

**Ballyduff Beg Central Waste Management Facility**  
**Quarterly Environmental Monitoring Report for Landfill Gas**  
**Quarter 2, 2021**

**Gas Monitoring Results**

During this quarter, gas monitoring was carried out at waste body wells P1G1 to P1G18, P2G1 to P2G26 and P3G1 to 27 within the landfill and at perimeter wells LG1 to LG21a, located around the landfill access road from the waste body footprint. Parameters measured were methane, carbon dioxide and oxygen (%v/v). Monitoring results were uploaded to EDEN on a monthly basis.

**Perimeter Gas Wells**

Perimeter well gas results for Q2 2021 are graphed in Figures 1 to 23. As can be seen from the graphs, methane and carbon dioxide levels were elevated at various levels during the quarter in LG7, LG7a, LG7b, LG8, LG9, LG20 and LG21. Highest levels were detected in LG7, LG7A, LG7B, LG8, LG9, LG20 and LG21. As discussed in previous reports, it is the opinion of Clare County Council that the elevated results are due to natural decomposition of tree brush/vegetation left in place during construction of the embankments. This opinion is supported by the findings of a number of investigations into the issue.

**Waste Body Gas Wells**

Graphs of waste body methane levels are shown in figures 25 to 51. As can be seen from the graphs, gas levels continue to drop with lower methane levels observed in the older section of the landfill (phase 1 and phase 2 gas wells). This is due to the age of the waste; the last filled cell (cell 13) was closed in November 2011. IBSL undertake a monthly gas field balance using both pressure and gas concentration to adjust valves.

Flare downtime was reported in the below incidents for the quarter.

- 1) INCI020931 10.00 am 04.05.21 to 05.05.21 (Approx 25 Hours)
- 2) INCI021054 10.00 am 21.05.21 to 25.05.21 (Approx 48 Hours)

The flare was operated on a 16 hours on - 8 hours off cycle during the quarter. Agency approval was received for this.