

24th February 2020

Our ref: GCU0257001/GW/JW

ESB Networks
Engineering Major Projects
One Dublin Airport Central
Dublin Airport
Cloghran
Co. Dublin

**Subject: Historic Cable Fluid Losses – Location 21
Recommendations from Preliminary Site Assessment**

Dear Sir/Madam

With reference to our Preliminary Site Assessment report on the historic loss of cable fluid in Leopardstown, Co. Dublin (Location 21) dated 24th February 2020. The PSA identified the following potential receptors and preliminary risk categories linked to the cable fluid loss¹:

- | | | |
|---------------------------------|---|----------|
| • Brewery Stream | - | Moderate |
| • Water mains | - | Low |
| • Bedrock aquifer | - | Low |
| • Occupants of nearby buildings | - | Very low |

With a view to confirming the above preliminary risk categories, we would make the following recommendations:

- Assess whether there is residual cable fluid (as LNAPL) in the cable trench at the leak location. This may be best achieved by excavating one or two slit trenches perpendicular to the line of the cable trench in close proximity to the leak location and recording field evidence of impact by cable fluid. If LNAPL is not observed, then consideration should be given to collecting soil samples from the slit trenches and submitting them for laboratory analysis for linear alkyl benzenes and potential breakdown products;
- Monitor water quality in Brewery Stream down-gradient of the leak location for linear alkyl benzenes and potential breakdown products;
- Refine the preliminary risk assessment based on the findings of these tasks.

¹ The preliminary risk categories were determined by applying the risk assessment methodology outlined in CIRIA publication C552 (2001).

Depending on the findings of the above tasks, further intrusive investigation may be needed to adequately refine the Conceptual Site Model and risk assessment.

Yours sincerely for
Geosyntec Consultants Ltd



Principal Environmental Engineer