

**F.A.O: Louise Ryan, Facility Manager.**

This licence audit report details the Agency's findings following an exit audit at Ballaghveny Landfill on 24/01/2018. Please quote the site visit number in any future correspondence in relation to this Report.

1. OPENING MEETING

Ms Fogarty gave a brief introduction to the objectives and scope of the audit and the procedure to be followed for the remainder of the audit. It was explained that this was an exit audit, which focuses on the condition of the site following cessation of the scheduled activity. The scope also addresses the enforcement documentation, the state of compliance with the licence and any outstanding issues.

2. ON-SITE ASSESSMENT

2.1 Review of Implementation of the Decommissioning Plan

Landfilling activities have not been conducted in this area of the site.

2.2 Site Inspection and Assessment

The areas inspected during the site visit included groundwater monitoring locations GW19 and GW6; the lands, outbuildings and entrance to Woodville House; and the fencing in place between the landfill and the lands proposed to be excluded from the licenced site boundary.

2.3 Interview

The following representatives were interviewed during the audit:

Name	Position	Issue
Anne Peters	A/Senior Executive Engineer;	All issues
Louise Ryan	Landfill Manager	All issues

2.4 Documentation

Documentation was not requested for review during this site visit but the associated documents reviewed prior to the visit included:

- Licence boundary change request for Ballaghveny Landfill submitted 14/11/2017;
- Groundwater monitoring returns December 2015-June 2017.

3. AUDIT FINDINGS

Tipperary County Council have proposed in Licence Change Request CR04134 (received 14/11/2017) to surrender an area of land that currently lies within the site boundary of Ballaghveny Landfill Licence Reg. No. W0078-03. The proposed land to be surrendered is 7.4 hectares in size and includes an 18th century house and associated buildings. It is noted that no waste related activities including landfilling has occurred in this area of the site.

The house (Woodville House) and lands which are proposed to be excluded from the licensed site boundary were inspected during the site visit. The house and lands are located to the west of the office and landfill access road, and to the west of the lands is another licensed site P0467-02 Woodville Pig Farms Limited. Woodville House has been empty and uninhabited for over ten years and is now in a derelict condition and possibly at risk of collapse. Outbuildings and stables were observed at the rear of the site along with extensive trees, grass and vegetation. The lands are accessed by a separate access gate and road, and a boundary fence was observed between the landfill site and Woodville House lands.

There were no open drains or surface water features observed during the site walkover. It is further noted that the bedrock is classified as a locally important aquifer which is Moderately Productive only in Local Zones, and that a groundwater flow divide occurs in the northeast part of the proposed land so that most of the proposed land is on the west of this divide while the landfill is north of the divide. Ground water flow west of the divide is to the south and west, while east of the divide the flow is to the east and south.



The Licensee's representatives stated that two wells associated with the licensed site monitoring programme are located within the area of the site intended to be excluded from the site boundary - these are:

1. GW6 which was historically the drinking water supply for Woodville House. Monitoring from this well ceased approximately four years ago. It is noted that the house has access to mains water supply at the entrance to the site - the Licensee could not confirm during the site visit if the water supply to the house was from the mains water supply or from the well GW6.

The Licensee's representatives confirmed their intention to decommission GW6 by the end of February 2018 and prior to the sale of the house, and stated it was their intention to declare in the sale contracts the risks associated with the site and that the groundwater beneath the site may be contaminated by historical landfilling activities.

2. GW19 is a current groundwater monitoring location which is southeast of the site near the entrance to the lands. Results of monitoring between December 2015-June 2017 (at a depth of 16.3-19.3m below ground level) indicates this well has been generally unpolluted. Two out of twenty-two samples taken identified ammonia, iron and manganese exceedances, which were attributed to local agricultural activities rather than leachate contamination, and are comparable with other monitored background groundwater quality for the area.

In 2017, contamination occurred during a hydrogeological investigation (reference Compliance Investigation CI000676). However, the risk of contamination arising from the landfill is expected to be reduced once the hydrogeological investigation concludes and measures implemented that are expected to take place in 2018 by the Licensee to better control leachate flows at the landfill.

The Licensee intends to continue to take samples at GW19 as part of the landfills monitoring programme, and will ensure any future sale contracts of the lands and house ensure Tipperary County Council staff and agents are provided an unrestricted right of way to this monitoring location at all times for monitoring purposes.

The Inspector was satisfied with the intended actions to be taken by the Licensee to reduce the risk of drinking water contamination for the house and to safeguard access to the land for monitoring purposes.

In this regard, and provided the Licensee carries out the proposed measures to decommission GW6, inform future owners of historical groundwater quality issues at the site, and require right of way access to GW19 as part of the sale agreement of the site, the OEE does not object to the exclusion of these lands from the boundary of Licence Reg. No. W0078-03.

4. CLOSING MEETING

The closing meeting commenced at 13:55 and the attendees were as at the opening meeting.

Ms Fogarty gave a summary of the audit result. The Licensee was briefed on the Agency's reporting procedures and was advised that an audit report would be issued.

Finally, the licensee was thanked for the courteous and co-operative manner of the staff, and the assistance and co-operation extended during the audit.