# Knockharley seeks footprint extension

## No increase in annual limits but additional footprint is required to meet national need

Beauparc, the operators of the Knockharley landfill are seeking to extend the footprint of their facility in order to meet Ireland's continued and increasing demand for waste management.

A number of factors including increased population growth, effects of a growing economy, a reduction in waste exports, unplanned outages at a major Waste to Energy Facility, slower than anticipated Solid Recovered Fuel (SRF) consumption at cement kilns, and expected closures of existing landfill facilities means an expansion of permitted landfill is of strategic importance to ensure that a well-managed waste system is in place to accommodate the needs of the country.

Whilst Ireland has made strides, and continues to make strides, in terms of sustainable waste management, landfilling is still a necessary element of Ireland's waste management system for waste streams than cannot be recycled or consumed as fuel in waste to energy facilities. And whilst every effort is made to reduce and reuse, not all waste streams can be.

Knockharley is only one piece of the puzzle when it comes to resolving Ireland's waste disposal capacity deficit and other operators/government have a significant role to play.

**Map illustrating the Knockharley site**

However, at current rates, Knockharley's capacity is expected to be full by 2029, three years earlier than previously projected at the time of the last planning application. Expanded capacity is therefore required to be permitted and ready for usage by this time.

Knockharley landfill is located in one of the most geologically suitable sites in Ireland for landfill and has the space to expand westwards to accommodate a capacity for 3.14 million tonnes of waste. At current max waste acceptance rates, the proposed additional landfill void would extend the life of this critical facility until 2043.

A planning application will shortly be lodged which will seek to add this additional capacity within the existing Knockharley site. The land to the west of the facility is within the area that is geologically ideal for a landfill. This is the area we seek to expand into.

It is not proposed to increase the annual tonnage allowance of 440kt/yr., so this is very much a continuance of the existing operation.

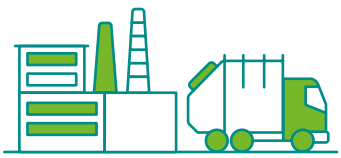
In summary, we are seeking a continuance of business as usual within a slightly expanded landfill footprint.

## Knockharley Landfill Capacity

| Material | Current Annual Permitted Annual Waste Allowance | Planned Annual Permitted Annual Waste Allowance |
|---|---|---|
| Municipal solid waste | 188,000 tonnes | 188,000 tonnes |
| Construction and demo | 60,000 tonnes | 60,000 tonnes |
| Incinerator bottom ash | 150,000 | 150,000 |
| Contingency | 44,000 tonnes | 44,000 tonnes |
| **Total** | **440,000 tonnes** | **440,000 tonnes** |
| **Change +/-** | **Zero** | **Zero** |

### Facility Lifetime

| | |
|---|---|
| Permitted Facility Lifetime | Until capacity reached |
| Expected Facility Lifetime at time of licencing | 2032 |
| Current Expected Facility Lifetime | 2029 |
| Planned Facility Lifetime | 2043 |



## Why here?

Sustainable development principles dictate that consolidation at existing facilities should be the first port of call when exploring suitable options. Consolidation of waste infrastructure significantly reduces vehicular trips, air quality emissions, and general visual impact compared to a larger network of smaller dispersed landfills.

It also increases efficiencies in terms of skilled operational management, on site infrastructure and effective tracking, which ultimately can help reduce the amount of waste landfilled.

Knockharley landfill has the space to expand westwards, and this land is geologically ideal for a landfill.

## What is landfilled?

With the successful roll-out of brown bin collection and advanced processing of waste, the material arriving in landfill is all pre-treated and is now largely comprised of ash, soils, construction and demolition waste (C&D) and stabilised materials meaning much less odour and much less emissions than might have historically been expected.

The demand for C&D waste to landfill has increased at a quicker rate than previously anticipated as a result of Ireland's growing economy and development works being undertaken leading to a need to accommodate waste that can't be reused, recycled or otherwise returned to the circular economy.

Some 150,000 tonnes of Incinerator Bottom Ash (IBA) is left behind as a by-product of the conversion of waste into energy in Ireland's two waste to energy facilities. Knockharley have become a leader in the processing of this material into re-usable raw materials.

Currently in Knockharley we are processing ash within a dedicated building where we extract ferrous and non-ferrous metals for recycling. We are also preparing the residual material for re-use as a raw material in the cement industry.

## Municipal Waste rates on the rise

Municipal Solid Waste (MSW) generation is projected to increase to 3.8 million tonnes by 2030 and could be as high as 4.5 million by 2040.

Whilst the percentage of MSW being landfilled will continue to reduce, with a maximum of 10% of all MSW to be landfilled legally targeted by the Government for 2035, it is likely that Ireland will still need to have at least 415 thousand tonnes in annual landfill acceptance capacity to serve Ireland's imminent landfill MSW demands.

## Municipal waste trends nationwide

| | Incinerated | Recycled | Landfilled | Total |
|---|---|---|---|---|
| **2020-2025 waste by volume** | 1.4m Tonnes | 1.3m Tonnes | 400,000 Tonnes | 3.1m Tonnes |
| **2020-2025 waste by %** | 47% | 40% | 13% | 100% |
| **2025 -2030 projected waste by volume** | 1.5m | 2.3m | 415,000 Tonnes | 4.15m Tonnes |
| **2025-2030 projected waste by %** | 35% | 55% | 10% | 100% |

## Landscaping and Bioversity

As part of the proposal, a comprehensive landscaping plan will be implemented to visually integrate the site and contribute to the long-term restoration and ecological enhancement of the land.

Reuse of excavated soils arising from the construction of landfill cells will provide new and extended berms located along the site boundaries to provide screening of operational areas and reduce any transmission of noise and dust beyond the site boundary.

Following construction, berms will be covered with a layer of topsoil and seeded with appropriate grass and wildflower mixes to encourage vegetation establishment, soil stabilisation, and habitat development.

Native trees and hedgerows will be planted to further enhance biodiversity and contribute to the site's long-term restoration objectives. The wider landscaping plan will also include enhancement of existing vegetation, planting of native species, and the creation of habitat corridors to support local wildlife.

## Community Gain

The existing operation currently provides €10,000 per month to local community projects. In the past 5 years we have already contributed over €1M to the community gain fund. The fund has so far contributed to;

- The new sportsground in Kentstown
- Renovations to the local school
- New footpaths and lighting in Kentstown and support has been given to Balrath football club and Greenstar park

In addition to the community gain fund, we also provide additional local benefits including;

- Provision of a sports field and other local services
- A €4 million spend with local contractors In the past 12 months
- A source of local employment, with most of our employees living locally
- The proposed extension would include an increase in community funding that could exceed €1m over its lifespan

**Contact us**

For more information on the project please contact our project email address:
**knockharley@beauparc.ie**