

26<sup>th</sup> May 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 43  
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 Carrickmines, Co. Dublin (Location 43) dated 26<sup>th</sup> May 2020. The PSA identified the following potential receptors and preliminary risk categories linked to the cable fluid loss<sup>1</sup>:

- |                       |   |          |
|-----------------------|---|----------|
| • Carrickmines Stream | - | Moderate |
| • Water mains         | - | Low      |
| • Bedrock aquifer     | - | 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 Carrickmines 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.

<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