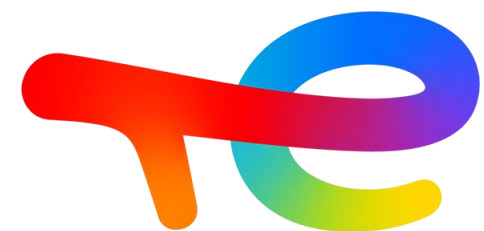
Environmental Liabilities, Health & Systems
HSSE



THANK YOU



TotalEnergies



TotalEnergies