

## Attachment A.1

### NON-TECHNICAL SUMMARY

Churchtown landfill site is located on the north western perimeter of Newcastle West, Co. Limerick. The site is accessed from the Old Mill Road, approximately 150 metres west of its junction with the R521.

The site was used locally as a dump since 1935. Sometime towards the end of the 1940's or early 1950's, Limerick County Council acquired the site for use as a landfill site. The site was used for relatively small scale disposal of municipal and commercial waste from 1940 until the early 1970's. Limerick County Council commenced the collection of domestic and commercial waste in 1973. The Churchtown site was the main disposal site for Newcastle West and surrounding areas until it closed in 1986.

The Geological Survey of Ireland indicates that the underlying bedrock is composed of Waulsortian Limestone. This rock unit may be up to 1000m thick and is the thickest known Waulsortian succession anywhere in the world. A borehole drilled near the site has penetrated over 500 metres of Waulsortian limestone. The limestone is formed from massive, unbedded lime-mudstone.

Churchtown Landfill is 4km from the nearest SPA site and 7.2km from the SAC site.

The site overlies a regionally important karstified aquifer. The *GSI Groundwater Protection Scheme* considers that the groundwater in the vicinity of the site is highly vulnerable to contamination. The groundwater vulnerability rating within the site should be considered as extreme as the waste body is in direct contact with the underlying bedrock.

Churchtown landfill site is classified as a **High Risk** Site as defined by the Code of Practice. The High Risk Status is associated with four Source-Pathway-Receptor linkages. These are:

- Leachate migrating to private wells.
- Leachate migration to the underlying aquifer.
- Landfill gas migrating laterally to surrounding houses.
- Landfill gas migrating vertically to surrounding houses.

Based on a review of the remedial options, it is proposed to install a 0.4m capping layer and passive venting. Time Scale for completion of remedial works is Quarter 4 2019.