

ATTACHMENT 4.3 WASTE ACCEPTANCE/TREATMENT

Waste Acceptance Not applicable.

Ballynacarrick Landfill Site operated from c.1980 until closure in July 2012 due to the capacity of the facility being exhausted. The site has been progressively restored on a phased basis in accordance with the Waste Licence (Ref: W0024-04) since 2004 with the final restoration being completed in 2013. No waste will be accepted at the facility for disposal.

Section 29(2A) of the Waste Management Act 1996 as amended states that it shall be the duty of waste producers and holders to ensure that waste undergoes recovery operations in accordance with sections 21A (Waste Hierarchy) and 32(1) of the Waste Management Act. An Integrated Constructed Wetland (ICW) will be installed at the landfill facility as agreed with Office of Environmental Enforcement of the EPA to provide an effective, sustainable and self-sufficient leachate management and treatment system which minimises, and where possible eliminates, the requirement to export leachate (19 07 03 landfill leachate other than those mentioned in 19 07 02) from the site to Letterkenny WwTW for final treatment. The effluent from the leachate treatment plant will be diverted to ICW tertiary treatment and discharge to the adjacent waterbody. Further details are provided in Attachment 4.4 and Site Operational Report

Since the granting of the Waste Licence a significant investment in the restoration of the site, including the installation of leachate management infrastructure, has been made by Donegal County Council (DCC). Leachate management infrastructure has been installed progressively as the site has been developed and restored in accordance with the current waste licence issued by the Environmental Protection Agency (Licence Ref: W0024-04).

Current leachate management infrastructure includes:

- Landfill capping across the site to minimise leachate generation;
- Culverting of all surface waters across the site entering the site to a down gradient off-site location into an unnamed stream;
- Abstraction of leachate from a number of locations onsite, including abstraction boreholes, toe drains and sump chambers for management in an onsite treatment facility;
- Diversion of contaminated groundwater from the groundwater drainage blanket underlying Phases 1 and 2 cells to the onsite treatment facility;
- A leachate treatment facility consisting of 2 Nr glass lined steel tanks, one of which contains activated sludge and is aerated overnight in order to provide preliminary treatment prior to disposal offsite to a Waste Water Treatment Works (WwTW) in Letterkenny by tankers.

Two glass lined steel tanks store leachate in a service area to the south of the site entrance. These tanks were installed in 2002 and 2005 in order to manage and treat leachate prior to removal from the site to a wastewater treatment works. Tank 1 has a diameter of 7m and was installed in 2002 and currently acts as a balance tank and provides additional storage capacity for leachate during wet weather.

A second, larger storage and treatment tank (Tank 2) with a diameter of 20.5m was installed in 2005 on a piled platform to support the tank. An aerator is located within the centre of this tank to provide pre-treatment of leachate from the site in conjunction with activated sludge, prior to disposal offsite at a WwTW in Letterkenny.