

ATTACHMENT 1.1 REASON FOR LICENCE REVIEW

The EPA carried out a site visit to Churchtown Landfill Site on the 26/10/2022 (SV23649 Licence Report) as part of its emissions monitoring programme. Monitoring was carried out at the following discharge points from the ICW/Willow system on site

- D1 - Northern Willow Discharge Monitoring Point
- D2 - Southern Willow Discharge Monitoring Point
- D3 - Pond 5B Discharge Monitoring Point
- D4 - Pond 5A Discharge Monitoring Point

One non-compliance was raised in relation to mercury and zinc concentrations at surface water monitoring points reference D1 and D3 as follows;

- At monitoring point ref. D1, a mercury concentration of 0.13 µg/l versus the licence emission limit value of 0.07µg/l;
- At monitoring point ref. D1, a zinc concentration of 19 µg/l versus the licence emission limit value of 8.0 µg/l; and
- At monitoring point ref. D3, a zinc concentration of 50 µg/l versus the licence emission limit value of 8.0 µg/l.

This was non-compliant with Condition 5.1 of the waste licence W0062-02.

The following was required:

Action Required: The licensee shall carry out an investigation into the elevated levels of mercury and zinc in accordance with condition 9.3.1 of Waste licence Reg. No. W0062-02, and submit the findings of the investigation to the EPA as a response to the EPA Site Visit Report through EDEN within two months of the issue date of this report.

An investigation was undertaken by Donegal County Council (DCC) and submitted to the Agency through EDEN. It was noted that the emission limit value (ELV) for all metals from the discharge points were set at the Environmental Quality Standard (EQS) required in the receiving waters in the proposed decision (PD) and not at higher concentrations as assessed in the Mass Balance assessment. This was not noted when the PD was issued and therefore was not included in DCC objection to the PD at the time.

The investigation noted that the mass balance assessment shows no impact on the downstream water quality in the River Finn as a result of the exceedances in the ELV noted in the EPA monitoring undertaken during site visit on 26/10/2022 based on 95%ile flow conditions.

If 25% of the headroom in the receiving waters can be utilised by a discharge based on the LASNTG guidance - concentrations of 3µg/l and 900µg/l for mercury and zinc respectively would still use less than 25% of the headroom available at 95%ile flows.

The results indicate that the ELVs for the discharge, which for heavy metals are set at the Environmental Quality Standard (EQS) required in the receiving water, are very onerous.

This waste licence review is for a revision of the current ELVs for metals as per Schedule B.2 Emission to Water of the licence.