



06 May 2020

Reference No. 19126590.L10.A.2

ESB Networks

Engineering and Major Projects
 One Dublin Airport Central
 Dublin Airport
 Cloghran
 County Dublin
 K67 XF72

RE ESB SITE 10 KINGSBRIDGE – WATLING STREET 38 KV CABLE OIL LOSS: RECOMMENDATIONS

To whom it may concern

ESB Engineering and Major Projects (ESB) commissioned Golder Associates Ireland Limited (Golder) to complete a Preliminary Site Assessment (PSA) for historical loss of fluid from a high voltage (38 kV) cable run located between Kingsbridge and Watling Street, Dublin ('Site 10') (hereafter referred to as the 'Site').

The PSA was produced in-line with current EPA guidance (*Guidance on the management of contaminated land*, 2013). The findings of the PSA were presented in our report reference 19126590.10.A.5 dated 06 May 2020.

The PSA identified potential pollutant linkages which in Golder's professional opinion requires further investigation and assessment. A summary of our findings for this Site and the recommendations required to assess these findings are presented below.

Summary of Findings and Recommendations

Potential pollutant linkages have been identified that could impact human health and/or controlled waters receptors as follows:

- There is a potential moderate risk to groundwater/surface water from the migration of free phase mineral oil to these receptors along cable ducting and infrastructure in the area (blended mineral oil is classified as hazardous in groundwater); and
- There is a potential moderate risk to the River Liffey from dissolved phase mineral oil migrating to the River Liffey in potential shallow groundwater.

Golder recommends:

- An intrusive investigation, initially focussed on the area surrounding the initial leak location and expanding the investigation area systematically to vertically and laterally delineate a potential contamination plume if required with a focus on the cable run between the leak and the River Liffey; or

Summary of Findings and Recommendations

- Targeted monitoring of the River Liffey to confirm the absence or presence of specific chemical markers (i.e. LAB and mineral oil).


Golder has presented an option above to either progress with a limited site investigation or to sample the receptor. Considering the spill location at a transport hub there is high public, tram, vehicular access needed. The area is also very dense with utilities serving industry and transport in the area. It may not be possible to complete a site investigation at locations needed. The preferred action for this site is to complete a surface water monitoring programme over the tidal range to demonstrate that surface water (River Liffey) has not been impacted from the loss.


The preliminary site assessment should be reviewed and updated to evaluate the residual potential risks identified after the investigation is completed (as per EPA guidance).

Golder are happy to assist with the scoping of such an investigation if needed.

Yours sincerely,

Golder Associates Ireland Limited


Geo Environmental Engineer


Geo Environmental Director

GF/TM/mb