



Comhairle Contae Mhaigh Eo
Mayo County Council



A: Áras an Chontae, Caisleán an Bharraí
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Environmental Protection Agency
Johnstown Castle Estate
Co. Wexford

Re: W0021-02 - Derrinnumera Landfill site Newport, Co. Mayo.

To whom it concerns

Mayo County Council operates Derrinnumera Landfill Site which is an engineered landfill site closed to the acceptance of waste since April 2012. The site operates under EPA Waste Licence W0021-02 granted in December 2009. Leachate from the two engineered cells and from the original waste body, collected in the lagoon, is pumped to three holding tanks and transported from there via road tanker to the Rathroeen Landfill site W0067-02 from where it is pumped for final treatment to the wastewater treatment plant at Ballina. This practice is not feasible in the long term, contains risks during transport, is susceptible to tanker/driver availability as highlighted during the Covid-19 pandemic and generates a significant carbon footprint. Alternative solutions have been assessed by Mayo County Council and it is now proposed to develop an Integrated Constructed Wetland (ICW) for the treatment of leachate for this landfill at Derrinnumera, County Mayo.

Mayo County Council is of the view that the project can be accommodated, within the current licenced boundary and under the existing Licenced Waste Activities under the third schedule of the Waste Management Act 1996, namely Class 6 (Biological treatment not referred to elsewhere in this schedule which results in final compounds or mixtures which are disposed of by any means of any activity referred to in paragraphs 1 to 10 of this Schedule)

Mayo County Council is also of the opinion that this project can be accommodated by agreement with the Agency in relation to the existing conditions of EPA waste licence W0021-02.

Section 4.23 Leachate Management:

Conditions 4.23.5 The licensee may treat and/or store leachate, as agreed by the Agency, prior to off-site disposal taking account of the prohibition on discharge to the Glaishty River in Condition 7.7. – The agreed treated effluent standard would be such that it would no longer be considered leachate, prior to off-site disposal to the Glaishty River.

Section 7.7 Disposal of Leachate

7.7.1. Leachate shall not be discharged to the Glaishty River. - The treated effluent would meet an agreed standard whereby it would no longer be considered leachate, prior to discharge from the site to the Glaishty River.

7.7.2. Unless otherwise agreed in advance by the Agency, leachate shall be removed from the facility for treatment at the Castlebar Sewerage Treatment Works.- Agreement required with the Agency on a revised discharge location for the treated effluent.

Since 2015 Mayo County Council have engaged Tobin Consulting Engineers to carry out an assessment of groundwater contamination from Leachate at the northern end of the landfill cells. It is proposed that the works as set out by Tobin Consulting Engineers, currently being finalised, and once agreed with the Agency, will be transferred to Byrne Looby Consulting Engineers and VESI Environmental and the groundwater contamination issue will be dealt with through the development of this integrated constructed wetland project.

It is envisaged that there is potential to accommodate between 20 to 30m³ per day of contaminated groundwater within the proposed ICW between the months of May to August, with lower availability outside those months due to rainfall volumes subject to further assessment and agreement with the Agency. While on-going groundwater monitoring would be required, the aim is to reduce the contamination in the groundwater body towards good status in line with the requirements of the Water Framework Directive.

As outlined in the conclusion to the attached report, the benefits of an ICW will provide on-site treatment for the leachate and eliminate the transport and treatment off-site. The ICW will be designed to meet any licence discharge limits set by the Agency and ensure that the receiving aquatic and terrestrial environment are protected. Furthermore, an ICW will provide a wide range of ecosystem services and enhance biodiversity at the site. The ICW delivers on many fronts in terms of climate action targets, focus on nature-based solutions and application of circular economy aims.

Reports relating to the project have been uploaded to EDEN for the Agency's assessment. Mayo County Council would welcome early engagement from the Agency on the proposed project.

Yours Sincerely



John Condon
Director of Services
Water, Environment and Emergency Services
Mayo County Council