

24<sup>th</sup> 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 4  
Recommendations from Preliminary Site Assessment**

Dear Sir/Madam

We refer to our Preliminary Site Assessment (PSA) report on the historic loss of cable fluid in Rathfarnham, Dublin 14 (Location 4) dated 24<sup>th</sup> February 2020. The PSA identified the following potential receptors and preliminary risk categories linked to the cable fluid loss<sup>1</sup>:

- |                                 |   |          |
|---------------------------------|---|----------|
| • River Dodder                  | - | Moderate |
| • Water mains                   | - | Low      |
| • Bedrock aquifer               | - | Low      |
| • Occupants of nearby buildings | - | 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, and if it is detected, its approximate extent. This may be best achieved by excavating slit trenches perpendicular to the line of the cable trench in the proximity of 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 the River Dodder 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.

<sup>1</sup> 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